Abstract

This thesis relies on extensive fieldwork in Bata, an Egyptian village located in the northern Delta, in order to highlight issues related to relations of production and market structures. Furthermore, the theoretical approach used in this thesis suggests that agrarian relations cannot be understood in isolation of the wider system, nor can they be appreciated solely on the basis of aggregate statistics.

The thesis is located within the wider theoretical debate in Rural Sociology regarding the penetration of capitalist relations in rural society. It attempts to demonstrate that despite the extensive capitalization of the Egyptian economy, non-capitalist relations persist within the agrarian structure, at the level of production, such as the forms of access to water, to land, and within the forms of organization of production under state policy. In their various forms, some of these relations are newly introduced, while others reflect historical developments, but adapted to meet the present conditions of the wider socio-economic system within which Bata is located. Similarly, the thesis shows that non-monetary relations persist in the agricultural labour market and the marketing of crops; the first being an essential factor in the process of production, and the second as the sphere in which profit is realized. Finally, the thesis shows that labour relies on non-monetary relations for reproduction, given the seasonal demand in the market, and that the distribution of crops under favourable prices, within the fluctuation of the market, is also based on non-monetary relations between the various categories of merchants to insure both reproduction and accumulation.

The thesis suggests that the persistence of non-monetary relations in both production and marketing shows that productive capitalist relations have failed to develop in agriculture. Instead, the thesis highlights the continuity of merchant capital as the dominant feature of the agrarian structure, but without suggesting that this structure has been static. On the contrary, it is viewed as a successful economic form which enabled the different social groups to survive, and for many to accumulate wealth, despite the severe economic crisis of the last decade. The process of social differentiation which has taken place in Bata is, therefore, the result of the intensification of market relations, in both their monetary and non-monetary dimensions.
The copyright of this thesis rests with the author. No quotations from it should be published without her prior written consent, and information derived from it should be acknowledged.
"to the memory of 'Abdil 'Ashirami"
It was my heart, woven in lacerations,
My heart, cursed by justifications,
Now lies over the remains of the city,
A flower of purity,
Scarce....
Having dismissed the ark with a 'ray',
... and the homeland loved [without a sway]!

'Amiel Dumul, "Private Encounter with the Sea of Noah".'
Peasants and Merchants in Batra.
The Process of Economic Diversification
in an Egyptian Village

by

Malek Said Rouchdy, B. A.
University of Cairo

Thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy, in the Department of Sociology and Social Policy, University of Durham.

September 1989
Table of Contents

List of Tables ..............................................................................................................v
List of Figures ...........................................................................................................xi
Note on Transliteration ...........................................................................................xii
Note on Exchange Rates, Units of Measures and Weights ......................xiii
Glossary ....................................................................................................................xiv
Acknowledgements .................................................................................................xv
Preface ......................................................................................................................xxi

PART ONE

CHAPTER I: Research Problem and Theoretical Debates on Agrarian Relations.............................................................2
1. Research Problem ...............................................................................................2
2. Theoretical Debates: The Egyptian Theoretical Model of Agrarian Relations.........................................................13
3. The Alternative Theoretical Framework in Third World and Advanced Industrial Countries..................27
4. The Other Side of the Debate A Reconceptualisation of Agrarian Relations in Rural Egypt.............................51
CHAPTER II: Jil'lah, Egypt's Political and Economic Context, and Agrarian Structure in its Historical Development

1. Changes in the Nature of the Economy
2. Egypt's Dependence on the World Market in a Historical Perspective
3. Egypt's Agrarian Structure

Notes

CHAPTER III Description of the Village of Batra

1. The Geographical Location of Batra
2. The Village of Batra
3. A Historical Account of Batra
4. A Contemporary Account of Batra
5. The Role of the Bank of the Village of Batra
6. The Policy of the Banking System in Batra
7. The Present Role of the Local Agricultural Cooperative in Batra

Notes

PART TWO

CHAPTER IV The Forms of Access to Water for Irrigation in Batra

1. A Review of the Irrigation System in Egypt
2. The Irrigation System in Batra
3. The Indirect Forms of Access to Water for Irrigation
4. The Direct Forms of Access to Water for Irrigation
CHAPTER V  The Forms of Access to Agricultural Land................................. 276
1. A Discussion of the Aggregate Data of the Forms of Access to Land in Batra.................................................. 279
2. The Historical Development of the Forms of Access to Land in Batra........................................................... 285
3. The Prevalent Forms of Access to Land in Batra........... 292
4. The Expansion of Access to Land in Reclaimed Land: al-Mawati Land, Sector C ................................. 323
5. A Preliminary Socio-economic Categorisation of Batra 329
Notes............................................................................................................... 336

CHAPTER VI  The Organisation of Agricultural Production in Batra, Sector C................................................................. 338
1. State Policy in the Organisation of Agricultural Production.......................................................... 340
2. The Organisation of the Agricultural Production in Batra........................................................................... 352
3. The Organisation of Agricultural Production in Sector C.................................................................. 358
Notes............................................................................................................... 405

CHAPTER VII  The Organisation of the Agricultural Production in Batra, Sectors B and A.......................................................... 407
1. Sector B........................................................................................................... 409
2. The Organisation of Agricultural Production in Sector B....................................................................... 414
3. Sector A The Cultivation of Compulsory Crops................. 438
Notes............................................................................................................... 484
PART THREE

CHAPTER VIII The Agricultural Labour Market in Batra.................487

1. The Position of Labour in the Organisation of
   Production of the Major Crops in Batra..................489

2. The Seasonal Calendar of the Agricultural Labour
   Market...................................................................495

3. The Agricultural Labour Market .......................507

4. The Livelihood Strategies........................................515

Notes..............................................................................534

CHAPTER IX The Marketing of Crops and the Socio-Political Structure
   in Batra.................................................................535

1. The Marketing of Compulsory Crops...................537

2. The Marketing of Free Cash Crops....................540

3. The Intensification of Merchants Power in Batra565

Notes..............................................................................583

Conclusion....................................................................584

References...................................................................592
List of Tables

Table II.1. Share of Economic Sectors in the G.D.P. from 1969 to 1982 ................................................................. 84
Table II.2. U.S. Share of Egypt's Imports ................................................................. 95
Table II.3. Average Growth of Agricultural Income ................................................................. 95
Table II.4. Average Distribution of Yarn to Western and Eastern Countries from 1973 to 1975 ................................................................. 100
Table II.5. The Cooperative Credit by Size of Land Ownership ................................. 138

Table III.1 The Financial Operations of the Bank of the Village of Batra, in 1983 ............................................................................. 217
Table III.2 Quota of Fertilisers for Each Crop in kg. per Feddan ......................................... 219
Table III.3 The Prices of Fertilisers from 1980 to 1985, in £.E. .................................................. 220
Table III.4 Investments in Poultry Stations on the Roofs of Houses .......................................... 225

Table V.1 The Distribution of Holdings in Batra, per Feddan ............................................. 281
Table V.2 Share of Each Category of Holders in the Total Surface of Agricultural Land ............................................................................. 382
Table V.3 The Distribution of Official Holdings in Batra in Percentage ............................................................................. 330

Table VI.1.1 Surface of Cultivated Winter Crops in Egypt ........................................... 343
Table VI.1.2 Surface of Cultivated Summer Crops in Egypt .......................... 344
Table VI.1.3 Average Rate of Change in the Surface of Cultivated Crops, from 1952-1984 .................................................. 345
Table VI.2 Production, Inputs, and Prices of Compulsory Crops, from 1965 to 1981 .................................................. 346
Table VI.2.1 Wheat........................................................................ 346
Table VI.2.2 Beans........................................................................ 346
Table VI.2.3 Barley......................................................................... 347
Table VI.2.4 Lentils......................................................................... 347
Table VI.2.5 Maize........................................................................ 348
Table VI.2.6 Sorghum..................................................................... 348
Table VI.2.7 Cotton......................................................................... 349
Table VI.2.8 Rice........................................................................... 349
Table VI.3.1 Inputs of Production of Twenty-Two Qirats of Orchards .............................................................................. 364
Table VI.3.2 Breakdown of the Inputs of Production of Twenty-two Qirats of Orchards .................................................. 365
Table VI.4.1 Inputs of Production of Eight Qirats of Long Season Barsim and Two Qirats of Short Season Barsim ........ 370
Table VI.4.2 Breakdown of the Inputs of Production of Eight Qirats of Long Season Barsim and Two Qirats of Short Season Barsim .................................................. 371
Table VI.5.1 Inputs of Production of Four Qirats of Summer Potatoes .................................................................................. 374
Table VI.5.2 Breakdown of the Inputs of Production of Four Qirats of Summer Potatoes .................................................. 375
Table VI.6.1 Inputs of Production of Two Qirats of Winter Potatoes........ 377
Table VI.6.2 Breakdown of the Inputs of Production of Two Qirats of Winter Potatoes .................................................. 378
Table VI.7.1 Inputs of Production of Four Qirats of Courgettes ........ 380
Table VI.7.2 Breakdown of the Inputs of Production of Four Qirats of Courgettes .................................................. 381
Table VI.8.1 Inputs of Production of Eight Qirats of Green Peppers .... 384
Table VI.8.2 Breakdown of the Inputs of Production of Eight Qirats of Green Peppers
of Large Peppers................................................................. 385

Table VI.9.1 Inputs of Production of One Feddan of Navel Oranges
on a Large Scale ................................................................. 397

Table VI.9.2 Breakdown of the Inputs of Production of Navel Oranges on a Large Scale ................................................................. 398

Table VII.1.1 Inputs of Production of One Feddan of Maize.... 416
Table VII.1.2 Breakdown of the Inputs of Production of One Feddan of Maize ................................................................. 417

Table VII.2.1 Inputs of Production of Two Feddans of Courgettes .. 422
Table VII.2.2 Breakdown of the Inputs of Production of Two Feddans of Courgettes ................................................................. 423

Table VII.3.1 Inputs of Production of Sixteen Qirats of Onions.. 426
Table VII.3.2 Breakdown of the Inputs of Production Sixteen Qirats of Onions ................................................................. 427

Table VII.4.1 Inputs of Production of One Feddan of Rice .. 434
Table VII.4.2 Breakdown of the Inputs of Production of One Feddan of Rice ................................................................. 435

Table VII.5.1 Surface of Wheat Cultivation from 1952 to 1985, per 1,000 Feddans ................................................................. 442
Table VII.5.2 Average Annual Change in the Cultivated Area of Wheat from 1952 to 1985, per 1,000 Feddans ................................................................. 442
Table VII.5.3 Production of Wheat from 1952 to 1985, per 1,000 Tons ................................................................. 443
Table VII.5.4 Rate of Change in the Production of Wheat from 1952 to 1985 ................................................................. 443
Table VII.5.5 Production, Inputs, and Prices of Wheat from 1965 to 1981 ................................................................. 444
Table VII.5.6 Development of the Cultivated Area, Total Production, and Productivity of Wheat, from 1942 to 1983, per Feddan ................................................................. 444
Table VII.5.7 Surface Cultivated by Wheat in 1985 as Compared to 1984, per Feddan ................................................................. 445
Table VII.5.8 Imports of Wheat and Flour from 1980 to 1983 ............ 445
Table VII.5.9 Gaps between Production and Consumption of Wheat ..... 445
Table VII.5.10 Average Price of One Feddan of Wheat, L.E per 'Ardab .......................... 446
Table VII.5.11 Average Production of One Feddan of Wheat, from 1965 to 1981, in L.E per 'Ardab .......................... 446
Table VII.5.12 Official Inputs of Production of One Feddan of Wheat, from 1965 to 1981, in L.E .......................... 446
Table VII.6.1 Inputs of Production of One Feddan of Wheat ............... 453
Table VII.6.2 Breakdown of the Inputs of Production of One Feddan of Wheat ........................................ 454
Table VII.7.1 Effective Inputs of Production of Twelve Qirats of Cotton ........................................ 473
Table VII.7.2 Breakdown of the Inputs of Production of Twelve Qirats of Cotton ........................................ 474
Table VII.7.3 Government Estimations of the Inputs of Production of One Feddan of Cotton, in 1982 ...................... 475
Table VII.8.1 Inputs of Production of One Feddan of Tomatoes .......... 478
Table VII.8.2 Breakdown of the Inputs of Production of One Feddan of Tomatoes ........................................ 479

Table VIII.1 Daily Wages of Agricultural Labours for the Major Operations in Batra ........................................ 493
Table VIII.2 Annual Seasonal Calendar of the Cultivation of the Major Crops in Batra ........................................ 493
Table VIII.3 Annual Requirements of Agricultural Labour Market in Batra ........................................ 494
Table VIII.4.1 Seasonal Calendar of Labour Requirements for the Annual Agricultural Operations of Free Cash Crops on One Feddan, per Five Hours of Work ........................................ 499
Table VIII.4.2 Seasonal Calendar of Labour Requirements for the Annual Agricultural Operations of Compulsory Crops on One Feddan, per Five Hours of Work ........................................ 500
Table VIII.4.3 Seasonal Calendar of Labour Requirements for the Agricultural Operations over the Total Surface of Cash
ix

Annual Crops in Feddan, per Five Hours of Work ............ 501

Table VIII.4.4 Seasonal Calendar of Labour Requirements for the Annual Agricultural Operations over the Total Surface of Compulsory Crops in Feddan, per Five Hours of Work .......................................................... 502

Table VIII.5 Examples of the Annual Calendar of Agricultural Labour in Batra .................................................. 517

Table VIII.5.1. Hamid .................................................................. 517

Table VIII.5.2 Muhammad ............................................................. 522

Table VIII.5.3 Gamal .................................................................. 525

Table IX.1 Breakdown of the Price of One Ton of Summer Potatoes from the Field to the Weekly Regional Market ..................... 550

Table IX.2 Breakdown of the Price of One Ton of Summer Potatoes from the Field to the City Market ............................................... 550

Table IX.3 Net Income of Luza and Zaynahum during a Day Spent in the Weekly Market of Shirbin, in L.E. ................................. 555

Table IX.4 The Daily Fluctuation of Prices of Vegetables and Fruit in Shirbin Market, in L.E per kg .................................................. 556
List of Figures

Figure II.1. The Cooperative Structure in Egypt................................................................. 131

Figure III.1 Administrative Division of Egypt............................................................... 155
Figure III.2 The Nile Delta............................................................................................... 156
Figure III.3 The Governorate of Daqahliyya................................................................. 157
Figure III.4 Cross Section of the Village of Batra.......................................................... 166
Figure III.5 The Village of Batra..................................................................................... 167
Figure III.6 The Location of the Jizah of Batra.............................................................. 168
Figure III.7 Urban Expansion in the Centre of Batra, Sector B........................................ 171
Figure III.8 The Lighting System..................................................................................... 213

Figure IV.1. The Irrigation System on One Feddan.......................................................... 268
Figure IV.2. Barbatkh, the Water Pipe under the Dyke.................................................. 270

Figure VI.1 Crop Distribution in Batra........................................................................... 355
Figure VI.2 Crop Composition in Batra........................................................................... 356
Figure VI.3 Crop Distribution and Composition on Twelve Qirats over Two Years......... 367

Figure VII.1. Crop Rotation Cycle in Sector B............................................................... 410
Figure VII.2. Crop Rotation Cycle in Sector A............................................................... 439
Figure VIII.1. Seasonal Calendar of Agricultural Labour in the Market ............................................................... 496

Figure VIII.2. Seasonal Demand for Agricultural Labour in the Market, above 7,500 workers ................................................................. 497

Figure VIII.3. Seasonal Demand for Agricultural Labour in the Market, below 7,500 workers ................................................................. 498

Figure IX.1. The Marketing Network of Summer Potatoes ................................................................. 544
Note on Transliteration

The transliteration used in this thesis is based on the system of the Library of Congress. It has been adopted in the simplest form; the only diacritical signs used are the 'ayn, represented by ' , such as in 'Ali, and the 'a, represented by ` , like in 'Ahmad.
Note on Exchange Rates, Units of Measures and Weights

£.E 1 = 100 piastres
1969 £.E 1 = Starting 0.24
£.E 1 = U.S. $ 0.40
(According to the official rates in May 1969)

1962 £.E 1 = US. $ 2.30
1975 £.E 1 = US. $ 1.40 unified rate
(Waterbury, 1984:xiii)

1 Feddan = 4,200.8335 m²
1 Feddan = 24 Qirats
1 Qirat = 175.0347 m²
1 Qirat = 24 Sahm
1 Sahm = 7.2931 m²
1 'Ardeh = 150 kg or 198 litre
1 'Ardeh = 12 Kila
1 Kila = 16.92 litre
1 Kanta = 44.90 kg
1 Dariba = 945 kg
1 Shikra = 150 kg
(C.A.P.M.A.S., 1985:301)
**Glossary**

**al-** : A definite article preceding a noun.

`Abbanii : A noun designating the profession of the person who weighs the cotton.

`Aburra : Naval oranges.

`Afir : A method by which the peasants cultivate wheat on dry soil. In general, it refers to a dusty environment.

`Arabah : A unit of weight used for weighing grains. (cf. Note on Exchange Rates, Units of Weights and Measures)

`Ashmuni (`Shamuni`) : A variety of oranges produced in winter. The inside of the fruit is characterised by the red colour. It is also known as Shamuni.

Balari : The broadcast sowing of rice seeds.

Babari : Name given to the employees guarding the main irrigation canals.

Baladi : A noun designating a variety of oranges produced in winter. An adjective designating local.

Barbak : A water pipe fixed under a dyke.

Barsim : Green clover, Trifolium Alexandrinum.

Da`ira (t) : The administration of a large estate, practiced before the agrarian reform laws. (t) designates the genitive case of the noun.

Dariba : A unit of weight for rice. (cf. Note on Exchange Rates, Units of Measures and Weights)
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fernez</td>
<td>A name attributed to the person who grades the cotton.</td>
</tr>
<tr>
<td>Fashita</td>
<td>A gate controlling the quantity of water derived from the irrigation canal.</td>
</tr>
<tr>
<td>Fadlan</td>
<td>A unit of measure for agricultural land. (cf. Note on Exchange Rates, Units of Measures and Weights)</td>
</tr>
<tr>
<td>Fellah</td>
<td>Noun designating the peasants in Egypt. Plural: Fellahen</td>
</tr>
<tr>
<td>Cafaf</td>
<td>The period of drought when the sluice and the gate controlling the irrigation system are closed in winter for cleaning of the irrigation and drainage canals.</td>
</tr>
<tr>
<td>Garuma</td>
<td>Water buffalo.</td>
</tr>
<tr>
<td>Garabiyya (f)</td>
<td>The main sluice on the main irrigation canals. (f) designates the genitive case of the noun.</td>
</tr>
<tr>
<td>Ghabit</td>
<td>A unit of weight representing the quantity carried by a donkey.</td>
</tr>
<tr>
<td>Ghafer</td>
<td>Guardians.</td>
</tr>
<tr>
<td>al-Gizira (land)</td>
<td>The land located on the bank of the Nile. This area has a direct access to water for irrigation from the Nile.</td>
</tr>
<tr>
<td>Hajj</td>
<td>A title attributed to the man who have gone on pilgrimage to Mecca. However, in most cases it is used as an honorary title for old men.</td>
</tr>
<tr>
<td>Himel</td>
<td>A unit of weight representing the quantity carried by a camel.</td>
</tr>
<tr>
<td>Hisna</td>
<td>Noun designating the territory on which the deputies of the mayor exercise their authority.</td>
</tr>
<tr>
<td>Hid</td>
<td>A basin. This word refers to the administrative division of the agricultural land in Egypt. Each basin comprises a large number of faddans, depending on the administrative partition.</td>
</tr>
<tr>
<td>Infitah</td>
<td>The open-door economic policy launched in 1975, by Sadiq.</td>
</tr>
<tr>
<td>Term</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>'Isha</td>
<td>The plural of 'Isha.</td>
</tr>
<tr>
<td>'Isha</td>
<td>A small agglomeration of inhabitants living near the centre of a village. It emerged under the large landownership system, prior to the agrarian reform laws.</td>
</tr>
<tr>
<td>Khith</td>
<td>Large estate owned by the ruler. A form of access to land in the nineteenth century.</td>
</tr>
<tr>
<td>Kantaar</td>
<td>A unit of weight for cotton. (cf. Note on Exchange Rates, Units of Measures and Weights)</td>
</tr>
<tr>
<td>Khafir</td>
<td>A method consisting of leaving a plot of land without cultivation for 20 days, during which it is flooded with water and dried out.</td>
</tr>
<tr>
<td>Khuli</td>
<td>The supervisor of wage labour during the worm campaign of cotton, and the collection of the crop.</td>
</tr>
<tr>
<td>Kila</td>
<td>A unit of volume. (cf. Note on Exchange Rates, Units of Measures and Weights)</td>
</tr>
<tr>
<td>Lavvata</td>
<td>A long wooden trunk pulled by two calves. It is used, after flooding the land with water, to render the plot less porous to retain the water for a long time.</td>
</tr>
<tr>
<td>Mafyafa</td>
<td>The guest room where the mayor receives the visitors of the village.</td>
</tr>
<tr>
<td>al-Maqdis al-Mahali</td>
<td>The local assembly of the village.</td>
</tr>
<tr>
<td>Marva</td>
<td>An irrigation channel surrounding a block of agricultural land constituting part of a basin.</td>
</tr>
<tr>
<td>Mashyyakha (t)</td>
<td>Administrative partition of the village, headed by the deputy of the mayor. (t) designates the genitive case of the noun.</td>
</tr>
<tr>
<td>Mashayikh</td>
<td>Plural of Shikh the deputy of the mayor, or the Headman of the Mosques.</td>
</tr>
<tr>
<td>Mersaf</td>
<td>A drainage canal.</td>
</tr>
<tr>
<td>al-Mawati (land)</td>
<td>This expression designates, in Fezra, the areas that have been cultivated in recent years by the peasants, and</td>
</tr>
</tbody>
</table>
which the government has recognised, officially, as held by those who cultivate it. Similarly, it refers, specifically, to the areas located on the bank of the Nile from which the donkeys transported the unloaded merchandise from the boats to the centre of the village.

Miṣqa : A small irrigation canal on the level of the basin.

Muzara'a : Sharecropping.

Nasirites : The adopte of Nasir's ideology.

Qirat : A unit of measure for agricultural land. (cf. Note on Exchange Rates, Units of Measures and Weights)

Rafī'ah : Sorghum.

Rayy al-De'im : Perennial irrigation system.

Rayy al-Hiyal : Basin irrigation system.

Saqil : A short term rental of agricultural land.

Sahm : A unit of measure for agricultural land. (cf. Note on Exchange Rates, Units of Measures and Weights)

Sanʿiya : A type of water wheel, used for raising water from one level to another.

Safri : Valencia oranges produced in summer.

Shamiyyah : Maize.

Sharshara : A sickle.

Sharqī : A system by which the peasants cultivate the land on dry soil.

Shikh : A title attributed to the head of the Mosques, or the older important figures in the village. Plural: Mashayyikh.

Shirah: A certain quantity of vegetables, which constitutes a unit priced on the market.

Shiyyakha (t): The position of deputy of the mayor in a division of the village. It is synonymous to Maskyyakha. (t) designates the genitive case of the noun.

Sut al-'Arab: The Voice of the Arabs, a radio station broadcasting programs to the Arab World.

Tabui: A type of water vessel, used for raising water from one level to another.

Tabariq: Period during which the water in the Nile is at its lowest level. This period took place in summer and preceded the annual flood.

Taivit: An operation consisting of passing with a lavvata, the wooden trunk pulled by two calves, on a plot of land flooded with water.

al-Tasviq al-Ta'arumi: The Cooperative Marketing.

'Umla: The mayor of the village.

'Umuniyya: The position of the mayor of the village.

'Uqala al-'Uwara: The leading figures of the nation.

Wehur al-Shirba: The irrigation pump of the company. Also 'Am Wehur al-Shirba. This name has been given to the land located around an irrigation pump previously owned by a company for reclaimed land. Literally, it means the land of the company's pump.

Waqf: Land under public endowment.

al-Wihdah al-Mahaliyyah: The local unit at the level of the village.

Zaruq: A small irrigation channel at the level of a small plot of land.
Acknowledgements

I would like to express my gratitude to all those who participated, and contributed to making my research possible. Since this thesis is based on extensive fieldwork, there are many, in the village of Batra and elsewhere, whose help has been invaluable.

I wish to express my gratitude to agricultural engineers Zohair El Far, and Rushdi 'Is-al-'Arab from whom I learned a great deal about agriculture and about Batra. They were always present and supportive during my stay. I am, particularly, indebted to Mahmud 'Abul Sha'ur and his family, for their support, and for the fact that the door of their house was always open to me whenever I was there. I wish to thank Hag 'Abdul Reziq, Hag Humid, Hag 'Abdul Ra'uf, Hag Ibrahim al-'Agami, Hag Sayid 'Alam, and Hag Sidki, for their time and efforts. Furthermore, I am indebted to Babiga and 'Ibr, 'Isat, Muhammad 'Abu Gad, Rushdi al-Netbar and his son, Hag 'Ali al-Hadi, engineer Shabban Raka, and all those who helped me and made my stay fruitful.

I can never thank enough my supervisor, Pameli Giavasis, for his encouragement, his patience, and his efforts over the years. Throughout this work, his critical approach, his advice, and his valuable comments assisted me in formulating this research in its present form. To him I am deeply grateful. The financial support
for this research, during my stay in England, in Batra, and in Cairo was made possible by my parents and my family and, therefore, I owe them all my gratitude. It is their support and their patience in putting up with my moods, that allowed me to continue my studies, and to complete this work.

I wish to thank Christine de Sainte Marie, for commenting on the manuscript and, in particular, for her comments on the technical agricultural aspects. As I am grateful for her encouragement during the last period which permitted me to complete the thesis sooner than expected. Many thanks are also due to Kathy Clavanas, for putting her own Ph.D. thesis, and her experience at my disposal. Her theoretical approach, and her fieldwork in Egypt inspired my own work.

Many friends helped me, and supported me morally throughout my five years of research and writing. I am grateful to Enid Hill who introduced me to the University of Durham, and has since always been available to answer queries and problems. I would like also to thank Erica Ashton who provided me with accommodation in Durham, and who tolerated my ups and downs without complaints. Likewise, many thanks are due to Margaret Bell, Linda Nurse, and Archy from the Department of Sociology and Social Policy in the University of Durham, who were always available whenever I turned to them. To Marie Christine Aulas who always expressed friendly support whenever I turned to her, to Alya Cherif who edited the final copy of the figures, and to all my friends in Durham who made my stay fruitful, I wish to express my thanks. I would like, also, to thank the al-Giḥaz al-Markazi lil-Taḥīṭah al-‘Amah waš-‘Itrā for giving me the time and the facilities needed to conduct my research and the writing of my work. Last but not least, to Nora and Allen Hibbard, who patiently corrected the final copy of the manuscript under adverse conditions, to Cessa Kassam-Drez and Malak Hasham who translated the epigraph from Arabic to English, I extend my thanks.
My familiarity with the village of Batra dates from the early 1950's, when I used
to accompany my parents and my family on vacations. Most of the younger
generation who helped in the present work were the same persons with whom I use
to share my time during my trips to Batra. It is this context which permitted me
to undertake the extensive fieldwork for the research, and to have access to
information on the village.

The research in Batra started in February 1984, when I spent nearly four months
learning the elementary aspects of the administrative system, and the agricultural
operations in the village. During the same period, I was introduced to the markets
for the first time. After that, I returned to Durham where I worked on the initial
material I had gathered, and extensively discussed my outline with my supervisor
in order to prepare for the in-depth study. On my return to Egypt, in 1985, I
spent two years working in Batra. My trips to Batra were for two week periods,
during which time I extensively worked on the basis of observation, and
discussions with many people, I took several trips to the surrounding villages, centres, and cities in the north east of the village. I accompanied village paddlers
during their long days in the market, where I learned a great deal about
marketing, and market relations. Similarly, by visiting the regional markets and
the markets of the cities, I was able to trace the marketing network of crops. It is
through the long days spent in the field with peasants producing in the different parts of the village, that I learned a great deal about the process of agricultural production, its organisation on the level of the household, and the diversity of the relations implied at the level of production. The schematic historical background of Betra, and the information on the socio-political structure of the village were the result of long discussions with the influential figures in the village, and with the older generation who witnessed the transformation that have taken place during the last seventy years.

Many events took place during my stay in Betra which allowed me to understand the dynamics of village society. By no means does it imply that I was part of the village community; I remained an outsider, and my participation took place on a limited scale. I shared in a number of events, I was part of a number of situations, and I participated in a number of debates on specific problems concerning the village. I also shared my personal experience with the friends that accompanied me, and were close to me during my stay. A form of exchange of experiences took place.

As a woman from the city, I was able to approach both women and men. I was able to engage in many debates, concerning personal and family questions, as well as on issues concerning my area of interest, namely the organisation of agricultural production and marketing. Although my focus for this thesis implied constant mobility, I received more help and support than I would have expected from the people in Betra, and in other areas.

The difficulties encountered during the fieldwork were essentially in gathering certain data from governmental institutions. The difficulty lay in their inaccuracy, as in most cases they did not match the reality. Therefore, the contribution of the inhabitants of Betra was indispensable. In fact, the people living in the village, and
working in agriculture, or those who are appointed by the government, are the only ones who know and understand the problems of the community, and who are the best informed about village statistics. Thus, I relied extensively on local information provided by the inhabitants and the government employees in the village, rather than on the aggregate data from the headquarters in the centre or the city.

Given the way in which the fieldwork was gathered—on the basis of observation and participation—the present work is an ethnographic study of the village, in which the relations of production and market relations were traced, and analysed. It is through this kind of approach that the dynamic of rural society can be grasped, and the regional specificity can be understood. Likewise, it is by describing and analysing the prevailing relations among the village community, that the research can overcome the limitations of the generalisations derived from aggregate data and statistics on the rural societies.
PART ONE
CHAPTER I

Research Problem and Theoretical Debates on Agrarian Relations

1. Research Problem

During the last three decades rural Egypt has witnessed a considerable transformation. This has affected the prevailing local structures, and generated a series of diversified complex relationships between the different categories of peasants and merchants, and with the society as a whole. These changes were brought about with the increasing integration of the agricultural sector into the world capitalist market. The state policies, shifting from direct intervention in agricultural production and marketing in the 1950's, to an open-door economic policy in the 1970's and the 1980's, lead to the acceleration of the process of commoditization in rural areas.

Among the changes observed in rural Egypt are the increasing population migration from rural to urban areas and to Arab oil countries, the increasing
involvement of peasants and merchants in the marketing networks through the production of market crops, and the mushrooming of urban features in rural areas, accompanied by considerable forms of economic diversification. However, the small peasant households are being consolidated by local structures and reinforced by state policies. (Glaveas and Glaveas, 1983) (Glaveas and Glaveas, 1989) These changes are largely the result of state policies implemented by local authorities, and mediated through governmental institutions and agents in the villages. Thus the process of commodification, which has characterised rural Egypt, generated a set of external relations at the village level, which effect the local structures, and the course of change.

The present thesis is located within the theoretical debate concerned with the impact of the penetration of capitalist relations in rural societies. The theoretical approach used in the thesis suggests that agrarian relations cannot be understood in isolation of the wider economic and political system, nor can they be examined solely on the basis of aggregate statistics. Therefore, attempts to generalise agrarian relations and their development in a specific socio-economic setting under changing conditions are misleading.

Similarly, the present work is located within the theoretical position arguing that rural societies are not passive recipients to external factors, nor are they submissive to change. Under the expanding process of commoditisation, and under intensive externalisation on national and international levels, rural societies, through their various socio-economic groups, mediate and transform these relations both agricultural and marketing within their existing local structures. Further, the local structures are themselves changed and modified by external factors. Therefore, this thesis argues that it is misleading to consider agrarian change according to a linear model of development. Instead, it suggests that change in rural societies should be viewed as a multi-dimensional process, in which
the local and extra-local structures modify and transform the prevailing relations of production and market relations. In this context, the differentiated structure and the local specificity of a village community should be emphasised and considered within the wider national historical development in order to analyse the nature of the transformation taking place.

Egyptian rural societies are not constituted of one homogeneous class of peasants, but reflect a heterogeneous structure in which the various socio-economic groups interact and adopt different forms of relations for their reproduction and expansion. These comprise a set of non-commodity relations which cannot be understood according to criteria derived from capitalist relations. To a large extent, the processes of commodification and external relations are mediated and transformed on the village level through these non-commodity relations, and in their combination these relations affect policies on the national level, and the existing local structures.

In this context, this thesis will attempt to analyse the nature of socio-economic change taking place in a northern Egyptian village, Betra, under the increasing integration of the Egyptian dependent economy into the world capitalist market. The present work aims to examine the impact of the increasing process of commodification on the local structures of the village community. More specifically, it aims at examining the interaction of both commodity and non-commodity relations and their impact on the local structures, and how, in their turn, they affect the wider system. Thus, the focus will be on the ways by which the various socio-economic groups combine both relations, mediate them and transform them in the village. Further, the present work will study the ways in which both relations constitute the components of the reproduction process of the unit of production and consumption. Thus, commodification will be examined as part and parcel of the reproduction process, and not as an isolated set of relations.
Therefore, this thesis will focus on the various forms of relations and responses to change adopted and occurring at the level of agricultural production and marketing, within the rural setting of Batre exhibiting a differentiated socio-economic structure. These relations and responses bear different significances and meanings depending on the socio-economic position of the groups. Thus economic diversification, which characterises rural Egypt and the village of Batre in particular, comprises and entails complex relations, which translate different meanings for the various groups.

In addition, it will be argued that the development of commodity relations in a specific socio-economic setting, like the village of Batre, does not necessarily dissolve non-commodity relations. Instead non-commodity relations are adopted in their various forms to support commodity relations and modify them in order to promote certain categories, while enabling others to reproduce themselves and survive under harsh economic conditions. Resulting from this combination of commodity and non-commodity relations is an increased form of socio-economic differentiation. Therefore, the regional and village specificities of the local structures of Batre are important factors in determining the nature of the various forms of relations and strategies adopted by the inhabitants.

In this framework, the thesis examines the relationship between the process of agricultural production and the marketing process, with reference to the village of Batre in the north east of the Egyptian Delta. Based on extensive fieldwork undertaken in the village, the organisation of production and the marketing process are examined within the wider context of state economic policies, taking into account the historical development of the Egyptian economy since its incorporation in the world economic system during the nineteenth century.
The study of the relationship between the process of production and marketing requires a detailed examination of the different levels of the agricultural economy, as agricultural production and marketing cannot be understood in isolation of their constituent components. The forms of access to water for irrigation and the forms of access to land are parts of the constituent components of the organisation of the agricultural production. Water and land are natural resources which are used, adapted, and organised according to regional specificity, local requirements of production, and state policies. Under these conditions, access to water and land takes a number of forms, which imply different relations among the peasant producers. Similarly, these resources cannot be exploited without the presence of labour, which undertakes the agricultural operations for production. Likewise, the access to the necessary inputs for agricultural production, also requires access to the market. In other words, the forms of access to water and to land are determined by the organisation of production and by market relations.

The study of the organisation of agricultural production cannot be understood without the examination of the forms of access to water and land on the one hand, and without studying the agricultural labour market which provides the necessary labour force for production, on the other hand. Finally, it is in the level of marketing that the profit from agricultural production is realised. Therefore, the market relations in a specific socio-economic setting cannot be analysed without examining the relations underlying the process of production, and the conditions under which the commodity is produced.

The three levels discussed above constitute the components of the agricultural economy, and produce specific socio-economic relations on the level of production and on the level of marketing. However, it is at the level of the market that accumulation is realised and through market relations that the process of social and economic differentiation takes place. Therefore, the levels of production and of
marketing constitute an entity and must be examined together in order to understand the dominant forms of relations and the social structure they generate in a specific rural society. Thus, given the regional specificity in which agrarian relations take place, and given the variety of forms underlying these relations, the generalisation about the impact of the penetration of capitalism on rural society cannot be valid.

Within the political and economic context of the Egyptian state, the first chapter examines the theoretical debates concerned with the impact of capitalist penetration on rural societies. A number of studies, constituting an Egyptian model, has confirmed the dominance of capitalist relations in rural Egypt, and the proletarianisation of the small peasants. However, this model fails to explain the persistence of the small peasant household, under an economy fully incorporated into the world capitalist market, as these studies are based on aggregate data and statistics. A number of scholars, however, have succeeded in explaining the persistence of the small peasant household within an economy integrated in the capitalist market. These studies were undertaken in various Third World countries, and in advanced industrial societies where similar phenomena were analysed. These studies elaborated an alternative theoretical framework based on the examination of the household economy, on the analysis of the forms of production, and on the combination of the different forms of relations adopted by the various socio-economic groups, in relation to the wider economic system.

In Egypt, recent attempts along similar lines have been undertaken to explain the persistence of the small peasant household economy. These attempts are based on a different conceptualisation of agrarian relations than the one advanced by the prevailing Egyptian model. This alternative theoretical framework focuses on the ways by which the small peasant household persists, survives, and relies extensively, for its production and reproduction, on non-capitalist relations within
the structural limitations of agricultural production. However, this argument is
correlated to an analysis of the relations of production, and was not elaborated with
regards to the level of market relations. Thus, the present study is based on a
framework of analysis extrapolated from the alternative theoretical framework on
rural Egypt. The thesis adopts this framework for the study of the dominant
forms of relations on the level of production and marketing, in Fata, within a
merchant capital economy on the national level. Thus, the adopted theoretical
framework is based on the analysis of the interaction between non-commodity and
commodity relations in a highly monetarised economy, through the study of the
various forms of relations in agricultural production and marketing, for the
analysis of the nature of agrarian transformation.

Within this framework of analysis the second chapter of this thesis focuses on the
prevailing economic and political conditions and the agrarian structure established
on the national scene. The changes of state economic policy, during the 1970's
with the initiation of the liberal, open-door policies, have further increased the
dependency of the Egyptian economy on the world market. This dependency led
to a number of economic crises which affected the agricultural sector in particular
but, in general, led to the establishment of a rentier economy, in which merchant
capital prevails. The dependency of Egypt has its roots in the early nineteenth
century, with its incorporation into the world market. In its different phases of
development, Egypt's dependency was a constant feature, which affected the
agricultural sector. However, this does not suggest that the society is stagnant or
passive. On the contrary, its dynamics are reflected in the forms by which the less
privileged social categories survive, and the ways by which a specific group of the
society is capable of accumulating wealth.

The agrarian structure and state control over the agricultural sector, are discussed
in the same chapter, through the examination of the role of the 'Agricultural
Cooperative" and the "Bank of the Village". The role of each institution, in the village, reflects the political and the economic system adopted by the state, which essentially promotes a certain category of peasants, namely the small peasant merchants, the merchants, and those who can invest in agro-industrial projects on a large scale. The choice of the beneficiaries of the institutions reflects the ability to maintain a certain balance between the village community and the government, for the direct and the indirect extraction of the surplus by the state.

In the context of the theoretical and political framework discussed in the previous chapters, the third chapter presents a detailed description of the village of Betra, and its regional surrounding, within a historical context. The specificity of the territory, which is consequently divided into three distinct sectors, and the diversity of the ecology are important factors determining the forms of relations of production and of marketing. From this description, and through the various social and political institutions the social structure of the village is traced. Thus the role of governmental institutions and agents through which externalisation takes place, are examined in detail, with particular emphasis on the banking system and the role of the agricultural cooperative in Betra. Likewise, the interactions between the various social categories and the government agents are traced. This aims to illustrate the role of the most influential groups in the village in promoting state policies and consolidating their social and economic position.

At this point the thesis deals with the relations of production, within the prevailing local and national conditions. The forms of access to water for irrigation constitute the theme of the fourth chapter. In the context of the diversity of the territory of Betra, the access to water takes a number of forms and organisations, depending on the organisation of production. The various forms of access to water reflect the different means by which the peasants organise themselves without the direct intervention of the state according to their needs and their
abilities. These strategies are comprised of both monetary and non-monetary relations, based on a local flexible form of organisation, which are modified according to changes in government policies.

Similarly, the fifth chapter examines the different forms of access to land in the three sectors of Betra. At this level, the inability of aggregate data to illustrate the social structure of the village based on the size of the ownership is evident. Agreements on access to land take different forms; they can be oral, verbal, and seasonal, or can be officially registered in the forms of ownership, tenancy and sharecropping. They may be monetary or non-monetary agreements. In a historical context, this chapter focuses on the development of the different forms of access to land, which correspond to specific economic conditions. The forms of access to land are largely determined by the ability of the present’s household to mobilise external labourers, and on the availability of unpaid members of the household who can participate in the organisation of production. Thus both forms of relations are adopted and combined. In many cases the forms of access to land are determined by the marketing conditions of agricultural production, and on the internal organisation of the household. Thus, on the basis of the changing production and market relations within the unit of production, reflected in the development of the forms of access to land in Betra, a preliminary categorisation of the various socio-economic groups is derived.

Both chapters six and seven focus on the organisation of agricultural production in Betra. Given the large variety of crops produced in the three sectors of the village, it was not possible to examine them all in one chapter. Thus, the sixth chapter will study the organisation of the production of free cash crops— not directly controlled by the government—in a specific sector of the territory, where the forms of access to water and land have followed a different course than in the other two sectors. A number of forms of organisations are adopted by the present
household in order to minimize cash expenditures during production, through the use of unpaid labour.

The seventh chapter, in its turn, deals with the crops cultivated in the other two sectors where the government's intervention in production was made possible, through the irrigation system. However, an important point that emerges from the two chapters is that whatever the form of organization adopted, the small peasant produces for consumption and for the market, and he relies extensively on unpaid labour whenever it is possible. Diversification on the level of agricultural production takes place, even on the smallest plot. However, it has different significance, depending on the socio-economic position of the producers. It may be either for reducing the losses on the market, or for providing an essential produce for the household consumption, or it may be for both reasons. Similarly, the diversification of agricultural production requires a number of forms of organization, entailing externalisation, monetary and non-monetary relations. Nevertheless, the extent to which diversification takes place on the level of agricultural production is conditioned by ecological factors, by government directives by marketing factors and by the capacity of the producers to organise their process of production on the level of the unit of production in relation with external factors.

The relationship between the level of the organisation of production and the market which mediates the agricultural wage labourers is discussed in chapter eight. Within the seasonal calendar of the agricultural operations required by the cultivated crops, and the sexual division of labour, the fluctuation of the demand, and offer of wage labour is examined. The main characteristic of this market is that it cannot absorb the available number of workers around the year. Thus, the strategies of survival of the households supplying labour are examined, showing their reliance on non-monetary relations for their reproduction, and survival
during the underemployment periods. It also shows the limited possibilities available for agricultural labourers to diversify their economic activities.

In the last chapter of this thesis, market relations are examined through the process of circulation. The different marketing channels, in which the merchants and the peasants from Barra are integrated, are traced through a detailed account of the various relations implied in each channel. Through this account, the extent to which the market level conditions the process of production is discussed. Similarly, the extent to which the different categories of merchants are able to dominate or survive in the market is examined through the analysis of monetary and the non-monetary relations. Thus, it is the capacity of each participant in the marketing network to sell his commodity under the best conditions that determines the profit realised, and his possibilities for accumulating wealth.

Upon examining the ways by which the influential families in Barra acquired their wealth and their social status, it was not surprising to find out that they were mostly involved in the market. It was not through the size of their ownership, or through the relations of production that they made their fortunes. In fact, they are not at the present time the largest owners, but they control the market and dominate the political scene in Barra, through government institutions or through the consensus of the villagers. Their authority is recognised and highly respected, regardless of their official positions. However, the families in power change. Some of them, under certain conditions, gradually lose their position, while others emerge to replace them, but their common factor is their control over market relations through the combination of commodity and non-commodity relations. Resulting from this combination, in its various forms, a process of socio-economic differentiation, through market relations, leads to the emergence of specific groups under specific historical conditions, and the disappearance of other groups. Those groups in power are mostly supported directly and indirectly by the state through
the consolidation of the local structures and the government representatives in the village.

In conclusion, it is hoped that this thesis will make a modest contribution to the current debates on the analysis of agrarian relations, along the line of the alternative theoretical framework discussed above. Although the majority of the present work focuses on the level of agricultural production rather than on market relations, it was indeed necessary, given the limited available literature within this theoretical framework. Therefore, the detailed study of the relations of production were essential for the understanding of market relations in a socio-economic setting such as the village of Baita.

2. Theoretical Debates: The Egyptian
Theoretical Model of Agrarian Relations

It is within the historical context of Egypt's dependency on the world market, and through the various attempts undertaken historically to create a politically and economically independent nation, that a number of studies were undertaken to analyse the social development of Egypt, and especially of the rural society which constitutes the majority of the population. In the last two decades, many interpretations were provided, mostly based on the assumption that capitalist relations dominate the process of agricultural production, yet different conclusions were drawn on its impact on agrarian relations. However, most of this literature failed to explain the persistence of the small peasant households, as the majority of the writers concurred on the assumption that it is being dissolved by capitalism. On the other hand, recent studies have shown evidence to the contrary and have
advanced interpretations explaining the persistence of the small peasant household production in its relation with the wider economic system.

The second section of this chapter will review the various interpretations advanced by the literature on agrarian relations and transformation which have constituted an Egyptian model of analysis. Through a critical study of these interpretations presented recently by a number of scholars, issues around the limitations and the problems underlying this model will be raised. The third section will be devoted to presenting alternative theoretical analytical frameworks formulated in the context of both Third World societies and industrialised countries where the persistence of small peasant households has attracted the attention of sociologists and anthropologists. Having done this, the fourth section will focus on the theoretical framework within which the present study is elaborated, emphasising the reasons behind the choice of this analytical framework which falls within a new attempt to theorise agrarian relations and class transformation in Egypt.

In a critical study by Giannasi and Giannasi entitled *The Sociology of Agrarian Relations in the Middle East: The Persistence of Household Production* (1983), on the literature of agrarian relations in the Middle East, the authors classify these studies into three interrelated categories formulated over the past three decades. The first category is located within the tradition of the "Orientalist/functionalist school", which falls "within the historical context of the colonial encounter and the nationalist struggles for independence" (Giannasi and Giannasi, 1983:3) (Mukhtar, 1985:200). Represented by the work of Father Ayroul (1939), the pioneer in this category, it finds its roots in the functionalist anthropology of the early twentieth century, and regards the rural Middle East societies as static, ahistorical and resistant to change given the cultural and normative values which characterises the social structure of the villages. With such assumptions, these studies consider
change in the village community as resulting only from external forces such as emigration, education, and mass media. (Glavanis and Glavanis, 1983:5-6) But Western influence is seen as the most powerful force generating and provoking change. (Mufid, 1985:200-201)

The 'Ain Shams school, the second category defined by Glavanis and Glavanis, started during the national struggle for independence in the Middle East. With the rise of Arab nationalism and the initiation of state capitalism by Nasir's regime, together with the agrarian reform laws and the restructuring of the agricultural sector, the 'Ain Shams scholars introduced new interpretations of agrarian relations aimed at breaking with the Orientalist/Functionalist studies and supporting Nasir's policies on the basis of a theoretical approach.

Glavanis and Glavanis consider 'Amir to be the first writer who later influenced the 'Ain Shams scholars. In al-and wal Falast, al-mas'alah al-Zira'iyah fi Misr, (The land and the Peasant. The Agrarian Question in Egypt) (1958) the author examines the changes that have occurred in Egyptian agriculture from the nineteenth century to the middle of the twentieth century. Through the study of the officially registered holdings, specifically the size of ownership, and the commercialisation of agricultural crops, he concluded that the transition experienced during this period was from a "feudalist" to a "capitalist" system. (Glavanis and Glavanis, 1983: 10) Glavanis and Glavanis add that the analytical framework of 'Amir is essentially derived from Lenin's study The Development of Capitalism in Russia. This approach was also adopted by scholars such as 'Abbas Hamid Ra'uf and 'Abdel Rahim Mustafa, to name but a few, who established an Egyptian model of rural analysis at 'Ain Shams University. This model, according to the authors:

...attempted to employ a Marxist concept of class, but in practice their definitions were in static numerical terms... Their use of a macro-
historical data in order to discuss agrarian relations of production and the consequent class structure constitutes, in our opinion, the major factor preventing the 'Ain Shams school from elaborating a dynamic class analysis of rural society. (Giavanis and Giavanis, 1983:12)

Furthermore, they accepted the use of Western categories of landownership as the basis for class analysis, while neglecting the dependent position of Egypt in the world market and in the international division of labour. (Giavanis and Giavanis, 1983:12-13) Moreover, given their reliance on aggregate statistics and on the relationship with the market as the indicators of the dominance of a certain mode of production, they tended to ignore the internal dynamics of the rural society and, therefore, change was regarded as resulting from factors external to the community; in which case, as Muterer puts it, Muhammad 'Ali and Nasir were seen as the forces determining change. (Muterer, 1983:201) Despite the contribution of the nationalist approach of the 'Ain Shams school, which provided valuable archival documentation, it cannot be considered as a real break with the Orientalist/functionalist studies as was intended. (Giavanis and Giavanis, 1983:13)

It was not until Muterism was defeated and the limitations of Arab nationalism were revealed after 1967 Arab-Israeli war, together with the failure of state capitalism to achieve independence that a third category of studies attempted to re-analyse agrarian society on new grounds. The new approaches attempted to locate the Middle East society within the international division of labour, were strongly influenced by the Dependency school of Latin America. Giavanis and Giavanis argue that, despite the contribution of the Dependency school in locating the Middle East as a dependent region in the global capitalist economy, the limitations of their approach were felt in many aspects.

Radwan's study Capital Formation in Egyptian Industry and Agriculture, 1882-1887, (1974) provided extensive material derived from aggregate data and statistics of the size of trade relations between Egypt and the world market,
illustrating an economy dependent on cotton cultivation and exports. However, its limitation lies in the fact that it is confined within an 'abstracted empiricism' which prevents him from exploring emerging contradictions within the agrarian sector or highlighting changes in the forces and relations of production. This limitation was also reflected in the work of Abdul Fadil (1975) who attempted to analyse class differentiation on the basis of aggregate data on land holding distribution, and concluded that capitalism dominated agrarian relations and led to the proletarianisation of the peasants. Richards (1982) followed the same path in assuming the dominance of the capitalist mode of production in rural Egypt as a result of the integration of Egypt into the world capitalist market through the accumulation of capital. (Giavasis and Giavasis, 1983:15-17)

It is within this framework, considering the Egyptian agrarian society in the most generalised view, whose internal dynamics in its relations with the society of which it is a constituent part are omitted, that an Egyptian model of analysis was established and produced a concept of capitalism deriving essentially from, and based primarily on, merchant capital and merchant relations.

In a study entitled al-'Uum al-Tarikhyya lil Bar'aliyya al-Mitiiyyah wa Natuurika, (The Historical Foundations of Egyptian Capitalism and its Development), (1974), Mitvali focuses on the historical development of capitalism. The author is concerned with showing how capitalism originated in the agricultural sector through the marketing of cash crops, and the market of land, rather than in the industrial sector as in Europe. He further argues, as Amir does that Egypt experienced a transition from a "feudalist" to a "capitalist" mode of production which distinguishes the Egyptian model from the European one. (Mitvali, 1974: 58) He recognises the dependent position of Egypt as a result of imperialism which, in his opinion, delayed the expansion of capitalism in Egypt.
In his theoretical framework, Mitvali defines the capitalist mode of production on the basis of three criteria: the concentration of large landownerships, the use of wage labour, and the expansion of markets in agricultural land and for agricultural crops. On these premises, he identifies three classes in the rural society prior to 1952: "capitalist aristocracy", which essentially included the merchants and landowners who monopolised the process of circulation, the "middle class", which was constantly defeated by the influx of foreigners in Egypt and which could not compete with them on the market, and "the peasant landless class" which was exploited by the capitalist aristocracy and with which the class struggle took place. (Mitvali, 1974:332-334)

In his efforts to show the development of capitalism in agriculture and to locate the economic dependency of Egypt in the world system, Mitvali focuses only on market relations in land and in agricultural products, on the concentration of landownership, and on the position of wage labour. Thus, he ignores the various forms of access to land in their development, the relations of production they entail, and the relations involved in the process of agricultural production within the various units. Instead of examining the relations and the forces of production, he assumes by definition that the circulation of commodities, of land, and of crops, which leads to the accumulation of capital is an indicator of the dominance of capitalist relations in agrarian society. An incompatible relation, a priori: capitalist relations can only be located in the sphere of production and not in the sphere of circulation or on the level of accumulation, as capitalism in its essence is not limited to monetary exchange but encompasses the process of production which does not exist in the sphere of circulation. Likewise, if he assumes that the use of wage labour is a sufficient criteria to establish capitalist relations, he omits the existence of other forms of labour relations, such as sharecropping.

As a result of this interpretation, Mitvali concludes his study by saying that the
"socialist" path followed by Nasser's regime, which extended capitalism to the industrial sector, was the expected outcome of the historical development of Egypt, as it achieved the two stages needed to reach socialism and, therefore, succeeded in reflecting much of the political ideas and discourses prevalent in the 1960's. (Mitwali, 1974:247,351) Given the limits of this framework, Mitwali can only present a historical account of the development of merchant capital in agrarian society, rather than an analysis of class transformation.

In an attempt to break with the Egyptian model, Nicolas Hopkins, in a recent study entitled "Agrarian Transformation in Egypt" (1988), proposes a new theoretical approach, "the labour process model", which focuses on the changes in the labour organisation under the increasing use of "mechanisation". On the premise that agrarian transition has not yet occurred with the penetration of capitalism, that the process of differentiation as explained by Lenin has not taken place, and that the subsistence-oriented peasant classes to exist as a result of the penetration of the capitalist mode of production, petty commodity production has become the dominant form of production. He places emphasis on the changing role of the household unit of production and consumption under mechanisation.

Based on an inductive analysis, the suggested model studies the social organisation of production within the established division of labour and the relationship between labour and capital. In this relationship, capital refers to machines rather than to land, as was the case in the works of the 'Ain Shams and the Dependence school. (Hopkins, 1988:21-22) The study of the household, according to Hopkins, is important for the understanding of the labour organisation since it acts as a manager of the labour process either by mobilising its own labour or by hiring additional labour. (Hopkins, 1988:23) According to the fieldwork conducted in the village of Masta, in upper Egypt, the majority of the agricultural operations are undertaken by hired labour with an increasing specialisation of skills. This has
been the result of the extensive use of machines, namely the irrigation pumps and the tractors. With these changes, the process of differentiation is seen to be derived from the control of machinery rather than from the concentration of land, and the small farmers and the labourers are subordinated to capital in the form of machinery. In which case, Hopkins argues, the survival of the small farmers and the landless depend largely on the subsidies offered by the state for agricultural inputs, and on migration which "acts as a safety valve". (Hopkins, 1988:189)

He concludes by saying that the agrarian transformation in the village does not imply an extreme form of class differentiation but includes a wide range of socio-economic positions, and the proletarianisation in Musta is masked and does not correspond to a specific model. (Hopkins, 1988:189) However, the nature of the change, once the process of mechanisation is completed, i.e. with the expansion of more labour-saving machinery, will be a concentration of the resources in the hands of small enterprises. (Hopkins, 1988:190-191)

The model advanced by Hopkins has a number of problems, which become apparent once it is subject to empirical investigation. In his attempt to focus on the changes of the labour organisation, Hopkins does not provide any substantial information on the different forms of access to land; he is content to distinguish between large ownership, small ownership, and tenancy, although he briefly indicates the existence of a non-registered form of access to land, which he calls "illegal" rent. (Hopkins, 1988:122) It should be noted that the fieldwork study indicates the existence of a variety of crops in addition to wheat and cotton on which he based his assumptions concerning the labour requirements and the use of machinery. (Hopkins, 1988:30-31) Despite this fact, the author does not refer to the different labour organisations and requirements of these crops over the year. Nor does his classification of peasant into landless, small holders, and capitalist farmers show how the small farmers coordinate their production and their crop
rotation cycle according to market forces, to state policies, and to their needs for consumption, since cotton and wheat— the only mentioned crops—are cultivated every two or three years, and only wheat is consumable. (Hopkins, 1988:64,65,76-80) Given the choice of the crops and given the focus on certain forms of access to land, Hopkins fails to show the various relations implied in the forms of access to land, and in agricultural production. Instead, he focuses on one aspect of the relations of production from which emerges a number of problems: the use of hired labour as a result of mechanisation. (Hopkins, 1988:131)

It is misleading to regard the use of irrigation pumps as elevatory machinery and the use of tractors for certain crops and for specific operations as a process of mechanisation. In our view, mechanisation of agricultural production is the control of production through machinery by reducing the use of labour to the minimum while controlling the quality and the quantity of the final product. The use of the mentioned machinery does not achieve any of these ends. Instead, as de Sainte Marie (1987) has pointed out, the rapid use of machinery does not necessarily change the labour organisation of production given the adaptive ways in which these machines can be used; however, the “motorisation” of certain agricultural operations increases the use of labour during a short period of time which in its turn allows the peasants to divert their economic activities towards migration, cattle raising, or other activities that increase the incomes of the small peasant household. (de Sainte Marie, 1987:180)

Although Hopkins does not disagree with this interpretation, he advances that access to machinery has increased the socio-economic differentiation of peasants by consolidating the power of the capitalist farmers and the labour coordinators, hence the subordination of the labourers to capital. (Hopkins, 1988:25,97,189) Therefore, survival strategies of small peasants are seen to take place under external forces such as government subsidies and migration.
(Hopkins, 1983:132,189) On the other hand, although Hopkins recognizes the limited information gathered on household organization, he clearly separates between the external household activities and the internal ones, a dichotomy that obscures the understanding of survival strategies and the participation of women in the reproduction of labour, as her role is confined inside the house. (Hopkins, 1983:140,184-185) While, in fact, most of the household operations are done inside the house and in cooperation with other households through the strong participation of women. (Hopkins, 1983:25-26) Therefore, Hopkins totally missed the important role of unremunerated labour and cooperation in which women occupy an important position. Therefore, the limited data and information collected to examine the labour process does not elucidate the relations encompassed in both the processes of production and marketing of crops under various conditions, nor can it explain how wage labour is reproduced, or how non-wage labour relations are organized in the household.

Finally, it is difficult to distinguish between this "new model" and the decomposition theory of peasants, since Hopkins's arguments imply that the process of transformation is the result of external forces, and that the survival of small farmers and labourers is also a result of external forces. In which case, rural society is seen as a passive recipient to the wider economic system, and the household is regarded as an isolated unit in which, of course, women are totally subordinated. Thus, the author's assumptions imply that the use of machinery, which increases the use of wage labour, is an indicator of the penetration of capitalist relations of production into agriculture, which ultimately will dissolve the small peasants group, which is regarded, meanwhile, as a wage labour equivalent.

From the above review it seems that Hopkins failed to offer a new interpretation of agrarian relations in Mutha, however, one should add that he did stress the
regional diversity of the entire Egyptian rural society, which means that his conclusions are only applicable to the area in question and cannot be generalised on the Egyptian rural society. (Hopkins, 1988:26) Nevertheless, his model can hardly be regarded as new, given the debatable premises on which he based his arguments, in particular, the definition of mechanisation. The lack of information collected on the forms of access to land, on the agricultural operations implied in the various cultivations, on the household economy and on the role of women, has prevented him from questioning his established theoretical categories and thus led him to fail within the analysis of the Egyptian model.

Commenting on the Egyptian model in general and on the Dependency school specifically, Giavanis and Giavanis argue that in its attempt to locate capitalism in agrarian relations the dependency school neglects to consider the household unit of production and consumption. The authors point to the fact that this line of analysis implies "that diversification is subsumed by the logic of the expanding capitalist relations and therefore the specific peasant responses to capitalism are denied any analytical significance". (Giavanis and Giavanis, 1983:18) In fact, this limitation results from a previous theoretical assumption that is not confirmed by the existing social relations. In other words, the dependency theory failed to explain the reason for the persistence of small peasant forms of production. The authors conclude that the Dependency school also fails to offer a new theoretical analytical framework of Middle East studies that would break with the Orientalist/functionalist studies and surpass the limits of the 'Ain Shams school.

In his discussion of the work of Giavanis and Giavanis, Mukhtar concurs with the basic arguments of the authors, and stresses the necessity of interpreting reality on the basis of fieldwork studies, in which aggregate statistics would be used as a secondary source, "instead of reading reality from a theoretical construction whose validity has been established previously". (Mukhtar, 1986: 207)
The critical position adopted by Giavasis and Giavasis concerning the studies of agrarian transformation and their formulation of an alternative analytical framework provoked a number of critical reactions. The critiques were advanced by scholars who support the opposite position and argue that the capitalist mode of production dissolves, in the course of its development, non-capitalist relations and during this transitional phase small peasants are considered as wage labour equivalents. This position was expressed by David Seddon in a critical study of Giavasis and Giavasis's work. He argued at first that non-capitalist relations and forms of production need to be located within a wider context of the capitalist system in which class relations represent a basis for the analysis of agrarian relations. (Seddon, 1985:164)

However, where their positions diverge is on the emphasis of Giavasis and Giavasis on the central role of peasant non-capitalist relations and forms of production as exemplifying "the specific 'responses' of 'the peasantry' to capitalist penetration and domination". (Seddon, 1985:164-165) Seddon refers to their analysis as being a "peasantist populist" approach, relying heavily on a model in which "peasant... economy represents a distinct 'form' of production with its own distinctive 'logic', realized through a particular unit... [the household]; the logic involved is that of simple reproduction". (Seddon, 1985:165-165) In which case, the focus on "persistence" rather than on "transformation", and "viability" rather than on "dissolution" implies that class relations are located in the sphere of exchange, and thus differentiation becomes determined from external forces. (Seddon, 1985:165-167) Finally, he adds that their position is "connected to a populist political rhetoric" which justifies populism. (Seddon, 1985:169)

Elaborating on their analytical framework in a response to Seddon's critique, Giavasis and Giavasis emphasize the need to consider the specificity of agricultural
production as distinct from industrial production, together with the internal
dynamics of non-capitalist forms of production and their role in the contemporary
capitalist economies. (Glaveas, 1985:179) The work of H. Friedmann was
inspiring in their attempt to do so, and the authors argue that she establishes a clear
distinction between modes of production and forms of production and advances
that the forms of production are more variable and transitory than the modes of
production.

Friedmann considers the simple commodity production of farming in
industrialised societies as a non-capitalist form of production with an internal logic
in which the division of labour is based on gender and kinship in the absence of
capitalist class relations. (Glaveas, 1985:180) According to Glaveas and Glaveas,
his weakest point lies in her construction of the relationship between the two, in
which simple commodity production implies that all its external relations are in the
form of commodity relations, an assumption which excludes the possible existence
of non-commodity relations between enterprises under the wider capitalist
economy. (Glaveas, 1985:181-182)

In a response to Scudder's critique on their use of autonomous categories, such as
the household economy, which, he claims, give privilege to theoretical status, they
reply in the following terms:

it is specifically the class position of the small peasant producers,
embedded in the particularity of the transformation experienced by the
Egyptian social formation, which determines the centrality of the
household as a unit within which non-remunerated labour is
organized. (Glaveas and Glaveas, 1985:192)

They maintain that Scudder's approach did not offer a break with the established
categories derived from the capitalist mode of production, and therefore could not
explain the persistence of non-capitalist forms and relations, nor did it offer a
clear class position of the peasants in question. Finally, they emphasize the need for empirical investigations for the rural Middle East for the elaboration of new categories which would break with the established ones, which have failed to grasp the specificity of class relations in different contexts and to bring about political transformation. (Glavanis and Glavanis, 1985:193-195)

From the above discussion two main theoretical approaches define the debate regarding the effects of capitalist penetration into agrarian relations. The first approach, represented by the Egyptian model, was further elaborated on in David Saldan’s work, which considers that non-capitalist relations are subsumed by the capitalist mode of production and are in the process of being decomposed. This line of interpretation examines the process of transformation through categories derived from capitalism, namely, the use of wage labour as the first step towards the proletarianization of peasants given the incapacity of the small peasant enterprise to resist capitalist penetration.

The second approach, represented by the work of Glavanis and Glavanis and the position of Muthair, focuses on the persistence of certain forms of relations referred to as non-capitalist since they comply with a different logic than that entailed in capitalist relations. These relations, as will be shown in the course of this study, follow a different type of division of labour and forms of access to land. As will be argued in this chapter, the organization of the household is adapted to meet the economic requirements of the family under the capitalist mode of production. H. Friedmann’s concept is important in this line as her work on North American farmers is concerned with these issues.

Therefore, debates on whether capitalism dissolves or does not dissolve non-capitalist relations of production, and the debates on the interpretation of the persistence of these relations have not been resolved, nor have they been confined
to Middle Eastern rural societies. Sociologists and anthropologists attempted to
raise these questions and to formulate theoretical alternatives for the understanding
of this issue in Third World countries and in industrially advanced societies where
similar phenomena occur. Several key theoretical concepts were developed and
became the subject of controversy, such as commodification, externalisation, non-
commodity relations, simple commodity production, the informal sector, the
production and the reproduction process, and the household unit. Taken in their
totality, these concepts were formulated with the objective of understanding the
persistance of certain forms of relations under the capitalist mode of production.
These relations were described, in some cases, as reminiscent of the past and, in
others, as newly introduced strategies, or as both.

Therefore, it is necessary to present the theoretical framework of the above
mentioned concepts in both Third World countries and in industrially advanced
ones, in order to understand the two sides of the debate and to examine the
relevance of these concepts to the analysis of the Egyptian agrarian relations.

3. The Alternative Theoretical Framework in
Third World and Advanced Industrial Countries

In a critical review of the theories on rural development, Long advances that rural
societies reflect a variety of "traditional non-capitalist and newly emergent
capitalist forms of organization" which cannot be understood in isolation of the
wider socio-economic structure, or in terms of categories constructed on models
derived from Western economic development. (Long, 1977:2) The modernisation
and the dependency theories are illustrative examples of such a limitation. Both, in
different ways, identify two sectors: the modern and the traditional, the industrial and the agricultural, or the centre and the periphery, in which the development of the second depends on the transfer of technology or social and cultural skills from the first. Such an interpretation assumes a priori that the development of all societies follows the same path and that change is the result of external forces. (Long, 1977:28, 39-40, 185)

Given the definition of capitalism associated with commodity exchanges rather than production relations, the dependency theory, Long adds, rejects the possibility of the co-existence of capitalist and non-capitalist relations. (Long, 1977:86) Thus, the study of the relation between the local level and the wider system, through the examination of the relations of production and circulation, would highlight the differentiation and the multi-structures of rural societies, and thus show that the rural community is not a homogeneous passive class. (Long, 1977:104, 187)

The commodification theory, in its turn, is concerned with the impact of the increasing integration of farming enterprises and households into the world capitalist economy. (Long & Others, 1986:1-2) Resulting from this integration is that the reproduction of the household becomes closely tied to market transformation, and gradually it is unable to meet the needs for consumption without having recourse to commodity exchanges. (Long, 1986:10) Therefore, the commodification theory, postulates the destruction of the present forms of production and the development of an agrarian bourgeoisie and a rural proletariat.

In this context, and as Saidian suggests, non-capitalist relations, such as non-wage labour and household organisation, are seen as a transitional phase that will eventually disappear with the domination of capitalist relations. (Long, 1984:1) Bernstein argues, as Friedmann does, that the process of commoditisation leads to an increased form of socio-economic differentiation among peasant farmers, as
well as an increased form of individualisation in the production and reproduction processes of the household. However, they recognise the differences in the types of peasantry, as well as in regional and national conditions. (Long, 1985:10-11,15-16) Similarly, de Janvry argues that the problems of agricultural production and rural poverty can only be understood in terms of the nature of class structure of peripheral economies, and the process of capital accumulation within the historical development of capitalism. (Long, 1985:109)

According to Long, the commodification theory developed as a reaction to the Leninist differentiation model, but, as Glavanis and Glavanis have pointed out, it is based on a certain reading of the works of Lenin and Kautsky. It sees the transformation of rural societies in a quasi-linear path, in which external forces (mechanisation and commercialisation) lead to economic and social differentiation, creating a class of rural proletariat and a class of rural entrepreneur. (Long & Other, 1986:1-2)

The commodification theory was also a response to the Chayanovian peasant approach which emphasised the role of the internal logic of peasant forms of organisation in resisting capitalist penetration; hence the persistence of the small peasant enterprises. This internal logic is maintained by capitalism as it proved to be "functional" for its operation. Thus, the peasant approach focuses on the domination of the household's internal organisation rather than on the overall external forces which generate change. (Long, 1984:1,3-4) (Long & Others, 1985:1-2)

Both the peasant and commodification approaches regard differently the process of economic diversification. The first focuses on the various forms of access to land and the relations implied in it, and thus regards off-farm work as a supplementary source of income. However, Long adds that despite the
contribution of this approach to the consideration of such aspects as the internal
dynamics of the household and the division of labour, it fails to regard external
forces as influential factors in the process of change. On the other hand, the
commoditisation approach regards small holders as a vulnerable unit of production
that cannot face external forces. (Long, 1984:5-6)

A number of authors have criticised the commoditisation theory on the grounds
that it views rural societies, in their various categories as passive recipients to the
process of commoditisation. Thus they exclude its internal dynamic, and its active
role in the process of change. Such an analysis leads to a linear view of agrarian
change, and develops a general model of capitalist expansion that cannot give
account of the different responses of the society to the process of commoditisation.
Finally, they add that it does not examine the intermediate structures that mediate
between the farmer or the entrepreneur and the wider economic structure and
institutional environment in which he is embedded. (Long, 1984:179-180) (Long &

Both van der Ploeg and Vandergaast add that the commoditisation model is a
deductive form of theory which develops ideal types such as simple commodity
production or capitalism, and therefore fails "...to allow for a program of practice
which might have led to a self-correcting dialectic of theory and practice."
(Vandergaast, 1988:3) (van der Ploeg, 1985:26-27)

According to Vandergaast the history of commodity theory was distorted by the
reaction to the modernisation of liberal social theory, which identified itself with
the state and its development programmes. (Vandergaast, 1988:25) In this context,
the state intervention programmes elaborated by the capital model (the
commoditisation theory) failed "...to consider the interests and strategies of the
State managers in the formulation and for implementation of policy." (Long,
1988:131) Thus, it does not differentiate between the 'imperatives' and the 'actualities' of capitalist development in different social contexts. (Long & van der Ploeg, 1988:24) On the other hand, the incorporation model focuses upon the impact of the various rural institutions serving the farmers which integrate them into the wider administrative system. The incorporation is achieved through three processes; the externalisation process through which production becomes tied to external bodies to the community, the scientification process through which the state achieves an increasing form of centralisation in the agrarian sector, and the centralisation process which coordinates the interrelations between the various institutions. (Long, 1988:130-131) Long argues that both the commoditisation and the incorporation approaches failed to analyse the nature of the relations between the state and local groups, and the peasant community is viewed as passive in the face of external forces. (Long, 1988:117-118) He further argues that the incorporation model depicts general trends within the society instead of isolating them, and, therefore, cannot give account for differences in the process of incorporation. (Long & van der Ploeg, 1988:240-241)

In an attempt to suggest an alternative theoretical approach for the analysis of agrarian change, Vanderveest argues that there are different, historically contingent principles which can only be investigated empirically, and that:

Transformation in the political and cultural dimensions cannot be separated from the process of commoditization in the economic dimension, and should be analyzed as part and parcel of the overall process, without reducing it to one dimension or another. (Vanderveest, 1988:24)

The theoretical alternative suggested by the author is based on the integration of the commoditisation and incorporation models to evolve a renewal form of the commoditisation theory, in which theory and practice can be brought together in a dialectical way. (Vanderveest, 1988:24)
Although the critical positions of Long and van der Ploeg are shared to a large extent by the author, they argue that the renewal of the commodification theory requires the development of a comparative research which explains the differential patterns of farm development and commodification within specific agrarian societies. They argue that the structural-historical approach adopted by the commodification theory lacks an actor-oriented perspective which would analyse the dynamic of the interrelations between commoditised and non-commoditised relationships, and the central role played by non-wage labour in peasant and simple commodity enterprises. (Long, 1984b:177, 180) (Long, 1986a:23)

In an attempt to suggest an alternative theoretical approach to the sociology of rural development, Long and van der Ploeg formulated an agenda for research comprising four areas of study:

a) the analysis of agrarian transitions,
b) the study of the impact and implementation of development policy,
c) the study of household livelihood strategies and rural enterprises,
d) the sociology of agricultural production and knowledge systems. (Long & van der Ploeg, 1988:35)

This agenda involves a number of concepts which are necessary for such an analysis. One of the key concepts is agricultural development, which the authors define as being multi-dimensional comprising of different sets of social forces originating from international, national, regional and local areas. When using this concept, the authors aimed to isolate the factors responsible for the differential processes observed. Likewise, the study of the agrarian structure is necessary in order to specify and categorise the different types of agricultural development patterns, and the interaction between different sectors. Thus regional structure becomes an important notion for the understanding of regional socio-economic and
political structures, since development programmes are undertaken on regional and local levels. This leads to the importance of developing a state concept in order to study the ways in which development programmes attempt to control the society. (Long & van der Ploeg, 1988:37)

In this context, Long argues that it is necessary to examine and theorise the sets of relationships developing between intervening agencies and local groups in order to explain the emerging differences within a farming population and between contrasting agrarian situations. Such an approach would permit the determination of the degree of capital subsumption or institutional control established by the state or external institutions regarding different categories of farmers. It is based on an actor-oriented perspective which emphasises the differential responses of peasants to change, and the significance of the analysis of human agency. (Long, 1984b:180) (Long, 1985a:19) (Long & van der Ploeg, 1988:31-34) In this way, the process of change is seen as a multi-dimensional process which depends upon historical conjuncture, and in which the farmers and the peasants are active participants. (Long, 1984a:7-8) (Long, 1988:118-119,121,132) The author further argues that:

...an actor perspective aims to bring out the significance of building into the analysis some account of 'human agency'. This ... entails both the idea of individuals or groups developing social strategies ... and that of emergent organizational forms that may acquire their own dynamics and thus shape future forms. (Long, 1988:132)

In addition to the above is the consideration of the intermediate level structures, and organised 'interface' structures, that constitute the regular modes of interaction between the farmers, and the public authorities. The author argues that the interface analysis focuses on the relationships developing between the interacting parties, rather than individuals; thus, identifying the various social groups, and illustrating the factors responsible for conflicts and incompatibilities
between these parties. It also examines the concrete nature of the relationship between the peasants and the state in particular regional settings, in which the intervention is modified and transformed through the processes of local and extra-local structures. Thus, the state is perceived as being constituted of multiple, conflicting interests and groups. (Long, 1988:121-122,123).

Long and van der Ploeg emphasise the necessity of examining how commodity and non-commodity relations are combined in the various types of units of production identified in a specific community. This would be achieved through the study of the units of production exhibiting peasant and pre-capitalist features in order to identify the nature of the operational units within which individuals or social groups make decisions regarding livelihood and labour. It should focus on the relations implied in the various forms of access to land, in non-agricultural activities, and in the division of labour within the various types of households and strata. Thus, the forms of access to land of the households would highlight the different relations involved, and would explain the dimension of the roles played by agricultural activities in the household economy.

Such a study would also focus on the various forms of exchange and cooperation between households, as their persistence would highlight the reproduction process of the household. Long adds that the forms of cooperation are multi-dimensional in the sense that they increase the process of socio-economic differentiation. The social and cultural contexts in which non-capitalist forms take place, and the ideological and cultural dimensions in the process of commoditisation are important aspects that should be closely considered, as their significance differs depending on the context. These aspects should be closely examined in order to avoid the use of generalised assumptions that might not be supported by both the local structure and the wider system. (Long, 1984a:6-8,14) (Long, 1984b:177,180) (Long & Others, 1985:2-3) (Long, 1986a:18,21,23) (Long, 1985b:78) (van der
Similarly, the process of externalisation through which commodity relations are generated in a number of different forms is an important aspect in understanding change in rural societies. The various external relations established between the peasants or the farmers and the different economic institutions affect agricultural production and reshape the process of reproduction. (van der Ploeg, 1983:31, 33) (Long & van der Ploeg, 1989:241-242)

Likewise, the effects of commoditisation are reshaped by the local non-commoditised institutions and cultural forms. (Long, 1985a:20-21) Thus, the processes of externalisation and commodity relations must be examined and analysed in their interrelation with non-commoditised relationships in order to illustrate the differential responses to change. (Long, 1984a:16-17) (Long, 1984b:177, 180) (Long, 1985a:23) (Long & van der Ploeg, 37-39) From this it is clear that the local structures play an important role in determining the significance and the degree of commoditisation in the community. Therefore, the increasing integration of rural societies into the world capitalist market does not necessarily imply that commodity relations do or will prevail. As Long puts it:

non-capitalist institutions act to restructure the monetary elements introduced into the system, and so long as peasants retain a relatively independent basis for the operation of their economic affairs, these capitalist relations and principles will not necessarily prevail. (Long, 1985a:20)

In conclusion, the author suggests an actor-oriented approach for the analysis of agrarian change which considers intervention as a "multiple reality" constituted of different cultural perceptions and social interests in which there are current political and social conflicts between the social actors involved. (Long & van der Ploeg, 1989:226) Therefore, the heterogeneity which emerges as the logical accompaniment of commoditisation and institutionalisation requires
Long’s theoretical perspective offers a series of key concepts relevant for the study of agrarian change in Egypt, as commodification has been an accelerated process in rural Egypt. His emphasis on the necessity for studying the processes through which commodification takes place is an important element in determining the degree and the ways in which commodity relations affect local structures. Thus, the process of externalisation through which commodity relations are mediated becomes a key concept for the understanding of how commodity relations affect agricultural production, and are reshaped themselves by local structures. This means that commodification and externalisation must be examined in their interrelation with the non-commodity relations adopted, and elaborated by the various households. Within this framework of analysis, the differential responses of rural societies to change can be examined and the role played by the various agents and mediators in expanding commodity relations can be grasped. Equally important is the detailed study of the various non-commodity relations adopted by the different socio-economic groups identified in the society. Non-commodity relations take a variety of multiple forms, and in their interrelation with commodity relations, they are the constituent part of the reproduction process of the unit of consumption and production. In this context, the differential responses to change can be depicted, the dynamics of the household can be grasped, and the heterogeneous character of rural society can be illustrated. Thus, the process of change can be viewed as multi-dimensional and not subject to a linear or a
Within the same critical position of the prevailing theoretical models on agrarian transition, Wood argues that the studies of population movements lack a comprehensive framework for the analysis of internal migration. The author criticises the structuralist analysis on rural migration on the premises that it is a reductionistic approach which treats population movements strictly as a class phenomenon within an analysis of the overall political economy, and thus ignores the behaviour of the individual (Wood, 1981:338) Wood suggests a definition of the household in which the family is and the unit of production and reproduction can be distinguished in order to analyse the behaviour of the members of the unit in their interaction with their environment and the external conditions:

The household can be defined as a group that ensures its maintenance and reproduction by generating and disposing of a collective income fund. ... As such, the household is differentiated from but not exclusive of the family, co-resident dwelling groups, and kinship structures. ... The dynamic character of household behaviour can be conceptualised as a series of "sustenance strategies" by which the household actively strives to achieve a fit between its consumption necessities, the labor power at its disposal, ..., and the alternatives for generating monetary and non-monetary income. (Wood, 1981:339)

As an alternative analytical framework, Wood suggests that rural migration should be conceptualised within context of the dynamic interaction between the present household and the constraints imposed by the socio-economic, political and environmental conditions. (Wood, 1981:339-342) He further suggests that the impact of these constraints should be studied through the analysis of the relations of production entailed in the economic activities of the household unit. Thus, the various strategies of survival adopted by the household to meet its needs for consumption, through the mobilisation of the available labour power and through monetary and non-monetary relations, reflect its dynamic character (Wood,
The author concludes by saying that:

Geographic mobility is viewed as a part of the adaptive strategy formulated in response to changing structural constraints. Yet the sustainable strategies of the household level can also affect the pace and the direction of changes in the structure of the larger of which the unit is part. (Wood, 1981:3340)

The contribution of Aydin's work on rural Turkey provides, also, a theoretical approach along the same lines of Long and Giavanis and Giavanis, corroborated by an empirical investigation of agrarian relations in two villages in Anatolia. (Aydin, 1985) He examines the role of the small peasant household economy within two interrelated levels: the dependent position of the Turkish economy in the world market, and the unequal distribution of the means of production expressed by the regional inequalities. (Aydin, 1986:44-45)

The author argues that despite the integration of Turkey into the world capitalist market, non-capitalist relations persist, some of which are reminiscent of the past and subject to a specific kind of calculation. These forms have been supported by the state policy for the extraction of the surplus from the small peasant household, which remains the basic unit of production. Adaptive strategies to capital accumulation requirements have been adopted by these units of production and their capacity to survive is the result of the division of labour among the members of the household. Economic and social differentiation have been increased through market relations and the small peasants are compelled to seek supplementary income through economic diversification. However, this by no means implies that peasants have been proletarianised, nor that they are in the process of being proletarianised. At this point, Aydin suggests that the concept of "labour formal subsumption" by capital is relevant, since it implies that capital can achieve effective control over the production process without undertaking its immediate organisation or dispossessing the direct producers. Under this assumption, the
focus is on the relationship between family-based household production and the activities of the different forms of capital, rather than on the proletarianization of the peasant by capitalism. (Aydin, 1985:256-257)

In advanced industrial societies, the persistence of non-capitalist relations and small farmer enterprises has attracted the attention of many researchers. The capacity of the small farmers to coexist with large scale farms and to cope with state policies has been the subject of debate. Among the images presented of peasants is their apparent irrationality and their maladjustment to state policies which take advantage of them. Far from being agreed upon, these images and arguments have been challenged by a number of studies expressing different theoretical positions. (Cox and others, 1985:5) Cox, Love and Winter, for example, emphasize the need to formulate a model that would allow a dynamic and cyclical analysis of farmers rather than a linear one. In which case, agricultural producers would not be presented as passive recipients of policy, but rather as an organized group which exercises influence on state policies among others. This argument can be examined through an empirical investigation of the survival strategies of farmers. (Cox and others, 1985:7)

Friedman's work, too, has shown concern regarding the persistence of family farming in advanced societies as previously mentioned. She developed the concept of simple commodity production referring to the market-oriented producers who depend on family unpaid labour. A category distinct from subsistence and from capitalist production, it is based on the dominance of commodity production and the use of unpaid labour. This concept has been central to the formulation of Gladwin and Gladwin's theoretical framework, which falls within an attempt to reconceptualize the analysis of agrarian relations in the Middle East. Given its relevance to the present study, and given the fact that she raises similar issues with regard to advanced societies, it would be useful to elaborate on the various aspects
of her work through a critical analysis of this concept and through her responses to support her theoretical position.

In their critique of the concept of simple commodity production, David Goodman and Michael Redclift, examine its validity under capitalism and within an attempt to theorise the relationship between technology and the rural labour process in Western industrialised countries. They argue that Friedmann attempts to create an ideal category, constructed on the exclusive use of family labour resources, but, which proves limited once confronted with empirical evidences. Her weak points revolve around three issues: wage labour, the nature of surplus production, and class relations. (Goodman and Redclift, 1985:20,24-25)

They argue that capitalist class relations are obscured in Friedmann's analysis because she focuses only on family labour, while in their approach they give priority to the role of wage labour in the reproduction of the household during its demographic cycle, through which class relations are implied when the separation between ownership and labour is achieved and the extraction of the surplus value takes place. Thus, the concept of simple commodity production as a theoretical category becomes a historically contingent variable phenomenon in the course of capitalist development. (Goodman and Redclift, 1985:25-29) Thus, instead of focusing on the survival of the labour-based family farm under capitalism, the focus would be on the capacity of capital to change the production process within the objective limits. In their conclusion, the authors argue that the process of capital penetration has been obscured by a powerful ideology which regards the unit of production as unchanged. They add that Friedmann's theoretical framework, as well as theirs, fails to include this dimension in the analysis. (Goodman and Redclift, 1985:35)

In her response to this critical position, Friedmann stresses the need to distinguish
between the various forms of agriculture, such as production for consumption, part-time farming, simple commodity production, and capitalist production. These various forms, she argues, cannot be regarded as a temporal chronology deriving their unity from labour. Therefore, it would be misleading to consider the impact of capitalist penetration in agriculture in one direction, capital produces a specific use-value structure and restructures the forms of production in relation to complex and changing determinants of profitability. This can lead, in certain cases, to the formal or to the real subsumption of labour, in others, it may relate to other forms of production such as the family farm.

Her point of departure starts by distinguishing industrialisation from the development of capitalism, and by rejecting the specificity attributed to agriculture, under capitalism and the established opposition between industry and agriculture, since it assumes a conceptual unity of each. Instead, she focuses on how capital organises the process of production which involves specific social relations within, across, and among enterprises. (Friedmann, 1985:41-44) In this perspective the specificity of the family farm lies in the organisation of the labour process through kinship and in the combination of property relations with labour. Inequality in ownership and in the participation of work is based on gender and age relations governed by the family rules. In this sense, wage labour is not a specific characteristic of the family farm in capitalist economies. Therefore, "as long as labour and property are combined, through the owner continuing to work in production, a transition has not yet occurred". (Friedmann, 1985:46-47)

In her analysis of the family farm in capitalist economies, she argues that the family farm has consumption and investment needs in contrast to capitalist enterprises, since there is no structural division between profit and wages. As such, the family farm is highly flexible under market forces, to the extent that under severe economic conditions it may have recourse to "self-exploitation" in a
CHAPTER VI

Chayanovian sense. (Friedmann, 1986:48) Furthermore, given the plurality of roles acquired by the members of the family, it is difficult to trace the calculation of the household economy. An illustrative example of this is the role of woman as mother, as manager of the household, and as worker in the family enterprise, which she assumes according to the internal and the external conditions she faces in everyday life. However, the division of labour also implies off-farm work which allows the survival of the household. (Friedmann, 1986:48-50)

In the case of a shortage of labour, due to the mobility of the members of the family or to the size of the property that cannot be exploited by the members only, cooperation between the households becomes an alternative, as in the Canadian and the American cases. Yet, a distinction should be established between the forms of family cooperation, and the cooperative institutions governed by juridical restrictions, such as the French cooperatives referred to as "les grandes nœbulees", since they are difficult to distinguish from the capitalist enterprise. (Friedmann, 1986:52) Friedmann argues that:

co-operation exposes the structural political uniqueness of family farms... One of its dimensions derives from demography and family sociology... The other is [from] the theory of value to interpret the division of labour. (Friedmann, 1986:53)

She finally concludes that simple commodity production is a key concept which refers to the contradictory unity of property and labour in an economy of generalised commodity circulation. Its purest form cannot be found just as the purest form of proletariat is not found. She adds that its historical contingency bears a double sense. Like capitalist enterprises it is specific to the modern epoch, but unlike capitalist enterprises it need not even exist within the capitalist epoch. (Friedmann, 1986:52-53)
Friedmann's argument on advanced societies is relevant in many respects to the present study, and will be further elaborated on at the end of this section. It is sufficient to mention, at this point, a number of issues that constitute the main frame of our interest. Her stress on the fact that capitalist penetration into agrarian relations cannot be regarded as occurring in a unilateral direction is important as it allows a definition of the outcome on the basis of empirical investigation. The focus on the organisation of the family farm is essential for a grasp of the dynamics of the relations of production, in which non-wage labour can be seen as part of the process of production and reproduction. Likewise, the difficulty in marking the distinction between profits and wages is an important point, which denotes the flexibility of family farming and its capacity for adaptation to external forces related, for example, to market instability, and to the internal demographic cycle of the family. This suggests the existence of a different logic within the relations in the unit of family farming than the ones implied in capitalist relations. Having suggested the above, one can add that economic diversification becomes a means of survival to the enterprise, and unremunerated work and cooperation is a fundamental aspect of its persistence.

As much as the theoretical conceptualisation of the persistence of family farming under capitalism raised a number of debates on rural societies, so did the concept of an informal sector in both urban and rural areas. The analysis of the relations of production and of markets outside the "officially" structured channels has concerned several studies in recent years, with the increasing number of family based small enterprises in both advanced industrial and Third World countries.

Mingione and Redclift, (1985), in a recent study, examine the development of this concept and its theoretical validity. They argue that this concept first developed in Third World societies where the new industrial sector could not absorb the surplus population into the capitalist labour force. Survival strategies were adopted by the
households, taking the form of petty commodity production, black market activities, and all sorts of non-structured marginalised economic activities. (Redclift and Mingione, 1985:2) European countries, in their turn, experienced economic activities outside the capitalist relations of production, for which a number of interpretations and explanations were provided. These economic activities located outside capitalist relations are regarded by some scholars as the vanguard of an alternative life-style, by others they are seen as exploitation by and subordination to capital. In both cases, the relationship between capitalist and non-capitalist relations is seen as predatory. (Redclift and Mingione, 1985:3-4)

Mingione and Redclift argue that the concept of an informal sector refers to the "casual" ways of working outside the statistically defined labour force, and thus becomes synonymous with poverty, and has taken a physical location. They take a stand against this definition, since it implies the existence of a formal and an informal sector. This dichotomy is difficult to identify and to define, as both sectors are intertwined under the capitalist economy. Furthermore, they suggest that this duality leads to the creation of static categories that fail to illustrate the interconnections between both. (Redclift and Mingione, 1985:1-3)

Within this critical theoretical framework, Mingione closely examines the factors behind the emergence of the informal sector in industrialised countries. She suggests that the decrease in the capacity of the employment system to absorb the surplus of population into the labour force is a long term trend, which implies that survival has become a crucial factor in shaping the problems of the society as the process of "informalization" takes place. Given this factor, "it has become necessary to develop an approach which allows interpretation of the different meanings of these various human activities in the context of different patterns, times and local historical conditions of industrial development". (Mingione, 1985:15-18)
She primarily suggests to examine them in the context of the changing structures of employment, the significance of the role of unpaid domestic activities, and the role of the state in shaping the economic and social relations. (Mingione, 1985:14) This approach would allow an understanding of the complex way by which the household structure is modified and changed, and would allow a detailed examination of the ways in which informal and irregular activities are diffused, organised, and how they persist. (Mingione, 1985:29) In a study conducted in southern Italy on the social reproduction of surplus labour, Mingione argues that the spread of informal activities has a number of common features concerning the cycle of reproduction. Informal activities are one of the consequences of the employment crisis, in the context of which unemployment increases without a parallel decrease in the cost of reproduction of guaranteed labour.

In this context, informal activities assume varied and complex roles with regard to state and public organisations, and which escape from state control. (Mingione, 1985:30) State intervention decreases and the reproduction cycle becomes more complex and varied as the requirements of the members of the households for social and economic organisation are ignored by the state. Mingione points out two types of contradictions brought about by this system which would eventually have radical consequences with regard to the prospect of social conflict:

An increasing degree of incongruence is due to the fact that many households are reproducing formal and informal labour at the same time...[which] may in turn produce competing antagonistic pressures which the households are unable to meet. (Mingione, 1985:31)

In her concluding remarks on the survey, Mingione notes that the unequal economic distribution in favour of the upper and middle classes is an evident outcome of the informal sector. Given the incapacity of the informal sector to
expand under the industrial decentralisation, which has been directed towards
Third World countries, the political prospects offered by the informal sector
cannot constitute a permanent alternative for subsistence for a growing surplus
population. Thus, the future of southern Italy is seen to be trapped in a cul-de-

sac. (Mingione, 1985:50-51)

Namaste Redclift, in her turn, raises a number of questions with regard to the
historical transformation experienced by the household under the penetration of
capitalism: “What is it about the domestic community that survives; what aspects
provide this supposed continuity?”, she asks. (Redclift, 1985:93) One of the main
features of industrial societies is the increasing importance of economic processes
that are not encompassed by commodity relations or by accepted definition of the
capitalist mode of production. These processes have often been explained within
preconceived conceptual categories that do not give account of their
dynamics. (Redclift, 1985:93)

Redclift criticises the terms “informal”, “domestic”, “subsistence”, or any other
notion referring to a category formulated and elaborated at the expense of the
understanding of the process and the relations in which they exist. (Redclift,
1985:96) She stresses the need to find an alternative pattern of analysis for
economic development which bypasses the static dichotomies established by
concepts that are initially inaccurately defined. She further argues that “we cannot
describe historical change unless we can specify what it is that is being
transformed”. Therefore, the universal dimension underlying the domestic and the
household categories becomes questionable as it does not give account of the
cultural contexts in which these relations take place. (Redclift, 1985:98)

Domestic economy is one of the concepts used in the most generalised way for
examining the role of subsistence reproduction in accumulation and for explaining
the nature of capitalist transition and the women's participation in work. Mostly conjugated with the concept of pre-capitalist economies, the relationship between the household/domestic economies/pre-capitalist forms and capitalism is far from clear. As the relationship between these concepts implies that these forms pre-date capitalism and therefore have autonomy, they cannot be considered as separate modes of production. (Redclift, 1985:113) To solve this problem, it has been suggested that at a certain stage capitalism penetrates a certain region and subserves "pre-capitalist" relations. According to the author, this assumption cannot stand as a general rule; given the contradictory patterns found between regions, it becomes difficult to regard the penetration of capitalism as a homogeneous process or to assume that the response to it will be everywhere the same. (Redclift, 1985:113,116)

Similarly, she criticises the use of the concept of reproduction which many Marxists and feminist Marxists have used in order to develop a theoretical account of the relationship between the family/household and the wider society. Given the generalised way in which the concept of reproduction is used as a unit of analysis, it does not elucidate the contradictions in family relations or the processes by which these relations operate. Such a limitation renders the concept of reproduction confusing and elusive. If reproduction is commonly held to entail the "adequate" provision of the material means of survival, then how is adequacy to be defined, she argues. (Redclift, 1985:116-117,119) In addition of being a culturally specific requirement,

Inequalities in adequacy are fundamental to stratified societies, and any model of reproduction must be able to capture the dynamics of unequal entitlements in which some groups are perpetually reproduced less adequately than others. The central issue in the analysis of the penetration of capitalism and its effects on social groups must be the differential levels of reproduction that are created in the process. (Redclift, 1985:119)
Therefore, it is necessary to consider reproduction as a form of unity, combining production and reproduction, in which contradiction and some degree of autonomy are included in the relations of reproduction. Thus, production and reproduction are a unity, but of an often contradictory rather than a functional kind. They are neither independently determined nor determinate in any mechanical way, nor is an explanation of one is necessarily to be found in the other. Rather, their intersection shapes the forms of the whole at any given time. (Redclift, 1985:119-120)

In conclusion, both authors reject the use of generalised categories that obscure the dynamics embodied in the relationships between and among the units of production. They both argue that accurate definitions of the concepts used must be formulated in the context in which the phenomenon in question is examined. Similarly, these conceptual categories should be defined on the basis of the specific logic underlying its relations with the wider system, in order to grasp the processes on which they operate and the relationships implied in it. In other words, the objective should be the elaboration of adequate conceptual categories rather than the duplication of them from models.

From the above discussion on the persistence of family enterprises in both urban and rural based societies, the household unit stands as the focal point around which the various relations between the units of production and reproduction, state policies, and the wider economic system revolve. Therefore, it is necessary to present attempts to define the different forms of relations within the household organisation and within the world system.

Smith, Wallerstein and Evers, argue that the persistence of household forms are a constituent part of the emerging world system. (Smith, 1984:7) Although the
reproduction of labour within the household may be seen as taking place outside the capitalist production, it is structured and subject to the laws of capitalist accumulation on the world scale. (Smith, 1984:7-8) Non-capitalist relations in the reproduction of labour are at the centre of capitalism. Although non-capitalist relations provide an important proportion of wage labour to the world system, they cannot be considered as autonomous modes of production as is often assumed. (Smith, 1984:8-9) In this respect, the role of the domestic labour is important for the reproduction process of wage labour, it depends upon the logic of the world-system, and thus is subject to its dynamics. (Smith, 1988:10)

Smith Wallerstein and Evers further argue that the world economy creates mechanisms which obstruct the realisation of the law of value, a contradiction which renders this law inapplicable universally. Thus: "As soon as waged labor is created, so too must be non-wage work". (Smith, 1984:10-11) However, non-wage labour has a variety of forms that emerge under increases in relative surplus value which should not be confused with subsistence. Thus, the contradictory pressures resulting from capitalist accumulation, under which the household organisation exists, may reinforce or erode the household organisation in the world-economy. Therefore, it is important to consider the historical context of the constraints of world economy in which the internal household structure is established. This dimension is essential for grasping the different structures of household organisation and for understanding the different pressures to which it is vulnerable. (Smith, 1984:12) Patriarchy in this context, one of the features of household relations, is not considered as a vestige of an earlier period in contradiction with the capitalist mode of production, nor as part of a universal need to dominate, but as part of the political elements of the world economy. (Smith, 1984:13)

The above comprised a review of the various theoretical trends concerned with the
persistence of non-capitalist relations and their significance in both advanced and less advanced countries. This theme is discussed by several authors who attempt to present a number of theoretical categories for the analysis of agrarian relations under the penetration of capitalism, focusing in some cases on the existence of wage labour and in others on non-wage labour, depending on the theoretical position. However, the organisation of the household in its relations with the wider system, and the increasing number of informal activities based on family enterprise under a specific division of labour have been central issues in the debates.

From the above discussion it is evident that there are two sides to the debate; the first side view these relations from the persistence position as discussed by Long, Aydin, Cox, Friedmann, Mingione and Redclift. Under the same position, Long, van der Ploeg, Vanderveest, Mingione and Redclift consider the persistence of non-commodity relations in their interrelation with commodification, in order to understand the nature of the process of change. Thus, the authors emphasise the dynamic character of rural societies, instead of establishing a dichotomy between the two sets of relations. On the other hand, the second approach, adopted by Seddon, Bernstein, Goodman and M. Redclift explains these non-capitalist relations as being part of a process of transformation during which they are destined to disappear. This position is.

Within these two positions, it is clear that the Egyptian model represented by the 'Ain Shams school, the Dependency school, and the recent contribution of Hopkins, falls on the side of the debate which is primarily concerned with the question of the transformation of agrarian relations. This model is essentially based on theoretical categories derived from the capitalist mode of production. As a result of the use of inadequate theoretical categories, only aggregate statistics and data collected from previous writings can corroborate the final conclusions.
Therefore, this model fails to interpret many aspects of agrarian relations, in particular the persistence of non-wage labour relations, cooperation, and reciprocity, in their interaction with commodity relations consolidated by state policies. The interaction of these relations within the differentiated local structures of rural societies, under the agrarian structure and state policies, cannot be illustrated by statistics or discourses based on assumptions.

4. The Other Side of the Debate: A Reconceptualisation of Agrarian Relations in Rural Egypt

Other scholars have contributed to the analysis of agrarian relations in Egypt by adopting a position located on the other side of the debate, i.e considering agrarian relations in their specificity and within the regional diversity of the rural society, illustrating the role of the household and focusing on the persistence of non-capitalist relations under the capitalist economy. Thus, this part of this chapter will first present the important contributions along this line in their relation with the debates on both Third World countries and industrially advanced ones. This will then be followed by a discussion of the theoretical framework within which the present study is inscribed.

Georg Stauth is one of the first to have paid attention to the study of unpaid work in the household of rural Egypt. The organisation of the production process in a market-oriented agricultural system and its role in determining the structure of income of a subsistence-oriented small peasant household is the focus of his study entitled “Capitalist Farming and Small Peasant Households in Egypt” (1983). The
author argues that the importance of household studies lies in the possibility of relating production to consumption relations and monetary relations to non-monetary ones. (Stauth, 1983:285) The main theme raised in this paper is the investigation of how the process of:

specific types of transfers between a given production system and a number of households determines the type of social and political interaction between the various households themselves, and between a network of households and system. (Stauth, 1983:285)

In this perspective Stauth undertook his fieldwork in a specific social and economic setting: the 'Izba system founded in the nineteenth century on large estates where the production unit was separated from the village economy and was based on peasant wage labour. (Stauth, 1983:285-287) Although the system as such has disappeared, and the landlord has become part of the village society, the 'Izba system remains the form of survival of small peasants who invert their labour force to a system of internationally articulated commodity production and by "externalising" the networks for securing and distributing the necessary means of subsistence. (Stauth, 1983:287-288)

In order to understand how the process of social differentiation takes place in the development of this system, he focuses on the organisational structure of the household. In his analysis, the author argues that households based on wage income have developed, although, non-monitarised subsistence processes and transfers which are necessary to maintain loyalty and to keep the heads of households in power, hence a non-economic connotation. The proletarianised peasant households are units of consumption and of production which are necessary for the reproduction of their members. Similarly, within the household unit, the self-sustained processes of production for consumption are maintained on the basis of a sexual division of labour, and through the selling of their labour
force, the 'Izba system provides its members with income for the purchase of needed commodities. (Stauth, 1983:289) Stauth adds that wage relations, in their various forms, and non-wage ones entail different social relations that cover production for subsistence and commodity production as a basis for reproducing the household and securing its survival. (Stauth, 1983:290)

Within the 'Izba system the discrepancies of social interaction are based on the contradictions between the moral traditions of everyday practice and the functioning necessities of the system. On this premise, Stauth points out the political structure and its coercion in compensating the incapacity of the economic apparatus to regulate these contradictions. (Stauth, 1983:290) By focusing on the specificity of the 'Izba system, the author suggests that it operates on a distinct logic which still functions so "as to tie the specific local tradition of an intended 'autonomous' reproduction of self producing and 'personally' interrelated individuals to 'the world economic system". (Stauth, 1983:291)

According to the author, this function developed a set of interconnections between property, produce, and labour, in a dynamic way. Regarding property relations, it relies on kinship descent rather than on the size of the holding; therefore, the division between various forms of property distribution and allocation, as it takes place, implies a highly differentiated organisational structure of the holding. (Stauth, 1983:291) The allocation of crops then tends to be diversified, and land on a big farm is divided into several parts, each cultivated by a different crop serving a specific purpose for the reproduction of the 'Izba system. One part of the big farm is devoted to the consumption of the household unit, another part of the land is cultivated by crops which require the maintenance of permanent labourers on the farm. A third part is leased to a peasant from the village for his consumption, on this Stauth notes: "The rationale here is social rather than economic." (Stauth, 1983:292-293) Finally, the remainder of the land is cultivated
by cash crops sold directly on the market. It should be pointed out that the subsistence crops are only partly consumed by the producers, and the rest of the crop may be distributed or converted into marketable produce. (Stauth, 1983:293)

Within the partition of land and of the cultivated crops on the big farm, the labour force is engaged on different bases for various types of tasks. These tasks may include internal household works, agricultural work, and non-agricultural operations for the maintenance of the farm. On the other hand, the labourers may be hired on permanent basis, in which case they are paid in a sharecropping arrangement or on occasional terms when they are paid on a daily wage base. (Stauth, 1983:295) On the whole, there is an evident difference between each part of the cultivated land on the big farm, on the level of the organisation of production, and in particular concerning the labour conditions. This difference is in its clearest form when it is looked at on the level of the subsistence unit which, in Stauth's opinion, represents a distinctive unit of production. (Stauth, 1983:296)

Within this organisation, the small peasant producers are not in control of the means of production. Thus, in order to have access to land and water, the main resources for production, the small peasant producers are compelled to sell their labour power and become dependent on the 'lzba for their monetarised relations. (Stauth, 1983:297) Stauth adds that the selling of labour power takes various forms, mainly wage labour which is materialised in the cash crops production, or subsistence wage labour which takes place in the form of traditional share-cropping arrangements. Although the subsistence wage allows labour to have access to subsistence means, it does not cover the actual reproduction of this labour since the subsistence means are produced in the unit itself. This point is of crucial importance since the subsistence means cannot be understood unless the various forms of labour relations are taken in their totality without dismantlement. Thus, field labour, household labour, and small commodity production within the
household are regarded as an integrated unit of production. (Stauth, 1983:300) This means that the household's decision on the amount of production destined to self-consumption or to the market depends on the accessibility of the small units of production to the means of production—land and water. (Stauth, 1983:301) On this point, Stauth comments:

It also becomes clear that the attachment of the small farmer to the normative orientation of all social organizational forms of subsistence production is by no means reactionary. It is a rather regional decision to defend and protect the known channels of organizing for survival: on this level, peasant behavior reflects a rather "rational" attitude. (Stauth, 1983:301)

Thus, the persistence of the relations of production between the large-scale agriculture and the small peasant unit determines the reproduction of the social organization of labour within the subsistence-oriented production of the household. It implies, on the other hand, that the exploitative means are held by the big-farm owners and the trustees' families, under which the small peasants maintain the conditions necessary for their reproduction. (Stauth, 1983:301)

In analysing the power system, by which the large owners exercise control over the small peasants in order to ensure the reproduction of their system, he advances that the lack of social regulative forces on the economic level is compensated by power relations within the 'Izba system. (Stauth, 1983:302-303) In which case, community traditions become an important means for the interference of the big landholders in the use value production of the small peasant producer and in their life-style. Stauth emphasises the regional variety of these traditions which are largely conditioned by the socio-ecological environment. (Stauth, 1983:307) He concludes by saying that in a market-oriented economy, the household is affected in such a way that it is unable to be integrated socially into the market sector, which creates forms of subsistence "governed by pure 'non-economic' and
coercive means", and thus social interaction takes place through the forms of transactions between the household sector and the market sector. (Stauth, 1983: 311-312)

Georg Stauth's contribution represents a new interpretation of agrarian relations in Egypt. He showed the process by which the persistence of the small peasant household production within a system that is fully integrated in the world market takes place. Although the 'Isha system bears the vestiges of an older one, it has been adapted and modified within the changes in the set of socio-economic relations. He traced, through a detailed fieldwork study, the subtle and interwoven economic and political relations necessary for the survival of the small peasant households and the accumulation of the big landowners. Thus, his study brings to the fore an analysis that lies beyond a simple economic interpretation of agrarian relations, and shows how this specific system uses "coercive power" to consolidate the economic and the social position of the various social groups.

Along the same lines as Stauth, Kathy Glavanis, in a study entitled Non-Capitalist Relations and the Small Peasant Household in Rural Egypt (1984b) conducted in the village of Mit Qamar in the Delta, analysed the persistence of various forms of non-capitalist relations in the household economy. The analysis was based on categories inherent in the dynamics of these forms, which are different than those derived from the capitalist mode of production. She notes that capitalist relations of production failed to be generalised and to dissolve non-capitalist relations in rural Egypt. (Glavanis, 1984a: 30) (Glavanis, 1984b: 54-55) Within this framework, Friedmann's distinction between modes of production and forms of production was inspiring. According to Friedmann, generalised commodity relations lead to the establishment of simple commodity production through the mobility of land, credits, and the appropriate technology. (Glavanis, 1984a: 34) (Glavanis, 1984b: 65)
With the objective of defining the forms of production prevalent, Glavanis examines the transformation in rural Egypt in the context of the changes that take place in the larger system, specifically the development of capitalist relations, and through a detailed study of the internal organisation of the productive unit responsible for the viability of simple commodity production. (Glavanis, 1984b:110) She advances that the small peasant household production has been consolidated by government policies after 1952 as the result of the agrarian reform laws which have reduced rents of tenancy, and put a ceiling on the size of landownership. Concomitant with these measures were the pricing and subsidy policies that imposed indirect taxation over the crops produced by small peasants. (Glavanis, 1984a:35-37) (Glavanis, 1984b:68-70) Under such conditions, livestock rearing became important for the small household to compensate for such restrictions, and to acquire additional income. Similarly, the construction of the High Dam allowed a regular distribution of water over the year, and the introduction of agricultural cooperatives provided regular assistance and short term credits in kind to peasants. Both changes have helped increase the yields per feddan and thus the viable size of landholding has been lowered. In the meantime, state policies in industrialisation, education, employment, military service, and recently in labour migration to oil countries, have contributed to the withdrawal of rural labour force from agriculture, permanently or temporarily, which affected the labour balance of the household. (Glavanis, 1984a:36-40) (Glavanis, 1984b:71-82)

The general changes on the national scene had had repercussions on the household unit of production in the village investigated, which witnessed, among other phenomena, a high degree of migration. An agricultural community a priori, the majority of the households in Mit Qamar are engaged in livestock rearing given the scarcity of land resources. In describing the regional environment of the
village, Glavanis notes that the territory of the village is divided into two sectors, each corresponding to different economic and social conditions. (Glavanis, 1984a:41) (Glavanis, 1984b:201-203) Within the ecological conditions and under the state policies, access to land takes various forms varying between Sagil, short term rental arrangement, and Muzara'a, rent by cultivation, sharecropping, and ownership. Each of these forms imply specific agreements between the parties whether legally registered or not. Based on an extensive fieldwork study, the author presents a detailed account of the various forms of access to land including the types of agreements, the conditions under which they take place, and the reasons for the prevalence of a specific form rather than another form.

The Sagil form, short term rental, is the most common way in which the small peasant households increase their land. As its rental value exceeds five times the one fixed by the government, hence its illegality, only small plots of between four and twelve qirats are rented. She points out that small households engaged in such a form to increase their land base for livestock rearing, are attributed by the society a different social class than the class of landowners. (Glavanis, 1984a:54) (Glavanis, 1984b:292-297)

Rent by cultivation, Muzara'a, is a rare form of access to land in the village, and when it exists it is not officially recognised. This form is based on a land exchange of the peasant's labour in return of the use of land. The case study shows that the agreement was between two relatives, and according to the author, kinship relations are partly the reason behind the agreement, although it is known to be a very demanding one for the lessee who undertakes the work. On this Glavanis comments, that this form has an economic rationality, specifically when the land is cultivated by free cash crops, but more important is that it protects the lessee from changes in the market prices of basic necessities. She adds that this form may still be viable for the extension of small peasant households when non-household labour
Sharecropping takes various forms of arrangement, but, in general, a plot of land is cultivated by a peasant in exchange for a percentage of the crop shared between him and the owner or the holder. In Mit Qamar, the peasant is given half the crop and expenses are paid by the cultivator. In the case studied, the peasant had recourse to this form rather than to rent by cultivation. Sharecropping tends to be a more permanent arrangement and in this specific case the agreement was with an absentee landlord. (Glavins, 1984b:302,310,321-322)

Finally, buying land is a rare form of access to land given its high price and the low income of the household, but more important is the high fragmentation of agricultural land in Egypt. Thus, if a household attempts to extend its ownership it is likely to purchase it near its original plot in order to consolidate its property and to minimise the efforts of cultivation; this, under the present conditions of land fragmentation, is rather difficult. Yet, in the village, peasants tend to reduce land fragmentation after inheritance by buying the shares of the land from members of the family who are entitled to them by inheritance. Glavins argues that this trend has an indirect effect of reducing the dependency of the households on income earned outside their household enterprises. (Glavins, 1984b:286-290)

From the above, she concludes that intensified commodity relations are essential for the reproduction of the small peasant households. (Glavins, 1984b:109) In their varieties, these relations cannot be depicted through statistics or aggregate data, as they take place unofficially or on informal bases. Furthermore, fieldwork showed that these relations are not the only forms adopted. In fact, non-capitalist relations are as necessary as monetary relations to ensure the reproduction cycle of the household. In the village, relations of cooperation take different forms between the small peasant producers to reduce the dependency of the household on
wage labour through unremunerated family labour. Cooperation is not a recent phenomenon, yet certain forms have disappeared while others have emerged or have been strengthened to meet the socio-economic changes following the post 1952 reforms. Hence, in times of economic hardship cooperative relations may increase or be transformed. (Glavanis, 1984b:219-224)

As most of the agricultural activities are labour intensive, labour cooperation is a recurrent form of relations between the small peasant households who are in a temporary or permanent shortage of manpower. However, Glavanis, in her analysis, establishes a clear distinction between the necessary labour requirements of a given operation and the optimum labour input, an important distinction, she argues, as "it highlights the extent to which a small peasant household given its family composition, is absolutely dependent upon additional labour external to it". (Glavanis, 1984a:47) (Glavanis, 1984b:233-235)

On this premise she examines the labour requirements for the major cultivated crops of various households on their plots, from which she advances that most of the operations can be undertaken by one adult man, with a few requiring two or three, including women and children. This means that most households can be labour sufficient on an average of 5.5 members per family. However, this is not usually the case: a number of factors such as the family developmental cycle, infertility, ill-health, imbalances between the sexes, education, employment, and migration, usually affect this equation. Both the flexibility in the sexual division of labour and in the timing of agricultural or non-agricultural operations allow the household to fulfill its requirements adequately. (Glavanis, 1984a:49) (Glavanis, 1984b:237-248,241-245)

This flexibility is seen, for example, in the escape of small peasant producers from certain time consuming agricultural operations such as the use of organic
fertilisers in cultivation. The logic behind this practice is the reduction of labour requirements. The use of other techniques, such as a tractor for ploughing, might be an alternative means of minimising the labour requirements. But this requires, in the case of compulsory crops, an outlay of cash something which goes against the logic of the household's minimisation of cash transactions. However, she points out that the use of machines for threshing wheat can be explained in terms of the importance given to dry fodder for animal raising, in which case the threshing capacity is increased as compared to the use of manual tools. In addition to the informal relations of labour cooperation, exchanges of extra-household labour is often adopted by households depending on their socio-economic status. (Glavanis, 1984a:50-51) (Glavanis, 1984b:246-248)

Similarly, the borrowing of the necessary means of production is another form of non-capitalist relations which covers many items for both agricultural and non-agricultural activities. It takes place mainly on the level of tools, as most peasants own the minimum tools required for agriculture: a hoe and a sickle. She notes that the fact that peasants do not purchase their tools on the market, despite their low prices, shows the extent to which the cost of productive consumption of the peasant household has decreased. (Glavanis, 1984a:51-52) (Glavanis, 1984b:226-227)

Finally, agricultural land exchange is a form of access to land that represents one of the numerous forms of cooperation and one of the means by which the peasants bypass government intervention, and achieve self-sufficiency. According to this form, the two parties exchange an equivalent plot of land located in different areas to avoid the government imposed rotation cycle, including cotton, which falls at the same time as maize cultivation. Land exchange is an informal relation which permits the peasants to have a certain flexibility over summer cultivation without violating the cooperative's directives. Likewise, this form takes place on the basis of kinship relations and between small holders. (Glavanis, 1984a:55-56) (Glavanis,
In general, these various forms of exchange cover goods, animals, land, and labour, and take place according to a general notion of the village social structure.

In her analysis, Glavanis was able to demonstrate how and why the persistence of non-capitalist relations is necessary for the continuous reproduction of the small peasant households under the increasing commoditisation of agrarian relations. She showed that the reproduction process of peasant households took place as such, and not as full-scale proletarians, in which case their dependence on market relations was consequently reduced. She stresses the fact that a number of these relations have emerged as a result of changes in national policies, and in the international economy in conjunction with the internal dynamic of the local organisation, although some may be reminiscent of the past. At this level she disagrees with Stath, arguing that the changing socio-economic realities in the larger system dissolve certain types of cooperation and in that process new ones emerge. This is illustrated by the various forms of labour cooperation often based on kinship relations but not necessarily on economic and social equality of status. Among the various emerging forms of cooperation is the labour cooperation for the use of newly introduced machines which require a team of workers. (Glavanis and Glavanis, 1983:70)

It is on these premises that she establishes the failure of the incorporation of Egypt into the world capitalist market to dissolve non-capitalist relations in rural society. She further argues that the persistence of these relations does not imply the isolation of the peasants from the wider system, on the contrary, non-capitalist relations should be located in the wider framework of capitalist power structures. (Glavanis and Glavanis, 1983:57-73)

In fact, both Stath and Glavanis inaugurated new ground for the understanding of
agrarian relations in Egypt. Both authors based their analyses on detailed fieldwork. They explicitly underlined the regional diversity of the Egyptian rural society even within one socio-economic setting. They formulated new theoretical categories for the understanding of agrarian relations under the capitalist mode of production. These conceptual categories are different from the ones derived from the capitalist mode of production, given the specificity of the agricultural sector when compared to the industrial sector. They both drew attention to the importance of the internal organisation of the household- the basic unit of production -in its relations with other households and the wider economic system. They focused on the role played by informal and non-capitalist relations in the survival and the reproduction of the household unit under an economic system fully integrated into and dependent on the world capitalist market. They both argued that non-monetary relations in their variety are necessary for the persistence of the household unit and it is for this reason that capitalism has, up to the present time, failed to dissolve non-capitalist relations in rural Egypt.

The contribution of Giavenis lies in her formulation of a new conceptual category for the understanding of agrarian relations. Through an examination of the wider economic system and its impact on the local level, she showed how commoditisation is generalised. However, generalised commodity relations do not necessarily imply the prevalence of commodity relations in agriculture, as argued by Friedmann. In fact, because of the structure of the household economy and its organisation of production under the limited market of land and of machinery, non-monetary relations persist. Thus, Giavenis elaborated the concept of the household economy based on Friedmann's distinction between mode of production and forms of production. This concept defines the form of production in the village investigated and refers to the unit of production and consumption which is fully integrated in the market and is subject to its instability.
In the household economy, the product is used for self-consumption and sold on the market, and the organisation of production in the household and between the households is undertaken through a number of relations, including non-monetary ones. Glavanis showed how non-capitalist relations are imperative for the survival of the household unit under the prevailing economic and political system. Given the high flexibility of the household economy, the household is able to adapt to harsh economic conditions through various non-capitalist relations which follow a different terms than the logic of the market. This flexibility allows the household to survive and prevents the capitalist mode of production from dissolving it. Through this analytical framework, the author was able to relate the global capitalist system to the local level— the smallest unit of production.

Although Glavanis's analytical framework was based on Friedmann's theoretical framework, she disagreed on several points that were not relevant for the analysis of agrarian relations in Egypt, specifically, on her definition of simple commodity production. Therefore, given the importance of both works to the present study, it is necessary to elaborate on Friedmann's definitions of simple commodity production, and of the various forms of peasant production which she identifies in agrarian relations.

In an article entitled 'Household Production and the National Economy: Concepts for the Analysis of Agrarian Formations' (1980), Friedmann argues that the form of production is the central concept of the analysis of agrarian relations, through the double specification of the unit of production and the social formation. In her approach, she distinguishes between two forms: simple commodity production and peasant production. The first concept is subsumed within the political economy and allows for the deduction of conditions of reproduction and class relations. The second concept is commonly used in a negative way, referring to the resistance of peasants to commoditisation, and does not permit the understanding of
reproduction or class relations. Therefore, she argues, it is necessary to focus on
the smallest unit of production where the labour process is organised in order to
understand class relations. (Friedmann, 1980:158)

For Friedmann, simple commodity production refers to a class which combines
both the ownership of the means of production and labour under a capitalist
economy. The reproduction of simple commodity production takes place through
commodity relations on the level of production and marketing. On the other hand,
peasant production includes a number of communal relations which resist the
penetration of commodity relations. However, Friedmann argues that the concept
of peasant production does not exist in an abstract way. Instead, she stresses the
need to illustrate the differences between the various class relations within the
different forms, such as sharecropping relations and immobile landless labourers,
where non-monetary relations and resistance to commoditisation are the common
factors between them. Therefore, the understanding of the relation between the
household production and the social formation requires a focus on the
reproduction and the transformation of the household. (Friedmann, 1980:162)

In this context, reproduction refers to the renewal of one round of production to
another of social and technical elements of production and the relations among
them. Transformation occurs when reproduction is undermined and some of the
old elements of production are recombined into new relations. (Friedmann,
1980:162) On the basis of this definition the reproduction of the agricultural
household takes one of two possible directions. One possibility, is the full
commoditisation of the household reproduction, that is, the dependence of the
household on commodity relations for the renewal of the means of production and
subsistence. The end point of commoditisation is simple commodity production
when the household is governed by market ties. The second possibility is the
limited ability of commoditisation to penetrate the cycle of reproduction, that is
when the household reproduction is based on reciprocal ties both horizontal and vertical for the renewal of reproduction and subsistence. Elaborating on this point, she argues that:

If access to labour, land, credit, and product markets is mediated through direct, non-monetary ties to other households or other classes, and if these are reproduced through institutionally stable reproductive mechanisms, then commodity relations are limited in their ability to penetrate the cycle of reproduction. (Friedmann, 1980: 163)

Thus, the necessary preconditions for the dominance of commoditisation of households are the high mobility of land, labour, and credit but if there is a stable immobility of inputs to the production process then there is a resistance to commoditisation. (Friedmann, 1980:163)

Glavanis, as explained above, established that the preconditions mentioned by Friedmann are not necessary factors for the dominance of simple commodity production in rural Egypt. The relations of production and their organisation within the household and between households are not completely ruled by commodity relations, as non-monetary relations still persist and are necessary for the reproduction of the means of production and subsistence. However, this argument was established on the level of the relations of production only, and was not elaborated on concerning market relations.

With regard to Friedmann's arguments on market relations, Glavanis argues that peasant households do not relate to product markets individually and competitively. (Glavanis, 1985:162) Therefore, peasants do not decide on the choice of their production according to market forces, since the objective of peasant production is subsistence and the renewal of the means of production and consumption. In simple commodity production, one of the requirements for the survival of the enterprise is the adaptation to changes in relative prices and
increases in productivity and organic composition. The central characteristic of simple commodity production is the circulation of commodities in both directions, which is governed by market determined prices for inputs and for commodities sold. On the other hand, the specific character of peasant production derives from its lack of integration into national factor markets. Thus, the stable or the decreasing generality of factor prices on peasant production indicates its resistance to commoditisation. This means that the transition from peasant production to simple commodity production implies the replacement of personal ties for the mobilisation of land, labour, and means of production by market relations. (Friedmann, 1980: 165, 167-168)

It is specifically at this level that Friedmann’s analysis raises a number of problems with regard to market relations in rural Egypt. It has been established that relations of production in rural Egypt cannot be identified or categorised under simple commodity production, nor can they be referred to as peasant producers, in Friedmann’s definition, isolated from market forces. The same argument holds for market relations. As it will be shown, market relations in a highly commoditised economy include both monetary and non-monetary relations which are interrelated in various forms, and as such are necessary for the distribution of commodities. These relations, through their interplay, are essential for the reproduction of small merchants and the accumulation of large merchants, and indispensable for the survival and consolidation of the various socio-economic groups. Therefore, it is difficult to accept Friedmann’s established criteria for measuring the extent to which peasant households are resisting or not resisting commoditisation, given the various forms of relations of production and marketing which emerge under specific conditions. Likewise, it is erroneous to view the process of the development of agrarian relations as being either one of two possibilities, firstly dominated by fully commoditised relations or secondly governed by non-commoditised relations resisting commoditisation. Instead, it is
more enlightening, and significant, to analyse agrarian relations according to the
interrelation emerging between a number of complex sets of relations reflecting
various forms under the wider socio-economic system. This position allows the
conception of agrarian transition in a multi-dimensional course.

As discussed throughout this chapter, a number of problems emerged from the
ways in which agrarian relations were approached by the Egyptian model.
Therefore, on the basis of the discussion of Stauth and Glavanis' work, the critical
use of Friedmann's main arguments, and the theoretical alternative suggested by
Long and van der Ploeg, a framework of analysis has been extrapolated for the
present study. The present thesis is primarily concerned with the analysis of
market relations given the dominance of merchant capital in the wider economic
system, as will be shown in the following chapter. Therefore, merchant capital
and market relations are the concrete economic framework within which this study
is undertaken.

Two aspects of market relations are focused on in the course of this study. The
first is the labour market and the second is the market of agricultural crops. The
choice of these markets as examples illustrating market relations is not arbitrary.
The labour market represents the principle element in the process of production
without which agricultural production cannot take place. The market of crops is
chosen on the basis that it is the sphere in which profit is realised and where
accumulation can take place. As will be shown in the course of the study, the
labour market in Batra follows an unstable seasonal calendar governed by the type
of crops cultivated and their seasonal requirements, as they are conditioned by
natural factors such as weather conditions or other conditions which affect the
demand and the offer. Because of the seasonal character of the labour market, the
labourers are not paid wages covering their full reproduction and therefore cannot
count on their daily wages for survival. Under these conditions, as will be shown,
the workers have recourse to various forms of relations to counter this situation. Commodity relations are necessarily adopted on the labour market to ensure the access to work. Similarly, external relations are indispensable for the workers households, between the workers and the entrepreneurs, and institutions for maintaining the access to work on an as much as possible basis. However, under harsh economic conditions, and during seasons of underemployment, many workers try to diversify their economic activities, and seek jobs in other areas, or in other fields. Thus, commoditisation, external relations and diversification are the means adopted for the survival of the workers households. They also rely extensively on the internal organisation of the household and on a certain division of labour, as they rely also on their relations with other households to reduce their expenses in monetary terms. Hence, the merging of monetary and non-monetary relations in various forms of organisations is adopted by the workers to increase their income and their capacity of survival.

One of the characteristics of the market of crops is its high instability which increases the risk of losses and gains. The constant fluctuation of prices under local, national, and international conditions affects directly the economies of the various categories of households, given the monetary relations implied in this sphere. As will be shown in this study, in a highly commoditised economy where monetary relations are intensified on the level of the market of crops, market conditions covering the quality, the price, and the size of distribution of the crops, are directly affected by the limited possibility of the storage of crops over a long period of time, and by the constant instability of prices. Together these constrains constitute an important factor determining the rate of profit or loss for the merchants.

Under such conditions, the various categories of merchants seek external relations with institutions and agents, locally or regionally based and in the cities, affiliated
to governmental companies or private ones and so ensuring the highest possibilities of selling their products. Likewise, they have recourse to diversifying their products. In many cases, they tend to reduce their specialisation in order to maintain their access to various marketing networks under favourable conditions, thus minimising their chances of losses in marketing. The diversification of the merchandise, therefore, is one of the means adopted by merchants for maintaining a regular position in the marketing network. However, specialisation is also adopted and sometimes required for a higher chance of accumulation. Thus, specialisation and diversification strategies are often alternated depending on the economic and political conditions, as well as the development of the local factors.

Conversely, and in order to ensure a high regular distribution under favourable prices, the small household merchants adopt a number of non-monetary relations for their reproduction, and the large merchants maintain these non-monetary relations to ensure their profits. These relations are adopted by the different categories of merchants in the different marketing networks. Thus, in order to adapt to the instability of the market and to counter the problems generated by the storage of the crops, merchants would maintain and support a number of relations whether monetary or non-monetary, not only to ensure a favourable circulation of their commodities but, essentially, to reach the highest profit for accumulation and permit the reproduction of the small merchants without whom the big merchants cannot operate.

From the above discussion, the significance of both non-monetary and monetary relations bears a different meaning for the agricultural labourers, than for the large merchants and for the small merchants. Thus, the process of economic diversification adopted by these various categories have different objectives. For some it is adopted for their survival, for the others it is a means for increasing their accumulation. Therefore, the interrelation of both commodity and non-
commodity relations through the various mechanisms increases the process of socio-economic differentiation in Betra, and both relations are indispensable for the reproduction of the various households under an economy fully integrated and dependent on the world market.

It has been established that non-capitalist relations are persisting in their interrelation with commodity relations on the level of agricultural production, because of the structural limitations implied in agriculture. It has also been argued above that market relations are not dominated by monetary relations only, but the existence and the persistence of non-monetary relations are fundamental to commodity circulation. Thus, concomitant to the increasing commoditisation of rural areas, are intensive processes of externalisation and economic diversification, and their interrelation with non-commodity relations adopted by the various groups ensures the reproduction and the survival of the least privileged households and the accumulation for others. Therefore, depending on the socio-economic position of the various groups, economic diversification, which as will be shown is one of the salient features of Betra, bears different significances, and contributes in increasing the process of socio-economic differentiation of the society. In this context, it would be incorrect to suggest that capitalist relations dissolved non-capitalist ones and dominate agrarian relations. Nor can it be assumed that the capitalist mode of production can develop in agriculture as argued by the Egyptian model.

However, Egypt is constituted in its majority by an agrarian society in which the agricultural sector is the pillar of the economy. It has been argued that the incorporation into the world capitalist market since the early nineteenth century, with the production and the export of cotton, cannot be regarded as an indicator of the development of capitalism as claimed by Mitvali, Radwan and Richards, to name but a few. Merchant capital, in the different stages of Egypt’s economic
historical development, was regarded as the means by which accumulation took
place through the export of cotton, and the market of agricultural land, and was
thus identified with the development of capitalism.

However, an important point which emerges from the above argument is that
merchant capital up to the present time has been the prevailing economic form, as
will be shown in the chapter on the political context and the agrarian structure. It
was even reinforced under Isfah, the open-door economic policy, during which
the economy was geared towards the demands of the world market. As will be
discussed, the agricultural sector was the first to be shifted toward these demands;
the area devoted to local needs was reduced, while the area of land cultivated by
export crops was increased, and most policies were revolving around this trend.
As also will be mentioned in the same chapter, the main sources of foreign
currency are the oil exports, the remittances of emigrants, the Suez Canal, and the
tourist sector; thus, most of these sources are raised through trade in the world
market, or through the service sector. As it will be argued in the following
chapter, the basic principle of the Egyptian economy is no longer "production",
whatever its mode, but rather a quest for "rent", i.e rentier income.(Aulas,
1982a:115) Under these conditions, the effective contribution of the agricultural
sector in the national economy was reduced by half over ten years time.

Nevertheless, the historical continuity in the economic form does not imply that
the society is static, nor does this view consider the society to be an a-historical
one; instead, it means that merchant capital was and is a successful form.
Therefore, on the basis of the above argument, Mitvali, Radwan and Richards
present an inadequate economic model in which capitalism cannot be traced given
the absence of relations of production in merchant capital. This is clearly
manifested on both the national and the local economic level. For example, despite
the apparent existence of a severe economic crisis in which external debt exceeds
U.S$ 35 million, and in which most of the economy relies extensively on American and foreign aids to meet the basic needs of an increasing population, and despite increases in the cost of living which are not met by increases in salaries, given the high rates of inflation which vary between 25% and 30% annually, a certain category of the society is able to accumulate large fortunes, while the rest of the population is surviving. Various groups involved in trade in the agricultural sector, through the imports of the necessary inputs such as fertilisers, pesticides, fodder for animals, and selected varieties of seeds for market crops, realise high profits and accumulate wealth. (Zealouk, 1989:5-6,99)

However, this is clearer when it is looked at on the level of the national economy. The case of the Islamic investment companies is the most recent example on the role of merchant capital in Egypt. Several Islamic investment companies have provoked a severe crisis on the political and economic scene which reached a point of threatening the government, among these companies is al-Rayyana Islamic Company for Investments.

al-Rayyana Islamic Company for Investment was created in the early eighties by three brothers who were initially dealers of foreign currency on the black market. (Fuda, 1988:23-27) They collected the savings of the emigrant workers and of the local employees in return of a high interest rate reaching 35% per year for ordinary investors, and reaching nearly 100% for important government employees and political figures. (Aql, 1989:9-10) The high interest rate, in addition to the Islamic slogans, legitimised the activities of their enterprise in the view of the public, and helped their company to reach most social categories of the population. The savings were collected in Egypt as well as abroad and most of the money was transferred on the stock market. A few investments were made in Egypt, mostly oriented to service sectors, to real estate, and to the imports of fodder for the account of the Ministry of Agriculture. (Aql, 1989:22)
However, after the international crisis on the world market in 1987, and the sudden drop of the American dollar on Black Monday, al-Rayyan was directly affected and could no longer pay its fixed interests. Meanwhile, the government suffered a lack of hard currency and realised that this company was attracting all savings and diverting it from national and private banks to the international market. Under these conditions, the company was no longer able to pay its annual interest rates to the investors. In the absence of a legal status for these companies, and with the increasing claims of the investors for their interest, the government had to take drastic measures to put an end to this charade. (‘Aql, 1989:131-135)

But more important to redirect capitals in foreign currencies to national banks in order to cover the deficits.

The investigation revealed that there exist more than 83 Islamic investment companies, which have no legal status, operating on the same logic as al-Rayyan. (Gabr, 1988:13) Moreover, the government estimated that al-Rayyan collected over £.E 1,700 million during its activities and only £.E 300 million were invested in Egypt. Several ministers and high ranking employees were involved in this company, and it has been published that they received regular sums of money in exchange of their services in facilitating the transactions. (al-‘Ahali, 1988) (‘Aql, 1989:55-56) To this day, the matter has not been concluded and it is unlikely that the investments will be refunded. Given the lack of information published on the case, it is difficult to establish what social groups invested capital in these companies. However, it is speculated that the investors are mostly of the middle and the lower middle classes from the urban areas; yet the extent to which these companies reached the villages has not been confirmed.

The above example is mentioned to show the extent to which merchant capital and market relations are the dominant forms in Egypt. It is through the social
relations and market relations that a certain group of the society is allowed to accumulate wealth in non-productive activities directly linked to the international market. This group, through its connections with the various social categories in the society, was able to collect its needed capital in return for a regular payment which permitted those in the poorest categories, especially government employees who represent the least privileged class, to survive under severe economic conditions. In the absence of state control and in an economy of a laissez-faire, it is on the level of market relations that the process of social and economic differentiation takes place. It is through this process of differentiation that a small group of entrepreneurs acquired political power to the extent that the head of al-Rayyan Islamic Company declared that they constituted a state within a state, which benefitted everyone in the government by their services. (Aql, 1989:10)

In conclusion, under these prevailing economic conditions, one question remains to be asked: how does a small agricultural village survive and persist under the economic crisis facing the Egyptian society? Before examining the way in which a particular part of Egypt, the village of Batra, exists as an agricultural society within an economic system dominated by merchant capital and merchant relations as shown above, it is necessary to examine in detail the specific ways in which the organisation of agricultural production takes place. In this context, the majority of this thesis will focus on the ways in which agricultural production is carried out, in order to extrapolate some understanding of merchant capital and merchant relations, which will be discussed in detail in the last two chapters of this work.

However, the following chapter will first discuss the Egyptian political and economic contexts in a historical perspective, in which agrarian relations develop. Similarly, it will focus on the agrarian structure through which state policies are mediated, and implemented at the village level, and through which the various socio-economic groups of the villages interact with the wider system.
Notes


2- The acceptance of the established Western categorisation of land ownership according to a specific size, without re-examining its validity, is one of the limitations of the 'Ain Shams scholars, among whom was Hamid Ra'uf Abbas, an Egyptian historian(1973). On this, Glavanis and Glavanis offer the following comment:

Cromer, ..., was the British Consul-General who effectively ruled Egypt from 1883 to 1903 and had formulated such definitions for the purposes of tax collection and control. Hamid's acceptance of such a static definition of class structure indicates a lack of theoretical understanding which is further complicated by the use of only certain types of archival material. (Glavanis, 1983: 12)

3- Given my lack of knowledge of the German language, the review of Georg Stauth's work is based on an article,(Georg, 1983), as his original work was written in German under the title of: Economic Structure in an Egyptian Village: Some Patterns of Analysis, Bielefeld, University of Bielefeld.(Mimeo) (1977).
Agrarian relations cannot be understood in isolation from the wider economic system nor can they be apprehended without considering the changes of state policies in the agricultural sector within the prevailing economic and political conditions. In this respect, the first section of this chapter will attempt to draw the general political and economic implications of the Infitah, the open-door economic policy, which has characterised Egypt's development during the past fifteen years. It will also attempt to trace the process by which the shift from a state capitalist system, to a form of a laissez-faire economy took place and altered the agricultural sector and its structure. Thus, under the open-door policy, and under a laissez-faire economy, this section will focus on the process by which the increasing withdrawal of the state from the agricultural sector leads to the transfer of the surplus to the international market, and the further dependency of the economy in general, and the agricultural sector in particular, on the world markets.
The implications of such policies, in their turn, cannot be explained simply in terms of the transformation that took place over thirty years; they are, rather, regarded as the result of a long process of economic and political dependency which began with the incorporation of Egypt in the world capitalist market during the nineteenth century. Thus, the second section of this chapter will discuss, in a historical perspective, Egypt's dependency on the world capitalist market, in the context of both political and economic forces and the conjuncture of external and internal forces which determined the process of development. It will also attempt to show how, under various forms of dependence, the Egyptian economy was and remains dependent on the agricultural sector.

In the third section of this chapter, the historical development of Egyptian agrarian structure will be discussed, illustrating the different state policies adopted in the agricultural sector. Likewise, the discussion of the transformation of the agricultural institutions established at the national, regional and village levels, will aim to illustrate the process by which, and the channels through which state policies are implemented and changed according to the wider system, affecting and affected by the local structures. More important is the way in which it reflects the different ways and means by which the state extracts the surplus value from the the agricultural sector on a local level, within the historical development of the national political economy. However, the latter point will be the focus of the third section in the following chapter.
During the last decade and a half, Egypt has experienced a fundamental economic transformation, which has directly affected its different sectors and provoked profound mutations in its social structure. The beginning of this transformation was clearly manifested in the early 1970’s when the economy shifted from being a state capitalist system to being a “liberal” economic system, wherein the development of private capital was to be emphasised and promoted.

During this shift to an emphasis on private capital the government encountered several problems, among which the policy of subsidies was to generate particular difficulties. The subsidy policy had been adopted under Nasir’s regime and was intended to provide the population with its basic needs of consumption at a price lower than the market price. It covered basic food supplies (bread, wheat, rice, oil, sugar, and beans) which accounted for nearly 75% of the total amount of subsidies, in addition to other basic consumption goods such as petrol, cloth, and soap. It also included various services (e.g. transport). However, the economic opening that took place in Egypt during the 1970’s, in conjunction with the oil boom and the increase of prices throughout the world, caused the rate of annual inflation in Egypt to reach 30% by 1979, while the rate of annual increase in individual income accounted for only 23% (Kurayyim, 1982:377).

Despite such facts, the World Bank and the I.M.F. became heavily involved in underwriting the Egyptian economy and put pressure on the government to abolish
the system of subsidies. This attempt to leave prices to market fluctuations was intended to release the Egyptian government's budget from the burden of subsidies that had reached £ E680.6 million. According to a study of the subsidy structure, the cancellation of the subsidies, in terms of 1979 prices, would have meant an increase in prices of 72.9% for cooking oil, up to 761% for frozen buffalo meat, 474% for wheat, and a double if not triple increase in the prices of flour, beans, lentils, and rice. (Kurayyim, 1982: 377)

No, to the liberalisation with empty stomachs! The open-door economic policy is done at the expense of the poor! (Mirel, 1982: 36)

Such were the slogans of protest together with calls of Nasir's name that followed an abrupt announcement of the cancellation of the subsidies on the 18th of January, 1977, when the Egyptian population demonstrated in the streets of Cairo, a massive movement of revolt that had extended throughout Egypt by the 19th of January. In Cairo, the demonstrations became a battle between the armed forces and the demonstrators, who expressed a profound feeling of revulsion for the regime and its policy. All manifestations of Infitah (the open-door policy) were attacked: shops selling luxury goods, expensive cars, street advertisements for consumption goods etc. The government attributed the revolt to individual acts of violence and called it "the insurrection of burglars", but as Mirel expressed it, the people voted against the open-door economy in the streets. (Mirel, 1982: 36)

In fact, the abolition of the subsidies as recommended by the I.M.F., in provoking the drastic increase in prices, in turn implied a reduction in the level of nutrition, already low. The implications of lowering an already low standard of living could hardly expected to be accepted by the poor. The government claimed that the revolts were the work of communists, Nasirites, and the Islamic radical
movements. Sadat, however, admitted on the 23rd of January that the events were a natural popular reaction to the economic burden. The armed forces were able to end the demonstrations only after there were 79 persons killed, 800 injured, and 200 arrested. The government quickly withdrew its announced intentions to abolish subsidies. However, despite the official statements confirming the maintenance of subsidies on the basic products, prices continued to rise, and in September 1984, the government made a second attempt to reduce the subsidisation of bread, petrol, pasta, cigarettes, and other important items. This provoked a similar protest by the working class in an industrial city of the Delta, Kafr al-Dawwar. Because of its localised dimension, the demonstrations were rapidly repressed by the armed forces and the government again explained it in terms of individual acts of violence.

The pattern that has emerged in recent years is one of progressive increases in the rate of inflation accompanied by a decrease in the share of the G.D.P. in favour of an increase in the share of commerce and foreign trade. The decreases in the shares of the productive sectors in the G.D.P. are attributable largely to a prominent feature of this period, economic diversification, especially in the rural areas and among peasants. This trend is seen in the countryside through the increase of non-agricultural activities, migration to urban areas, migration to the Gulf, and the expansion of non-monetary markets. At the same time, there has been an urbanisation of the villages, that is, the expansion of built-up areas of the village into agricultural land. These phenomena are interrelated and reflect the present economic situation which is, in turn, an outcome of the policies undertaken by the state during the 1970's. The present crisis is, thus, largely a result of a state planned, socialist oriented economic policy and the shift to a so-called open-door economic policy.
1.1. The Shift to an Open-door Economic Policy and the Position of Agriculture

...whatever the state of resources that we can mobilize locally, we are still in the most urgent need of external resources. The circumstances of the world today render it possible that we obtain these resources in a manner that strengthens our economy and hastens growth. On this basis we have called for an economic opening (infitah), and it is a call founded upon the calculation of our economic needs on the one hand, and available external funding on the other. A. al-Seidat, The October Paper (Waterbury, 1984:123)

The symptoms of Egypt's crisis began to appear after the 1967 defeat, with the increase of foreign debts, the decline of national industrial production, the fall in cotton prices on the world market (the effects of which on Egypt was increasingly to feel after the opening), together with the world economic crises, which led Egypt, after 1971, into a vicious cycle. Between 1971 and 1974 Egypt's foreign debts reached £E 500 million. The government shifted its economic system in 1974 from a state capital, to a "mixed economy", in which private control was to be expanded and integrated with the public sector. "What it means (the 1974 'opening'), in effect is the reintegration of the Egyptian economy into the network of the world capitalist market." (Abdel Khalek, 1982:260)

After the decisions declared by the government in 1974, a series of laws were promulgated, formulating the general framework of the revised economic system, and covering in general the following points:

a) Promotion of private and foreign capital in investment projects, covering most of the economic sectors, effectively without constraints or conditions.

b) Provision of extensive credit available on both the short and the long terms.
c) Reduction of the share of the public sector in the economy.

d) Modification and adaptation of legislation concerning the workers to this policy. (Eisa, 1984)

A flood of foreign and private local capital was invested in projects with high profitability, principally in the service sector, such as hotels and banks, and in agro-business. The share of private capital in the economy rose to 23.1% in 1979, while the share of the public sector was reduced from 90% to 76.9%. The introduction of foreign capital, in the form of foreign aids and loans, further conditioned the economic and the social structure to rely on imports of food, arms, and a great variety of luxury goods. Meanwhile, the major exports became petrol and labour, while agro-business was promoted as a policy for food security. The Egyptian economic system has, thus, been deprived of basic industrialisation and is severely dependent on foreign imports. Imports reached £.E 4,300,000 in 1981, while exports were only £.E 808,900. The deficit in the balance of payments is thus monumental. At the present time, the crisis is reaching its climax. (Eisa, 1984) The foreign debt exceeded U.S.$ 17 billion by 1981 and presently (1987) is estimated to have surpassed U.S.$ 35 billion. The main sources of hard currency during that period were:

a) Exports of petrol and its product.

b) Emigrants remittances.

c) Suez Canal.

d) Tourism.

While the share of the other sectors in the G.D.P. are 1:
During the 1950's and the 1960's, agriculture was the main pillar of the Egyptian economy, the primary supplier of the industrial sector and of the basic needs of consumption. But under the present circumstances, agricultural production has become oriented toward the demand of the foreign markets, while its inability to meet local food needs extends to an extensive list of products. The present agricultural system is based primarily on private capital, and marketing is carried out through a policy of free (i.e. non-subsidised) prices for free market crops.

As a result of the latter has been an increase in prices for most agricultural products, in particular the cash crops - fruit and vegetables - and a decrease in compulsory crop production. This policy most directly benefits the category of farmers who have direct access to the capital needed, while the overwhelming majority of the farmers are confined to forms of cultivation which are under state control and are subject to fixed prices. The new agricultural system was consolidated by a series of laws, which altered or modified to a great extent the essence of the agrarian reform undertaken in the 1950's and the 1960's. The open-door policy has, thus meant the reassessment of the legislation of the Nasir era, and a gradual return to Egyptian big capital of land, previously confiscated during agrarian reforms.

As early as 1971, the reversal of previous policy was accompanied by the
promulgation of laws allowing the liquidation of the sequestrations of the 1950's, including agricultural land. These measures implied changes in the maximum size of land ownership which had been limited to 100 fields per family according to the agrarian reforms of the previous era. Also early in the 1970's, the People's Assembly voted an amendment to the taxes assessed on agricultural land and then stipulated that:

a) Rates should be equal to seven times the amount of taxes, which meant a rent increase of 20% to 25%.

b) The land owner and tenant are authorised to have a rental agreement in kind, not simply in monetary terms, something which had been strictly forbidden since 1952.

c) The landowner is authorised to evict the tenant from the land he rents if the rent is not paid within two months after the end of the financial year, while the delay had been fixed at three years since 1952.

d) Civil litigation is required in cases of dispute over rentals. From 1952, such disputes had been resolved by village committees, which were closer to the present, quicker, and, above all, free from delays and other rigidities in the laws.

This amendment had been proposed by a group of landowners, the president of the People Assembly, and the president of the General Federation of Agriculture Cooperatives. (New Left Review, 1976) These laws were to lead to an enormous increase in the market value of agricultural land. At the same time, the government transformed the agricultural cooperative system into a banking system based on financial credits and loans for agricultural operations and for investment projects; however, only people with specific amounts of land were eligible for these credits. As result of the latter change, the monetary market expanded in the
countryside, and costs of living escalated, in many cases, prices in those urban areas where benefit from the subsidies is proportionally greater. The flood of migration from rural areas, to the cities and to the Arab countries, has been a way by which peasants have surmounted the displacement they have experienced in the rural economy thus transformed. Only a minority of the peasants benefit from the present system. The majority have severe gaps between their income from the compulsory crops and the costs of living; and those who do not migrate are thrown, of necessity, into working in “informal” sectors of one kind or another, including activities associated with the marketing networks.

1.2. Imfitah: the Road to Dependency

Launched after the October War of 1973, the open-door economic policy or Imfitah, was aimed at an entire restructuring of the Egyptian economy. A new policy was first stated in the “October Pages”, followed shortly by a new foreign investment law which attempted “to create a new economic system”, whereby:

public and private sectors (would) match one another in weight and in which the government (would) severely limit the degree of its interference in the economy... The private sector—domestic, Arab and foreign—is being encouraged to invest, produce, and export. Imports are being allowed in a liberal fashion. Foreign exchange controls have been relaxed, and the private sector now has easy access to free foreign exchange in the parallel market.(Elram, 1980:46)

But in reality this policy had two basic objectives. On the political level it meant a reconciliation with the United States in order to solve the Arab-Israeli conflict and put an end to the state of war. On the economic level it meant the end of Nasser’s socialist course, and the beginning of an era of capitalist development.(Aulis,
1979:68)

It is the intention of this section to consider the real significance of such a reconciliation for the U.S. and for the Egyptian state, and the real meaning of such a "capitalist" development; whereas both objectives are interrelated, we will attempt first to present their economic and political manifestations and then analyze their implications. As Aulas2 puts it in an article,

Whereas capitalism refers to a mode of production, such a definition would be hardly adequate to explain the orientations of the open-door policy in the course of the last ten years. In fact, the basic principle of the Egyptian economy is no longer "production", whatever its "mode", but rather a quest for "rent", i.e rentier income. (Aulas, 1982a:115)

This quest for "rent" was the solution for many people. As a lawyer in Cairo explained it, "new incentives are necessary for the investors, because the profit motive favours development, similarly private investments should be given the maximum encouragement instead of leaving it to search for profit that it never realises".(Hurel, 1982:133) In other words, the only alternative for the economic crisis is to open the doors to investment that will bring an immediate realisation of profits, the quickest and most lucrative way being in non-productive sectors. This is clearly manifested in the creation of free zones in Alexandria, Port Said, Ismailiya, Suez, and Cairo, which became the usual, as well as the "official", means for profit "tax-free" importation. Moreover, in addition to duty free zones, which are the primary suppliers for trade throughout Egypt, most private capital in Egypt is invested in exports and imports.

On the other hand, the largest proportions by far of private sector investments in import and export trade "in a liberal fashion" was oriented toward the finance and
services sector that have been established through foreign capital and foreign loans. Foreign banks played an important role in this orientation. It was expected that these foreign banks would attract new foreign investors, but in fact they have relied on Egyptians who were previously clients of the Egyptian National Banks. They also attracted ministers and other high ranking officials in the government through whom they were given privileged positions in the Egyptian financial system. It is important to note that the share of the private sector and individual deposits reached, by 1979, 75% of the total deposits in the investment banks. These banks made tremendous profits under the government. The profits of the joint venture banks reached 54.8%, and the profits of the investment bank reached 35.4%. This means that they regained the amount of their original capital within two or three years time; such a phenomena had never occurred previously in investments carried on by banks in Egypt investment activity. (Abul Hassan, 1982:282-283)

For individuals, the quest for "rent" was a result of a combination of internal and external dynamics. Thus, the creation of "a new economic system in which the public and private sector match one another and in which the government severely limits the degree of its interference in the economy", meant the disintegration of the public sector apparatus of production, since the economic objective was no longer production, but earning without producing. (Ibrahim, 1980:46) (Aules, 1982:115)

Paradoxical as it may seem, the role of foreign capital to the expansion of investments is quite low. The share of the U.S., in the total investments, did not exceed 12.3%, that of Western Europe 7%, and of the Arab countries 17%; while the share of Egypt was 53%. At the same time the Investment Authority
recognised that the tourist sector relied to a great extent on foreign loans rather than on investments, due to the high costs of its projects. (Husain, 1982, Vol. II:505-506) This statement reveals the role played by foreign capital in accelerating Egyptian indebtedness. Foreign investments in Egypt are mostly in consultative activities, directed either by foreign companies or by joint ventures, involved with the construction sector. These foreign-dominated companies, moreover, operate as contractors for services; that is, they deal in expertise rather than in capital for investment. (Husain, 1982, Vol. II:514-515)

1.2.1. U.S. policy in Egypt and economic aid

All those who do not understand that the heart of the Arab World is Egypt, that its force is situated in the valley of the Nile, will never understand anything about the region. It is by breaking this heart that we will (finally) neutralise this region, bring it closer to our democratic ideals, prevent it from falling under the Soviet-communist domination, and ensure the survival and the reinforcement of the Israeli power. (Aulis, 1979:61)3

It was in these words that John Foster Dulles4 summarised U.S. strategic, military, and political intentions towards Egypt and the Arab World, clearly underlying the role of Zionism and imperialism in the area. The October War of 1973 provided an opportunity to begin to understand some of these objectives. The Arab defeat in 1967 had achieved certain goals of Israel, but did not serve the U.S. objectives directly. In this context, and after the intervention of the U.S., first in the cease fire in October 1973, and later in the negotiations, Egypt's economy was regarded as flourishing and her economic future never more potentially prosperous. Arab capital was flooding in, and the U.S. began its programs of economic support. Such ideas were widely conveyed and propagated through American agencies, the World Bank reports, and the international and
local media, providing ideological cover for their economic invasion of Egypt. Already this strategy was clearly prepared during H. Kissinger’s trips in the Middle East, followed by a visit to Egypt by the president of the World Bank, who declared to Sadat that the World Bank was willing to support the Egyptian economy as long as its economic policy was revised according to the recommendation of the World Bank. (Husin, 1982, Vol. 1:19-26)

According to a source close to H. Kissinger, it is believed that the essence of his policy concerning the Middle East was on two levels. The first level involved propagating American technology, which meant that Egyptian officials were supported by American capital, as they encouraged American and Arab investors to rescue the economy. This policy, launched by the U.S. in the name of countering Soviet influence in the area, was fully supported by Western European countries and expressed in the arms deals of Western Europe with Sadat. By 1978, the economic aid offered by Kissinger and Nixon, was estimated to have reached more than U.S.$ 2 billion yearly, and the government policy announced by Law no. 143 of 1974, concerning Arab and foreign investments, and free zones (e.g. Port Said), that trade was firmly established. Thus the new era of dependency under the label of Infitah was inaugurated. (Husin, 1982, Vol. 1:25-27)

Up to the end of February 1978, the total amount of American loans and credits given to Egypt reached U.S.$ 2,280.9 million, from which U.S.$ 545.6 million were allocated between 1975 and 1978, for imported agricultural crops. From this amount, only U.S.$ 468.6 million were used, since according to the Food Commodity Imports Agreement, the loans are fixed on the basis of quantity and not on the basis of specified funds. As for the loans, they were given through the USAID and were, destined for three main sectors:
a) Loans for importing American non-agricultural commodities.
b) Loans for USAID approved projects.
c) American technical and scientific scholarships.

The largest proportion of the above mentioned loans and aid was in the sector of food commodities and was 100% consumed. However, only 74% of the loans for other American commodities was consumed, while 71% of the technical and scientific scholarships and 20% of the fund allocated for American projects were used. (Husin, 1982, Vol. I:87)

1.2.2. The “tripartite” alliance: USAID, World Bank, I.M.F.

In the light of the above, it is important to show the role played by the foreign institutions in the economic policy of Egypt. The USAID is the main channel through which the U.S. policy operates in Egypt, since it represents the American government directly. The aid administered is located according to specified political and security criteria, and in most cases AID projects are entirely designed within AID itself. Although technically an “independent” agency, the relationship between the agency and the State Department is close and cooperative not only in terms of specifying criteria for aid, but also in the design of means of implementation which can be assumed within AID itself. Such a close relationship between the agency and the State Department naturally requires the reinforcement of the U.S. security apparatus, and the activities of the agency are widely believed to be used as a cover for the activities of the C.I.A. (Husin, 1982, Vol. I:255-257)

Most of the budget of USAID is designed to promote the distribution of commodities produced in the developed capitalist countries, as well as to encourage the tourist sector and oil production. Thus, such programs did not include any
serious industrial development for the establishment of an infrastructure for the economy. However, such an orientation reflects not only economic objectives but also political ones. This dimension of USAID is evident in the Suez Canal region which, in being returned to civilian use, is closely tied to interests of Western (especially American) capitalism and has been converted into a kind of civilian "Barleiv Line". The government is encouraging young people to settle there by providing them with improved land for agricultural and other forms of assistance. Water from the Nile is being brought to the Sinai through canals. A new port Qabus\(^5\) is being constructed opposite 'Aqaba, and the entire region is being prepared to receive tourists from both Tel Aviv and Cairo. Any military alternative for the Arab-Israeli conflict has now become virtually impossible. In addition there are nearly 1,116 American experts permanently in Egypt, many of them performing supervision and consultative functions for the different ministries. In Israel, it is interesting to note that there are only three permanent American experts in the USAID while the support Israel receives from the U.S. is equivalent if not higher than that received by Egypt. (Husin, 1982, Vol. I:263)

It is therefore not a coincidence that the agreement signed between Egypt and the World Bank in March 1977, formulated by the World Bank, concerning the strategy of development to be pursued in Egypt, is based predominantly on loans for the oil production sector, the construction of the Suez Canal area together with the cities located on it, and tourist sector. Moreover, the bank emphasized the important role and contribution of the migrant remittances for increasing incomes, and as a major source of exchange; yet it was not similarly enthusiastic about increasing the number of skilled labourers. (Husin, 1982, Vol. II:431) Likewise, the World Bank and the I.M.F continuously press for the release of the agricultural and the industrial sector, instead of the whole economy, from the
pricing policy of the government and other administrative measures retained from the preceding era.

Turning now to the concern stated in the beginning, i.e.: the loans for agricultural crops, the focus will be in the following part on the subject of American imports, since they represent the main item in the imports.

1.2.3. Wheat: imports from the U.S.

The total amount of imported wheat in 1975 reached U.S.$ 1,610,000, most coming from the U.S. The U.S. offers loans for wheat under Public Law 480, passed in the U.S. in 1954. This law declared the intention of solving the problem of stock-piled food products and grains, specifically the surplus of wheat in the U.S. At this time, (1953-1955), the annual production of wheat had reached 27.5 million tons, while the demand in the internal U.S. markets was only for 16.4 million tons, and the amount of exports through ordinary commercial trade channels did not exceed 3.7 million tons. As a result of the annual accumulations, the surplus wheat had reached 7.4 million tons.

The law is composed of three major articles; the first article related to the sales of the surplus of the product which would be sold in exchange for a local currency; the second article, deals with the surplus product given in the case of famine or in the forms of aid; the third article deals with the food products given through American agencies seeking profit. Thus under the second and the third articles products are usually given in the form of grants. As for the first article, it represents the main channel through which the surpluses are commercialised. This puts at the disposal of the American administration credits in the local currency of
the importing country that are to be used for: expansion of international trade, economic development, buying strategic products, paying the U.S. foreign duties, the increasing of labour power, and the reinforcement of U.S. policy through different means. (Husin, 1982, Vol I:105-107) In this context, it is interesting to compare the terms of agreements of wheat exports to Egypt in the 1960's and the 1970's.

While in the 1960's the debts were paid in Egyptian pounds they were paid in the 1970's in U.S dollars or in other foreign currencies convertible to dollars according to a rate of exchange agreed upon by the two parties. The U.S., as a creditor, is given control over the revenue of the Egyptian government from the selling of wheat. Furthermore, the creditor decides on the forms and the direction of its expenditure and the Egyptian government is committed to present an annual report on the incomes and the expenditures of this section of its budget.

As a result, the application of this law and these agreements implies a direct intervention of the American government in Egypt's economy. Notably, the U.S. orients its policy in this sector of the economy toward the reorganisation of the local agricultural marketing system, the planning of the irrigation system, and the expansion of cash crops, specifically crops destined for foreign markets, that are, at the same time, under these agreements. On the other hand, the Egyptian government is committed to take the necessary measures to ensure a "fair share" to the U.S. of any increase in its importation of agricultural products which means, in effect, that Egypt is committed to keep U.S. as its foreign source for the importation of grains. (Husin, 1982, Vol I:103-111) The following figures illustrate the proportion of the U.S. share in Egypt's imports since 1971:
Table II.2.: U.S. Share of Egypt's Imports

<table>
<thead>
<tr>
<th>Year</th>
<th>1971/72</th>
<th>1973/74</th>
<th>1975/76</th>
<th>1977</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>12.8%</td>
<td>41.5%</td>
<td>53%</td>
<td>56%</td>
</tr>
</tbody>
</table>

(Husin, 1982, Vol I:105-106,113)

1.3. Process of Agricultural "Development"

The intervention of foreign states is manifested in other ways in the agriculture sector and its organisation. Figures show that agriculture did not increase productivity under the open-door policy, when compared with the 1950's. During the five year plan of the 1960's, investments in agriculture reached 23%, amounting to U.S.$ 355 million, whereas they decreased during the 1970's, e.g. from 13% to 8%, between 1974 and 1977. Similarly, the average income from agriculture did not reflect any increase, in the 1970's.

Table II.3.: Average Growth of Agricultural Income

<table>
<thead>
<tr>
<th>Average Growth</th>
<th>1975</th>
<th>1976</th>
<th>1977</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>2.4%</td>
<td>1.5%</td>
<td>0.7%</td>
</tr>
</tbody>
</table>

(Husin, 1982, Vol. II:438)

These decreases in agricultural income, can be understood in the light of the general economic policy in Egypt during those years. It can be understood, also, in relation to the USAID policies directed specially toward Egyptian agriculture, which policies did not- it might seem deliberately -aim at any independent development. That such was indeed the strategy corroborated by recommendations of the World Bank, which emphasised the necessity of "Qualitative Transformation" of agriculture in Egypt, in order to realise an
average growth in agriculture production that could reach 4% in ten years.

On this basis an agreement was signed between the Egyptian government and the University of California, launching a large research project on "Qualitative Transformation", with a budget of U.S.$12 million, in which the U.S. role was to direct the training of Egyptian researchers. In addition, 65 projects were undertaken. These projects were, of course, designed and implemented under the Public Law 480, while the surplus U.S. grain was pouring in. What all these various agreements and programs have meant, and were obviously intended to mean, was the reorganisation of the "traditional" agricultural system in a "scientific" way, using technological knowledge. However, as will be shown below, science and technology tend to promote the interests of those who contract their use. "America has a precise role: that is of social innovator, putting technology in the service of man, but avoiding the dogmatic regulation of man's life".(Euliss, 1982:37)

The cult of American technology was to penetrate the "traditional" agricultural system through mechanisation, the restructuring of the irrigation system, and by means of storage and marketing. In order to gain the support of Egyptian researchers and their collaboration, the U.S. program attracted them from the national institutions by offering high salaries, travel facilities, and scholarships, in sharp contrast with many fewer facilities and opportunities offered by those institutions. As a result, and as 'Adil Husin analyses it, Egyptian scientific research has become deprived of its autonomy and its independence, since Egyptian researchers recruited for these projects are offered colossal amounts of money compared to their monthly salaries from national institutions. Personal economic interests prevail and they direct their loyalties to the foreign financial resources. Thus, the data they collect and the results of their scientific studies are
used within a political context. (Husin, 1982, Vol. II:433)

One of the most illustrative examples is the food security policy launched in the 1970's. Husin defines it in these terms: "The political objectives of food security are to ensure the provision of the basic needs of nutrition for the society, while releasing this society from the dependency on foreign sources for foods". (Husin, 1982, Vol. II:439) However, in the context of the Egyptian political economy, such objectives cannot be achieved by just increasing the productivity of the soil, if the seeds, the fertilisers, the pesticides, the irrigation pumps, and the drainage equipment, etc, are imported from abroad; nor can it be achieved if the economic, the financial, and the social institutions organising the policy of the agricultural sector are tied to foreign institutions.

The present agricultural strategy was summarised in a study done by the Ministry of Agriculture in 1972, which recommended "large expansion in the cultivation of fruit, citrus, vegetables, flowers, and medicinal and aromatic plants, since these crops realise high profits and create many opportunities for agricultural, industrial and marketing operations". The study predicted that this strategy would lead "to the creation of agro-industrial modern cooperatives, the development of villages and the increase in productivity". With such ideas as this in mind, chicken station projects, previously directed by the public sector, were given to the private sector. The private sector then proceeded to import new technology, starting with the equipment for pre-fabricated units and heating system. Poultry products are now sold on the markets under free prices. It has become a very lucrative business for those who had the capital or credits to import the technology. (Husin, 1982, Vol. II:469470)
In 1977, the government embarked on agricultural projects of 145,000, with the participation of Arab and foreign investors in the cultivation of 92,000 acres located in regions near irrigation and drainage sources, and near ports having facilities. Also, a large project for sugar beets was undertaken by Egyptian and French capital, with the participation of the British consultative U.L.C. company, in the north of the Delta, on 100,000 acres. However, due to its high technological operations, the project did not provide many opportunities for jobs, nor did it increase the productivity of the land, since the region is not adequate for this type of cultivation. Reclaimed land in Wadi al-Malak in the east of the Delta, previously owned by the public sector, was sold below its price to the I mam'iliyya/Egypt Agricultural Development Company for an agricultural development project within the context of the “food security policy”. Foreign capital was invested, the share of Pepsi Cola being 15%, of the Jiford Company for irrigation equipment 10%, of the Saba Swedish company for the marketing of agricultural production 5%, of American exports 5%, and the rest was owned by the Arab Contractors Company.

The respective agricultural strategies of the Egyptian government, on the one hand, and USAID, the World Bank, and the I.M.F on the other, complemented each other. The latter provided the capital needed for the Egyptian component of the investment through the state’s local government apparatus, the Agricultural Credit Bank. (Husin, 1980:470) More recommendations were basically concerned with the changes in crop patterns, from compulsory ones to others related to export. They also dealt with the state pricing policy whereby the government fixes the prices paid to the farmer for certain export crops (e.g. cotton), as well as fixing prices on many agricultural commodities in the local market.
Such a pricing policy represents a major obstacle to the quantity and the level of agricultural production, in both the agricultural land in the valley of the Nile, and on the newly reclaimed land, since lands in both areas are subject to the crop rotation system and its costs are mainly financed by the public treasury. This means that the release of the prices of inputs and outputs from government control, and hence a shift to world market prices is inevitable. Such pressure on the government subsidies policy have led to changes in crop pattern organisation and a general increase in the prices of market crops, although the government pricing system has not yet been completely abolished. (Musa, 1982, Vol. II:445)

1.3.1. The case of cotton: "the qualitative change"

As previously mentioned, cotton was and remains the main Egyptian agricultural export; but it also has a symbolic value. As British imperialism had historically been closely associated with control of cotton commerce, so the final expulsion of the British and political independence meant regaining control by the Egyptians of "their" cotton. Cotton continues to represent an important national institution and Egyptian control is regarded as a major bulwark against any future penetration into the country.

Under the slogan of "qualitative change" recommended by the I.M.F and the World Bank, the Minister of Planning declared officially in 1977 that cotton was no longer to be a main source of national wealth but rather it had become a real burden on the economy, and recommended its abolition from the system of required crop rotation. Despite the strong opposition to this declaration, the area cultivated with cotton, wheat and grains was decreased, to 1.8 million feddans from cotton in 1978 and 1.38 million feddans of wheat, as compared to 1.7 million
feildans of barain (clover), the major competitive crop. Such changes in the crop pattern not only affected the agricultural but also the industrial sector, and, of course, exports. (Husin, 1982, Vol.II:454-455) Most of the national industries are dependent on cotton cultivation. On the other hand, marketing channels are in the hands of the public sector, which explains the "necessity for a qualitative change in agriculture".

The average distribution of yarn and textiles to Western and Eastern countries between 1973 and 1975 is as follows:

Table II.4.: Average Distribution of Yarn to Western and Eastern Countries from 1973 to 1975

<table>
<thead>
<tr>
<th></th>
<th>1973</th>
<th></th>
<th>1974</th>
<th></th>
<th>1975</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Foreign</td>
<td>EastBloc</td>
<td>Foreign</td>
<td>EastBloc</td>
<td>Foreign</td>
</tr>
<tr>
<td>Yarn</td>
<td>Currency</td>
<td>Agreement</td>
<td>Currency</td>
<td>Agreement</td>
<td>Currency</td>
</tr>
<tr>
<td>Yarn</td>
<td>27.5%</td>
<td>72.5%</td>
<td>29.5%</td>
<td>70.5%</td>
<td>12.9%</td>
</tr>
<tr>
<td>Textiles</td>
<td>36.9%</td>
<td>53.5%</td>
<td>23.5%</td>
<td>74.7%</td>
<td>4.6%</td>
</tr>
</tbody>
</table>

(Husin, 1982, Vol. II:460-461)

From the above figures it is evident that the percentage of cotton exports to hard currency areas reached their peak in 1973, although the greatest proportion of it was destined for the socialist markets, since the capacity of the European markets to absorb cotton fibres is quite limited. In an economic context, in which Egypt is conducting trade with the socialist countries the major antagonists of the U.S., it is not surprising to find the World Bank and the I.M.F. strongly opposing such a development. It is a fact that the area cultivated by cotton was reduced by 600,000 feddans after the open-door policy, which meant a decrease of the quantity of raw cotton exported, and hence a reduction of foreign currency and credits. On the other hand, the new cotton policy ensured an increasing quantity of raw cotton
destined for the local spinning and textiles factories. Their share jumped from 44% in 1973 to 63% in 1977. At the same time, the value of cotton exports decreased from U.S.$ 592 million in 1974 to U.S.$ 275 million in 1978. However, the government covered the decrease in revenue from this source in its budget through the export of oil, the tourist sector, and the Suez Canal revenues. (Husin, 1982, Vol II:465-466)

According to Husin, the decrease in cotton exports in favour of the increase in the local production of textiles is only a transitory stage aiming in the long run at the breakdown of the national industry. Thus, the decrease in the cotton exports is part of the strategy of dependency. By reducing cotton cultivation, the source of industry's raw material, Egyptian production cannot cover both the demands of the international market and the local industrial ones. In addition to the spinning and weaving public sector industries, there has been considerable expansion of private enterprises in this sector, encouraged by Infitah policies. In the beginning, the reduced production will be for the local industrial sector and the local markets at the expense of exports, which will alter the flow of foreign currency. But later on there will be a shift. The public and the new private sector companies will import short staple cotton from the U.S. Such a change will have several implications: a reduction in foreign currency, the break of the cotton institution, and the national industry, and finally the expansion of the Egyptian market for U.S. cotton. (Husin, 1982, Vol II:467)

The changes that have altered the agricultural sector remain within the logic of the open-door policy, and within the context of American policy in Egypt. With the shift toward cash crops for export and agro-business based on foreign capital, Egyptian agriculture can no longer be the supplier of a surplus for the Egyptian
controlled industrial sector, nor does that sector any longer function according to the demand of local markets. Rather, it became oriented to the demands of the world market and in particular to the Arab market. This shift, moreover, even affected to a certain extent the demands of the local market, although the local pattern of consumption is only gradually being adapted to new crops.

Thus, Egypt's agricultural policy has been planned in the name of a kind of technological development that has, to a great extent, been influenced by the United States and its allies, who control financial aid to Egypt. Another result has been, in addition to the distortions of the pattern of production and trade mentioned above, to create in Egypt a larger market for their technological experts and equipment. Such a strategy has political implications for the Arab-Israeli conflict. The Israelis have had a long experience in the development of agricultural technology and are therefore potential suppliers to Egypt of this technology. (World Water, 1989) The Egyptian Minister of Agriculture declared that the development of Egyptian agriculture is directed in three circles: the first, Egypt and the U.S.; the second, Egypt, the U.S., and Israel; the third, Egypt, Israel, and the Arab countries. He added, that the first circle was a way to improve the inputs, namely, seeds, fertilisers, pesticides, and small scale mechanisation. The second circle, with the help of Israel, would improve the outputs by improving technology and, finally, the meaning of the third circle is that Egypt, with improved production, would increase its agricultural exports thanks to Israeli technology, to Arab countries... (Husin, 1982, Vol. II:477)

1.3.2. The industrial sector

Inevitably, the industrial sector did not escape the American strategy, since the
major part of the industrial infrastructure is related to the agricultural sector, if not dependent on it. However, the public sector industries are obviously its target, since they are regarded as the major obstacles to economic development in the form of American strategies envisage. The introduction on the local market of imported articles, many of them products of multinational companies, was a direct weapon against the public sector and a big threat to the local production. Associated with the claims of the World Bank and the I.M.F. concerning the unsoundness of the pricing policy in the agricultural sector, came similar advice concerning the industrial sector, namely the desirability of releasing industry from being a government monopoly with controlled prices. In their view, a policy of the government releasing its control over pricing must be an inevitable consequence of the increase in prices of imported needs for production, and a logical consequence of the very nature of the open-door policy.

The public sector should operate on a commercial basis, by realising average rates of profits and encouraging the criterion in the capital of these companies. The administration and the management of the companies became a weapon against the government to implement their recommendations with regard to pricing policy. The changes in the position of the public sector in the economy vis-a-vis the private sector has been called by the World Bank, "the way of the mixed economy". (Husin, 1982, Vol. II:479-484)

1.4. The Implications of Infitah

Despite the extent and nature of American political and economic strategy in Egypt, and despite the large amount of money involved in their programs, the
policy was met with considerable opposition, primarily from the public sector and its political position within the economy inherited from Nasir’s regime. It has been the industrial technocrats in the public industrial sector who have taken an independent line. Their opposition and resistance to British policies has taken on an important dimension as it has been led by high ranking officials or, in some cases, even by ministers. There are intensive critiques of the programs established for the production of consumption goods, and detailed reports have been prepared for the programs for public sector development.

The opposition has also taken other forms, like the critical confrontation concerning the pharmaceutical industry led by the Minister of Health in April 1978, supported by different unions and academics, who defended the local industry. In the same year, there was a similar confrontation led by the Minister of Industry, supported by the General Organisation of Industry, the leaders of the spinning and textile industry, and several members of the People’s Assembly, against the Minister of Planning. (Husin, 1982, Vol. II:501) In fact, this form of opposition emerging from the public epitomised the ultimate social and economic contradiction between the Nasir period and the Sadat regime.

The misuses of the state initiated policies created a major political and economic contradiction between the old Nasserits / public sector social classes and the newly emerged entrepreneurs and merchants. It was this political crisis which constituted the parameters within which the public sector refused to compromise and cooperate with policies that aimed at restructuring it. (Giavasis, 1983:185)

In general, the changes sought by the U.S. and its agencies had to be very large scale in order for them to have control over the different economic and political levels, and in order to establish Egypt as a base for the diffusion of their strategies.
in the Middle East. Thus, neither the transformation in the industrial and agricultural sectors, nor, indeed, economic policy itself, were sufficient to realise these objectives. They needed the support of the population, which meant changing the nationalist feeling of the Egyptians, that is, was their aim to secure an ideological transformation as well. As Aulas explains it, an ideological invasion of the Egyptians was achieved through the classic channels: films, television, radio, advertisements, and other forms of mass-media (Aulas, 1982b)

On the other hand, the Egyptian intelligentsia represents an important element for potential ideological influence. In order for the intelligentsia to serve American ideology, however, it must, of course, have been first itself subjected to and moulded by American ideology. Many of the young generation intellectuals are indeed a product of the American cultural network in Egypt, as represented by the American University in Cairo and the American school. As Aulas describes them, these "scribes" of a new style combine the dynamics and the techniques of their adopted culture with the polished authenticity of their culture of origin. Thus, they combine the permanent and active line in the American ideological penetration into the middle classes of the society and induce the public to perceive the basic contradictions from a different angle. According to them, the economic dislocations are not so much the consequences of a certain type of development as they are of blockages inside Egyptian social organisation. There are no "miracle solutions" and the crisis is world wide. Thus, one should be realistic. The management of the country should be as rational as possible within the given context of dependency. (Aulas, 1982b)

As part of its focus on ideological directed strategies USAID offered a grant of U.S.$ 70 million to the national universities and academic institutions. They
offered "Peace Scholarships" for research students to spend a year in an American research centre or university. (Aulas, 1982a:125) Such a cultural and ideological intervention was strongly opposed by a large group of intellectuals. They expressed themselves through seminars, articles, reports, and petitions. The movement reached its peak in the winter of 1983, when a strong campaign was launched in the local newspapers, especially in a weekly economic journal Al-Ahram Iqtisadi, which specifically criticised the intervention of foreign institutions in Egypt.

Nevertheless, whatever the forms or movements of political and economic opposition that this invasion generated among the Egyptians, it has certainly provoked the fears of the U.S. regarding any form of opposition. This was clearly felt during the last five years in the reports presented by the U.S., in which the linguistic tone has become less sure of itself about the forms of pressures and intervention to be used to bring about social and economic changes. In 1981, the U.S. Congress's financial watchdog, the General Accounting Office, presented an official report, a critique of USAID policy, entitled: "U.S. Assistance to Egyptian Agriculture: Slow Progress after Five Years", in which the role of the USAID in Egypt was questioned, given the time and the money spent since the 1970's. The position of the USAID in Egypt was explained in these terms:

USAID and especially the State Department is most worried by G.A.O.'s recommendations that the U.S. require a formal understanding to be incorporated into future Commodity Imports Agreements (which would outline) Egyptian plans to address agricultural and other economic policy concerns. Egypt is known to be extremely sensitive to foreign interference in its domestic policy. (Bailey, 1981)

The fears and worries were manifested after the assassination of Sadat in 1981,
followed by the revolts in Upper Egypt, which were translated into a generalised opposition and discontent. At the same time, in an economic situation, in which the foreign debt had surpassed U.S. 35 billion, the World Bank predicted a serious economic crisis in 1985 and claimed that changes in the basic structure of the economic growth were needed, through national investments. President Mubarak has launched a campaign for the rationalising of the open-door policy and reorienting it toward national production, under the slogan of "made in Egypt". There have also been campaigns against corruption and court cases have been brought against foreign currency merchants. Meanwhile, the government is attempting to put free zones under tight control in order to reduce the import of consumption goods, while at the same time encouraging agricultural and industrial production. Despite this evidence of reorientation to changing economic and social conditions in Egypt, once again stimulated from outside, in which the economic future and political strategies are still planned in Washington or in the offices of the USAID in Cairo, the essence of Egypt's economic problem remains.

The consequences of this long term dependency are strongly felt by most social categories in Egypt and were clearly expressed in February, 1986, in what was qualified as "acts of disorder". In these events, the soldiers of the anti-riot police troops attacked and destroyed all manifestations of the open-door policy: hotels, night clubs, shops, including the police head quarters and the police military camps- the guardians of this policy. In a few days the "rebellion" covered Cairo and Giza, reaching 'Asyut and Subag in Upper Egypt. For a month, the police force was suspended from duty and the Minister of Interior was replaced; meanwhile, the army took over the control of the country. For more than two weeks, tanks and military troops were stationed in the main avenues of the capital, until the situation was put under control and "order was restored" by the armed
forces. One of the results of these events was the continuous application of martial law of emergency which was recently extended by the parliament to 1992.

These events were reminiscent in many ways of those that took place in 1977; they expressed the inability of the population to cope with the economic conditions in which the gap between the income and the costs of living is constantly increasing. The majority of the rebel soldiers were recruited from the poorest categories of the rural areas to serve in the police force. Given their low qualifications and their poor backgrounds they were (and still are) given merely symbolic salaries which—supposedly—would allow them to support their families in their absence and even cover their daily needs. It was under these difficult economic conditions that the soldiers turned against the government and civilians.

Finally, despite a general feeling among most Egyptians that the country is on the edge of a popular explosion, and despite the fact that economic crisis is reaching all social categories, the majority of the Egyptians have been able until the present time to survive in one way or another. In the rural areas, where the agricultural sector was strongly affected as previously mentioned and where the vast majority of the peasants are less taken in charge by public service institutions, and where the intervention of the government has been noticeably reduced, peasants manage to organise themselves to survive. Surprisingly enough, only minor incidents of discontent have been reported during this period, as compared to the events that took place in the urban areas. This phenomenon cannot but raise questions as to how the peasants survive under severe economic crisis, given the fact that the economic dependency of Egypt is not a recent phenomenon, nor is it the direct result of Nasser’s period, but finds its roots in the incorporation of Egypt in the world capitalist market.
2. Egypt's Dependence on the World Market in a Historical Perspective

This section is an attempt to present the efforts and the implications of this integration within the world market, and the conjuncture of internal and external factors, on the different phases of Egypt's historical development. Within this framework the following section will focus on three major periods as examples reflecting the important role played by the market forces and by the political conflicts in orienting the Egyptian economic system.

2.1. The Introduction of Egypt into the World Market since the Early Nineteenth Century

The beginning of the nineteenth century witnessed the first attempts of Egypt's incorporation into the world market, under Muhammad 'Ali, who attempted "to make of a Egypt a country richer and stronger than its nominal master, Turkey". (Croucherley, 1938:10) Muhammad 'Ali's aspiration urged him to consolidate his regime against internal and external opposition, and his efforts to achieve independence and internal development directed him toward a monopoly of the resources of production. In the beginning he relied upon taxation, but that was not sufficient, so he then turned to trade. (Owen, 1939:19)

Furthermore, the development of long-staple cotton in Egypt as an export crop
coincided with his economic needs, since neither taxation nor the grain trade could provide him with the sufficient revenue for his ambitious projects for national development. Moreover, cotton is not a consumable crop which rendered it a perfect commodity for state monopoly; and its cultivation was readily attainable and there were ready markets. It was discovered in 1824, that cotton could be sold to the spinners of Liverpool at such a price that profits could be realised (Owen, 1938:19,37) Under these circumstances, Egyptian exports jumped from 413 Kustars in 1821, to 223,076 Kustars in 1824, and the state monopoly was established, and foreign merchants settled in Alexandria. As Croustchley puts it, "Muhammad 'Ali bought (the cotton) from the farmers at 5 dollars a kantar, and sold to merchants at from 15 dollars to 17 dollars."(Croustchley, 1938:63)

The expansion of cotton agriculture implied the restructuring of the agricultural system, and the creation of an adequate marketing system. An agricultural infrastructure was established, and a new irrigation system was applied in order to support the production of the summer crops: cotton for export and maize for local consumption. By 1825 the perennial irrigation system covered the Delta and allowed a considerable increase in agricultural output. Parallel to these achievements, Muhammad 'Ali tried to establish an industrial sector, mostly based on cotton production.

Muhammad 'Ali's economic policy had a direct impact on the local level, the control over the resources of agricultural production led to a considerable increase in the cultivated land from 3,217,671 feddans under the French expedition, to 3,856,226 feddans in 1840. (Croustchley, 1938:57-58) The export of cotton led to the expansion of monetary markets and the further monetarisation of the rural areas as the state paid the peasants in cash, and taxes were collected in cash. It also
led to the revival of several towns like Alexandria as centres of trade and export; and to the influx of foreign merchants, and of foreign communities, who later after Muhammad 'Ali consolidated their position, played an important role in the economic policy of the country. (Crouthley, 1938:63) (Owen, 1969:122) Finally, the high level of trade exchange led to an increase in imported goods, and of the basic equipment needed for agricultural infrastructure.

In order to reduce imports, Muhammad 'Ali embarked on a long industrial project which did not succeed for several reasons. Crouthley argues that, firstly, the industries were a drain of money because of the high costs of the imported equipment needed; secondly, there was a general feeling of discontent among the workers, originally peasants, who were moved to the towns; and finally, the inadequacy of the engineering system failed to meet the needs of industrialisation. All these factors contributed in the increase of the local products' prices despite the imposition of duties on imports. Likewise, this policy led to the breakdown and the closure of most guilds and craftsmen. (Crouthley, 1938:72-73)

Industrial countries such as Britain and France were soon interested in Egypt as a market for their finished products, as well as a supplier of raw material. But neither Muhammad 'Ali's monopoly over trade and the resources of production, nor his industrial policy, were serving the interests of these countries. Similarly, his local policy protected Egypt from any foreign interference, to the extent that he forced many of the European merchant houses to leave the country. His military expansion into the levant also threatened the Ottoman Empire, of which Egypt was at time supposed to be part. The 1838 treaty stipulated that "...English merchants were given the right to enter any part of the Ottoman dominions and buy from the natives the product of the country... The application of this treaty
meant inevitably the collapse of the system of monopoly and the break down of the industrial system" (Crouchy, 1938:74). Muhammad 'Ali's monopoly system was, thus, forcibly undercut and Egyptian economic dependence began. (Radwan, 1974:167-168)

The foreign merchants community doubled by 1835 and foreign capital progressively penetrated the country. Commercial relations with Great Britain took on considerable dimensions, so that by the 1850's it bought nearly four-fifth of Egypt's exports of cotton, and cereals. (Crouchy, 1938:138) At the same time, industrial production, whether related to cotton or not, declined drastically due to the lack of adequate equipment. It was the policy of the European countries, who provided Egypt with the necessary technology, to discourage competition with their own industries.

2.2. The Impact of the American Civil War on Egypt: The Emergence of Monoculture and the Establishment of British Imperialism

The period following Muhammad 'Ali's reign was a long process of preparation for the establishment of British imperialism. During this period, historical facts proved the dependence of the Egyptian economic system on the world market and its vulnerability to the instability of the market. Illustrative of this situation is the impact of the American Civil War of 1851-1864 on the Egyptian economy. During this period, Egypt was totally dependent on cotton trade as the source of national revenue. At the same time, it had incurred large debts to meet the expenditures of Khedive 'Isma'il, whose spending reached £.E 51,394,000 during his reign, largely directed toward the establishment of an adequate network for
marketing and for foreign trade, in particular the Suez Canal project. (Crouseley, 1938:117) Most of these costs were financed by loans from foreign banks and companies, which increased external debts, meanwhile the American Civil War took place, and American cotton was scarce on the market. (Crouseley, 1938:33)

However, the return of the American cotton on the world market after the war, at a time of high expenditure in Egypt, led to a serious economic crisis; due to the consequent drop in the prices of Egyptian cotton. In search of a way out of this economic situation, Khedive Isma'il fell deeper into a vicious circle of crisis, the cotton crop dropped from 2,001,169 Kantars in 1855 to 1,288,762 Kantars in 1856. The government turned to sugar cultivation as a substitute for cotton exports, but sugar could not match cotton prices, especially during the period following the American Civil War when cotton prices recovered. (Crouseley, 1938:134-135)

Resulting from these conditions, there was a high demand for agricultural land which raised the value of land on the market. It is important to take into consideration the role played by the foreign communities in increasing the value of agricultural land, which in its turn led to the increase in Egypt's foreign debts. By the middle of the nineteenth century, according to the 1838 treaty, foreign communities had the right to own land in all the Ottoman Empire. At the same time, with the increase in the value of agricultural land, there was a high demand for loans. Therefore, the first two mortgage banks were established: Le Crédit Foncier Égyptien (French capital) and The Mortgage Company of Egypt (British capital). Most of the loans were given to Copts, to Greeks, and to members of other foreign communities, since Islamic law forbids usury. The presence of foreign communities in the land market, with large capital to offer, contributed to
its increase in value. (Croutchley, 1938:131)

The conjunction of all these factors led to the British occupation in 1882. It was not a coincidence that the British occupied Egypt at this particular moment; the colonisation took place at a period where there was a severe budget deficit, and a general revolt against the government’s policy, given the economic and political conditions, under which foreign debts in 1877 reached £E 7.5 million out of a total revenue of £E 9.5 million. In addition, a tribute had to be paid to Turkey, and the interests paid on loans for building the Suez Canal. Most of the debts were handed to foreign bond holders, and as a result foreign controllers appeared in the state treasury, and prices and taxes were sharply increased. Inevitably, the burden of these measures taken by the government fell on the peasants. (Burns, 1928:6)

At the same time famine invaded the country, due to a crop failure and the spread of cattle plague. The British government refused to postpone the interest payments on loans, and all these circumstances created a general atmosphere of opposition, rebellion, and revolt, affecting all classes of the society. The large landowners and the upper class found their interests threatened by foreign interference, the soldiers suffered from discrimination and the peasants from exploitation. Under these conditions the revolt of ‘Urabi11 was supported by most of the Egyptian population and took on a national dimension. As a result, British and French warships were sent to Alexandria in May 1882, "... to safeguard the lives of their subjects". (Burns, 1928:11)

Thus, the imperialist policy of Britain, in coalition with other foreign countries, aimed at breaking down any attempt to create a local economic infrastructure, in order to establish Egypt as a regular and secure market for their own exports.
This policy was practiced before the occupation. The figures of Egypt's trade, on the eve of the occupation, show that four-fifth of cotton exports were to Britain, with cereals sent in exchange of providing most of Egypt's imports. Rothstein claims that during their 28 years of occupation in Egypt, the British did not succeed in building a single manufacturing industry; on the contrary, they "effectively killed whatever possibilities there had been for one". (Rothstein, 1910:307) Lord Cromer argued that the British policy with regard to the proposed establishment of cotton mills in Egypt "will obviously produce serious consequences both in respect of the finance of Egypt and the huge trade in cotton goods now carried on between England and this country". (Radwan, 1974:223) At the same time Lord Cromer imposed a duty of 8% on home-made products, and then concluded that if home-made products were exempted from duty, "Lancashire would be up in arms against the Government". (Radwan, 1974:174)

2.3. The Political and Economic Significance of Egypt's Incorporation into the World Market

British policy is best understood in the context of the international political economy and the colonialisit conflicts of the nineteenth century, in which Egypt as well as the entire Middle East held an important position, in terms of its geographical location and its natural resources. The location gives control over two important trade routes: one linking the Mediterranean Sea and Europe to the Far East via Alexandria, Susz, and Aden; the other across the North Syrian desert down the Euphrates and through the Persian Gulf. Both routes were equally important to Europeans for commerce and for access to their colonies. Therefore, Muhammad 'Ali's attempt for an independent Egypt and his expansionist
aspirations constituted a threat to the European countries concerned. Muhammad 'Ali's seizure of Syria from the Ottomans in 1831 and his agreements with the Sublime Porte* in 1833, meant that he had total control over both routes, "...in a way that was never to recur until the three years during Nasser's United Arab Republic included Syria from 1958 to 1961"(Monroe, 1981:14).

However, British official opinion was divided on the best policy to be adopted for the Middle East and Egypt. In 1819, the British colonial government in India was prepared to help 'Ibrahim Pasha, (Muhammad 'Ali's son), in putting down the Persian Gulf pirates. Similarly, British ship owners were in favour of a British-Egyptian agreement. When a representative of a new British steam line, the P & O, held conversation with Muhammad 'Ali in 1840, the latter is reported to have said:

(as Nasser was to say over a hundred years later) that he had no interest in stopping the traffic that brought him in a useful income: 'it is a very bad policy on the part of your government to fight with me; this is your high road to India, and I shall always promote it'.(Monroe, 1981:14)

But other British politicians disagreed because they feared a French-Egyptian agreement which would put France in a position to block both routes. On the other hand, if Muhammad 'Ali's foreign policy led him to break up the Ottoman Empire, the subdivision of its dominions would be in favour of the Russians, since the latter was perceived as a threat to the Black Sea straits.(Monroe, 1981:14)

Therefore, British occupation of Egypt in 1882 concerned not only economic interests, but also was affected by the context of international political conflicts, Britain had lost its influence over Constantinople, and Egypt represented: "... an alternative bastion for the protection of the route to India".(Monroe, 1981:17)
Following the First World War, the Egyptian struggle for independence was pushed forward after formal independence in 1923, and was just recovering from the re-imposition of British control during the Second World War, when Israel was created in 1948, and new constellation of real power interests emerged.

2.3.1. The rise of nationalist movements during the first half of the twentieth century

As Radwan explained it: “The war, however, by demonstrating weaknesses in the Egyptian economy, developed the national awareness of the need for industrialization” (Radwan, 1974:179) This period marked a turning point in the historical development of Egypt. It is not a coincidence that a national movement claiming independence expressed itself on a large scale, while an economic shift toward national industrialisation was taking place. Nor is it a coincidence that both movements took place during and after the First World War.

During the period between the two world wars, cotton prices were subject to strong fluctuations on the world market; in 1920, prices fell from U.S.$ 200 to U.S.$ 24. This had direct impact on Egypt’s economy and the largest losses fell on the cotton producers. Most of the farmers withheld their cotton from the markets at their own expense, and the big landowners had to seek the intervention of the government. As a result, there was a considerable decline in cotton exports. However, the government had to take rapid measures to save the big landowners and to overcome the crisis; a number of laws were promulgated restricting the area cultivated by cotton to one third of the total acreage. At the same time, the government intervened on the spot market of Minat al-Basal, in Alexandria, as a
By 1921, the economic crisis was partly overcome and Egypt's net balance of profit reached £E 100,000,000. (Crouchley, 1938: 192-194)

In fact, the direct factors that led to this crisis were: the depreciation of the English pound to which the Egyptian is related, the rise in the world prices of certain categories of commodities, the difficulty of obtaining shipping facilities to import goods, and finally, the role played by the upper Egyptian class in increasing the prices on the local markets as they could afford whatever price was asked for goods. Under these circumstances there was an urgent need to find other economic resources besides cotton. In 1916, the government appointed "La Commission du Commerce et de l'Industrie", (The commission of commerce and industry), which recommended the establishment of an industrial sector based on local national capital. Meanwhile, the political scene witnessed the rise of the national movement claiming independence from British occupation and its imperialist policy in the Middle East. (Radwan, 1974: 179-180)

2.3.2. The creation of "Bank Misr"

On the recommendation of the appointed commission, and because of the urgent need for establishing national economic enterprises, Bank Misr was created. It represents the most important achievement that took place during this period, given its economic and political role. The creation of an Egyptian national bank raised several problems, in particular the competition of free trade and foreign industrial investors. The bank, under Tal'at Harb's leadership, was identified with the Wafd Party policy on the basis of "national independence", and a boycott policy was planned against British banks and British products. As Radwan explains, "Bank Misr represented Egypt's new national entrepreneurial class. It
was an institution that made good the defects in the national credit structure, and it created a framework for the support of Egyptian enterprise". (Radwan, 1974:185)

It can be added that the creation of Bank Misr was a response to the urgent need for the establishment of a non-agricultural sector for the development of the economy. Despite the attempts to break the economic dependency on agricultural revenues, the national movement was unable to establish the necessary infrastructure for the implementation of a strong industrial sector that would achieve this independence. Instead, Egypt remained dependent on merchant capital and trade. As a result, both the political and the economic conditions reached a stage of great decline after the Second World War, and the conjunction of several internal and external forces led to the 1952 revolution.

The main concern with the period post 1952 lies in the nature of and the reasons behind the changes that took place. The economic system that arose after 1952 shifted gradually to a state capitalist system based on the agricultural sector, and a long process of industrialisation. It was aimed at an economic independence and a social justice that had not been achieved in previous periods. However, several questions are to be raised concerning this period: What was the nature of the changes that took place, and to what extent were the objectives realised?

2.4. The Revolution and the Burden of the Legacy

The revolution of 1952, led by the free officers, took place within the context of the Middle East struggle for independence. The main objectives of the new regime were projected under the slogan of "al-hayya wa'l-adl", i.e. sufficiency and
justice. (Richards, 1982:176) Under this slogan the new regime was aiming at the provision of the basic needs for the increasing population; the restructuring of the social basis of society, by reducing the role of the upper rural bourgeoisie on which the economy was to a great extent dependent; and the destruction of the ideological label under which Egypt was classified by the colonialisit powers, known as "the agrarian mentality that characterized Egypt's ruling circles since the collapse of Muhammad 'Ali's system". (Radwan, 1974:203) National development meant the increase of the growth of capital through new economic schemes and policies; the government was committed to industrialisation and to social reform.

In the early 1950's the agricultural and the industrial sectors were in the hands of the private sector. (Ikrar, 1980:17) During the first period of Nasir's regime the government was in favour of the intervention of private capital in the industrial sector; thus, in order to promote the industrial sector, it worked in cooperation with the Federation of Egyptian Industries constituted of private capital. But it was difficult to attract private capital given the instability of the economic and political conditions. Soon after this attempt, measures were taken against the rural bourgeoisie through the agrarian reform laws which limited individual ownership and redistributed the excess holdings to landless peasants. These measures were largely aimed at weakening the political and economic power of landowners.

The changes that occurred in the agricultural sector were mostly oriented toward rapid growth through an equitable income distribution and an increase in productivity. These objectives were realised through control of the market in land and the reform of the traditional land tenure system through the agrarian reform laws which took place in three stages. These included the organisation of a crop rotation system and the establishment of multi-purpose agricultural cooperatives,
which were extended over Egypt by 1933, as a means of controlling agricultural surpluses. The government had control over credit and over trade in the principal farm products, with a view of facilitating the integration of production, marketing, and industrialisation. Government policy was to acquire foreign exchange through agricultural exports, while providing sufficient food for urban areas to avoid inflation of prices and political instability under shortages. (El-Ghonsy, 1938:70-73) However, the productivity of the agricultural land was not sufficient to achieve these goals, partly because of the bad irrigation and drainage system, so this induced the government to establish a new hydraulic system to regulate the irrigation and the drainage systems and, at the same time supply energy.

If the construction of the High Dam in Egypt had an economic and an agricultural importance, it also took on a considerable international political dimension within the Arab-Western and the U.S.-Soviet conflicts.

The politics of funding the Dam began with Israel’s Gaza raid of 1955, and the ensuing of Egyptian-Czech arms deal. The World Bank’s financial conditions (for funding the Dam) were already stringent. Further, they required the participation of the United States and provided for funding to proceed in two stages. Nasser, ..., felt that this second feature could leave him open for black mail... 'The terms were not only patronizing but ominously reminiscent of the Caisse de la Dette... [when the European powers assumed control over the Egyptian economy in the 1870's]' (Richards, 1982:192-193)

The U.S sought to justify these conditions and their subsequent withdrawal from the funding by the following statement:

The United States-British offer of December 17, 1955 to help finance the construction of the $1,350,000,000 Aswan Dam was a gesture by both countries to offset the effect of Nasser’s 1955 arms deal with the Russians and thereby to restore waning Western prestige as well as to stem...
This event highlights the important role played by international political conflicts in the economic development of Egypt. The government responded by nationalising the Suez Canal, and as a reaction, the Trigraphite aggression took place in 1955. It was obvious to the government that the revenue from cotton exports and the agricultural sector were not enough to promote the economy, nor was the participation of the private capital in the industrial sector sufficient; thus, there followed a period of the nationalisation of private enterprises alongside the agrarian reform. By 1950, the state consolidated its position in different sectors of the economy by launching a five year plan for economic development, which was the first stage of a ten year plan aimed at "doubling the national income within a limit of ten years". (Radwan, 1974:205) This plan had quite impressive results, despite the cotton failure in 1951, the Yemen war of 1952, and the foreign exchange crisis. (Radwan, 1974:207)

However, the stagnation of exports due to the decrease in agricultural production, together with the increase of imports, led Egypt to a deeper dependency on foreign markets for finance. Despite the government's measures for increasing the productivity of cotton plantation, the marketing policy and the monopoly system imposed by the government on cotton production contributed largely to the decrease of its production, and its exports. Thus, dependence of the economy was even deeper given the reliance of Egypt on foreign resources. (Radwan, 1974:208)

Despite these facts, by 1957 Egyptian dependence on cotton exports was considerably reduced, to only 57% of the total exports as compared to 85.4% in 1952. Industrial output supplied 84.5% of the domestic demand for goods, 67.4%
of intermediate products and 31.3% of capital goods as compared to 74.2% and 33.2% and 12% respectively in 1952. (Radwan, 1974:246) Nevertheless, it did not reduce dependence on foreign exchange and foreign aid, since the price of national industrialisation was the cost of the importation of the raw materials. (Radwan, 1974:247)

This situation was exacerbated during the period following the 1957 defeat. The failure of Nasir's attempt to create an independent national economy was the result of the conjuncture of external and internal factors. Despite his efforts to protect Egypt from political and economic foreign pressures, internal conditions were not sufficient to support such an attempt. Nasir's regime cannot therefore be understood simply in terms of political external factors or events, such as the Yemen war or the defeat of 1957, but rather within the historical process of Egypt's political and social dynamics since its integration into the world market. This context of understanding is relevant in explaining the period following Nasir's regime which is part of the long process of dependence. (Radwan, 1974:247)

In conclusion, the schematic review of Egypt's historical development was an attempt to trace its economic development since its incorporation into the world market. It was shown in the previous two sections that, under different forms, Egypt's dependency on the world market was and remains a constant feature which took place as a result of the interaction of various factors on the national and the international level, where the conjuncture of both political and economic forces determined the direction of the process of development. The agricultural sector, over the last two centuries, was and remains the centre around which this development largely revolved, and through which the dependency of Egypt took
place. The recurrent attempts to release the economy from this dependency through the implementation of an industrial sector and the establishment of an independent state control were destined to failure as explained above.

Despite this constancy, the Egyptian society has not been stagnant, nor has it been passive; the dynamics of the society have been expressed by the various attempts to overcome these conditions and by the capacity of the less privileged social categories to survive under harsh economic conditions. Social and economic mutations are among the outcomes of the recent transformation in rural Egypt. Specific categories of the rural societies were able to cope and consolidate their political and economic positions through their integration in the newly established structures and institutions, and were able to participate in the implementation of agricultural policies. However, before illustrating the impact of such changes on a specific village like Betra, it is necessary to examine the changes in the agrarian structure on the national level, in order to understand the context in which agrarian relations take place in Betra.

3. Egypt's Agrarian Structure

The following section is an attempt to examine the state agricultural policies in the context of the historical development of the cooperative and the banking system. Since their creation these two institutions have witnessed constant change reflecting the prevailing political and economic conditions on the national scene. As argued
previously, agrarian relations cannot be understood in isolation from the wider system, nor can they be regarded as separate units operating in a closed circle.

Thus, in the light of the above, this section will focus on the nature and the implications of the changes in the role of the banking and the cooperative system during the first half of the twentieth century. A review of the state policy and its control over the agricultural sector through the agrarian structure will be traced during Nasir's regime, as it represents a turning point in the contemporary history of the Egyptian agrarian question. Similarly, this section will examine the nature and the factors behind the transformation in the cooperative and the banking system under the open-door economic system.

The state intervenes in the agricultural sector through two main institutions:
1. The Principal Bank for Development and Agricultural Credit, an autonomous authority under the jurisdiction of the Ministry of Agriculture.
Since their creation, the roles and the functions of the two institutions have witnessed changes according to the conditions of, and the policies adopted by the state at different stages of Egypt's economic development.

Thus, in order to understand and follow the policies undertaken in the agricultural sector and its organisation at the present time, it is necessary to trace the course of development of these institutions, since they reflect the economic and political conditions prevailing on the national level. (Radwan, 1977: 54) On the other hand, their study will explain the use of certain measures and strategies adopted by the peasants, in Betra, with regard to the system in general.
3.1. The Historical Development of the Agricultural Cooperatives and the Credit System

Both Mari' and Radwan recognize two different periods in the general development of these two institutions: the period prior to 1952 and the period post 1952. The year 1952 represents a turning point in this historical development, as it inaugurated a period of major changes, during which time agrarian reform was one of the main objectives of Nasir's regime. In addition to the historical partition, a third period must be included: the open-door economic policy in which the agricultural system has been modified and adapted to the economic policies adopted.

3.1.1. The credit system prior to 1952

In the first half of the twentieth century, with the international economic depression and with the indebtedness of the Egyptian landowners and cotton merchants, there was an urgent need: "for an alternative source of finance... . Agricultural credit was difficult to obtain from a banking system totally controlled by foreign interests". (Radwan, 1977:54) Short term loans were given by commercial banks to large landowners and cotton merchants, while the small landowners (representing 80% of the total landowners) had to turn to village usurers: "The rates of interest charged ranged from 30 to 40 per cent, and at times were as high as 50 per cent per annum". (Radwan, 1977:54)

An unsuccessful attempt was made, in 1902, to provide loans at low rates through the establishment of the Agricultural Bank of Egypt. The failure of this project
was due to the fact that most borrowers were unable to repay their debts under the fluctuation of cotton prices. In addition, the bank addressed its services, essentially, to large landowners, as the 1912 law prohibited the "seizure for debt of properties of five feddans or less". (Radwan, 1977:55) As a result, "the bank loans offered to small holders amounted to 4 million Egyptian pounds compared with debts of 12 million Egyptian pounds to private moneylenders." (Radwan, 1977:55) Under such circumstances, there was an urgent need for a national institution which would provide the peasants with the necessary services. The agricultural cooperatives were, thus, created within the context of an economic independence.

Despite all the efforts made to expand the cooperative system in the country, "...the movement was soon to die because of strong government opposition,... More important was... the fact that all these co-operatives developed clubs for the village notables." (Radwan, 1977:55) However, the landowners exercised pressure on the government for their active intervention in agrarian policies, and in the organisation of the agricultural sector:

One of the most important measures taken in this period was the establishment in 1931 of the 'Credit Agricole d'Egypte' to provide co-operatives with the needed credit at a low interest rate (5 per cent). Nevertheless, the Government maintained a tight grip on the movement, mainly through allocation of funds to the Credit Agricole, which limited the effectiveness of most societies. (Radwan, 1977:55-56)

The structure of the Credit Agricole d'Egypte was not able to meet the needs of the agricultural sector during the depression in the late 1920's. (Seab, 1937:7) Pressure was made once again by the landowners to gain the government's support under the financial crisis. The Credit Agricole was reorganized under the name of the Credit Agricole et Cooperatif, with the objective of providing funds for the
increasing number of cooperatives. Radwan explains the reason behind the ineffectiveness of the system as such:

First, and perhaps most important, was that agricultural co-operation lost its popular character in the face of increasing government intervention. The co-operative societies, ... were in most cases reduced to branches of the Credit Agricols, the sole function of which to provide credit. Moreover, small peasants, who were supposed to be the main beneficiaries of the system, had little or no access to co-operative services. The low credit-worthiness of these peasants made it difficult for them to obtain co-operative credit. Most co-operatives were dominated by large landowners who found it advantageous to form themselves into co-operative societies in order to obtain cheap credit. (Radwan, 1977:56)

3.1.2. The state agricultural policy, post 1952

The agrarian question was a major issue facing the new regime in 1952. Under the slogan of sufficiency and justice, the agrarian reform laws were launched at different stages with the objective of changing the land holding system. This objective was to be achieved by limiting the maximum size of ownership, reorganising the relationship between the landowner and the tenant, and by fixing the rate of the annual rent.

The first agrarian reform of 1952 made it obligatory for all land reform beneficiaries... [in the same] village to form a co-operative society among themselves. The co-operative was to replace the former landowner in the organisation of cultivation, provision of credit and other inputs, and the marketing of produce". (Radwan, 1977:57)

The agrarian reform was largely a political strategy, attempting to reduce the political power of the large landowners who constituted a threat to the new regime. (Riad, 1954:33) (Seab, 1957:17) Initially, it was addressed to landless and to the less privileged peasants. The redistribution of the excess land owned by the
large landowners on landless and small holders, who became the majority of the holders, implied the reorganisation of the agricultural sector to meet the needs of the new emerging class of landowners and to consolidate state control over the agricultural production and its marketing. The agricultural cooperatives were thus restructured to achieve these objectives in the context of the agrarian reform laws.

3.2. The Status Quo of the Cooperative Structure

Agricultural cooperatives were defined by 1939 law\textsuperscript{17} as a democratic organisation acting on the basis of the principles of the law of cooperation. The cooperative is constituted of individuals working in agriculture or those who are directly related to agricultural activities where the cooperative undertakes its activities.\textit{(Mar'i, 1970:283)} According to the law, the share in the capital of the cooperative is fixed at £.E 0.50 and the subscription fees in the cooperative for the land holders at £.E 1 per feddan.\textit{(Mar'i, 1970:283)} \textit{(Sahb, 1967:43-44)} The surplus realised by the cooperative is divided among the different services it assumes, from which 10\% are deducted annually for the general services offered by the cooperative in its area, 5\% deducted for social and charity activities, 5\% for the training of the cooperative's employees, and finally 5\% are deposited in the treasury of the Agricultural Cooperative Union to be invested for the care of agricultural labourers. The law considers the cooperatives' budget as public, and the employees, the members of the board of directors, and the members of the supervision committees as public employees.\textit{(Mar'i, 1970:283)}

The hierarchical structure of the agricultural cooperative covers the various agricultural specialisations and the different levels of the administrative divisions
in Egypt and operates in coordination with the credit system. In his book, Sāyyid Mar'ī distinguishes the different levels in which the cooperatives operate, the different types of cooperatives, and their relation with the credit system. The following description illustrates the role of the various subdivisions of this system (Fig. II.1)

3.2.1. Local Multipurpose Agricultural Cooperative

At the base of the pyramid, the Local Multipurpose Agricultural Cooperative serves a village covering an average area of 1,500 feddans. In 1959, there were 4,200 village cooperatives constituted of the members of the general meeting from the village, headed by a board of directors, whose members are elected from the general meeting. Four-fifths of the seats of the board of directors are occupied by peasants. On the other hand, in each cooperative a director is elected from the board of directors and is responsible for the execution of the decisions taken by the board. In addition, there is a supervisory committee for the supervision of the cooperative's activities. This committee is constituted of five members, from which two are chosen by the Arab Socialist Union, one is chosen by the Central Agricultural Cooperative Union and the two others are chosen by a governorate committee. (Mar'ī, 1970:284)

3.2.2. District Multipurpose Agricultural Cooperative

The District Multipurpose Agricultural Cooperative provides the local village cooperatives with the necessary services and distributes to each the quota of inputs. The general meeting of this cooperative is constituted of one member of the board of directors of each of the village cooperatives.
The District, corresponds to the administrative division called Centre or Markaz.

This table is based on Radwan's table and on Harl's division (Radwan, 1977:59) (Harl, 1970: 286-287, 297-298)
3.2.3. Government Multipurpose Cooperative

Following the same model, the cooperatives on the level of the governorates are constituted of one member of the board of directors of each centre it covers. It assumes the same tasks as the previous ones but on the level of the governorates.

3.2.4. General Agricultural Cooperative

At this level of the hierarchy, the cooperative operates on the national scale. The General Agricultural Cooperative organises the cooperatives on the level of the governorates, as well as the specialised cooperatives and their branches. The members of the General Agricultural Cooperative comprise one member of the board of directors of the Government Multipurpose Cooperative and of the specialised cooperatives. (Mar'i, 1970:285) The main task of this institution is to draw the general policies of the cooperative system within the framework of national policy. It coordinates and controls the internal activities of the cooperative system and its relations with other institutions, such as the Agricultural Credit and Cooperative Organisation. (Mar'i, 1970:287) The cooperative system operates in coordination with the financial and credit system which has been defined in the context of the national policy. Short term loans are advanced to landholders for agricultural production. Medium term loans are provided for the purchase of agricultural equipment, for selected new seeds, and for cattle breeding and fattening. Under state policy, long term loans for investments in private projects, and for expanding landownership, have been abolished. (Mar'i, 1970:297)
3.2.5. Agrarian Reform General Cooperative

Following the same administrative divisions as the Multipurpose Agricultural Cooperative, the Agrarian Reform General Cooperative, was established in areas where the agricultural land of the large landowners was redistributed on small and landless peasants. The members of these cooperatives are holders of five feddans or less. The Agrarian Reform Cooperative provides loans on inputs for agricultural production as well as technical assistance and storage facilities, and undertakes the marketing of certain compulsory crops.

3.2.6. Land Reclamation General Cooperative

These cooperatives were introduced in areas where land reclamation took place. The Land Reclamation Cooperative follows the same administrative divisions as the multipurpose ones and assumes the same tasks under the aegis of the Central Agricultural Cooperative Union.

3.2.7. Central Agricultural Cooperative Union

The Central Agricultural Cooperative Union leads the entire cooperative system in Egypt. The members of the general meeting are constituted of 30 members of the board of directors of all cooperatives in Egypt. Five members of the board of directors of the union are appointed by the Ministry of Agriculture. The president of the board of directors of the union is appointed by the President of the Republic. (Mar'i, 1970:285-6)
3.2.8. General Agricultural Credit and Cooperative Organisation

Under the slogan of "centralisation of planning and decentralisation of execution", the organisation of the financial and credit system has been explained in the following terms:

a) The Agricultural Credit Bank deals with individuals through the agricultural cooperatives.

b) The bank offers credit facilities to tenants who hold less than 30 feddans on the basis of the crop guaranty instead of ownership guaranty.

c) The bank services are delivered to the farmers in their villages through the village cooperatives.

d) The bank acts as a supervisory body in order to guaranty the execution of its policy. (Mar'i, 1970:298)

It should be pointed out that the services of the Agricultural Credit Bank are confined to the members of the Village Agricultural Cooperatives. Furthermore, the bank, as an agricultural institution, supports the cooperative movement by providing the necessary funds for hiring employees, for training the members of the cooperatives, for the purchase of agricultural equipment, as well as for providing storage and marketing facilities.

In this context, the 1954 law called for the creation of the General Agricultural Credit and Cooperative Organisation which represents the seat of the Credit and Cooperative Bank. The branches of the bank in the governorates were, thus, transformed into joint stock companies under the authority of the organisation. The role of the organisation covers several fields in the agricultural sector:

a) The provision of agricultural inputs, including seeds, fertilisers, and pesticides.

b) The provision of the necessary inputs for animal production.
c) The marketing of agricultural production.

d) The delivery of certain crops to the Ministry of Approvision.

e) The storage of the agricultural production.

This sophisticated system led to the consolidation of state control over the agricultural sector. (Riefl, 1954:34) This control has been utilised to establish a crop rotation cycle and a specific marketing and pricing policy. Thus, in order to understand the mechanisms of this system and the problems it generated, it is necessary to examine the impact of the policies adopted by these institutions in the organisation of the agricultural production, marketing, and pricing systems.

3.3 The Impact of the Agricultural Policy of the 1930's

The state agricultural policy, during the sixties, revolved around three specific issues:

a) The consolidation of a triennial crop rotation cycle.

b) The control of agricultural inputs.

c) The control of the marketing of compulsory crops.

3.3.1. The consolidation of a triennial crop rotation cycle

The triennial crop rotation cycle divides the agricultural land, of one area, into three annual blocks, each cultivated by a specific crop according to the type of the soil and the location in relation to the source of irrigation, the season, and the national annual needs. Through the Local Agricultural Cooperative the holders are notified annually of the list of crops to be cultivated on their plot, regardless of
the household needs for consumption. (Seah, 1967:79) The logic of the system was to combine the advantage of large scale management with the possibility of providing an incentive of private gain to individual farmers. (Radwan, 1977:61) According to Radwan, the advantages of this system became apparent immediately: crop rotation increased the yields of the land. By cultivating a single crop on a large area it was possible to avoid certain losses caused by the contiguity of different crops, which may have varied irrigation requirements, in a single block of land, and which, of course, resulted in the transmission of pests and diseases from one plot to another. (Radwan, 1977:61-62) (Seah, 1967:79) Land fragmentation was increased under the agrarian reform laws as a result of the unequal distribution of landownership, too rapid a population growth, and the effect of the Muslim law of inheritance. (Radwan, 1977:60-61) Thus, the crop consolidation program was unsuccessful in solving the problem of land fragmentation. Furthermore, this problem generated an adverse effect... on poor and small landowners who found it difficult to diversify their products. Their small plots of land would inevitably fall within a single block and they would be obliged to grow a single crop. ...if,... their plot falls in the cotton block, they will have to buy their needs... on the open market. Here the large landowners have an advantageous position: the holdings are large enough to enable them to diversify their production and have a surplus to sell... this situation has resulted in the creation of an actual black market, especially in cereals, rice and fodder, where large landowners sold their surplus to small farmers at exorbitant prices. Moreover, the practice of small farmers hiring land in specific seasons to grow a specific crop at rents much higher to the official rate became widespread. (Radwan, 1977:63)

Radwan's argument raises a number of problems. Evidence from fieldwork in Batra suggests different reactions and strategies adopted by the peasants to counter the same policies. It is largely agreed upon that the agricultural land in Egypt is
highly fragmented due to the reasons advanced by Radwan. However, in cases of inheritance, very often the small holders living in the same village avoid registering the land in the name of the new holders or owners in order to escape from taxation, and to ensure access to credit from the cooperative on the basis of a larger proportion of crop production or landownership.

On the other hand, with regard to the difficulty of diversifying the types of crops cultivated on a small holding as suggested by the author, it has been found in the early seventies in Bata, under the instability, the plurality, and the flexibility of the policies adopted by the cooperative, that small holders were able to escape from the compulsory crop rotation through different means. Peasants had recourse to different forms of organisation of production and marketing within the socio-economic setting of the community. One cannot generalise in the absolute terms, but one cannot ignore, however, the existence of such phenomenon and their impact in the long term.

According to Radwan only "large landowners" (assuming that they are owners of ten to 20 feddans and are under the compulsory crop rotation cycle) were able to diversify their agricultural production. In fact, fieldwork showed that agricultural diversification took place more intensively on divided plots than on large units. Depending on the location of the plot, if the holding is located in different basins it would be cultivated by a variety of crops, but if the holding is grouped in one block, as a large unit, it is most likely that it would be cultivated by one or two crops. Thus, the owner operates on the assumption that the large scale production can reduce the costs of production, an argument that has been raised and contested theoretically. Nevertheless, it is a logic often adopted by large landowners.
### Table II.5: The Cooperative Credit by Size of Landownership

<table>
<thead>
<tr>
<th>SIZE</th>
<th>1933 - 1954</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LOSS</td>
<td>CASES</td>
<td>AVERAGE DEBT</td>
<td>PERCENT</td>
</tr>
<tr>
<td>HELD</td>
<td>(£.P.)</td>
<td>(000 £)</td>
<td>(£.P.)</td>
<td></td>
</tr>
<tr>
<td>&lt; 5</td>
<td>25,4</td>
<td>50</td>
<td>1,177</td>
<td>85</td>
</tr>
<tr>
<td>5 - 25</td>
<td>15,6</td>
<td>31</td>
<td>187</td>
<td>13</td>
</tr>
<tr>
<td>&gt; 25</td>
<td>9,6</td>
<td>19</td>
<td>26</td>
<td>2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>59,7</td>
<td>100</td>
<td>1,390</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SIZE</th>
<th>1972 - 1973</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LOSS</td>
<td>CASES</td>
<td>AVERAGE DEBT</td>
<td>PERCENT</td>
</tr>
<tr>
<td>HELD</td>
<td>(£.P.)</td>
<td>(000 £)</td>
<td>(£.P.)</td>
<td></td>
</tr>
<tr>
<td>&lt; 5</td>
<td>35,4</td>
<td>50</td>
<td>2,159</td>
<td>83</td>
</tr>
<tr>
<td>5 - 25</td>
<td>33,5</td>
<td>43</td>
<td>409</td>
<td>16</td>
</tr>
<tr>
<td>&gt; 25</td>
<td>5,0</td>
<td>7</td>
<td>22</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>70,9</td>
<td>100</td>
<td>2,559</td>
<td>100</td>
</tr>
</tbody>
</table>

* Percentages and averages rounded.

** Average debt per unit of land was available only for this year. It amounted to £.E 10,957, 10,573 and 10,597 for the three ownership classes respectively. (Radwan, 1977:68)
Similarly, the different forms of access to land can lead to agricultural diversification. For example, a property of 15 feddans can be divided among a number of farmers by tenancy, seasonal rent, or sharecropping. These different forms of access to land divide the property into smaller units which enable the peasants to escape discretely from the crop rotation constraints. In other words, the smaller the land holding is, the easier the peasant can escape from the cooperative directives, as a unit of one feddan or 12 gireis does not alter the entire system, whereas, a unit of 15 feddans cannot be ignored easily by the cooperative. Finally, access to the open market is not confined to large owners, as suggested by Radwan, but includes the smaller peasants, who acquire cash money by selling part of the crop. The expansion of the open market is the result of the pricing and marketing policy which is incapable of meeting the needs of the peasants.

Radwan concludes by saying that this system failed to introduce an alternative form of organisation of agricultural production, and adding that "It is not therefore surprising that the system was strongly resisted by small farmers". (Radwan, 1977:63) But, a few questions remain to be asked: how was this resistance expressed, and to what extent is it manifested?

3.3.2. The control of agricultural inputs

The consolidation of state control over the agricultural sector was achieved through the cooperatives' channels, which supplied improved seeds, fertilisers, pesticides, technical services, and credit facilities to peasants. The government became the only distributor of inputs and the sole provider of credits in cash or in kind, for a subsidised interest rate of 4%. However, the distribution and the type of inputs was determined according to the crop rotation cycle in the area, more
precisely according to what the peasant was allowed to cultivate on his plot. (Riaa, 1964:34) (Saeb, 1967:84)

Radwan argues that: "Fragmentary evidence ...suggests that the system may have favoured large farmers rather than small and poorer peasants". (Radwan, 1977:68) He adds, that despite an apparent equality in the distribution of credit per unit of land, small peasants, representing the majority of the debtors (83-85%) and the most needy, receive half the credit advanced by the cooperative system, while medium and large landowners receive the other half. (Tab.III.1) (Riaa, 1964:34)

"One would expect an inverse relationship under the credit policy which was primarily design to relieve small and poor peasants of their burden of indebtedness". (Radwan, 1977:69) The author elaborates on this point in the following terms:

the medium and large landowners found in the credit facilities advanced by the co-operatives a cheap source of finance not only for their agricultural operations, but to enhance their wealth by buying more land, machinery, livestock and sometimes to finance some commercial business. [Furthermore,]... many privileges were enjoyed exclusively by rich farmers by virtue of certain provisions of the agrarian reform laws. For instance [in] the system of livestock insurance, only the owner of at least three head of cattle is formally eligible to ensure his livestock, and subsequently to obtain a ration of 150 kg. of fodder at the subsidised price fixed by the State. (Radwan, 1977:69)

The contradictions of the system were not confined to this level, they also covered both the marketing and the pricing policies of agricultural products. These contradictions played an important role, on the long term, in reorienting the entire system within the the open-door economic policy launched in the middle of the 1970's.
3.3.3. The control of the marketing of compulsory crops

In 1953, the control by the state of the marketing of cotton began in the land reform areas. By 1955, this system was extended to the non-reform areas and gradually covered the entire agricultural land in Egypt. Most of the crops were included in the list: rice, wheat, sugar cane, onions, cotton, etc. According to this system, the producer is compelled to deliver a proportion of his production, or the entire quantity in the case of cotton, to the cooperative, which assumes its marketing. Under the compulsory delivery system, the prices offered to the producer by the cooperative correspond to what is called "administered price", which is lower than the price on the free market. This system was meant to ensure the necessary provision of basic food requirements for the population; it was also meant to increase exports of rice, onions, and cotton. (Radwan, 1977:70)

Although the system of compulsory deliveries was coordinated with the crop rotation cycle, certain areas under specific conditions did not fall under this system. As a result, the holders in those areas were not subject to government constraints as the others were; and they benefited, meanwhile, from the subsidised price of inputs. Although the government claimed that it provided inputs to peasants on the basis of subsidised prices, Radwan argues that:

The use of price differentials as a means of appropriating agricultural surplus was not limited to the requisitioned crops... the Government sought to influence the agricultural terms of trade through the manipulation of inputs, the supply of which it almost totally controlled through the co-operatives. For instance, in the case of chemical fertilisers... a ton was sold to farmers during the 1960's at 25 pounds, when the import price was 15-16 Egyptian pounds only. (Radwan, 1977:73)

He further argues that the government was able to regulate domestic terms of trade
primarily by purchasing agricultural products at relatively lower prices than those for export or for local producers. (Radwan, 1977:73) Thus, the development of the policies adopted by the cooperative and the credit agricultural system had created, by the end of the 1960's and the early 1970's, a contradictory situation. In fact, the ideals of this movement as expressed by the authorities soon became lost illusions.

It was feared that once the land is redistributed, the new small owners would be lost, credits would be lacking, benefit of large scale production would disappear and every one would be on his own way. By the creation of co-operatives these fears are eliminated. The co-operatives are there, and they are backed by the Agricultural Credit Bank which is half-owned by the Government... Crops will be distributed according to scientific data, and will be sold under the best circumstances, and the price distributed according to the size of the land. Thus each unit will constitute a sort of parliament, and little by little, the co-operative spirit will prevail. (Abussoud, 1954:13-14)

Despite all these expectations, those who benefited the most from the cooperative system were the medium and the large land owners, who were in a better position to have access to credit and inputs. Under the pricing policy the producers started to orient their production toward free cash crops (crops which are not subject to compulsory delivery). This shift enabled the farmer to escape from the compulsory delivery system and its prices, while benefiting from the free market prices. Meanwhile, peasants who could not convert their cultivation to free market crops, were under the restrictions of the agricultural system, especially the pricing policy of the compulsory delivery crops which followed a very slow rate of increase as compared to the free market prices.

In this context, small peasants had to find different means of survival within a system that generated economic differentiation in the rural society. The spirit of
cooperative did not prevail as expected and the fears were not eliminated...

...However, on another level, the cooperative system succeeded in consolidating the state position in this sector.

The Government was certainly successful in using the new system to mobilise and transfer the agricultural surplus to finance industrial accumulation and redress the balance of payments deficit. It was estimated that the net transfer of surplus from agriculture during the 1960's was in the range of 5-8 per cent of agricultural income. (Radwan, 1977:76)

3.4. Infitah: "the Strategy of Civilisation" and the New Agricultural System

During the early seventies many suggestions were made toward finding a remedy to the cooperative system which was progressively declining. Several criticisms and solutions were proposed to modify the cooperatives in order that they may achieve the objectives for which they were originally structured. The main issues raised were the deficiency of the financial organisation and the mismanagement of the cooperatives. By 1972 there were nearly 5,051 agricultural cooperatives, including the various branches and specialisations. Each cooperative had an average capital of £.E 1,210. Land Reclamation Cooperatives had an average capital of £.E 11,154; while the average capital of a Local Multipurpose Agricultural Cooperative was £.E 448, and there were 4,200 local cooperatives by that time. Furthermore, the members of the local multipurpose cooperatives were mostly small farmers with fragmented holdings. (Gami', 1972:68)

Thus, with a very limited budget and with members mostly constituted of small peasants with fragmented holdings, the local cooperatives reached a stage where
they could no longer provide the necessary services and the necessary funds for agricultural production. This led to their total dependence on the Agricultural Credit and Cooperative Organisation and its banks. This also meant that the local cooperatives were indebted on a permanent basis to the credit system. Likewise, the local cooperatives faced the problem of a small number of members of the general meeting as compared to the large number of members of the board of directors. The disproportion in the membership led to the mismanagement of the institution, as it was very difficult to elect 17 competent members to the board of directors. This in its turn allowed a few members to monopolise and control the cooperative, namely, those who were appointed by the official authorities or those who had an important position in the village community. (Gami', 1972:68)

Suggestions were advanced to increase the number of members in the general meeting, which would have eventually allowed a larger proportion of the community to participate in the management of the cooperative, and would have given a chance to new efficient elements from the village to influence the decisions and policies of the board of directors. Similarly, it would have increased the capital of the cooperatives and would have allowed a larger margin of autonomy. (Gami', 1972:69)

Despite many efforts made to find solutions for the cooperative system, which was in the process of decomposing, the government did not respond in an active way. On the contrary, the conditions were declining and the local cooperatives came to be at the service of state policy, no longer representing the interests of the small peasants. Under such circumstances, and in the context of Infitah, there was an urgent need to modify the agricultural system in order to meet the objectives of the new policy, aimed at promoting private capital, reducing government
interference in the economy, and reorienting the economy toward the demands of the world market. However, such modifications implied the revision of the legislation of Nasir's regime.

By 1971, the government embarked on a policy of liquidation of property, over which it assumed control through selling or redistribution. This was consolidated by the promulgation of a law concerning the liquidation of the sequestrations that had taken place in the 1950's. Thus, the cooperative system became a heavy constraining burden that could no longer fit into this new "liberal" approach. Change was needed; but it must be change which would not alter the stability of the regime. Therefore, the cooperatives could not have been simply replaced by another system, since they were one of Nasir's achievements. Instead, the system was left to parish gradually by being submitted to an unequal competitive situation through the creation of a parallel organisation (de Saints Marie, 1984:35)

In a letter addressed to the general conference of agricultural cooperation, Sadat summarised the main issues of the new agricultural system:

I proposed, previously, in the national work program, my ideas for the development of the Egyptian village and for agricultural development, based on the introduction of mechanisation and modern agricultural techniques... In the October paper, I focused on these objectives, within a complete strategy of civilisation... and I am comforted to learn that you are studying the idea of the expansion of the "Bank of the Village" as an apparatus working in conjunction with each cooperative organisation, to serve the cooperative, and to provide it with the necessary funds", Sadat 7th of February, 1976. (Principal Bank for Development and Agricultural Credit, 1977:1)

One of the claims of the "strategy of civilisation", was "the liberation of the economic units" from constraints. This implied the elimination of all public
organisations and the redefinition of their legal status. One such organisation, the Agricultural Credit and Cooperative Organisation, was changed into The Principal Bank for Development and Agricultural Credit. The main official argument claimed that the cooperative system was no longer self sufficient and that the government had to support it through subsidised services; it was, thus, a heavy load on the state. Instead of modifying the cooperative system in order to redress it, the government opted for the restructuring of the financial system in order to reorient the entire agricultural sector within the open-door economic policy, and to reduce the role of the cooperatives to the minimum.

In the light of the new policies, the role and the functions of the cooperatives were clearly defined and reduced proportionally to the new role assumed by the Principal Bank for Development and Agricultural Credit and its local branches, the Bank of the Village. Their role covered the following points:

a) The role of the Local Multipurpose Agricultural Cooperative is confined to the technical assistance and the planning of agricultural production.

b) The Bank of the Village assumes all the financial operations and responsibilities, and deals directly with the public without the intermediary of the local cooperative.

c) The Bank of the Village undertakes the agricultural delivery operations of inputs, as well as the marketing of the compulsory crops.

d) The Bank of the Village collaborates and contributes in the activities and the development projects undertaken by the local institutions in the village. (Principal Bank for Development and Agricultural Credit, 1977:84-85)

Thus, the new definition deprived the cooperatives of their basic responsibilities, putting them under the total control of the banks. The Bank of the Village provides under, its new structure, banking services, loans in kind and in cash for
agricultural operations, and loans for private investments and development projects, covering several areas:

3.4.1. Animal and Poultry production

a) Fattening veal; this form of cattle fattening follows a short cycle of six months, until the animal reaches a specific weight.
b) Fattening veal on green clover; this is addressed basically to peasants who grow green clover and barssim.
c) Breeding and Fattening cattle around the year; this is done under specific conditions, namely, when fodder is available all through the year.
d) Female cattle breeding, for dairy production and reproduction.
e) Raising poultry.
f) The construction of poultry stations.
g) Chicks breeding, this is addressed to the peasants’ wives.

3.4.2. Mechanisation

a) Ploughing and pulling machines.
b) Threshing machines.
c) Fixed and mobile irrigation pumps.
d) Electrical machines.
e) Transport vehicles for agricultural purposes.

3.4.3. Non-traditional agriculture

a) The production of medical and aromatic plants for internal industries and for export.
b) The production of flowers, through the import of bulbs, for export purposes.
c) Linen production for medical industries.
d) Investments in beekeeping stations for local consumption and for export.
f) Silkworm raising.
g) Beekeeping and silkworm industries.

3.4.4. Handicrafts and family industries

a) Textile units for wool and cotton.
b) Knitting units for wool.
c) Weaving of cloth and school uniforms.
d) Carpet and mats industries.
e) Dairy products.
f) Fish industry.

3.4.5. Urban and cultural development projects in the village

a) The construction of modern housing for peasants.
b) The provision of means of transport for peasants, such as bicycles and motor cycles.
c) The provision of television and radio sets for peasants. (Principal Bank for Development and Agricultural Credit, 1977:84-85)

This long list of the development projects financed by the banks covers short term projects with high remuneration. It is evident from the above that this new structure and the new approach to rural development, is largely addressed to owners of agricultural land, to merchants, and to all those who have access to the capital needed, or have access to collaterals for bank loans for agricultural
investments. Under the open-door economic policy, the agrarian structure is conceived to increase the process of commoditisation at the village level, and has directed agricultural production towards the demands of the international markets. Moreover, these policies are addressed to peasants and farmers households, and are viewed as single units of production, and are pushed to compete with each other on a limited market. Likewise, the mobilisation of unpaid labour by the household is being encouraged by the implemented development projects, which aim to establish an informal network of income generating sources within the conception of development formulated and adopted by non-governmental agencies, and governmental aid agencies.

From the above discussion, it can be argued that the state policies implemented through the various governmental institutions, at national and regional levels, are oriented towards the withdrawal of the state from the agricultural sector, and from the social and economic obligations assumed previously. On the other hand, an alternative system had to be promoted based on the local structures, and in which the community in relations with the new apparatus and government agents, through locally established channels, mediates state policies and maintains a certain balance between the different socio-economic categories in rural areas and with the state. In which case, the surplus extracted from the agricultural sector is being diverted, partly by a certain category of producers and merchants, while the rest is being recuperated by the state through the compulsory system of production and marketing, and through the banking system. In this context, the following chapter will be devoted to presenting a detailed description of the various aspects of the socio-economic setting of the village of Batra, under the described economic and political conditions, and in its concrete relations with the government agents and institutions.
Notes


2- Marie Christine Aulas is a French journalist specialised on the Middle East. She wrote several articles on Egypt, covering the transformation that has occurred during the last decade.

3- Quoting John Foster Dulles.

4- J. Foster Dulles was Secretary of State under President Dwight D. Eisenhower, from 1953 to 1959. He extended the anti-communist alliance system which began in Europe with NATO.

5- Qabus port project was launched in April 1985, in the context of an Oman, Jordan, and Egyptian agreement.

6- 'Adil Husin is an Egyptian economist, presently editor of the weekly party paper, al-Sha'b.

7- Muhammad 'Ali ruled Egypt from 1805 to 1849. He was appointed Viceroy by the Ottomans. He and his family were granted the hereditary right to rule Egypt and the Sudan, but the Sultan remained his suzerain.

8- Crouchtley's figures show the extent of Egypt's reliance on the British markets as follow:
   - 80% of the total exports were to Britain.
   - 44% of the total imports were from Britain.
   - 10% of the total exports were to France.
   - 11% of the total imports were from France.
   - The rest of the trade was with other countries. (Crouchtley, 1938:138)

9- Khedive 'Isma'il the grand son of Muhammad 'Ali, ruled Egypt from 1863 to 1879. His reign was marked by large debts which he could not control given
his large expenditure policy. After the declaration of Egypt's economic crisis in 1878, and with the explosion of the nationalist movement led by 'Urabi, Khedive 'Isma'il abdicated and retired in Istanbul until his death.

10- For further details on the expenditure on public works during the reign of Khedive 'Isma'il, see Croucherley, 1938:118-119.

11- 'Urabi was born in a peasant family, he joined the army and rose to the rank of colonel. An Egyptian nationalist hero, he led a socio-political movement that expressed the discontent of the various classes under the slogan of Egypt for the Egyptians. In 1881 'Urabi was appointed Minister of Defense. After the defeat of his army by the British in 1882 he was exiled to Ceylon.

12- cf. note 8.

13- Baring Evelyn, 1st Earl of Cromer, army officer and British diplomat who ruled Egypt from 1883 to 1907. In 1879, he came to Egypt as British controller of the Caisse de la Dette. In 1883, he returned as British Agent and Consul General. He instituted the so-called Veiled Protectorate.

14- The Sublime Porte refers to the Sultan of the Ottoman empire.

15- Tal'at Harb is an Egyptian economist who launched the idea of creating Bank Misr, with Egyptian capital, within the nationalist movement claiming independence.

16- The Wafd Party was founded by Sa'd Zaghlul after the formation of a delegation representing the nationalist movement in Egypt, for the negotiations for national independence with Britain, in 1919. Until 1952, the Wafd Party played an important role on the political scene, especially in its confrontations with the King and the Palace. The party governed the country from 1950 until the revolution in 1952.


18- The Arab Socialist Union, al-Itihad al-'Ishtiraki al-'Arabi, was the only ruling political party from 1952 to 1976, until Egypt's policy system shifted gradually toward the plurality of political parties.
As discussed in the previous chapters, it has been established that the specificity of agricultural production in the ecological environment is a key element for the analysis of agrarian society. Similarly, it has been argued that rural societies are not constituted of one homogenous class of peasants, but exhibit a heterogeneous socio-economic structure which cannot be depicted on the basis of aggregate data. It has been also suggested that rural societies are not passive recipients to change, nor are they submissive to changing policies. In fact rural societies in their various socio-economic categories interact with external change and in the process of mediating external factors they are transformed as they transform them, thus, differential reactions to policies and change are developed by the inhabitants. These reactions are reflected in the different forms of social and economic relations adopted among the inhabitants, and with the government agents and external institutions to the village (Chapter I).

In this perspective the following chapter will present a detailed description of the
village of Betra and its regional location, based on an extensive fieldwork study. This account attempts to examine the village community in a historical context, in which the development of access to land and of the socio-economic relations was directly related to the historical development on a national level. Thus, ecological diversity of the village's territory is one of the important factors determining the process of development at the village level, under the national political and economic conditions. In the process of transformation, a number of relations are adopted by the various groups in the village, combining commodity and non-commodity relations, and bearing different significances for the different socio-economic categories. These relations are adopted between the different categories of villagers, as well as with external agents, and government institutions. Hence it is necessary to examine the set of relations established among the different categories of villagers, and the interaction between government institutions and the various groups within the local setting of Betra, in order to understand the nature of the process of change.

In this framework, this chapter will first examine the regional geographical location of the village within the historical development of the main cities and the present relations established between the village and the urban areas. This will be followed by a physical description of Betra, illustrating the specificity of the territory. Through a historical account of the village, the development of access to land, and the social relations they entail will be traced. A contemporary account of the various aspects of the socio-economic setting in the village will be presented through a detailed study of the different economic, political, and social institutions of Betra. Finally, within the socio-economic setting of the village, the role of both the Bank of the Village and the Agricultural Cooperative will be examined in detail in order to show one of the channels through which externalisation takes place at the village level, and the process by which state policies are mediated and transformed by the existing local structures, under the national economic and
1. The Geographical Location of Bátara

The village of Bátara is located in the north east of the Delta, on the west bank of the Damietta branch of the Nile. (Fig. III.1-2) Administrativey, Bátara is attached to Talkha centre in the governorate of Daqahliyya. The governorate of Daqahliyya is one of the largest governorates in Egypt, covering nearly 314,839 feddans¹, representing 8% of the total agricultural land in Egypt. Daqahliyya is located in the north of the Delta, and has a triangle shape: its base is in the north and its point to the south. (Fig. III.3) The governorate is surrounded on the north by the Mediterranean Sea, the governorate of Damietta, and by Manzala lake. On the east, it is surrounded by Sharqiyya governorate, on the west by Gharbiyya and Kafr al-Shikh governorates. The Damietta branch of the Nile divides the governorate into two distinct parts on the west and the east sides of the Nile. (Fig. III.3)

The Nile is the main source of irrigation in Daqahliyya and, parallel to its course, several irrigation canals cross the territory of Daqahliyya such as Mansuriyya canal which provides water to the east side of the governorate. al-Sabil canal, on the other hand, supplies water to the west side of the governorate. The irrigation canals and the main branch of the Nile are used as a means of transport joining Cairo to Damietta. al-Sabil canal joins Mansura city, the capital of the governorate, to Damietta city, while al-Mansuriyya canal joins the city of Mahala—an important industrial centre—to Mansura city, the capital of the governorate, to Damietta city, while al-Mansuriyya canal joins the city of Mahala—an important industrial centre—to Mansura.

¹Feddans are the unit of measurement of agricultural land in Egypt.
Figure III.1. *Administrative Division of Egypt*
Figure III.3. The Governorate of Dagahlivva
Besides the maritime transport, there exist nearly nine main roads and a large network of railways, joining the governorate to the different parts of the Delta and Cairo. The communication and the irrigation network in the governorate date from the end of the nineteenth century and the beginning of the twentieth, with the incorporation of Egypt into the world market and with the cultivation and the export of cotton. During this period, Daqahliyya governorate was restructured accordingly.

1.1. A Historical Account of the Region

1.1.1. Damietta

When referring to this part of the Delta, it is difficult to ignore the strategic location of Damietta city. An important port on the Mediterranean Sea at the joining point of the Nile and the sea, Damietta is the capital of a governorate holding the name of the city\(^2\). The city is located 45 km from Batra, and 60 km from Mansura. (Fig.III.3) Throughout the history of Egypt, Damietta was the first access to the country from the east, which rendered it an important military bastion against invaders namely, against the crusaders in Middle Ages and the French expedition in the end of the eighteenth century. Similarly, it was an important commercial centre for trade with the world.

In a visit to Damietta, in the nineteenth century, 'Ali Mubarak\(^3\) describes it as a big city with 35,000 inhabitants, in which a number of civil services are offered, and military bases are established under the reign of Khedive 'Isma'il. He notes that small industries, such as squozers of linen grain, steam engines for rice hulling, and mills for grain were spread throughout the city. Weavers of cotton, linen, and sheets, as well as potters, were seen at the markets. A large variety of
merchandising, locally made or imported from Syria and Anatolia, was sold on market days. (Mubarak, 1935, Vol XI: 52-53)

This brief historical account of Damietta illustrates the importance of the geographical location and the ecological conditions, which determined historically its role in the region, especially as the only passage to the country from the north east. However, both Alexandria and Rosetta competed with Damietta. This competition led to the decline of Damietta with the revival of Alexandria port under Muhammad 'Ali. More specifically, the restructuring of the irrigation network in the north west of the Delta for the cultivation of cotton took place at the expense of the irrigation system in the north east.

During Muhammad 'Ali's reign, the level of water in the Damietta branch was higher than the water level in the Rosetta branch. This is due to the fact that the Damietta branch follows a more zigzagging course. This ecological feature affected the level of water in summer in the areas surrounding Rosetta. As a result, several canals were dug in the middle of the Delta to divert the water from the Damietta to the Rosetta branch. (Rivilin, 1958: 323) Such a step in its turn affected the irrigation system in the north east of the Delta. Thus, in order to meet the demands of the export of cotton, Muhammad 'Ali had to establish an appropriate navigation network on the Nile for the transport of cotton to Alexandria, the main port for exports. This policy induced the ruler to partly divert the Nile water from the east to the west, in order to raise the level for navigation. Thus, the major problem was the unequal distribution of water on the various parts of the Delta, which was to be partly solved with the construction of Qanatir Dam, in the north of Cairo.

The competition between Alexandria and Damietta, in the nineteenth century, was thus the result of the economic policy of Muhammad 'Ali which entailed the
adaptation of the topography to his projects. As a result, Alexandria prospered to a large extent between 1821 and 1845:

Yet the influence of Alexandria's growth was felt even more there [Damietta]: 'Damietta... once famous as the principle emporium on the side of the Delta, has sunk in importance, in proportion as Alexandria has increased, and now [Damietta] only carries on a little commerce with Greece and Syria'. (Bear, 1969:138)

The decline of Damietta continued, with the exception of three years during which:

the digging of the Suez canal granted Damietta a respite of three years in the early 1860's, when the offices of the company had been located in that town; afterwards its decline continued even in the absolute number of inhabitants, the main reason being the competition of Alexandria and the ruin of the traditional handicrafts [by Muhammad 'Ali]. (Bear, 1969:141)

Moreover, the creation of Port Said by the end of the nineteenth century accelerated even more the decline of Damietta. On this Bear notes,

By 1907, there lived in Port Said a greater proportion of people born elsewhere that in any other Egyptian town -29,755 out of 49,884, that is, 59.5 per cent. Among them, 8,804 were born in Damietta, which explains the continuous decline of that town. (Bear, 1969:145)

In general, the rise and the decline of Damietta and its surrounding areas, followed the economic and political strategies undertaken on the national level. Although it never succeeded to become a pole of attraction as Alexandria has, it remains an important regional centre.

1.1.2. Mansura

Although Mansura, the capital of Deyabliyya, does not occupy the same important location as Damietta, it is a central commercial and industrial city in the north east of the Delta. Mansura is located on the east side of the Nile 60 km from Damietta
and 15 km from Batra. (Fig. III. 3) According to 'Ali Mubarak, the city was built in the early thirteenth century during the siege of Damietta by the crusaders and served as a military base for the Mamluk troops. Mubarak notes that during the French expedition, Bonaparte's troops were stopped in Mansura where they faced a very strong resistance. By the end of the nineteenth century, Mansura became a crowded city with an important administrative apparatus, civil services institutions, and military camps. (Mubarak, 1886, Vol XV:87-91)

An important commercial centre, Mansura held several marketplaces where all sorts of goods were sold, and where the stock exchange offices were established. Small industries were flourishing, such as cotton gins, dye houses, sweets factories, in addition to cotton and linen spinning and weaving factories, constructed under Muhammad 'Ali. (Mubarak, 1886, Vol XV:87-91) The revival of Mansura by the end of the nineteenth century took on a considerable dimension as Bear describes it:

Mansura too profited by the railway connection which was established in 1865... In the 1860's the sales of cotton, wool, flax, fruit, rice and oilseed in Mansura amounted to about a quarter of the yield of lower Egypt. As a result of these developments foreign merchants settled in Mansura and it became the seat of a Mixed Court[4]; moreover, Mansura was the first town in Egypt, except Alexandria and Cairo, in which a municipal commission was established. (Bear, 1969:139)

The establishment of a municipal commission in Mansura was directly related to the reorganisation of the administrative system in the context of the economic policy undertaken with the full incorporation of Egypt into the world market, and with the high influx of foreigners into the country. The increasing number of foreigners in Egypt required an administrative representation to protect their interests with regards to government policies. Several attempts were made to organise a system in which the inhabitants of a city or a town took in charge of its
planning and its direction. The municipalities were the suggested form to achieve this objective. In the beginning, this administrative form was not approved by foreigners, since it meant that they would be subject to the Egyptian legislative system. By 1893, local commissions were created in the provincial towns of Egypt, and in a report presented by Lord Cromer he explained it as such:

Some two years ago the Egyptian government prepared a scheme for the creation of Municipalities in the provincial towns of Egypt. Owing chiefly to the fact that it was proposed to tax Europeans, the scheme required the unanimous assent of Povars. That assent was not obtained. The Egyptian Government, therefore looking to practical points at issue, has now decided to grant an additional sum of £E 10,000 a year to be spent on improvements in nine of the provincial towns in Egypt. Small commissions will be appointed in each town to draw up the local budgets. Should this system work well, it may be possible to extend it to other towns (Bezz, 1939:204)

The local commissions were established in Damiatta and Mansura, among other cities, but their achievements were limited as they depended on limited grants from the government. According to Bezz:

The first attempt to change this situation was made by the town of Mansura, which demanded, and achieved in 1895, the reinvigoration of the 1881 decree[5]. It will be remembered that that decree has authorized the inhabitants of Mansura to levy 'voluntary taxes', and this principle became the basis of a new kind of municipal commission... The second principle of these new municipal commissions... was the participation of foreigners (Bezz, 1939:204-205)

In conclusion, the above account shows how the rise and the decline of the two cities took place historically. The reasons behind it were essentially related to the national economic policies that took place during this period. The geographical location and the ecological conditions of the region in conjunction with political and economic factors, contributed in the ways in which the development took place. Although the two cities are directly linked, each one of them followed a
different path of transformation. Whereas Damietta witnessed a considerable
decline in the nineteenth century, as a result of the competition of Alexandria and
the lack of cotton cultivation in its surroundings, Mansura knew a considerable
revival due to the expansion of cotton cultivation and its export through
Alexandria. The latter led to the increase of foreign merchants in the city and to
the prosperity of commerce and trade.

Although there exists an abundant literature on the provincial towns of Egypt in
the nineteenth century, there is a lack of similar information in the twentieth
century. Therefore, it is beyond the scope of this study to trace the development
of these towns in the twentieth century, as this description is intended to locate the
village of Bistra and its surrounding in the wider system, and in the context of the
historical development of Egypt. It is sufficient to mention at this stage that from
the above emerge two important points:
a) The regional specificity underlying the historical development of a region.
b) The state economic policies on the national level which are reflected on the
regional level.
These two factors are largely determinant of the economic development of the
north east, and are reflected in the features of the region at the present time.

1.2. A Contemporary Account of the Region

The region of the north east is an agricultural area, where Daqahliyya is
predominantly producing cotton, rice, and maize. The production of citrus fruit is
rather limited, but is mainly located on the banks of the Nile. In the north of the
governorate, around Manzala Lake, papyrus and bamboo are cultivated because of
the high salinity of the soil. Parts of the north east, located on the sea, were
transformed into summer resorts. Thus, several roads were constructed joining
Mansura with the different towns located on the sea, and means of communication were expanded with the promotion of local tourism in Egypt. Despite this expansion, maritime transportation on the Nile is no longer used as it was twenty years ago, as vehicle transport has become cheaper and faster.

Starting from the 1970’s, trade and commerce developed between this region and Port Said, when the port was established as a free-zone for exports and imports. Thus, the existence of a free-zone greatly affected the city of Damietta, as most economic activities take place in Port Said without direct government intervention. Until the present time, Damietta has been dependent on handicrafts, and the industries of sweets, leather, dairy products, and furniture. The industry of furniture represents 75% of the national production, from which 30% was exported to the U.S.S.R. and the eastern block. With the open-door economic policy, and after the breakdown of the Egyptian-Soviet relations, this industry witnessed an especially great decline. As a result, the stagnation of the furniture trade affected the employment capacity in the city. Yet, it is hoped that Damietta will gain its position after the inauguration of the new Damietta Port in 1986, and that the opening of the city on the world market will activate the economy of the city6.

Mansura is a larger urban centre than Damietta. The former includes a population of 259,387 inhabitants, while the latter covers only 93,488 inhabitants. Mansura is an important commercial and industrial centre for agricultural production. It is also an important centre of attraction for the surrounding areas. Civil services are provided to the population of the governorate, including a large hospital and educational system comprising Mansura University, technical institutes, private, and public schools. Administratively, the governorate of Daqahliyya is constituted of nine centres affiliated with the government departments located in Mansura (al-Bashir, 1979)
One of the nine centres is Talkha centre, located on the west side of the bank of the Nile opposite the city of Mansura. Talkha centre, in its turn, covers administratively eight villages, among which is the village of Batra. Talkha is known for its cultivation of potatoes. In addition, it has one of the largest factories of chemical fertilisers in Egypt, with 1,000 workers, and the main electricity station in the region with a capacity of 25,000 kw, which supplies the entire north east with energy. (al-Bashir, 1979)

The above review of the regional setting of Batra was an attempt to relate the regional level to the national level in a historical context, through which the specificity of the area was illustrated. Within this geographical and historical context, the following pages will focus on the village of Batra.

2. The Village of Batra

As previously mentioned, Batra is located on the west side of the Damietta branch of the Nile, 15 km north of Mansura, and 45 km south of Damietta. The population of Batra is estimated to be 15,697, and the surface of its territory covers nearly 2,897 feddans. The territory of the village is surrounded on the south by the Damietta branch and from the north by the railway joining Shirbin centre and Bilqas centre. (Fig.III.5) The main road that joins Mansura and Damietta divides the territory into two distinct sectors. In addition, the two main irrigation sources of the territory: al-Sabil canal and the Damietta branch are
The Nile ———>
al-Mawati Lands ———>

SECTOR C ———>

Main dyke ———>

SECTOR B ———>

al-Sahil Canal ———>
Main road ———>

SECTOR A ———>

Figure III.4. Cross Section of the Village of Betra
Figure III.5. The Village of Retir
Figure III.6. The Location of the 'Izab of Baitra
located parallel to the main road and constitute a demarcation line between the various sectors of the territory. (Fig. III.5) The ecological diversity of the territory is largely determined by the location of the land in relation to the source of irrigation, which has partly determined the quality of the soil and consequently the type of cultivation and the quality of the crop. (Fig. III.4) The schematic map of the territory shows that it can be divided into three distinct sectors, a division based on a number of criteria:

a) The location in relation to the source of irrigation.
b) The quality of the land.
c) The type of crop rotation.
d) The access to the market centres and the centre of the village. (Fig. III.4-5)

Together these factors are taken into consideration for determining the value of the agricultural land. Therefore, it seems important to examine in detail the three subdivisions of the territory, as they will constitute, in the course of this study, the reference of the various aspects of agricultural production and marketing.

2.1. Sector A

This area constitutes approximately 55% of the total territory covering 1,600 faddans. Sector A is located between al-Sabil canal and the railway from the north. The reason for the separation of this sector from the two others, although there are no natural demarcation lines, is its location in relation to the irrigation source. Located far from the Nile, this sector is supplied with water for irrigation from al-Sabil canal through water pipes placed under the main road that joins Mansura and Damietta. As a result of this location, the distribution of water is controlled by the government, and the production and the marketing of crops is determined by government directives. The main crops comprise wheat, cotton,
rice, and maize. Therefore, the access to free markets for crops becomes more limited for the producers. Additionally, these restrictions affect the value of the agricultural land, which varies between £E 10,000 and £E 20,000 per feddan. (Fig. III.4-5)

This sector includes in its territory seven small 'Izba 10, spread in different parts, with a population of 2,117 inhabitants, and nearly 284 households. Each 'Izba is a small agglomeration of inhabitants varying in size and in number, in some cases it can include ten to 12 houses, in other cases, it can cover 184 houses with 1,418 inhabitants such as the case of 'Izba(t) al-Hag Khatil. However, it should be noted that the 'Izba system in Batra corresponds to the previous system of landownership (prior to the agrarian land reform that took place in the 1960's) where the landowner hired wage labour on permanent terms. The labourers and their families settled on the land and were provided with accommodation by the landowner. The ownership of the land they occupy remains in the name of the landowner, but the houses are inherited by the members of the families as long as they work on the land. The 'Izba holds the name of the owner and the name changes with the change in ownership. (Fig. III.6)

2.2. Sector B

Sector B is located between al-Sahil canal and the main dyke parallel to the branch of the Nile. This sector covers an area of 735 feddans, constituting 25% of the territory of the village. This sector is a residential area for the inhabitants of Batra, and includes all civil services as well as a large market. The reason this sector became the residential area, is because it is directly located on the main road, and it is located at a distance from the Nile. This location protected the villagers from the annual flood of the Nile.
Figure III.7. Urban Expansion in the Centre of Daira, Sector A.
At the present time, with the expansion of the urban centre, the constructed area covers almost 400 feddans and the rest is devoted to agriculture. (Fig.III.4-7) This sector is supplied with water from two main sources: al-Sebil canal, and the Damietta branch. The first irrigates the areas located in its surroundings, while the second irrigates the land located behind the dyke, through water pipes placed under it. The quality of the agricultural land in this sector is better than the land in sector A.

A large variety of crops is cultivated in sector B, comprising compulsory crops (crops that are under the state control in terms of inputs and outputs), such as cotton, wheat, and rice, and free cash crops like fruit, and vegetables sold freely on the market without government control. The diversity of the production entailed the increase in value of the agricultural land on the market as compared to sector A, reaching £.E 20,000 to 30,000 per feddan, and the value of the land for construction reaches £.E 95,000 per feddan, i.e. £.E 4,000 per qirat. The high price of land for construction, as compared to the price of agricultural land, reflects the high demand for construction and the limited offer on the market. Similarly, it expresses the trend towards economic diversification, and the expansion of housing areas. Thus, it can be noted that the expansion of the urban centre is taking place at the expense of the agricultural land, given the limited surface of land. Although the above description can lead to the impression that the peasants of Batra are abandoning agricultural activities, as is often claimed of rural Egypt, one can argue that there are still 2,497 feddans of agricultural land cultivated by the villagers out of 2,897 feddans.

What is being advanced in the above argument is that there are nearly 200 feddans that have gone under construction over the last ten years. This is the result of the agricultural policy adopted by the government on the one hand, and the result of the high monetary circulation, namely with the labour migration to Arab oil
173
countries, and with the increase in the marketing activities on the other hand. Finally, if the construction boom took on such a dimension in sector B as compared to the other sectors, it is because it includes the administrative offices, the Bank of the Village, the Agricultural Cooperative, the market centre, the schools, and the Local Health Unit which constitute the centre of the village.

2.3. Sector C

This sector is located directly on the Damietta branch of the Nile which constitutes the border of the village on the south. This area represents 20% of the territory and covers 550 feddans. The land in this sector is called al-Gizira land, i.e. the land of the island. This name refers to effects of the strong flow of the Nile during the annual flood on the land. The strong movement of the Nile during this period pulls out parts of the land from the zigzag areas of the bank and moves them to other parts of the bank. (Mursi, 1935: 160) As shown on the map, Batra is located on a curve of the Nile course on which alluvial deposits were accumulated over the years, these parts were therefore called al-Gizira land. (Fig.III.2,5)

Parallel to the Damietta branch, on the other side of this sector, a long dyke constitutes the demarcation line between sector C and sector B. It should be pointed out that along the two branches of the Nile, the Rosetta and the Damietta, two dykes were formed over the years from the alluvial deposits of the Nile. With the reorganisation of the agricultural system and the restructuring of the irrigation system under Muhammad 'Ali, the two dykes were restored from al-Qanatir, in the south of the Delta, to Damietta and Rosetta in the north. The idea was to protect the fields behind the dykes from the inundation of the flood, the system was effective until the construction of the High Dam, after which the annual flood of the Nile stopped. In Batra, peasants built several small dykes before the big
one, as a first preventive measure against the unpredictable river. (Fig. III.5)

The ecological conditions and the direct location on the Nile have distinguished the quality of the land in this sector from the other sectors. Similarly, this location has enabled the producers to have a direct access to water for irrigation without the control of the government. Furthermore, given the immediate and the regular accessibility of the peasants to water, the drainage water is used by sector B for irrigation. This is particularly the case in Hud Dayir al-Nabiyya basin located directly behind the dyke. The drainage water is directed to sector B through water pipes installed under the dyke.

Under these conditions, sector C does not obey a crop rotation cycle imposed by the government, nor are compulsory crops cultivated there. Only fruit, and vegetables are cultivated because of their high price on the market. The value of the agricultural land in this context is particularly high and varies between £ E 35,000 and £ E 80,000 per feddan. This value is a specificity to all agricultural land located directly on the bank of the Nile and in the valley of the Nile. The access to market centres has been facilitated with the production of free cash crops. Until the early 1970's, boats on the Nile transported the crops to the market centres in Damietta and Cairo, together with the use of vehicles for transportation. Moreover, the local market centre in Batra developed recently in such a way that it became also a diffusing centre of free market crops. Sector C has contacts with the village of Badawih, located on the other side of the bank, and anchorages are fixed on the two banks for fishing boats that transport passengers from both sides.

Finally, unlike the two other sectors, sector C does not include housing areas, as peasants found it difficult to live in an area annually threatened by floods. Therefore, the agricultural land is intensively cultivated given its high quality and since there are no other ways of using it. (Fig. III.4-5,7)
In general, the diversity of the territory as shown above entails specific forms of socio-economic relations, as will be illustrated in the course of this study. These relations can only be understood in the context of the historical development of the village under the wider system. One of the illustrative examples of the latter is the existence of the 'Izba system in one sector and its absence in the others. (Fig. III.6) Thus, in order to explain the differentiated socio-economic relations that exists at the present time, it is necessary to draw a brief account of the historical development of Batra. However, it should be noted that because this village was not studied before, the present history is based on personal oral accounts gathered from the inhabitants, on documents from local families, and on literature concerned with the history of provinces in Egypt.

3. A Historical Account of Batra

'Ali Mubarak counted the number of irrigation pumps in Egypt; in Batra he counted one mobile irrigation pump with a capacity of 16 horse power registered in the name of Jiflik Batra. (Mubarak, 1886, Vol XIX:41) According to Baer: "Probably the most important factor in the formation of large estates last century was the institution of Jiflik". The etymology of the word is traced to a Persian name, and "It eventually came to mean land given to the ruler, beginning, in Egypt with Muhammad 'Ali himself and to members of his family". (Baer, 1962:17-18) Baer adds that: "A number of contemporary sources...state that the greater part of them consisted of villages abandoned because of the heavy tax burden and transferred to royal family". (Baer, 1952:18) The property of the ruling family expanded to reach 370,000 faddans in particular in Gharbiyya province to which Batra was administratively attached until the early 1940's. (Baer, 1952:18 fn.5)
The region surrounding Batra was the property of Muhammad 'Ali's family. Khedive 'Isma'il had a palace with a large garden and cotton mills in Tulkarem. (Mubarak, 1886, Vol XIII:33) Mubarak adds that the village of Bisat, located on the borders of Batra, was called Jiflik of Bisat, in addition he mentions the existence of Jiflik al-Hise, a basin shared between Batra and the village of Bisat. (Mubarak, 1886, Vol XIX:14-41) (Fig.III.5) This shows that a considerable area on the west bank of the Damietta branch, around and including Batra, was a Khedivial property. This situation probably continued until 1878, when the economic deficit of Egypt and the control of La Caisse de la Dette took place. (Chapter II) A new distribution of large landed properties started, due to the burden of foreign debts. "Towards the end of the century, then, part of the great estates of the Khedive and his family passed into the hands of new large landowners, in particular wealthy people who could readily afford the large outlay necessary." (Baer, 1962:28)

Part of the new landowners were foreigners whose interests were protected by the Mixed Court and by the measures of sequestrations for debts, as most of the creditors were foreigners. According to Baer the province of Gharbiyya was the third large province were the presence of foreigners owning agricultural land was strongly felt. (Baer, 1962:66-67) The creation of land companies by foreigners was one of the means of expanding the market of agricultural land:

The interest shown by foreigners (and also to some extent by Egyptians from towns) in acquiring land increasingly took the form of investment through land companies, a considerable number of which were founded in 1880's and 1890's. The main business of these companies eventually came to be the improvement of land with a view of re-selling it, but they seem at first to have tried to work the land themselves. (Baer, 1962:68)

According to property contracts and to the statements of landowners in Batra, until
the end of the nineteenth century and the beginning of the twentieth century, the agricultural land was owned and controlled by foreigners through The Société Anonyme d’Irrigation dans le Bahara created in 1881.

It [the company] began by undertaking the construction of a large pumping-plant... After the abolition of forced labour it helped to substitute mechanical for manual drainage of canals. On 27 July 1884 it changed its name to Société Anonyme du Bahara and added the purchase of land for improvement to its other activities. It received 121,682 feddans of daira [12] land in Basantila [13] in settlement of a government debt, and increased this to 150,000 feddans by purchases in Bubaira and Gharbiya. (Beer, 1962:68-69)

The information advanced above is significant for the understanding of the development of ownership in Batra as it is corroborated by a number of indications. According to the statements of the people from Batra, there were several well-known persons working for the account of the Behera Land Company during the enlargement of al-Sahil canal. A few workers were paid in the form of landownership in Batra and their ownership is still maintained. It is also known in the village that the company, during its presence in the area, installed a large irrigation pump in sector C, the basin on which the pump was installed is called officially: Wabur al-Shirka land, the land of the company’s pump. Finally, the contracts of landownership signed in the beginning of the century show that the company is the second party in the contract. According to an agronomist, whose family bought land in Batra in 1914, most of the works undertaken by the company in Batra were in sector C, as the level and the surface of the land required improvement works for agricultural uses. Therefore, it can be suggested that part of the land purchased by the company from da‘ira(I) Basantila, which comprised 121,682 feddans, must have included Batra and other villages in the surrounding area.

To sum up the argument, from the above it can be concluded that the territory of Batra was part of the Khedivial Jiflik during the middle of the nineteenth century.
With the bankruptcy of the ruling family and the Egyptian state, and with the increasing intervention of foreigners in the Egyptian economy, foreign merchants invested in the market of agricultural land through the creation of land companies. The Behara Land Company undertook the necessary improvements of the infrastructure and the improvement of reclaimed land in Batra for resale on the market. The incorporation of Egypt into the world market, and the importance of cotton cultivation during the British occupation in 1882, induced Egyptian and foreign merchants to buy agricultural land in new areas.

Sector C in Batra was among the newly reclaimed land on the bank of the Nile. The land was sold by the company in plots varying between 75 feddans and 120 feddans as the price was high because of the costs of work. The buyers were essentially absentee landowners based in urban areas. The foreigners, were either Italian, Greeks, or foreign Jews who were involved in the market of cotton and on the stock market. Baer explains the logic of investment of the Behara Land Company in the following terms:

The Behara Land Company sold alone 100,000 feddans.[at the end of the nineteenth and the first half of the twentieth century] It was the practice of this company to level the land and prepare the main irrigation and drainage channels; then it sold it in large blocks to large landowners, or rented out to fellahs who prepared each plot for working and laid down the secondary channels. These fellahs had the option of buying land. They paid part of their profits (higher than usual due to the low rent charged) to the company as a deposit against future purchase. (Baer, 1962:127-128)

Peasants were then able to pay the remainder price of the land by installment over 25 years. (Baer, 1962:128) In Batra, the same situation occurred in some cases, in others the conditions of agreements differed. The land sold by the company was mainly to foreigners or to Egyptian absentee landowners, and few peasants were able to buy land.
According to Hag Guda Gavdat, an authority in the village community, during this period peasants were not inclined to buy or rent agricultural land as they were unable to meet the high price of the land reaching by 1914, £.E 120 per feddan in sector C. But more important was an article in the contract stating that the Sublime Porte had the right to confiscate landownership for public use if needed, in exchange for a compensation (Mursi, 1936:219). The peasants were especially afraid of the consequences of this clause, since they were not rich or powerful to protect their property from such a decree.

It should be noted, argues Hag Guda Gavdat, that landownership by peasants from Batra was not a common practice during this period, and in general, the maximum size of landownership differed from one sector to the other. In sector A, the largest ownership reached 700 feddans owned by Hag Khalil, who established the seven 'Izba holding his name. In sector C, the largest ownership reached only 700 feddans, because of the high price of the land. On the other hand, it is difficult to establish the size of ownership in sector B, because the distinction between the sectors, during this time, was only between sector A and C.

In the light of the above, it would be useful to examine the formation of certain landownerships in Batra, as examples reflecting the regional diversity of the village, and the specificity of each sector. One of the most illustrative examples is the ownership of Hag Khalil in sector A, which led to the establishment of the 'Izba system, one of the specificities of this sector. According to what is said in Batra, the owner of the 700 feddans in sectors A and B was originally a contractor of public works from upper Egypt, who was hired by the the Behara Land Company for the works of al-Sabil canal. At the end of the works in 1920, Hag Khalil was paid in part by a large plot of land in sectors A and B. It was, at that time, the largest ownership in Batra, but it should be noted that the price of the
land in this sector was rather low, reaching only £E 40 per feddan. Hag Khalil hired wage labourers whom he settled with their families in the 'Jebra in exchange of their work on the land. (Fig. III.6)

In sector C, the situation is different, in the sense that it was a newly reclaimed land, and the ownership in the early twentieth century varied between 75 feddans and 200 feddans, mostly owned by Egyptians and foreigners from Mansura and Cairo who were involved on the stock market of cotton. Despite this fact, the area was not adequate for the cultivation of cotton; instead, vegetables, and fruit were the appropriate crops, despite the fact that most peasants had no experience with their cultivation before. Therefore, landownership in this sector was a considerable risk, although the landowners already owned agricultural land in other parts of the Delta where cotton was cultivated.

For example, a large landowner family from the province of Kafr al-Shikh, producing cotton and vegetables—potatoes, bought a plot of land in this sector, in 1914, in view of expanding their vegetable production. A few years after the purchase of the land, the property was expanded and a branch of the family transferred their property to Batra. Although it was a risky step to move from a well-known area to a newly explored land, members of this family realised the benefits of investing on this land. Thus, investments in agricultural land for the production of highly profitable crops, being cotton or vegetables, led to the establishment of a new class of landowners. As Baer explains it:

*From 1880's onwards a new class, the urban rich, rapidly became the chief class of landowners... this class included foreigners and members of local minorities, as well as the land-improvement and mortgage-credit companies. Differences in land legislation helped to bring this about, as did the extension of cotton cultivation, the rise in land prices, the greater attractiveness of Egypt for foreign businessmen, and the British occupation. (Baer, 1932:70)*
It was not until the end of the 1920's and the early 1930's that peasants from Batra started to own agricultural land. This period corresponds to the economic depression between the two wars. During this time large landowners faced considerable losses on the world market with the drop in cotton prices, to a point that the Egyptian government had to intervene on the spot market of cotton to save the landowners', and the merchants' investments. On the other hand, the landowners started to transfer their investments from agricultural land to real estate in the urban areas. As a result, the price of the agricultural land fell on the market and peasants found the opportunity to buy off the land. Batra was then a very poor village, as these days are described by the villagers, and cash money was difficult to collect. However, a few families whose members were working for the large landowners and had become more involved in the marketing of crops were able to have access to cash money paid as a deposit for the purchase of agricultural land.

Hag Husni Husnami's family was among the first families to have bought land during this time. He argues that it was very difficult to raise the cash money, the family borrowed part of the needed capital from the absentee family for whom they worked and the women sold their jewellery. Although all the members of the extended family contributed in the capital, the land was registered in the name of the head of the family. Through the purchase of agricultural land, his family expanded the property and progressively became entirely involved in the marketing of crops. It was from this family that the 'Umda, the mayor, of Batra was elected, as one of the conditions for the election to the post of 'Umda, was a minimum size of ownership fixed at ten feddans.

With the increasing of peasant ownership of land, together with the condition of ownership, conflicts and rivalries grew between the peasant's families in Batra on questions related to access to land, to water, and to political positions in the village.
These conflicts were exacerbated by the political instability on the national scene, as this period witnessed a permanent succession of the antagonistic political parties in the government. On the village level, the loyalty of the different families to the political parties and prime ministers had a direct repercussion on the post of 'Umda.

After 1952, with the application of the agrarian reform laws, and the restrictions over the size of agricultural landownership, land sequestration and confiscation took place on a very limited scale, as compared to other villages in the same region, where landownership reached 2,000 feddans. In Batra, the maximum size of ownership per family reached 500 feddans, which allowed these families to sell their excess ownership to peasants. Peasants who bought land during the agrarian reform were usually working as wage labourers for the large landowner, which allowed them to pay the price on installment over a long period of time. Other large landowners families registered the land in the names of their adult children, which permitted them to maintain the property in the family. Thus, because of the relatively small size of ownership in Batra, and because the agrarian reform laws were applied over ten years time, most large landowners in Batra managed through various means to escape from land confiscation. However, this new phase in the development of ownership in Egypt created in its turn a new class of rural based landowners extensively involved in the market of free cash crops.

Concomitant to the agrarian reform laws, the control of the state over cotton production, and its monopoly over marketing, led most producers to shift from government controlled crops to free market crops which included essentially vegetables and fruit. The free cash crops were already produced in sector C where a considerable proportion of agricultural land was sold to peasants from
Batra. In the two other sectors peasants found various means to reduce government control over the production and the marketing of crops. The orientation to the production of free cash crops was supported by the government policy under the open-door economic policy.

With the open-door economic policy and the orientation of the agricultural production towards the demand of the world market, together with increasing labour migration from Batra, monetary circulation took on a considerable dimension. The expansion of the markets of fruit and vegetables allowed, more than ever, peasants to have access to cash money. According to Hag Husni Husnani, a producer and a merchant of tomatoes, trade and commerce of free cash crops expanded considerably in Batra covering local markets and markets in the urban centres. Unlike in the 1960’s, competition between merchants became one of the characteristics of the present days. With increasing costs of living in the rural areas, and with the increasing rate of consumption affecting the village as well as the city, it is becoming difficult to support an average household of five members from agricultural production alone. Additional income is needed, which compels most producers to get involved in the marketing network as merchants.

From the above, it can be argued that the village of Batra is directly affected by changes on the national level, as it is affected by the world economy. The changes that occurred in the last decade can only be understood in the context of the transformation that occurred in the wider system of which the village is a constituent part. However, these changes must be examined within the dynamics of the socio-economic setting of the village. In the following section, a contemporary account of the village will be presented, in the context of the prevailing economic activities, through a detailed examination of the following aspects:
a) The features of the centre of the village and the effects of the urban expansion on agricultural land.
b) The administrative system.
c) The civil services.

4. A Contemporary Account of Batra

Agriculture was and remains the most important economic activity around which revolve the economic and the social relations in Batra. The agricultural land is cultivated by a variety of crops covering both free cash crops and compulsory crops. Each crop has different requirements in terms of inputs, labour, and marketing within a different seasonal calendar. Within the ecological varieties of the territory, and under the present agricultural policy, peasants have oriented their production towards free market crops. Potatoes, tomatoes, oranges, bananas, and green clover, barsim cultivation have expanded in the village to occupy 36% of the agricultural land, over the year. Compulsory crops: wheat, cotton, rice, and maize are cultivated under a controlled rotation cycle determined by the government, and occupy nearly 74% of the cultivated land. Despite the prevalence of compulsory crop production, peasants and merchants in Batra tend to be more involved in the production, the storage, and the marketing of free cash crops, in particular potatoes, oranges, and tomatoes.

It is very difficult to estimate the proportion of the villagers involved directly or indirectly in agriculture, as the official figures advanced by the 1976 census are not accurate, and do not reflect the present situation. It only adds to the difficulty in approximating a figure that most of those involved in agriculture are not registered officially, with the exception of landowners, and tenants or those
who deal officially with the government. Migration to Arab oil countries, and the constant mobility of peasants also have rendered such an estimation difficult. Nevertheless, it is possible to argue, on the basis of an observation over two years, that most of the population, including women and children, is extensively involved in agricultural activities under different forms. They may be seasonal wage labourers, tenants, sharecroppers, landowners, and merchants. It is known in Batra that labourers engaged during the year are from the village. Several disputes took place between the labourers and members of other villages when they attempted to be hired in Batra. The villagers of Batra refused to allow them to work in their territory because of limited employment possibilities.

Fishing is a limited activity in the village. A small number of families have maintained this occupation for a very long time and have inherited it from their fathers. With the construction of the High Dam, the level of the Nile was lowered and controlled, this, according to fishermen, affected fishing and sailing activities which became less attractive to people. However, fishermen generally combine fishing with agriculture; they often own land, work as wage labourers in sector C, or are involved in sharecropping arrangements.

Commerce of agricultural production was originally related to the cultivation and the storage of potatoes and vegetables in general. Batra knew the cultivation of potatoes since its introduction in the early 1920's, and nearly 700 feddans are cultivated annually by summer and winter potatoes. Therefore, trade and commerce of agricultural products are not recent phenomena, but have expanded in the last decade. Buying vegetables from other villages or 'Izba is undertaken by merchants from Batra who store and resell them on the local and the regional markets. Similarly, the collection of the crops from the peasant to be resold on the larger markets or for export takes place on regular terms. Thus, Batra is an important market and is extensively involved in the various marketing networks on
the national level. Peasants in Batra found their ways on different scales in marketing and are able to raise additional incomes in a short period of time.

Marketing has created a class of big merchants who play an important role in the economic relations in the village through their monopoly of the marketing of certain crops. Under the open-door economic policy, with the promotion of private capital in investments, with the facilities of access to capital through the local Bank of the Village, and with the increasing flow of migrant remittances, commercial activities became accessible to most peasants. Commerce covers a large number of commodities starting with consumer goods imported from the centres to agricultural products. There are no limits to the quantity and the quality of commodities sold as long as the demand is available. Commercial activities take place at the centre of the village (the resident area in sector B), and are reflected in the features of the area and in everyday life.

4.1. The Centre of the Village

The market street and the marketplace in Batra are the heart of trade and commerce. By focusing on the centre of the village it is noticeable that the market street divides it into two distinct quarters. The one located on the east side of the market street is known as the new quarter and is the residence place of the wealthy peasants and of the return migrants. The one located on the west side of the market street, known as the old quarter, is the residence place of the small peasants, the wage labourers, the fishermen, and the small peddler merchants. Thus, this simple distinction is based on a social and economic differentiation of the community. (Fig. III.7)

Across the market street, the new quarter is mostly occupied by the big merchants
of the village, the big landowners, the Umda, the high ranking employees of local
government institutions. In recent years the transfer from one side of the street to
the other is considered as an economic and a social mobility. The transfer to the
east quarter implies considerable capital for construction and a regular income to
maintain the standard of living which only a limited number of households can
afford. The creation of the east quarter and its expansion led to the adaptation of
the environment to the new urban setting and to the new consumption needs
adopted by this category of inhabitants. (Fig. III. 7)

In the centre of the village most of the commodities sold on the market are
diffused from the market street through wholesalers, shopkeepers, or retail
merchants. Despite its importance, the market street was never restored. A long
narrow street, it starts from the marketplace in the north and ends in the south at
the end of the village centre. (Fig. III. 7) The marketplace is the common meeting
area on Thursdays, for the market day, where exchanges and trading among the
peasants of the village and with peasants from other villages take place. (Fig. III. 7)
The products sold on Thursdays include dairy products, meat, poultry, fish,
vegetables, fruit, and grains. Prices are generally higher than in Mansura or
Damieta since the imported goods from the city have to keep their prices
consistent with those of the big markets, and those products locally made are
priced consistent with the big markets as well. Thursday market in Batra is an
open day for the people to sell, to buy, and to exchange goods. Most women are
involved in Thursday market by exchanging or selling their household products
for other goods or for raising additional cash money.

Beyond the limits of the marketplace, however, the marketing system and network
is highly organised and controlled by big merchants. On both sides of the market
street there are a variety of shops selling all sorts of commodities. Most of the
goods sold in these shops are imported from cities like Cairo, Damieta, Mansura,
or from abroad through return migrants or from the free-zone of Port Said. The opening of the shops dates from the late 1970's and onward, and they are decorated in a modern style. All sorts of goods are sold, such as, electrical appliances, and housing services are available for carpentry, plumbing, and electricity works. There are several groceries selling milk, cheese, cigarettes, processed food, frozen vegetables, bread, ice-cream, juices, Coca-Cola, Pepsi-Cola and beer. The consumer goods correspond more to an urban life style, and their prices are often higher than those in the cities since the cost of transportation is added.

Basic needs for consumption such as pasta, flour, sugar, oil, tea, rice, and cigarettes subsidised by the government, are available in scarcity at the local cooperative, and if they are sold in private channels their prices correspond to the black market prices. Specialised shops in agricultural inputs selling seeds, fertilisers, and pesticides, locally made or imported, have increased considerably with the expansion of free cash crops. Similarly, there are a number of fruit and vegetable shops open daily, each known for its quality in certain varieties of products. Likewise, the price of vegetables and of fruit is higher than in the city even if they are produced in Batra. This is due to the fact that the wholesalers prefer to sell their merchandise to a large market that can absorb a large quantity at an interesting price rather than to sell it to a small shop which will buy a limited quantity. Therefore, the retail merchants buy the merchandise from the wholesaler in Batra at a higher price to match the price in the cities which includes the cost of transport. By doing this, the wholesaler finds it profitable to sell a smaller quantity for the same price as in the city, in which he acquires the price of transport that he has not actually provided.

According to the people in Batra, prices have increased considerably in the last decade, to the extent that the income from agricultural production can no longer
support the household. Additional sources of income are needed constantly. In fact, the increase in prices corresponds to the increases in the cost of living on a national level, but it was accelerated in Batra as a result of the high monetary circulation that accompanied rural labour migration. It is difficult to find a household where migration did not take place. At least one or two members of the household migrated on a seasonal term to one of the Arab oil countries. The remittances were invested in marketing and commerce, in buying shops, and in housing constructions. Many migrants acquired new skills in mechanics or in driving, and thus were able to raise additional income from the new sources.

However, the situation is starting to change, since 1985 there has been a considerably lower demand for labour migrants from Batra. Consequently, the economic activities in the village have been affected, consumption was reduced and construction was not increased. Most return migrants have consumed their savings as they did not anticipate the crisis on the international labour market. Thus, most of these households, deprived of a fundamental source of income, were unable to maintain or support their standard of living. For example, many families who in the recent years transferred their housing place from the west quarter of the village to the east quarter, and were in the process of constructing a new house of several floors, are at the present time unable to continue the constructions as they consumed their capital, while in the same time prices of construction material are increasing. It is a common saying among young peasants in Batra that those who did not take advantage of the open-door policy during Sadat’s regime will never find the chance in their lifetime to make money. Such a feeling illustrates the dependence of the local economy on international markets.

Batra, like most rural areas in Egypt has witnessed tremendous change since the early 1970’s, transformation has been and is taking place at such a speed, and in different ways, that it is difficult to trace it in a systematic or a coherent way.
However, changes and transformation are reflected through a number of aspects in the village. The expansion of the urban areas at the expense of agricultural land, is among the changes that cannot but strike the eyes of a traveler.

4.2. The Urban Expansion

The expansion of housing constructions does not comply to an urban planning; houses have been mushrooming in all directions in the absence of an effective state control to protect the agricultural land. This phenomena cannot but raise a number of questions when it is focused on:

a) In which direction are the constructions taking place?
b) What is the size of the new constructed area?
c) For what purpose are the new buildings used?
d) Who owns or controls the new constructions?
e) How are the new constructions affecting the agricultural land, the irrigation, and the drainage system?
f) How is the present crisis in the international labour market affecting the size of constructions and the market of land?

Thus, in order to examine these questions that are necessary for the understanding of certain aspects of change in Batra, it is important to draw a general picture of the process of urban expansion which is illustrated by a schematic map of the centre of the village.(Fig.III.7)

Until the early 1970's, the resident areas in Batra were concentrated around the 'Izah located in sector A, and in what is called today the old quarter, located in sector B.(Fig.III.5-7) These two residence areas are composed of small houses made of mud bricks. The houses consist of a ground floor and a roof, divided into two or three rooms: one room is used as a guest room and a kitchen, the other as a
bedroom, and the third for the animals and the oven, and the roof is used as a storage place. These houses are conceived on a horizontal plan and cannot be expanded vertically. (Hénon, 1988:20-23) During the seventies, there was a very limited market for land for construction to a point that its price was lower than the price of agricultural land. Starting from the middle of the 1970's, housing conditions changed, due especially to labour migration.

The first objective of a return migrant was the improvement of his housing conditions, and the insuring of accommodation for his future sons' families under his roof. Demand of land for construction increased and, consequently, its price which exceeded, in recent years, the price of agricultural land. This phenomena indicates the importance of construction in an agricultural village, where economic diversification is increasing. While the price of one feddan of agricultural land, sector B, varies between £.E 20,000 and £.E 30,000, the price of one feddan of constructed land reaches £.E 95,000, sold in small plots of one qirat for £.E 4,000.

It is not a coincidence to find that the newly constructed areas are concentrated in sector B on both sides of the market street, and around the railway station, while the expansion of constructions in the 'Izba did not follow the same rate. Most of the agricultural land converted into urban areas was cultivated by compulsory crops, despite government restrictions. This conversion meant a further land fragmentation, as families are unable to construct over large plots because of the high costs of construction. Most of the families who transferred their residence areas from the old quarter or from the 'Izba to the new areas are, in one way or another, involved in the market. (Fig.III.7)

The new houses are constructed in stages over a long period of time in order to raise the needed cash money. The house is usually constituted of two or three floors and on each floor there are one or two apartments of 50 m² each. The first
floor is occupied by the owner's extended family and the second is left for his sons' families if there are any. The ground floor is planned to include one or two shops, which are rented out by the owner or used as coffee shops. Investments in real estate tend to be widespread, as the monthly rent of an apartment in Batra reaches £E 50, and the rent for a shop starts from £E 70 monthly. The rent represents a higher income for the owner than the official rent of agricultural land which varies between £E 50 and £E 80 annually. The rented flats are occupied by government employees who are appointed in the province, the shops are rented to merchants from the village who find it more convenient to rent the shop than to buy it. At the same time, the housewife uses the roof for a small project like raising poultry or raising rabbit for self consumption and for selling on the market.

According to a civil engineer in Batra, the constructed area covers 460 feddans, covering the 'Izba and the old quarter, from which 220 feddans were constructed in the last fifteen years. The newly constructed areas were originally agricultural land on which peasants constructed their houses, in most cases through illegal channels. It should be pointed out that the conversion of an agricultural land into a construction land is preceded by long administrative procedures imposed by the government to protect agricultural land from violation.

These procedures consist first of a demand of conversion presented by the owner of the land to the department of agriculture in Mansura. In the same time the elected Local Assembly of Batra certifies that the owner is a resident in the village who does not own a house. The demand is followed by a permission from the irrigation department in Mansura stating that the location of the construction will not affect the drainage or the irrigation canal in the area. Finally, the above steps are followed by a permission from the communication department proving that the owner will leave a space of ten metre around the construction for public use. If
these conditions are met, the permission is granted on the condition that the owner builds the construction on a surface representing 2% of the total land and not exceeding one qirat.

These endless procedures are usually not respected by the peasants, as most of those who constructed their houses own a second house in the village. Therefore, the permission for construction on agricultural land is granted through the personal connections of the owner in the various governmental departments concerned with such matters. In many cases, personal relations and mutual interests with the members of the Local Village Assembly are the channel through which such permissions are provided. On the other hand, many peasants take advantage of the facilities granted to the food security projects, such as permissions for construction on agricultural land. These permits are granted on the ground that poultry projects, for example, require adequate construction for their operations. Thus, once the permission is delivered to the owner, he builds his own house and on the roof starts a small poultry station, thus avoiding the endless problems of construction procedures. In other cases, when the permission is granted, the owner sells the land on the market for construction and makes such a profit that he can expand his agricultural land base by purchasing another plot for a lower price, and still save a considerable part of the capital.

By focusing on the map of the urban expansion in sector B, it is clear that the area located on the east side of the marketplace and the road that joins the railway station and the marketplace, have witnessed the highest construction boom as compared to the west side. As seen on the map, civil services offices, schools, and the Local Health Unit are located on the west side. This is due to the fact that the west side constitutes the borders of Batra with the village of Diyast, administered by the village of Batra. Therefore, peasants from Batra do not transfer their residence to this area given the possibility that in the future it might be under the
administration of Diyast. On the other hand, the possibility of transferring this area to the territory of Batra, something which the Local Assembly of the village of Diyast has been fighting against for a very long time, makes it difficult to grant construction permissions to the inhabitants of Batra. (Fig. III.7)

Thus, urban expansion took place at the expense of agricultural land cultivated by compulsory crops in sector B, while agricultural land cultivated by free cash crops was not affected. This expansion took place around the commercial centre and the communication network. However, it should be pointed out that the side effects of urban expansion, in the absence of government planning, were immediately felt in sector B. Serious problems emerged on the level of the irrigation and the drainage system, the sewer and drinking water were affected in the absence of an adequate infrastructure. This has created problems and disputes over water between the peasants living in this area, as it has affected their environment.

As mentioned earlier, sector B is supplied with irrigation from al-Sahil canal. This is through a main irrigation canal called 'Um Nasir canal located alongside the street of the market joining the railway station with the marketplace. At the level of the marketplace the canal changes its direction and crosses the east quarter to reach the end of the centre of the village. There is also a main drainage canal alongside al-Sahil canal, from which a smaller drainage canal called 'Um Nasir canal is derived and which follows a similar course as the irrigation canal. 'Um Nasir canals for irrigation and drainage serve two thirds of sector B located on the east side of the market street. (Fig. III.7)

This area is constituted of two basins called Hur 'Um Nasir and Hur al-Halfayya. (Fig. III.5) As a result of the construction boom in these two basins, both canals were blocked at various levels of their course. This blockage is due to the fact that the houses do not have a sewage system, the alternative was to build pipes
from the houses that empty the sewage water in both canals, or to install large reservoirs in the ground which are often emptied in the canals. But more important is the effect of the construction of a large factory of egg production in Hud 'Um Nasir. This factory did not construct an independent sewage system, instead, it empties its remainders into the two canals, which are supposed to serve 400 feddans of agricultural land. The natural result of the above is the blockage of the two canals and grave effects on agricultural operations and agricultural productivity in the basins. Furthermore, this blockage, together with the overflow of the sewage and drainage water have affected the environment of the residents. (Fig. III.7)

The same problem occurs on a more crucial level on the west side of the market street in a basin called Hud Qibli Dayir al-Nabihyya. (Fig. III.5) The main drainage canal of this basin, called Qibli Dayir al-Nabihyya surrounds the old quarter of the village. Long time ago, when the construction of this quarter took on a considerable dimension and especially around the drainage canal, the same problem emerged and is still persisting. In the absence of any measures for solving the problem, the drainage and sewage water accumulated and overflooded the low agricultural land to the extent that a swampy area of more than 25 feddans is no longer useful for cultivation or for construction. (Fig. III.7)

However, the problem was not confined to the drainage and the irrigation systems, but reached the drinking water system. The drinking water, through internal house tubs, was introduced in Batra in 1981. The drinking water is supplied from a central drinking water station in the village of al-Tavila located at ten km from Batra. Each village receives a specific quota of drinking water through water pipes. Batra's main water pipe is located parallel the main road that joins the railway station with the centre of the marketplace. Thus, with the expansion of construction and specifically after the construction of the egg factory, the
consumption of water exceeded the quota fixed by the government. The problem took on a serious dimension when the egg factory used the drinking water for its chickens, instead of using ground water. The reason, of course, is the subsidised price of drinking water which is cheaper than installing ground water pumps.

As a result of the latter, the area located behind the factory up to the main dyke separating sector B and C no longer receives drinking water. Women and children resident in this area have recourse to public water tanks and carry their daily needs of water for the household. However, those who could afford it, installed electrical engines in their houses to increase the water pressure, thereby leaving the rest of the community deprived of water. There were no serious collective measures undertaken by the villagers against the owner of the factory, because those with influential relations are the same ones who installed the electrical engines, and who are involved in commercial trade with the owner of the factory. The rest of the residents, the poorest people in the area, are deprived of their rights to have access to drinking water. (Fig.III.7)

The above presentation is a review of the changes that took place on the level of the urban expansion and its implications for the villagers in the absence of government intervention. However, according to the civil engineer, the construction boom started to decline in late 1985 and the market price of constructed land has stayed the same. This phenomenon is the result of the crisis in the international labour market and the cuts made by these countries in the importation of foreign labour. In the same time, many peasants who relied on this source of income, and who invested their savings in construction found themselves unable to maintain their standard of living and to continue the construction. A number of houses are left unfinished as a result of the increasing price of material together with the consumption of the household savings. At a certain point, the transfer of residence, which represents an economic and a social promotion, was
the objective of most peasants. But with the changes of the labour market this situation is in the process of changing and the aspirations of peasants will not be as possible to realise. However, the distinction between the two quarters remains significant in terms of social and economic differentiation and class relations. Finally, if the urban expansion in Batra illustrates certain aspects of the nature of change that is taking place, it is seems necessary to make a brief presentation of the administrative system within which the community is developing.

4.3. The Administrative System

4.3.1. The Local Unit, al-Wihdah al-Mahaliyyah

Within the administrative divisions of the governorates in Egypt, Batra is affiliated with Talkha centre, one of the nine centres of the Daqahliyya governorate. A number of village Local Units, al-Wihdah al-Mahaliyyah, are attached to these centres, each representing several villages in the centre. Batra's Local Unit represents nine villages in its surroundings. Administratively, Batra is regarded as the mother village. In the context of the decentralisation policy, the Local Unit of each mother village assumes the control of the activities in the village, and the execution of the decisions taken by the the Ministry of Local Governing, under which the Local Units operate.

The Local Unit of Batra supervises the activities of public services in the nine villages, in particular the educational system, the health care system, the provision office, and the quotes of subsidised goods distributed to the inhabitants. It also supervises the social security office and the distribution of pensions. It supervises the youth activities, clubs, mosques, and the employees appointed to these offices. However, each of these institutions is a subdivision of the various ministries. In addition, the Local Unit organises in the nine villages several activities such as
alphabetisation classes and koranic lessons supported by the different ministries. It also introduced, in Batra, a public telephone service, a fire unit, and a nursery. Until 1985, there was a regular bus service from Batra to Mansura and Damietta financed by the Local Unit, but it could not support it with its limited budget.

The Local Unit receives its credits from the Ministry of Local Governing through the Investment Bank, a branch of the Egyptian Central Bank, in addition to donations which are collected from the inhabitants of the villages. The Local Unit undertakes improvement projects on a very limited scale, such as the improvement of roads and the restoration of schools. With the national economic crisis there is a considerable cut in the budget of the Local Units which prevents them from undertaking large scale projects, namely the improvement of the irrigation and the drainage systems.

4.3.2. The Local Assembly, al-Maglis al-Mahali

Besides the government administrative apparatus, there is in each mother village a Local Assembly, al-Maglis al-Mahali, derived from the hierarchical system of the People's Assembly, the Parliament. The elected members of the Local Assembly represent the interests of the people vis-a-vis the government and its institutions. It supervises the works of the administrative executive institutions of the government in the villages represented by the Local Unit. Batra's Local Assembly represents the inhabitants of the nine villages, and each village occupies a number of seats for its representatives according to the size of the territory and the population of the village. In this structure Batra occupies five seats of the total number of 18 seats.

The election of the members of the Local Assembly takes place every four years, with the elections of the People's Assembly. The elections take place on the basis
of a restricted list, excluding any independent candidate. In the electoral campaign of May 1984, the majority of the candidates presented in Batra were from the National Democratic Party, the ruling party, with the exception of one member representing the Labour Party\(^17\). The Labour Party had a candidate in Batra because the leader of the party is originally from Shirbin city located eight km from Batra. The candidate of the Labour Party was gradually eliminated by the representatives of the ruling party in the village, despite a large number of Labour Party sympathisers and supporters in the surroundings of Batra, reaching 85\% of the inhabitants.

According to an important figure in Batra, an adept of the Wafd Party\(^18\), and a member of the ruling party at the present time, the reason behind the failure of the Labour Party’s candidate in Batra was directly related to the interests of the influential people and the large merchants with the government. The candidate was a former coachman, later appointed as an employee in the Agricultural Cooperative of Batra. As a small government employee and a member of an opposition party, he was not an influential person to support.

4.3.3. The mayor, al-‘Umda

The mayor, ‘Umda, and his deputies, Mashayikh al-Balad, represent the police authority in the village, under the control of the Ministry of Interior, and directly attached to the police head quarters in Mansura. On the level of Batra, the ‘Umda is the head of the security force and the Mashayikh al-Balad are under his command. Batra is divided administratively into quarters, Mashyyakha, each headed by a Shikh al-Balad, a deputy responsible for the order and security of his quarter.

The system of ‘Umda and Shikh al-Balad is traced historically to the beginning of
the nineteenth century when these authorities played an important political role. Beer explains it in the following terms:

The population of Egyptian villages in the nineteenth century could be roughly divided into simple fellah families and rich families of notables. The heads of the notable families, known as mashayikh (plural of shaykh) concentrated a considerable proportion of the village's religious and secular offices in their hands. In fact, they and their families ruled all aspects of village life. They thus came to control a large part of village lands, which they converted into their private property. (Beer, 1982:50-51)

Beer elaborates on the establishment and the evolution of the position of the notable families in the nineteenth century:

From amongst the mashayikh of the families in question, the ruler would appoint the man with the strongest position in local affairs as head man of his village (shaykh al-balad). Although this was a subordinate position in the civil-service hierarchy, it was one of influence in determining landownership relations within the village. From the second half of the nineteenth century onwards the incumbent was known as 'umda... instead of shaykh al-balad. In many villages the office of 'umda remained in the same family for generations. (Beer, 1982:51)

Thus by the end of the nineteenth century the 'Umda's position was related to the rise of powerful families who consolidated their status in the village and acquired land through this position. During this period, the role of the 'Umda and Shaykh al-Balad were clearly defined for the villagers and the state. Among their responsibilities were the collection of taxes on land sold by the state to individuals and the assessment of sequestration for non-payment of debts; and from these tasks they acquired a certain profit from sales. They also gave loans to peasants in exchange for an interest rate on the loan. Beer adds the following activities to the list:

As the 'umda was also responsible to the Government for the quota of
men for the corvée and the army, and it was he, therefore, who decided who was to be conscripted, one can imagine what power he had over the fellahs and their land... And since they came into contact with the fellahs more directly than did the Turco-Egyptian officials, and, above them, the members of Muhammad 'Ali's family, their tyranny was felt all the more keenly. Furthermore they had more opportunities than many of the higher officials of enlarging their estates particularly at the expense of fellah holdings. (Baer, 1962:53)

As a result, the 'Umda's and Shikh al-Balad's images were identified in the people's minds with wealth, power, and tyranny. 'Ali Mubarak in his book gives several accounts of peasants' insurrections in the villages against the authority represented by the 'Umda in the nineteenth century. According to Baer, many of the 'Umda rose to high positions in the government under Khedive 'Isma'il's reign, with the creation of advisory councils constituted of 'Umda. The British, during their occupation of Egypt, understood the important role of the 'Umda on the village level and in the government. To reduce the power of this class the British:

deprived them of many functions from which they had derived their power. They no longer collected or assessed taxes, or selected men for the corvée, nor did they dispose of village lands which had become vacant. In many cases new 'umdas without much landed property were appointed in their stead. (Baer, 1962:55)

By the turn of the twentieth century, with the changes in the structure of the Egyptian society, the group of 'Umda was no longer classed with the large landowners. As a result of the above measures, their land base was no longer expanding and their property was divided or was maintained with a larger number of beneficiaries. At the same time, the newly appointed 'Umda were no longer holders of large estates, and were deprived of their initial source of wealth.

Most 'umdas today are medium landowners with properties of 10 to 50 feddans. Some members of the old 'umda families have risen to eminence in the business world and must be considered as belonging to a different class. (Baer, 1962:55)
This was the general historical development of the 'Umda and Shikh al-Balad class until the early twentieth century, and their position on the village level and in the government.

In Batra there were and still are five notable families that rose in the 1920's with the economic crisis of the large absentees landowners who sold their land as explained above. From these families the 'Umudiywa, the post of mayor, is held. During this time, one of the conditions for the occupation of the position of 'Umda was the ownership of ten feddans, and five feddans for the Mashyakhe, the post of deputy, and a minimum payment of L.E 5 taxes on agricultural land for the right to vote. This meant that the voters and the candidates were landowners of a minimum size of ownership. However, this was not the only determinant factor, as Beer explains it: "Alternatively, as happened more than once last century, changed relations with the Government led to the post of 'umda being taken away from one family and given to another". (Beer, 1962:51)

According to one member of a notable family in Batra, before 1952 there were constant conflicts between two important families in Batra, the Girgis family and the Hushmi family. The Girgis family was a supporter of the Sa'di Party19, while the Hushmi family was a supporter of the Wafad Party. During this period, 1930-1950, the political scene witnessed permanent government changes shifting from different political parties to independent figures. These changes were reflected on the village level at Batra: systematically, the 'Umda post was the subject of dispute between the two families when the changes in the government cabinet took place. However, the Girgis family was able to maintain the post during the majority of this period.

Regardless of their political orientation, the Girgis family became the richest and
the most powerful family among the villagers. They owned one of the largest 'Izab in Batra in the name of the family, and one of its members held an important position in the Credit Bank. It was not until 1950 when the Husmani family took over the post from the Girgis family. This was partly the result of the decline of the Girgis family whose members began to migrate to the cities; part of the landownership was sold. But more important was the access of the Wafd Party to the government.

After the succession of the Husmani to the post, a dispute over a plot of land started between them and the Zaghlul family, another notable family in Batra who occupied one of the posts of Shikh al-Balad. This dispute developed and the Zaghlul family and their allies tried to boycott the election of Husmani for the 'Umudiyya, the post of mayor, and attempted to acquire it in their family. As a result, the village was divided into two parties, each supporting one side of the dispute. Coalitions began between the various notable families in Batra, and the Husmani family was allied to the Hammam family, one of the largest families in Batra. They constituted the strongest front and the 'Umudiyya was kept in the Husmani family, while the Zaghlul family lost the election and has occupied ever since al-Mashyakha, the post of deputy. The Husmani family maintained the 'Umudiyya until a few years ago, when one member of its family refused to succeed his father and transferred it to a member of the Hammam family.

According to Hag Husni Husmani, who was suppose to succeed his father: "since the last dispute it is known and agreed upon by the villagers of Batra that the position of 'Umda is held by the Husmani family or transferred to their allies with their consent, and any measure taken by another family against this consensus is considered a declaration of dispute". However, legally, the 'Umda should be elected democratically by the villagers regardless his family origins. Although a transfer of the 'Umudiyya took place from the Husmani to the Hammam family, in
reality the power remained with Husama because of a family alliance between the
two and thus mutual interests of both families are not in conflict.

The present 'Umda in Batra was a former Shikh al-Balad and was promoted
because of his family alliance. The 'Umda has five children, four of them are
receiving school and university education, the other works the land of their father.
The 'Umda and his family own a plot of land in sector C, two poultry stations, and
they are involved in the marketing and the storage of potatoes. In addition, the
'Umda owns two buildings in the new quarter of the centre of the village. He has
an office, located near his two buildings and the poultry stations, from which he
attends his official obligations and his private business. The office is a small room
under his house where he has a telephone, a desk, and guns. The office is also the
guest room of the village, al-Madyafa, where he receives visitors. Under his
command, the armed force is constituted of a small number of ghafar, the
guardians, who control the security of the village and the agricultural land.
According to the present 'Umda, after 1952 certain privileges were removed from
the 'Umda, such as the exemption of his sons from the military service. He adds
that the monthly salary is symbolic, at only £ E 10.50.

The 'Umda of Batra assumes officially- vis-à-vis the government -specific
responsibilities which include the maintenance of stability and order in the village,
the intervention between peasants in cases of disputes, the conscription for the
military service, etc. However, in reality the present 'Umda is not the authority in
the village, there are highly respected figures who play this role in the community.
Their authority is such that they are involved in family disputes, their consent is
needed for any engagement or disengagement. Disputes over land, water, financial
matters, or over moral questions are solved by them, they are the effective judges
and the executors of judgment in the village, among the peasants or with the
government authorities. In other words, the present 'Umda is only an official
figure in the village without real authority. This means that the 'Umda's authority is no longer maintained and his image in the peasants' minds has changed. Thus, the real authority in the village is not the state authority, but a local agreement of the leading men of the village which provides a legitimacy and a stronger power to its holder over the community than the one provided legally.

4.3.4. The deputy of the mayor, Shikh al-Balad

The Shikh al-Balad, the deputy, is appointed by the 'Umda under specific conditions determined by the government for his recruitment. In Batra, there are four Mashayyikh Balad (plural of Shikh al-Balad) from four different families. These families have been occupying these positions for a very long time and the position is inherited by members of the families. According to the 'Umda, the village, with its 'Izab and its agricultural land, is divided administratively into four Hissas, shares or subdivisions, covering a specific area of land and its inhabitants. Each Hissa with its Shikh al-Balad constitutes a Mashyyakha or Shiyakha, i.e. the domain of control of the Shikh al-Balad. Family relations are determinant factors in the recruitment of the candidate for this position, regardless of any consideration of government conditions.

Shikh Guda Gawdat, a member of one of the notable families in Batra, is the Shikh of Mashyyakha(G) Gwadat, held previously by his father and his eldest brother. The candidate for this post must pass an examination of reading and writing as a precondition to his recruitment. Illiteracy was the first problem facing Shikh Guda Gawdat, in the beginning of his career. He and the members of his family had recourse to a member of the Girgis family who held an important position in the Ministry of Education, and whose cousin was a member of the examiners' committee of Shikh Guda Gawdat in the police station in Talkha. Of course, on the day of the exam, he failed but because of his personal contacts he was declared
qualified in reading and writing. For 20 years he held the post until he retired in 1982. The reason behind his retirement was the disagreements he had with the new generation of appointed members in Shiyyakha(t) Batra and in the 'Umudiyya post. He argues that the main role of Shiikh al-Balad is to insure order and security, and to intervene in cases of disputes in his Mashiyakha. However, he must coordinate his work with the other members of Shiyyakha(t) al-Balad and give regularly reports of the situation to the 'Umda. In other words, he executes the 'Umda's orders.

In conclusion, despite the fact that the 'Umda and Shiikh al-Balad are official and government positions, complying with specific rules and laws, family relations are strongly maintained and are a constant feature in the historical development of the village authority. The dynamics of these forms of relations lie in the rise and decline of families and in their relations with the national economic and political development, as has been shown. In the course of the historical development of Batra, local families have emerged under specific political and economic conditions; others have disappeared and lost their power under different conditions. Wealth and connections are associated with these positions, however, they are not necessarily determined by the size of landownership as will be discussed in the course of this study. It would be interesting, therefore, to study the significance of the persistence of the authority of the five families mentioned above throughout the various socio-economic changes in the village. This question will be raised in the last chapter of this thesis which is concerned with the socio-political structure and class relations in the village.

4.4. The Civil Services

In the context of the administrative system in Batra, there are several public
services offered by the government to the inhabitants of Batra and the nine villages it covers administratively. The public services can be divided into three categories:

a) Health, education, religious, and social services.
b) Electricity, water, and communication services.
c) Agricultural and financial services.

These services are officially under the supervision of the Local Unit, however, each is derived from a different ministry. Most of these services depend on the community for support of their projects, since their capacity to meet the needs of the growing population is limited.

The Health Unit is attached to the Ministry of Health, and is located in the centre of the village on the west side of the market street. It assumes preventive measures more than providing for the cure of diseases; most of its activity revolves around vaccination and immunisation campaigns against endemic diseases. The Health Unit launches campaigns against dehydration, poliomyelitis, and bilharziasis, and organises campaigns for family planning. In addition, it is responsible for issuing birth and death certificates. The Health Unit includes an out-patient clinic constituted of a room for maternity and child care, a dentist room, an emergency room, a dehydration care room, a laboratory for analysis, and a pharmacy. It also provides a follow up service for the cases.

The medical staff working in the Health Unit is headed by a chief doctor, a general practitioner appointed on a permanent basis in the village by the Ministry of Health, and by a dentist, who comes twice a week. There are two female nurses, a male nurse, and a general inspector of registers. Finally, there is a health inspector for the inspection of the quality and the type of food sold on the market,
and for the supervision of the private doctors practicing in the village.

According to the doctor in charge of the unit in Batra, most of the campaigns are launched under the supervision of U.S.A.I.D., which finances and controls such programs as the family planning program, the dehydration program, and the bilharziasis program. The U.S.A.I.D.'s inspector visits Batra once a month to report on the progress of the work. In addition to these campaigns, the Health Unit has undertaken an information project, initiated by the Minister of Health, on the members of the household units in Batra. At the present time, there is an information card covering the number of members of each household, their sex, and their health condition before and during the survey. The information was collected in 1985 by the local staff and is being updated constantly within the limits of their capacity. On the basis of these information cards, there is systematic follow up of pregnancy, birth, dehydration, and bilharziasis cases through a monthly visit to the households by the nurses.

However, according to the doctor, the capacity of the Health Unit is limited as was indicated, and cannot cover a population of 15,697 spread over such a large territory. Likewise, the available equipment is not sufficient nor in such a condition to meet the medical needs of the community. The doctor adds that the male nurse is a major problem in Batra. In previous times, the barber used to play the role of the doctor; in recent years, with the introduction of male nurses in the village, the latter has replaced the role assumed by the barber.

Initially, the male nurse was not scientifically qualified; he was appointed to assist the doctor in his daily needs. However, he gradually learned a few common skills, such as injections and the use of certain drugs and standard prescriptions for colds and common illness. But because of his social relations in the village, as one of its members living among the people and engaging in evening talks in the coffee shops
and social gatherings, many families trust him more than the doctor who is, after all, a stranger living in the city. Thus, the male nurse has begun treating patients at home in the afternoons and charging £.E 1 per visit. This is, of course, a rather dangerous and uncontrolled situation whereby he may make a faulty diagnosis or prescribe the wrong medication.

However, the male nurse is not the only problem facing health care in Batra, there are eight private clinics owned by doctors either originally from Batra or those who found that medical practice in small villages is profitable. Private visits to doctors are charged £.E 5 per visit and £.E 10 per home visit. This created a strong competition between the private doctors to the extent that personal accusations were made. The competition is essentially on the fees charged by the doctor. The lower the fees per visit are, the more a doctor will attract patients. This was the case with the head doctor of the Health Unit who charges £.E 2 for private consultation and £.E 3 for home consultations.

From the above it is clear that medical practice has become a commercial enterprise in the absence of an adequate public system to meet the demands of the society. This is clearer when the equipment and the facilities provided to the Local Health Unit are looked at. For example, the Health Unit has use of one car for the transportation of medical equipment and the staff, but it cannot serve for the transportation of patients in cases of emergency. The patient will be expected to call the ambulance from Talkha centre 15 km from Batra, and he would be lucky to find a working telephone line.

Education has expanded considerably in the past ten years to serve the nine villages of the Local Unit. There are four primary schools in the centre of the village, and one school in 'Izah al-Hag Khalil serving 1,440 pupils. There are two preparatory
schools; one was built from the local resources of the community, raised from the villagers. The raising of the funds was announced at Friday's prayers by the Mashayikh al-Balad, who collected £.E 12,000, the rest of the money, £.E 8,000, was paid by the government. In addition to these schools, there are four specialised secondary schools for agriculture, arts, technicians, and one general secondary school. These schools serve nearly 1,388 pupils. The students of Batra represent 33% of the total number of pupils, while the rest come from the surroundings of the village. These schools are affiliated with the Ministry of Education, while the religious institute is under the control of al-'Azhar University. The religious institute was created in Batra in 1978, serving the primary stage of education; a preparatory level of education was introduced in the early 1980's with a capacity of 140 pupils.

The educational system in this institute is based on programs of the Ministry of Education and on intensified religious and koranic classes from al-'Azhar University. Pupils from secular schools can transfer to the religious institute provided they pass mathematic, calligraphic, and Arabic exams. The institute is financed by al-'Azhar University. Grants are given to poor pupils and financial support is given to the primary school students, in addition to lunch meals. Similarly, incentives are granted to pupils in the form of annual competition for learning the five parts of the koran, for each part learned the pupil and the teacher receive £.E 3 each. Therefore, teachers work hard with their pupils on the learning of koran to raise additional income above their salaries; in some cases incentive pay may reach £.E 600 annually for the teachers. The teachers of religion, Arabic, and the learning of koran are graduated from and appointed by al-'Azhar University, and the rest of the teachers are appointed by the Ministry of Education.

The public educational system in Egypt is free of charge, and the salaries of the
teachers are very low, with an average of £E 45 per month. As a result, most teachers reduce to the minimum their teaching capacity in public classes, and impose on the pupils private collective classes at home charged per hour according to the subject and the level of education. This is commonly adopted by most teachers in urban and rural areas, whereby they increase their income by, in some cases, ten times their monthly salary. These classes are not controlled by the school or by the Minister, and take place in the afternoons in the school class rooms or at the pupils' houses.

Religious services are diffused from al-'Azhar religious institute and from the mosques in the village. There are nearly five or six mosques in the centre of Batra, in addition to the mosques in the 'Izab. Each mosque is directed by a Shikh, a preacher, appointed by al-'Azhar University. On Fridays, or on the occasion of religious celebrations, the villagers- mostly men - gather in the mosques for prayers where a long speech is given by the Shikh and important announcements are made after the prayer.

Social services are officially assumed by the Local Social Unit in the village, which is affiliated with the Minister of Social Affairs. The Local Social Unit is responsible for distributing monthly pensions, in addition to organising, in coordination with the Local Unit, small-scale activities such as literacy and sewing classes. These activities are undertaken on a very small scale given the limited budget of the Social Unit.

Within the second category of services provided in the village, water for drinking was only introduced in 1981, as mentioned above. Similarly, the electricity system was introduced in the village at the same time. However, the electricity service is
quite weak and parts of the centre of the village and the `Izab suffer from constant electricity failures. Under such conditions the villagers have maintained the old system they created for lighting. This system is based on the reinforcement radio power station of Sut al-'Arab, Voice of the Arabs, located in the territory of Bisat. The reinforcement radio power station emits electro-magnetic waves, which are captured by a very simple system installed on the roofs of the houses to generate electric power.

This system consists of the following parts: (Fig. III.8)

a) A long copper wire is applied to two wooden carriers placed on the roof of the house, constituting an antenna for capturing the waves.

b) A wooden board placed in one of the rooms of the house which consists of the following pieces:

- A coil made of a metal pipe and covered by a copper wire, is connected from one end with a copper wire attached to the antenna.
- A long thick piece of copper is fixed to one end on the wooden board while the other is in free motion on the coil. The fixed end is connected to a ground wire and the entire part plays the role of an indicator.

c) An expired neon lamp is connected to the indicator and the coil at both ends. A switch can be fixed for the facility of use.

By adjusting the position of the indicator on the coil, by a friction movement, the neon lamp is turned on. The reason a burned neon lamp is used is because it requires a very low power for its functioning. For an additional use of this system, a potato can be fixed on one end of the coil and, by adjusting the length of the coil, the frequency of Sut al-'Arab station can be selected. Thus, the potato plays the role of a condenser and the system is used as a radio.
Figure III.8. The Lighting System
This system is commonly used in Batra since the installation of the radio reinforcements station in the early 1960's, and apparently is also used in Egypt wherever a reinforcement power station is located. According to the inhabitants of Batra, this local system is quiet cheap to install and is free of charges as compared to the electricity rates which have increased in the past five years. It should be noted that the government has embarked on a policy of reducing subsidies on electrical energy as well as other subsidised goods. Therefore, under these conditions, peasants find it more convenient to use local resources which the government cannot control or tax.

In addition to electricity services, there are public communication networks consisting of a railway service connecting Batra with the surrounding villages, Damietta, and Mansura. The railway station is located in sector B on the main road that joins Mansura and Damietta. Collective taxi services are available by individuals from the village and are the only means of vehicle transport in the absence of public bus services.

Finally, the third category of services provided in the village includes the Bank of the Village and the Agricultural Cooperative. As discussed earlier, the Bank of the Village and the Agricultural Cooperative are the direct channels through which the government intervenes, and controls agricultural production and marketing (Chapter, II). Likewise, through these institutions the peasants, the farmers, and the merchants in their various groups, interact with government policies within their local structures. Given the important role played by the two institutions in increasing the process of commoditisation, and in maintaining social and political balance at the village level, and between rural areas and the state, both institutions will be examined in detail in the following sections.
5. The Role of the Bank of the Village of Batra

The Bank of the Village of Batra was created in 1977, with the objective of reorganising the delivery system after taking over from the Local Multipurpose Agricultural Cooperative, which was in a budget deficit. The Bank of the Village of Batra serves nearly 4,160 holders over an area of 8,044 feddans, divided over the five villages. However, Batra remains the largest village in terms of the number of holders, reaching, 1,425, and in terms of the territory.

The Bank of the Village of Batra is attached to the Bank for Development and Agricultural Credit in Talkha, affiliated to the larger branch of the bank in Daqahliyya governorate, a branch of the Principal Bank for Development and Agricultural Credit in Cairo. The Principal Bank for Development and Agricultural Credit is an autonomous organisation which works in close coordination with the agricultural policy of the Ministry of Agriculture. The Bank of the Village of Batra covers four areas of banking services:

a) The provision of loans for inputs and for agricultural operations.

b) The provision of credits for agricultural development projects.

c) The provision of loans for sales.

d) The attraction of rural savings.

In the following section, each of these functions will be examined.

5.1. Loans for Inputs and for Agricultural Operations

As mentioned earlier, the state intervenes directly in the agricultural sector through the crop rotation cycle and the monopoly of the agricultural inputs. Each
holding registered in the cooperative receives a quota of inputs at a subsidised price, according to the crop and the size of the land. Under the previous system the cooperatives assumed the delivery of quotas. But with the establishment of the Bank of the Village, the terms and the conditions of the delivery system changed to be addressed exclusively to landowners registered in the agricultural cooperative and, thus, excluding all other forms of holdings. This condition was extended to cover all activities of the Bank of the Village. The Bank of the Village of Batra provided in 1983, a total of £E 1,048,302, covering loans in kind and in cash for agricultural inputs and for certain agricultural operations under specific conditions.(Tab.III.2)

5.1.1. Loans for seeds

The landowner is allowed to buy his quota of inputs or to get a loan in kind or in cash from the bank on the basis of the guaranty of ownership, and not on the basis of crop production as was the case before. Loans for agricultural inputs in kind are given for seeds, fertilisers, and pesticides, in exchange of 4% interests. The interest on loans is subsidised and is to be repaid at the end of the season of cultivation. It can also be deducted from the price of marketing of the compulsory crop delivery. Only loans for seeds of winter potatoes are given in cash, ranging between £E 150 and 200 per ton, according to the market price. This is due to the fact that seeds for winter potatoes are taken from the crop of summer potatoes, which means that the peasant gets his seeds from his previous crop of summer potatoes or buys it from the local market.

As for the loan for summer potatoes, they are given in kind and under specific conditions. It should be noted that the Specialised Cooperative of Potato Producers is the sole importer of summer potato seeds and the only exporter of summer potatoes. Several months before the cultivation of summer potatoes, the owner has
Table III.1: The Financial Operations of the Bank of the Village of Batra, in 1983

<table>
<thead>
<tr>
<th>Type of Loan</th>
<th>In Egyptian Pounds</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Agriculture:</strong></td>
<td></td>
</tr>
<tr>
<td>- Agricultural operations</td>
<td>1,046,392</td>
</tr>
<tr>
<td>- Sales in cash</td>
<td>260,045</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,306,437</td>
</tr>
<tr>
<td><strong>Raising Cattle:</strong></td>
<td></td>
</tr>
<tr>
<td>- Female mixed breeding</td>
<td>300,600</td>
</tr>
<tr>
<td>- Fattening around the year</td>
<td>225,000</td>
</tr>
<tr>
<td>- Stable constructions</td>
<td>10,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>535,090</td>
</tr>
<tr>
<td><strong>Poultry stations:</strong></td>
<td></td>
</tr>
<tr>
<td>- Stations constructions</td>
<td>249,600</td>
</tr>
<tr>
<td>- Poultry</td>
<td>235,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>484,600</td>
</tr>
<tr>
<td><strong>Egg Production</strong></td>
<td>1,100,000</td>
</tr>
<tr>
<td><strong>Mechanisation</strong></td>
<td>91,259</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3,592,305</td>
</tr>
</tbody>
</table>

Source: The Bank of the Village of Batra, 1983
to apply, for the quota of imported seeds, to the Specialised Cooperative of Potato Producers in Batra represented by the Local Multipurpose Agricultural Cooperative, and pay a deposit of £.E 50 per ton. The quota is then delivered through the bank to the peasants cultivating summer potatoes in the form of a loan in kind. The value of the loan for the seeds is fixed according to the price charged by the cooperative for the different types of imported seeds, varying between £.E 400 and 600 per ton. At the end of the season the owner pays back the loan and the interest rate of 4%. In cases of delays in payment, the bank charges 15% interest (which means 11% more than the interest charged by the Local Multipurpose Agricultural Cooperative in similar situations). Moreover, there is a trend to compel all producers of summer potatoes who buy seeds from the Specialised Cooperative of Potato Producers to deliver their production back to the specialised cooperative for marketing at a specific price, thus extending the monopoly of the specialised cooperative over marketing. The Bank of the Village supports this policy because it ensures the repayment of the debts, by deducting them from the market price.

Concerning the seeds needed for the crop rotation, such as: rice, cotton, maize, and wheat, the bank offers loans in kind to landowners on the same terms, according to the size of the cultivated plot. Similarly, the type of seed is usually determined by the Ministry of Agriculture according to its annual needs and according to the type of seeds available; which means that rarely does the peasant have the possibility of choosing the type of seeds he plants if it is purchased from the Bank of the Village.

5.1.2. Loans for fertilisers

The government provides the owners of agricultural land with a quota of fertilisers and pesticides at a subsidised price according to the crop and the size of the ownership, distributed under the control of the bank\textsuperscript{23}. Thus, on the basis of
Table III.2: Quota of Fertilizers for Each Crop in kg. per Feddan

**Winter crops:**
- Wheat : 450 kg / Nitrate
- Barley : 300 kg / ”
- Linen : 300 kg / ”
- Beans : 100 kg / ”
- Lentils : 100 kg / ”
- Garlic : 350 kg / ”
- Balsim : 100 kg / ”
- Onions : 300 kg / ”
- Others : 300 kg / ”

**Summer crops:**
- Maize : 700 kg / Nitrate - 100 kg / sulphate
- Maize Baladi : 600 kg / ” - 100 kg / ”
- Cotton : 450 kg / ” - 100 kg / ”
- Rice : 300 kg / ” - 100 kg / ”

**Vegetables:**
- Potato : 800 kg / Nitrate - 450 kg. / Super Phosphate
- Lettuce : 800 kg / ” - 150 kg. / ”
- Tomato : 800 kg. / ” - 300 kg. / ”
- Aubergine : 700 kg. / ” - 150 kg. / ”
- Green Pepper : 700 kg. / ” - 150 kg. / ”
- Artichoke : 500 kg. / ” - 150 kg. / ”
- Courgette : 350 kg. / ” - 150 kg. / ”
- Others : 350 kg. / ” - 150 kg. / ”

**Fruit:**
- Citrus fruit
  0 - 3 years: 300 kg. / Nitrate - 150 kg. / Super Phosphate
  3 - 7 years: 450 kg. / ” - 200 kg. / ”
  7 - 10 years: 915 kg. / ” - 200 kg. / ”
  > 10 years: 1200 kg. / ” - 200 kg. / ”
- Apples and Pears
  0 - 3 years: 150 kg. / ” - 150 kg. / ”
  3 - 6 years: 400 kg. / ” - 200 kg. / ”
  > 6 years: 600 kg. / ” - 200 kg. / ”
- Peaches and Apricots
  0 - 3 years: 300 kg. / ”
  > 3 years: 600 kg. / ”
- Grapes
  1 - 3 years: 300 kg. / ” - 200 kg. / ”
  > 3 years: 750 kg. / ” - 300 kg. / ”
- Bananas
  permanent : 2500 kg. / ” - 600 kg. / ”
  annual : 400 kg. / ” - 300 kg. / ”
- Mangoes
  1 - 3 years: 150 kg. / ” - 150 kg. / ”
  3 - 7 years: 500 kg. / ” - 200 kg. / ”
  7 - 10 years: 700 kg. / ” - 200 kg. / ”
  > 10 years: 1000 kg. / ” - 200 kg. / ”
- Others : 450 kg. / ” - 150 kg. / ”

Table III.3: The Prices of Fertilizers from 1980 to 1985, in T.E.

<table>
<thead>
<tr>
<th>Year</th>
<th>Nitrates</th>
<th>Super</th>
<th>Animal</th>
<th>Urea</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>2.35</td>
<td>1.65</td>
<td>2.31</td>
<td>5.35</td>
</tr>
<tr>
<td>1981</td>
<td>2.39</td>
<td>1.70</td>
<td>2.35</td>
<td>5.35</td>
</tr>
<tr>
<td>1982</td>
<td>3.10</td>
<td>1.65</td>
<td>3.05</td>
<td>6.60</td>
</tr>
<tr>
<td>1983</td>
<td>3.25</td>
<td>1.70</td>
<td>3.20</td>
<td>6.60</td>
</tr>
<tr>
<td>1984</td>
<td>3.50</td>
<td>1.70</td>
<td>3.18</td>
<td>6.55</td>
</tr>
<tr>
<td>1985</td>
<td>4.70</td>
<td>1.76</td>
<td>3.15</td>
<td>6.64</td>
</tr>
</tbody>
</table>

the annual agricultural census, the bank receives each year the quota for the village of fertilisers to be sold to the owners proportionate to their crop and the holding. (Tab.III.3) The owners must receive their quota of fertilisers before the beginning of agricultural operations and they can obtain it on the basis of a loan in kind with an interest rate of 4% and £ E 1 charged by the bank for its services. Although the prices of fertilisers follow an annual increase, they remain subsidised by the government. (Tab.III.4) The insufficiency of the quotas fixed is the main problem facing the peasants. Similarly, the owners do not often find the type of fertilisers needed, in which case they must substitute another type available from the bank of a different quantity at a different price. According to an employee in the bank, the bank receives a specific quota of each fertiliser for the territory of Batra which should cover the demand, according to the listed crops of the annual agricultural census.

Thus, the problem of the scarcity of fertilisers is due - according to the employee - to the fact that the crop rotation cycle is not followed by peasants as planned, and according to which fertilisers are distributed. As a result, most holders purchase a part of their needs of inputs from the black market for 50% more than the initial price. Another recurrent problem is the delay in the delivery date of inputs. Often the cultivation of a crop can start earlier than expected due to climatic factors, or to unexpected conditions, in such cases the peasant cannot wait for the delivery of inputs to start the agricultural operations. In the meantime, he purchases the fertilisers and often the seeds from the black market.

A decade ago, the problem was not as serious as at the present time since peasants did not rely on chemical fertilisers for cultivation. This shift is the result of the increase in the price of organic fertilisers. According to a potato producer, ten years ago he used to put 100 kg. of sulphate on two feddans cultivated by potatoes, and add organic fertilisers on the same surface. At the present time, he uses nearly
800 kg. of sulphate and every two years puts on organic fertilisers. The cost of organic fertilisers has reached £.E 120 per feddan, whereas, the cost of sulphate for the same surface is only £.E 65; this is largely due to the increase in the price of imported fodder.

5.1.3. Loans for agricultural operations

In addition, the Bank of the Village offers loans for agricultural operations of cotton. At the beginning of the season the owner receives a long term loan fixed at £.E 25 per feddan for an interest rate of 4%. The loan and the interest rate are deducted from the price of the crop delivered to the bank24. At the end of the season, a short term loan of £.E 50 per feddan is provided for the harvest of cotton at a non-subsidised interest rate of 14%. Similarly, the bank offers subsidised loans in cash for wheat and maize cultivation of £.E 25 per feddan at an interest rate of 4%, and a non-subsidised short term loan of £.E 40 at an interest rate of 14% for the harvesting operations. Thus, long term loans at a subsidised interest rate are provided for the cheapest agricultural operations, while short term loans at a non-subsidised interest rate are given for the most expensive operations.

5.2. Credits and Loans for Development Projects

Besides the provision of loans for agricultural operations and for inputs, the Bank of the Village in Batra has embarked on a large investment loan program for development projects in the context of the food security policy25. The projects include mechanisation, veal fattening, female breeding, raising poultry, and dairy product production. The loans for investments in these projects vary between long, medium, and short term loans, provided only to owners of agricultural land
under specific conditions for investment.

Thus, it would be interesting to examine in detail the kinds of investment projects supported by the Bank of the Village in Batra and the preconditions for giving loans. This would illustrate the orientation of investments in Batra and will show how the peasants use the services of the Bank of the Village.

In 1983, the Bank of the Village of Batra provided loans to 222 owners for 11,114 head of cattle fattening throughout the year, amounting to £.E 225,000 at a non-subsidised interest rate of 14%. (Tab.III.2) This short term loan is given only to owners of agricultural land registered in the Local Multipurpose Agricultural Cooperative. The Ministry of Agricultural have fixed the amount of loan per head of cattle at £.E 600 and a maximum of five heads per feddan. The loan is not given immediately, the owner receives an initial £.E 450 for buying the cattle, followed by £.E 150 for the expenses. Until 1986, the owners had to present an insurance certificate stating that they had paid insurance on the cattle and that they were entitled to receive a subsidised quota of fodder. This certificate was one of the bank's preconditions to providing the loan, in order to ensure that the owner used the loan for the proscribed purpose.

However, this condition was eliminated when a fodder crisis began to appear in the market. Until recently, fodder was imported by the government, but with the national economic crisis cuts were made on the importation of fodder. As a result, the government was no longer able to provide subsidised fodder to cattle growers, instead, they had to purchase it from the market at a higher price. Consequently, cattle fattening around the year is no longer supported by the government through the provision of subsidised fodder, and the owners are no longer compelled to present an insurance certificate to the bank as a precondition for the loan. Instead, they receive the first installment of the loan, and the rest of the loan is granted
after the inspection of the project by the bank's committee. The payment of this loan is due in six months time with an interest rate of 7%.

In cases of delay in payments, 7.5% interest is charged. However, the bank requires a minimum of two feddans of ownership as a guaranty, however, the employees of the bank will generally pass a request of loan to owners of 12 girats on the basis of social relationship. Similarly, the bank provided, in 1983, nearly £.E 300,800 for breeding female Frisian cows to 21 owners.(Tab.III.2) These loans are registered under investments in female cattle breeding projects. They are usually given for water buffalo cows, imported Frisian cows, and mixed breeding Frisian cows. These loans are inscribed under terms of four years at an interest rate of 14% and the preconditions are similar to the ones mentioned above. The loans for water buffalo cows are provided on the basis of £.E 600 per head, and loans for the mixed breeding Frisian cows are for £.E 700 per head, whereas loans for imported Frisian cows are fixed at £.E 1,400 per head.

Therefore given the high amount of the loan, it is not a coincidence to find that the majority of the long term loans are provided for female cow breeding, including mixed breeding cows, and for imported cows. Although the water buffalo cow is a less expensive animal and requires very little care as compared to the imported cows, the owners prefer to invest in the imported cows or in the mixed breeding cows because they follow a shorter cycle of reproduction of nine months as compared to 11 months for the water buffalo cows. They also produce a larger quantity of milk, but with less fat. Despite the fact that imported cows are much more vulnerable to climatic changes and to local diseases, the bank promotes such loans because it receives a higher interest rate than it would receive from loans on local cows.
Table III.4: Investments in Poultry Stations on the Roofs of Houses

<table>
<thead>
<tr>
<th>Number of</th>
<th>Surface per</th>
<th>Number of</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sections</td>
<td>Metre²</td>
<td>Chicken</td>
</tr>
<tr>
<td>1</td>
<td>350</td>
<td>3,500</td>
</tr>
<tr>
<td>1</td>
<td>330</td>
<td>3,300</td>
</tr>
<tr>
<td>1</td>
<td>300</td>
<td>3,000</td>
</tr>
<tr>
<td>1</td>
<td>100</td>
<td>1,000</td>
</tr>
<tr>
<td>1</td>
<td>250</td>
<td>2,500</td>
</tr>
<tr>
<td>1</td>
<td>100</td>
<td>1,000</td>
</tr>
<tr>
<td>1</td>
<td>540</td>
<td>5,400</td>
</tr>
<tr>
<td>1</td>
<td>300</td>
<td>3,000</td>
</tr>
<tr>
<td>1</td>
<td>120</td>
<td>1,200</td>
</tr>
<tr>
<td>1</td>
<td>125</td>
<td>1,250</td>
</tr>
<tr>
<td>1</td>
<td>200</td>
<td>2,000</td>
</tr>
<tr>
<td>1</td>
<td>110</td>
<td>1,100</td>
</tr>
<tr>
<td>1</td>
<td>135</td>
<td>1,350</td>
</tr>
<tr>
<td>1</td>
<td>200</td>
<td>2,000</td>
</tr>
<tr>
<td>Total:</td>
<td>14 3,160</td>
<td>31,600</td>
</tr>
</tbody>
</table>


Similarly, one of the bank's conditions for female cattle breeding loans is the construction of adequate stables, for which the bank provides loans on the same conditions to as much as £.E 10,000.

In addition, the Bank of the Village of Batra provided, in 1983, loans for poultry and for the construction of poultry stations, to as much as £.E 484,600. From this loan, £.E 235,000 were given for the construction of 11 stations and £.E 249,600 for the operation of 13 stations. Thus, the total amount of loans for poultry stations covered 20 stations with a capacity of 89,000 chickens.(Tab.III.2) Poultry stations, in the context of the food security projects, started in the early 1980's in Batra, when the government exempted all farmers and owners of agricultural land investing in food security projects from agricultural restrictions. Furthermore, the government offered all the financial facilities to promote such projects at a
subsidised interest rate for loans, a subsidised price for fodder, as well as an exemption from taxes for a specific period of time.

All these facilities attracted large and middle owners to invest in such a line on their agricultural land, thus ensuring a high profit on a very short term and under advantageous conditions as compared to agricultural production. Furthermore, most investors of food security projects, namely, in poultry station, took advantage of the flexibility of the system that allowed any owner who constructed a poultry station on a part of his agricultural land to transfer it into construction area. This provision was enough to attract owners to make profit from selling land for construction or to invest in housing that is much more profitable and less risky than agricultural production. (Tab. III 2,5) On the other hand, small farmers who did not own enough agricultural land to invest on it, used the roofs of their houses or their yards to construct poultry stations.

Thus, the bank encouraged both large scale investments on agricultural land and small scale investments, on the basis of personal ownership guaranty or on the basis of someone who stands surety to a landless investors. It should be pointed out, that raising poultry follows a short cycle of approximately, 60 days, during which time the chick grows to maturity under specific conditions of heating and feeding. Despite the fact that raising poultry is a very profitable investment on the short term, it is also a risky investment because of contagious diseases that can spread very easily, especially in the usual closed heated section built on 500 metre square, containing 5,000 chickens. Many investors in this sector were in deficit at different cycles due to lack of adequate medical and hygienic measures, similarly, the crisis of fodder has generated serious problems in this sector.

After being subsidised by the government, fodder was lacking on the market for the reasons mentioned above and, if found was at double price, this meant an
increase of price of poultry on the market. As a result, by 1985, the government stopped granting permissions for the construction of new poultry stations on agricultural land and the subsidies on interest on loans for these projects were removed. Loans were subsequently available at the non-subsidised rate of reach 14%. Therefore, at the present time, the expansion of poultry stations takes place only on previously built stations and on the roofs of houses.

Since investments in poultry stations represent a large proportion of the bank's loans, it would be interesting to know who invests in this sector and the scale of the investments. According to the figures advanced by the Bank of the Village in Batra, there are only six owners who invested in poultry stations on agricultural land on a large scale, ranging between 1,000 and 13,000 chickens. In addition, other owners constructed large scale poultry station on the roofs of their houses, ranging between 5,400 and 3,000 chickens.

These 11 investors received loans for constructions amounting to £.E 235,000 in one year. The loan constituted 48.5% of the total amount of loans granted to this type of project. The remainder of loans, 51.5%, was given as loans for production to the same 11 owners and to two others who installed their projects on the tops of their roofs at a smaller scale, ranging between 1,000 and 2,000 chickens. (Tab.III 2,5) This means that half of the investors in this sector received more than three quarters of the entire loan. It is interesting to note that the names figuring in the list of investors on both agricultural land and on houses, are owners of agricultural land and are involved in the marketing of agricultural production. Similarly, two thirds of the investors are members of the largest families in Batra and the 'Izab who also invested in female cattle breeding.

More important in proportion, was the loan paid to the production of eggs. In 1983, the bank offered a loan of £.E 1,100,000 to an egg factory with a capacity of
15,000,000 eggs annually. (Tab. III.2) This loan was granted on the basis of 65 feddans of ownership as a guaranty, estimating the value of one feddan at approximately £.E 20,000. The bank reduced the interest rate on this loan to 8%, including the bank's services. This loan was given in the name of one owner farmer, who is considered to be one of the largest field merchants in Batra.

Finally, in the same year, the bank gave loans for "mechanisation" amounting to £.E 91,269. These loans covered ten tractors, ten irrigation pumps and two cars. These loans were given at a subsidised interest rate of 7% if the borrower owned a minimum of three feddans. If this condition was not met the bank charged an interest rate of 14% on the basis of two feddans of ownership.

5.3. The Attraction of Rural Savings

The attraction of rural savings started with the strong flow of rural migration to Arab oil countries and with the promotion of investment projects with high profitability on the short term. According to an employee of the bank, accounts in the Bank of the Village of Batra reached nearly £.E 1,500,000 in 1984. This figure includes the current accounts of pensions given by the Ministry of Social Affairs, and the current account of the Local Multipurpose Agricultural Cooperative, in addition to individual accounts. The bank charges a 10% interest rate on its services for the current accounts of the governmental institutions. For individual rural savings accounts, which are mostly from migrant remittances or from private investments, the bank offers an interest rate ranging between 11.5% and 12.5% on deposits.

5.4. The Provision of Loans for Sales

The Bank of the Village provides to its customers non-subsidised loans for buying personal commodities, such as television, and radio sets, refrigerators, and other
household equipment, as well as knitting and sewing machines. These loans are under the development of culture and small family industries in rural areas. The equipment is usually sold directly by the bank which acts as a commercial enterprise. Included in the list of sales of the bank are selected seeds and pesticides that are sold at a higher price than on the market, ranging between 2% and 2.5%. The loans are granted at an interest rate of 14%. The total sales of the bank in 1983 reached £E 260,045.

6. The Policy of the Banking System in Batra

From the presentation of the financial operations of the Bank of the Village of Batra, several issues are to be raised concerning the significance of the figures and the preconditions for granting loans. Similarly, a number of questions cannot be avoided: who benefits from this system, or to whom is this financial system addressed? and, since only holders of agricultural land are eligible for bank services, how do the different categories of owners deal with the system?

According to the figures advanced by the Bank of the Village of Batra in 1983, there was a total of £E 3,520,305 provided as loans, to a total number of 4,160 owners of 8,044 feddans (Tab.III.2) These loans fell into two categories: a) loans for agricultural operations and inputs, amounting to £E 1,308,347 provided to the 4,160 owners of 8,044 feddans; and b) loans for development projects, namely to food security projects, amounting to £E 2,211,952 provided to 390 owners26. According to the records of the bank, most of the investment loans were provided to owners from Batra, the largest of the five villages served by the bank.
The loans provided for agricultural operations and inputs are generally loans in kind, given at a subsidised interest rate of 4% to all owners of agricultural land on the basis of the crop rotation cycle or the fixed crop cultivated as registered at the cooperative. Similarly, the type of inputs distributed to the owners is determined by the government, regardless the needs of the peasants or the local conditions. Thus, the bank is a means of government control over agricultural production, and in some cases this control can be resisted by the peasants. For instance, in 1986, the Ministry of Agriculture imposed on the peasants the cultivation of Philippine rice seed known for a higher productivity than local seed. Many peasants resented its cultivation because of its unsuitability to the local taste, and the majority of the peasants did not eat it. Instead, the rice was given as fodder to chickens. Despite the fact that this experiment did not achieve the desired objective, the government had distributed the seeds to the peasants through the bank and they had no choice but to plant it, especially since rice falls under compulsory crop rotation.

The use of loans in kind for inputs is confined to agricultural purposes, but many peasants find a way to use these loans for other purposes. For instance, very often the borrower sells his quota of inputs on the market at 50% over the bank's price and pays back his debts to the bank. This takes place frequently when the peasant lacks cash money during the agricultural operations or after a bad season. It also takes place when the delivery of the quota of inputs from the bank is delayed, in which case the peasant is forced to buy what he needs from the black market in order to start his agricultural operations on time. Thus, after he receives his quota from the bank, the peasant sells it back on the black market to cover his costs. However, only loans for winter potato seeds and agricultural operations of compulsory crops are provided in cash. According to the small peasants, this type of loan is the most advantageous since it can be used according to the peasant's household needs, such as paying for the children's' private lessons in school, and it can be used for the cultivation of another crop.
Loans on agricultural operations are provided for cotton, maize, and wheat. With the exception of cotton, which is permanently controlled by the government, the policy changes nearly every year in accordance with the marketing of maize and wheat. Depending on the annual needs, these policies vary between compulsory delivery for marketing and free marketing. Subsidies on the interest rates are confined to the long term loans, which are made to the limited sum of £E 25, for the least expensive operations. Interest rates on short term loans are not subsidised although they are usually for the larger sum of £E 50, and are used for the most most expensive operations. What seems contradictory about this situation is that the short term loan falls at the end of the season when the peasant has already spent all his cash money on his previous operations. Harvesting, for which the short term loan is provided, is among the expensive operations in agriculture. Thus one can wonder on what grounds do the government claims that it is subsidising the costs of production of compulsory crops. More precisely, with regard to cotton production, the collection of the crop, the most expensive operation of all, is not supported by the government through subsidies, although the government is maintaining the low delivery price which hardly covers the costs of its production. Furthermore, the amount of loans provided by the bank for agricultural production represents only 37% of the total amount of loan given to the total number of owners. The question is: what happens to the remaining 63% of the loan? (Tab.III.2)

The figures of the bank show that £E 2,211,952 were provided as loans for investments in food security projects to 390 owners. This means that 9% of the owners benefited from 63% of the total amount of loans. Furthermore, one owner alone, who owns 65 feddans, in Batra, had access to £E 1,110,000 for the construction of an egg factory. This amount represents 50% of the loan for investments and one third of the total amount of loans provided by the bank in
1983. (Tab.III.2) As mentioned earlier, loans in cash for food security projects are provided to landowners with a minimum of two feddans. If the ownership is registered in the cooperative, the loan amounts to 60% of the value of the registered holding; but if the ownership is not registered in the cooperative, as often it is the case for small holdings, the amount of the loan may cover 30% only of the value of the guaranty. This means that if an owner of two feddans applies for a loan for buying a tractor for £.E 16,000, the bank estimates the value of the two feddans at £.E 24,000 and the borrower will only receive £.E 14,400 representing 60% of the value; but if his ownership is not registered he will receive only £.E 7,200 for his project.

Thus, it is clear that the general policy of the Bank of the Village is to promote private investments with high remuneration for a certain category of owners and to act as a commercial enterprise or as a “super market” for the diffusion of consuming goods. Meanwhile, agricultural production seems to occupy a minor position and the small holders seem to be forgotten.

On the other hand, the gaps in the system and the social relations of the rural society have enabled many small owners to have access to loans from the bank for personal uses. Short term loans for food security projects, namely, loans for cattle breeding and fattening are used by the small owners for other purposes than breeding cattle. 'Azam is an owner of one feddan and ten qirats and is a potato merchant; theoretically, he is not entitled to receive a loan from the bank since he owns less than two feddans. Given his personal relations with one of the employees of the bank, he was able to receive over the last three years, a loan for five cows, amounting to £.E 3,000 a year.

Because the control over cattle breeding and fattening is no longer as strict as it was when the government provided peasants with subsidised quotas of fodder,
'Azam was able to use his loan for the construction of his house. Thus, every time he is informed that the committee of administrative supervision will inspect the cows, to make sure that the loan is being used for its nominal purpose, 'Azam borrows from his neighbours and friends, for two or three days, five cows to be shown to the committee as his. When the term of payments arrives, he first pays the interest rate of the loan and from the profit of potato commerce he pays back his loan. He sought this formula for financing when he began to build a new house for his family after the collapse of their old house. Given his irregular cash income from the seasonal selling of potatoes, he had to find another source of regular cash in order to finish the construction of his home in a timely fashion. Other small owners, like 'Azam, find various means of access to cash in order to meet their basic needs for living under harsh economic conditions, where the income from agricultural production do not increase at the same rate as the cost of living.

Lately, the government has embarked on a development project financed partly by U.S.A.I.D. aimed at increasing the income of small owners of agricultural land. "The development program for small peasant", is a project based on financing small scale production of chickens, rabbits, and eggs on the roof of the peasant’s house. The bank’s role is to provide the small owner with a long term loan of £ E 3,000 per feddan over a period of four years, for an annual interest rate of 14%. This project was launched in the governorate of Daqahliyya and is going to be introduced in Baita by 1988.

According to an employee of the bank, small scale projects are usually profitable for both the small owners and the bank, in the sense that the effective costs of the project on a small scale can hardly be affected by the fluctuation of the fodder price on the market. Similarly, it is based on household unpaid labour and on household resources, which reduce the costs of production. On the other hand,
this type of project follows a very short cycle of reproduction which enables the owner to have access to cash more frequently. As for the bank, this project will attract a large number of clients, since owners of less than two feddans represent the vast majority of owners in Batra and in the five other villages. Similarly, this project will expand the amount of short term loans at the non-subsidised interest rate of 14%.

In conclusion, the banking system in rural areas, has been oriented toward specific types of investments with high remuneration on the short term, and "development" as defined by the Principal Bank for Development and Agricultural Credit, has been initially addressed to owners of agricultural land over two feddans, thus excluding totally the vast majority of peasants who are either owners of less than two feddans, tenants, or landless.

7. The Present Role of the Local Agricultural Cooperative in Batra

After the presentation of the role of the Bank of the Village in Batra and the policy it is adopting, an important question remains to be asked: where does the Local Multipurpose Agricultural Cooperative, known in the village as the local agricultural cooperative, fit in this system. In other words, what has become of the role of the local agricultural cooperative in the village and what is the relationship between the Local Multipurpose Agricultural Cooperative of Batra and the Bank of the Village of Batra?

The Local Multipurpose Agricultural Cooperative in Batra is located in the centre
of the village. Originally, it occupied a large building for its offices, surrounded by a storage space on an area of two feddans. Today, the local cooperative occupies only two rooms in this building, and the Bank of the Village has acquired almost all the rest of the building and the storage areas. Thus, when visiting the place, it is extremely difficult to make a distinction between the cooperative’s offices and the bank’s. It is also difficult to understand the role of the cooperative, as it has obviously been reduced to the minimum. Unlike the Bank of the Village of Batra that covers five smaller villages and is represented in each one, the local agricultural cooperative serves only 1,160 holders and the area of 2,728.01 feddans that constitutes the territory of Batra.

Since the creation of the Bank of the Village in Batra in 1977, the role of the agricultural cooperative has been reduced to technical assistance and supervision. According to an old member of the board of directors, when the Bank of the Village took charge of the tasks previously assumed by the cooperative, the cooperative was on the edge of a budget deficit. The financial resources of the cooperative were confined to the membership fees of the holders, and to a minimum percentage charged for its services. Despite the limited resources, the government did not take any measures to redress the financial and the management conditions of the institution. Thus, facing a strong unequal competition with the Bank of the Village, the members of the board of directors started to invest in food security projects on the basis of loans from the Bank of the Village in order to save the cooperative’s financial situation. At the present time, the cooperative of Batra relies largely, in terms of its financial resources, on loans from the Bank of the Village and on a poultry station of its own.

The role of the cooperative includes the agricultural technical services, namely, the application of the annual crop rotation cycle on the different parts of the territory. It notifies the peasants of their annual cultivation and their annual crop delivery to
the government. The employees of the cooperative consist of an agronomist and technicians to guide and direct the peasants in their agricultural operations. Similarly, the cooperative supervises and follows up investment projects in agro-business. Finally, the official role of the cooperative is to express and protect the interests of the holders of Batra as represented by the seven elected members in the board of directors. For example, in the last ten years, on the request of the peasants, the board of directors was able to convert nearly 850 feddans cultivated by compulsory crops to vegetable. In addition, the cooperative attempted to offer to the holders agricultural services such as renting tractors at a low price. In 1983, the cooperative of Batra bought two tractors and hired two mechanics and two drivers to be rented to the holders during the agricultural operations at a lower price. But because of the competition of the Bank of the Village and of private investments, and due to the mismanagement and the lack of financial assistance, the project did not survive for two months.

The decline of the cooperative system entailed the decline in the financial position of the employees as compared to the employees of the bank. The employees of the cooperative are graduated from universities or from technical institutes; both categories receive a monthly starting salary of £.E 45 in addition to the government incentives, thus reaching an average of £.E 55 monthly. Although the employees of the bank are graduated from universities or from technical institutes like the employees of the cooperative, they are appointed by the bank on different terms. The starting salary of an employee in the Bank of the Village in Batra is £.E 45, a salary that corresponds to the government's rate, but by adding the incentives on loans, on sales, and a percentage on the profits, the starting salary reaches £.E 90 a month. Moreover, the bank offers larger possibilities for promotion and within five years time the same employee can receive a salary of £.E 200, which the local cooperatives cannot afford. The difference in salaries has affected the services of the cooperative, because it is impossible for an employee in
the cooperative and his family to live on a monthly salary of £E 55. Therefore, most of the employees of the cooperative start their working day at 10 a.m and leave at 1 p.m, since most of them are engaged in other economic activities, while a day of work in the bank starts at 8.30 a.m and ends at 3.30 p.m.

All these factors have led to the inefficiency of the cooperative system, and the peasants cannot but compare between the services they receive from the cooperative and the ones offered by the bank. Many complaints were made and the Ministry of Agriculture realised that a large proportion of profits were taken by the Principal Bank for Development and Agricultural Credit when it took over the sales of agricultural inputs and the storage of agricultural crops. Pressure is being made by the Ministry of Agriculture to take over, once again, the sales of agricultural inputs and the storage of the crops.

However, agricultural production is not the only concern of the local cooperative, as it might seem at first sight. The elected members of the local multipurpose cooperative play an important political role on behalf of the government or the ruling party in the village. Inevitably, the members of the board of directors must be members of the ruling Party, the National Democratic party, regardless their political orientations. Thus, the interests of the village as expressed by the cooperative must be loyal to the government policies.

From the late seventies up to the present time, 'Izba(t) al-Hag Khalil has been claiming its administrative and economic independence from Batra, together with two other 'Izba. They based their argument on the fact that the forms of access to land are predominantly based on sharecropping and tenancy arrangements which are different from the prevailing forms in sectors B and C. They also claimed that because of their historical back ground they benefit the least from the services offered by the government to Batra. (Fig.III.6)
It is said that the inhabitants of 'Izab al-Hag Khalil were originally from the neighbourhoods of Batra, and they came to this village during the nineteenth century, escaping from the tyranny of a powerful 'Umda who imposed on peasants very high fines in exchange for dismissing them from the corvée during the digging of the Suez canal. As a result, many poor families escaped and settled in Batra where job opportunities were available.

Playing on the idea of minorities during the electoral campaign of 1984, an employee of the National Democratic Party from 'Izba(t) al-Hag Khalil promised the authorities of the 'Izba, members of the most powerful families and members of the board of directors of the cooperative, to promote the 'Izba into a separate, independent village with its own institutions. In exchange of this favour they were to vote for him in the election as a candidate of the National Democratic Party, against the candidate of the Labour Party, who was from Batra. The two representatives of the 'Izab in the cooperative of Batra launched a large campaign against the candidate of the Labour Party and supporting the candidate of the ruling party. At the same time, they applied to the different government authorities for the independence of the 'Izab covering six large basins of more than 600 feddans located in sectors A and B. They also applied for the creation of an autonomous cooperative, a bank, and a storage area.

This situation provoked serious conflicts and accusations from both parties, the 'Izba versus Batra. The representatives of the 'Izab argued that the inhabitants of Batra, namely, a few families in power, benefited privately from the funds given by the government for public services. Similarly, by the time the peasants of the 'Izab were informed that the quotes of inputs had arrived at the bank, the peasants from Batra already would have taken more than their shares. Finally, they argued that because they were not living in the centre of the village they were the last to
be informed of what was happening and the last to receive their share of services. Furthermore, because of their origin as wage labourers, they felt that they were resented by the people of Batra and that there was a social discrimination between them as a minority and the majority living in Batra.

The other five members of the cooperative strongly opposed the claims of the representatives of the 'Izba and denounced them in the name of personal interests. The party representing Batra made an opposition front with the members of the cooperative of the neighbour village, Kafir al-Hataba, who also claimed that the partition of the territory of Batra will affect the frontiers of the two villages. However, the representatives of Batra on the board of directors of the cooperative, together with the 'Umda of Batra, could not oppose the candidate of the ruling party and support the candidate of the Labour Party. Instead, their role was to orient the opinion of the voters of Batra against the opposition party and meanwhile to gain the support of the government against the claims of the 'Izab, which were initially supported by the candidate of the National Democratic Party. A balance was made by the representatives of Batra in the cooperative and the official authorities, and the candidate of the ruling party won the election in 1984.

After the election these conflicts were not seriously raised until April 1987, when the electoral campaign for the People's Assembly took place. The same scenario was repeated: the leaders of the 'Izab supported the candidate of the ruling party, and the leaders of Batra declared that the candidate of the Labour Party, who is from Batra, would never stand a chance and that they would fully support the government candidate. Meanwhile, the candidate of the Labour Party publicly denounced the strategy of the government and its role in the division of the village and the partition of its unity. The results of the election came as a surprise to the leaders of both sides, the candidate of the opposition party won a seat in the parliament, and it seems that the voters of Batra decided to express officially their
discontent and their need for change to the government. It remains to be seen how the ruling party and its representatives in Batra and in the cooperative will react regarding the choice of the people, and how will they deal with the partition problem.

In conclusion, if the economic role of the Local Multipurpose Agricultural Cooperative in Batra has been reduced to the minimum, there must be a reason why ten years later the system is still operating effectively, on a different level, and seems to be indispensable to the government. It is true that the cooperative movement in Egypt no longer assumes the role for which it was originally created, nor does it express or protect the interests and the rights of the least privileged categories of peasants as was claimed. Instead, it maintained its role as a representative of the state policy through the most powerful elements in the village community. Thus, it assumes the responsibility of ensuring the stability of the system and the loyalty of the community to the regime. Although, their seems to be a permanent conflicting position between the cooperative and the bank, their coexistence in this form is important.

The economic role assumed by the Bank of the Village cannot operate without the political support of the cooperative as it is the only local official institution representing the peasants and working in coordination with the government policy, despite all apparent inefficiency or retreat. The neutralised appearance of the cooperative’s role seems to be a necessity at this stage in order to maintain a certain balance in the village community, and a certain equilibrium between the government and the rural community.

In conclusion, the purpose of this descriptive chapter is to provide a detailed description of the different aspects of the village in relation to its surroundings and to the wider system, within which this study is undertaken. It was shown that the
regional geographical location of the village in a historical context played an
important role in the development of Batra. Under various political and economic
conditions the village structure developed to meet the emerging social and
economic relations. The rise and the decline of Damietta and of Mansura cities,
for example, is one aspect reflecting the dynamics of change in provincial areas.

On a micro-level, the ecological diversity of Batra's environment was adapted,
during different historical phases of Egypt's development, to meet the new socio-
economic needs of the various social groups of the village. On the other hand, the
local social structure was reorganised, restructured, and changed under the wider
economic and political system. The development of ownership, for example, and
the emergence of new forms of relations, such as the 'Izba system, illustrates the
dynamics of the rural society and its differentiated structure within the village
under a given historical development.

Agricultural and market activities were and remain the main occupation of the
inhabitants, around which social relations revolve. However, under certain state
policies, a number of different socio-economic relations have been generated
within the ecological diversity of the village and the social structure of Batra.
These relations encompass both commodity and non-commodity relations, which
are necessary for the reproduction of the various socio-economic categories, and
for the accumulation for the richest groups. The authority in the village has been
in the hands of a few notable families that are not necessarily the large landowners,
and are not by definition directly involved in a governmental institution but are
strongly involved in marketing. Instead, they have acquired a legitimacy based on
a social agreement in the village that has been consolidated and maintained by
kinship relations. Yet, the above does not mean that the social relations in the
village are stagnant; change and transformation in the national scene have been
reflected in the local political relations and a few families have emerged while
others have disappeared. The form of the economic and political power exercised has been modified and reflected in the prevailing relations between the various groups in the village. These changes are constantly generating new forms of relations, and with them new problems and new questions for the understanding of class relations in the village. Therefore, the course of transformation in Batra cannot be regarded as evolving according to a linear model.

On the other hand, the state policies undertaken by the Agricultural Cooperative and the Bank of the Village cannot be implemented without the interaction and the cooperation of influential figures in the village. Without this cooperation political stability could not be achieved, nor could the loyalty of the villagers to the regime be maintained. Similarly, neither institution could achieve the economic objectives aimed at relating agricultural production to international demands through private channels, while maintaining its control over the strategic crops necessary for the national economy, without the promotion and the direct participation of merchants and farmers, at the same time maintaining the position of the small peasant households. Thus, the state policies in the agricultural sector have enhanced commoditisation, and expanded the process of externalisation. Such policies have increased the process of social and economic differentiation at the village level; and so, the different reactions adopted by the various categories of the villagers to state policies, have differing emphases. For the influential figures the non-commodity and commodity relations adopted with the various groups in the village allow them to consolidate their socio-economic positions, while for the less privileged categories it allows them to survive under difficult economic conditions. These relations in their different forms, as shown in the course of the chapter, are adopted in the economic diversification of the activities of the various groups, and with government employees. Their significance differs depending on the position of the enterprise, and reflect the socio-economic differentiated structure of the village.
Finally, in the context of the agricultural system and its local institutions, and within the specific socio-economic setting of the village, it seems important to examine in detail how the peasants in Batra deal with the system and its representatives, and how agricultural production is being organised within the local structures and under the wider national system.
Notes


2- In his monumental work on the historical topography of Egypt Al-Khitat al-Tawfiqiyah al- gadidah, 'Ali Mubarak notes that the city of Damietta holds its name from a Syriac word Damt, which means capacity, referring to the capacity of joining sweet water and salted water. (Mubarak, 1886, Vol XI:36)

3- 'Ali Mubarak (1823-1893) was an administrator in the government and the author of a number of books claiming the modernisation of the Egyptian institutions. He occupied several important positions: Minister of Public Works and Minister of Education. He established a new educational system and was the founder of Dar al-'Ulam, the House of Sciences.

4- The Mixed Courts were created in 1875 by the consent of the Power, to try and defend cases advanced by foreigners or by Egyptians against foreigners or Egyptians, on the basis of an international jurisdiction.

5- The 1881 decree authorized "the inhabitants of Mansura 'to levy voluntary taxes' on goods exported from the town or imported into it in order to enable them to execute works of road paving, the construction of sewers [...etc]". (Baer, 1969:200)

6- This project was undertaken by Egyptian, Japanese, and Italian contractors. Although the government counts a great deal on the success of this project to create new economic activities, it is likely to generate problems concerning employment capacity. Unless measures are adopted for restructuring of the employment capacity, Damietta will become an attracting area for labour, and thus a large group will settle in its surroundings, creating a community of unemployed settlers.

7- Source: the census conducted by the Local Health Unit of Batra, 1985. Given the fact that the Central Agency for Public Mobilisation & Statistics did not publish the results of the recent census conducted in 1986, and given the inadequacy of the last official census published in 1976, which counted the population of Batra at 11,812 inhabitants and estimated it reaching by 1985, 15,034 inhabitants, we used the figures collected by the Local Health Unit of
Batra, as they represent the most recent and most accurate figures.

8- The figure regarding the surface of the territory was collected from the local responsible for the land registra cadaster in Batra. We preferred to use the local source instead of the official one because of the inaccuracy and the contradictions of the official figures. For example, the Agricultural Department of the Ministry of Agriculture in Mansura, estimates the surface of the village to cover 2,830.11 feddans, while the Local Agricultural Cooperative of Batra estimates the surface to cover 2,728.01 feddans. The difference between the two figures exceeds 100 feddans.

9- Shirbin and Bilqas centres are located in the governorate of Daqahliyya.

10- Georg Stauth defined in a historical context the socio-economic development of the 'Izba system, as being a vestige of the large estates of the end of the nineteenth century, where the production unit was separated from the village economy and was based on peasant wage labour (Stauth, 1983:285-287).

11- Source: the Local Health Unit of Batra, 1985.

12- Da'ira refers to the administration of a large estate which is part of the Khedivial property.

13- Basandila is a village located on the borders of Batra on the north (Fig. III.5)

14- The 1986 census did not until recently publish information about the size of the population involved in agriculture in Batra.

15- The factory of eggs will be discussed in the course of the following chapter, however, it is sufficient to add that this factory has an annual production capacity of 15 million eggs.

16- It should pointed out that the drinking water through pipes was only introduced in sector B. The rest of the village uses public water tubs which pumps the water from the ground.

17- The Labour Party, al-'Amal, was formed by the government before the People's Assembly's elections in 1979, under the leadership of 'Ibrahim Shukri. The main role of this party was to express a "loyal opposition" to the ruling party. Soon after it became one of the largest official opposition party.

18- As mentioned previously, the Wafd Party was founded in 1918. In the beginning it was a national delegation representing the Egyptian nation in the negotiations for independence from British occupation. A liberal nationalist party, it was abolished during Nasir's regime like the other political parties; however, under Sadat's regime, with the re-initiation of the party system, it
was reformed and supported by the middle urban class.

19- The Sa'di Party was a breakaway group from the Wafd Party. It was formed in the 1930's, its national objectives were based on the "cooperation between the Egyptian commercial and industrial interests of the local bourgeoisie and the local 'foreign' industrialists and merchants". (Deeb, 1979:360)

20- The Bank of the Village of Batra serves the following villages:

<table>
<thead>
<tr>
<th></th>
<th>Batra</th>
<th>Diyast</th>
<th>Shalimash</th>
<th>Bisaat</th>
<th>Kafral-Tawila</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of holders</td>
<td>1,425</td>
<td>1,000</td>
<td>800</td>
<td>540</td>
<td>350</td>
<td>4,160</td>
</tr>
<tr>
<td>Number of feddans</td>
<td>2,912</td>
<td>1,805</td>
<td>1,243</td>
<td>690</td>
<td>398</td>
<td>8,044</td>
</tr>
</tbody>
</table>


21- The figures advanced by the Bank of the Village of Batra, do not match the figures advanced by the agricultural cooperative of Batra. The Bank of the Village estimates that it serves 1,425 holders on a territory of 2,912 feddans in Batra alone, while the agricultural cooperative counts 1,160 holders on a territory of 2,728.01 feddans. Such a contradiction was not solved by questioning the heads of both institutions, each insisted on the validity of the figures advanced by his institution.

22- There are nearly 700 feddans of potatoes cultivated in Batra annually, which represent nearly 34% of the total agricultural land cultivated annually on a rotation cycle.

23- The fixed crops, such as citrus fruit, do not follow a rotation cycle, and are sold on the free market. This is the dominant crop in sector C in Batra.

24- Cotton cultivation is compulsory and the entire harvest is obligatorily delivered to the government.

25- The food security programs were launched at the end of the seventies. Under the slogan of modernisation, these projects aimed at diversifying the agricultural production toward non-traditional ones, with the objective of increasing productivity by introducing new techniques. This policy was adopted by foreign aid programs in coordination with the Egyptian government.

26- These loans were provided to the five villages covered by the Bank of the Village of Batra. Source: The Bank of the Village of Batra, 1983.

27- Source: the Local Multipurpose Agricultural Cooperative in Batra, 1983.
PART TWO
CHAPTER IV

The Form of Access to Water for Irrigation in Bana

Access to water is the most vital factor in the process of agricultural production. The organisation of the access to water and its distribution to agricultural land imply a number of relations between the peasants and with the state. Therefore, this aspect of agrarian relations cannot be neglected when focusing on the process of agricultural production. The relations implied in the access to water reflect, as will be shown in the course of this chapter, the regional specificity of the village, and a number of monetary and non-monetary relations adopted by the peasants in order to undertake their agricultural production. Commodity and non-commodity relations are intertwined, and together they are used by the various categories of cultivators as means of adaptation to government changing directives, and to local conditions. It will be argued in this chapter that government directives are themselves implemented according to the local ecological conditions, to the local type of crop rotation, and to the different requirements of the fixed crops, just as they are conditioned by national requirements and national ecological conditions.

Conversely, the farmers and the peasants, in their various categories practice a
number of strategies to make the best use of the available conditions for irrigation. These strategies are adopted in coordination with government employees and in coordination with the different uses of water who share the same source of irrigation. Furthermore, the diversified strategies adopted reflect the differentiated position of the cultivators resulting partly from the location and the quality of the land, from the size of the plot, from the type of agricultural production, and from the conditions of the unit of production.

In the context of the regional specificity of Bata, and within the various adaptive strategies covering both commodity and non-commodity relations adopted by the peasants under the state national policy, the following chapter will present a brief description of the development of irrigation in Egypt. This will be followed by a study concerning the organization of the irrigation system in Bata by the state. The examination of the various forms of access to water and their organization by the peasants will cover the direct and the indirect forms of access to water, and the use of fixed pumps for irrigation. These aspects will be illustrated through case studies on the organization of irrigation on a large scale cultivation, on a small ownership, and the organization of the use of the drainage water for irrigation. These examples will show the variety and the diversified forms of access to water within the specificity of the area.

1. A Review of the Irrigation System in Egypt

The human agglomeration in Egypt is confined to live in the valley of the Nile, which constitutes 3% of the total surface of the country. Thus, depending on one source for the access to water, the Nile, the peasants need to draw the maximum
benefit from it, while coping with its unpredictable challenges. The history of irrigation in Egypt reflects the adaptation of the topography to the natural hydrological conditions in order to meet the economic needs of the population. Historically, the irrigation system in Egypt was conceived to achieve such objectives, and started by the introduction of the basin irrigation system, Ravy al-Hiyd, which was followed later on by the perennial irrigation system, al-Ravy al-Dalfin.

1.1. The Basin Irrigation System: Ravy al-Hiyd

This system has been used since the early days of agricultural activities. Ravy al-Hiyd consisted of dividing the agricultural land into basins through dykes parallel and perpendicular to the Nile. During the flood, cuts were made in the dykes to allow the water to fill the basins. When the first signs of decrease in the level of the water in the river were seen, the dykes were closed, and the basins became a reservoir of water for the cultivation of winter crops. Thus, at the end of October and the beginning of November, the valley of the Nile resembled a gigantic ricefield. (Bezaouen, 1937:37)

According to Bezaouen, the size of the basins varied between 400 hectares and 1,700 hectares. Each basin was submerged with water for a minimum of 40 days and a maximum of 70 days, starting from the 10th of August until the 10th of October. Although the agricultural land was divided into basins for irrigation, the entire irrigation system was highly synchronised and coordinated. Each basin not only was dependent on the other basins, but its irrigation was closely linked to the irrigation system of the neighbour basins and often to a number of distant basins. (Bezaouen, 1937:35-36)
The synchronised structure of the irrigation system depended totally on the level of the water in the river. In some cases, elevation machines were required to raise the water from its source to the basin. The system of water reserve allowed a large proportion of the agricultural land to proceed into one winter cultivation such as wheat, barley, lentils, and tea. However, it did not achieve the maximum use of water as a result of the limited period of irrigation over the year.

1.2. The Perennial Irrigation System: al-Rayy al-Dira'i

There was a need to establish an irrigation system that would allow the cultivation of the land during the seasons of low water level. Perennial irrigation was an accomplished fact in the Delta long before the introduction of Egypt into the world market, and before Muhammad 'Ali's organisation of the agricultural infrastructure. The favourable topographical conditions of the Delta allowed the use of this system, which enabled the peasants to cultivate short staple cotton, sugar cane, and rice. (Bessarba, 1937:98)

However, the cultivation of long staple cotton- a summer cultivation -and the introduction of Egypt into the world market implied the intensification of agricultural cultivation. Thus, the restructuring of the irrigation system entailed the expansion of perennial irrigation beyond the Delta, to cover the rest of the valley of the Nile. The first works consisted of digging deep rectilinear summer canals which would be filled with water when the level of the Nile was at its lowest level. This stage of the development of perennial irrigation was based on summer canals only during the dry season al-Taharia, as the stage of building dams was to follow. Yet this method was ruinous in terms of human labour and required that the state has recourse, annually, to the corvée, nearly 4,000 men were engaged permanently on this project. (Bessarba, 1937:100)
The alternative was to raise the water to the canals through dams. This stage of development meant the creation of dykes, of regulator canals, and dams. This system allowed new distribution of water over the year, and to the different parts of the valley. The agricultural land was divided into ten circles of irrigation, of which four, in the Delta, were subdivided into districts. Each circle was under the supervision and the control of an engineer. (Ezzanepan, 1937:102) Thus, the main objective was the control of the distribution of water to agricultural land over the year. Yet, the main problem was not the lack or the excess of water, but the adjustment and the stabilisation of the level of water in the canals throughout the year, in order to achieve the maximum use of water over the entire agricultural land.

Until the 1970's, the perennial irrigation system was based on the annual damming of water, with the exception of certain areas, in the south of the valley, where Bagy al-Hiyad still persisted. The construction of the High Dam in Aswan, in Upper Egypt, led to the establishment of an accumulative damming. This system realised the regulation and control of the level of water in the Nile, regardless of the level of the annual flood. Such an achievement enabled the perennial irrigation system to cover the entire valley. (Hauman, 1981:252-259)

"Neither economically nor socially, the fellah is a free cultivator, he is in the strongest sense of the word, a 'constraint producer'". (Ezzanepan, 1937:252) One of the means by which the state intervenes in the agricultural sector is through the control of water. The more the irrigation system develops and becomes centralised, the more control can be practiced over agricultural production. The sophisticated perennial system implied systematic intervention of the state in controlling the quantity, the level, and the course of the water in the canals. Similarly, this system led to the partition of agricultural land into large blocks,
each following the same crop rotation cycle with the same water requirements during the same season. It also meant the organization of a precise water turn synchronized for the entire agricultural land. The quantity of water released into the canals is determined by the type of the cultivated crops in the block, which are previously fixed by the government through the crop rotation cycle. On the basis of the crop rotation prevailing in each area, the Irrigation Authority fixes the diameter of the water pipes installed on the canals.

In conclusion, this brief review of the development of the irrigation system shows one of the means by which the state controls the agricultural sector on the national level. However, on the level of the unit of production, the form of access to water and the extent to which the government intervenes varies from one area to the other according to topographical conditions, to the forms of access to land, and to the type of cultivated crops.

2. The Irrigation System in Batra

The irrigation system in Batra includes a variety of forms of access to water in the different sectors of the village. In general, however, there are two means of irrigation: direct and indirect. In both cases elevation machines are used as the level of the soil is higher than the level of water. The forms of access to water in each sector depends to a great extent on the location of the land in relation to the main source of irrigation, the Nile. For example, sector C have access to water directly from the Damietta branch, without the intermediary of a public irrigation or drainage canal. Whereas, sector A and parts of sector B have access to water from al-Sabhi canal on the basis of a water turn and through water pipes, gates,
schemes, and drainage canals controlled by the government. This system can be called an indirect irrigation system as compared to the irrigation system in sector C. (Fig. III.5)

However, it can be advanced that the location of the land in relation to the Nile can determine the type of the soil and to a certain extent, the type of cultivation. Similarly, the location of the land in relation to the source of irrigation can imply a variety of forms of access to water and different means of control over the quantity and the timing of irrigation. Therefore, in order to understand the diversified forms of access to water for irrigation, and the mechanisms of the various means of control in the different sectors of the territory of Beira, it is necessary to examine in detail the organisation of the irrigation.

However, it is difficult to draw a clear picture of the various forms of access to water prevailing in each sector, since basins located in the same sector can be irrigated differently. The peasants organise accordingly and adapt their irrigation operations. Thus, the following section will present the irrigation system controlled by the government in sectors A and B, in order to understand the context in which the peasants organise their forms of access to water.

3. The Indirect Forms of Access to Water for Irrigation

As mentioned previously, al-Sabil canal, the major public irrigation canal, irrigates sector A and most of sector B, with the exception of basin Hur Dapir al-Nabiyya Qibli and parts of Hur al-Nabiyya located parallel to the dyke of the Nile. (Fig. III.5) al-Sabil canal is supplied with water from Bahr Shihin, a small
breach of the Nile in the Delta. During its course in the canal, the water is controlled and regulated by sluices and gates established at different levels on the banks it irrigates.

On the level of Batra, opposite the railroad, there is a sluice called Gareeshiya(1). Batra which controls the quota of water. The sluice distributes the water for irrigation to 1,000 feddans located in sector A, through an irrigation canal of two km. On the same level of the sluice, there is a gate called Fatbit 'Abdallah, located opposite 'Jela(1) 'Abdham, and two irrigation canals called Miqaa(1) al-Hag Khalil and Miqaa(1) Gorg, located opposite 'Jela(1) al-Hag Khalil. Each of the irrigation canals and gates irrigates a specific number of feddans in specific basins. For example, Fatbit 'Abdallah, distributes the water in most basins of sector A, to 'Um 'Umair, and to parts of Hud al-Halayya in sector B. Finally, Miqaa(1) al-Hag Khalil and Miqaa(1) Gorg irrigate the basins around 'Jela(1) al-Hag Khalil up to the northern borders of the village. (Fig. III.5-6)

There is a regular Bahari, a guard of the sluice, appointed by the Irrigation Authority to control the level of the water and its distribution on the level of Gareeshiya(1) Batra and Fatbit 'Abdallah. The Bahari guards the banks of al-Sebil canal from use by the peasants for private purposes, as the canal and its banks are owned by the Irrigation Authority. Throughout the year, the Bahari receives orders to open or close the sluice in order to maintain the level of the water in the canal so that it does not exceed a maximum of 3.60 m. However, the level of the water in the canals varies according to the season and according to the crops cultivated in the area, usually under a crop rotation cycle controlled by the government. It should be pointed out that, as a general rule, the sluice is opened for five days and closed for ten days from the month of February through the following June of every year. In summer, the sluice is opened for four days and closed for four days, to meet the water requirements of rice cultivation, and is
maintained until the harvesting of rice in October. From November to the end of December, the sluices are opened for five days and closed for ten days, after which the water is completely cut from the canal in order to undertake the cleaning and the digging of the canals; this period is called Qaṣaf, drought.

During the opening days of the sluices, the Bahārī is responsible for ensuring the arrival of the water downstream the canals. Because the irrigation system in the basin is done through elevation pumps installed on the canals and on channels crossing the fields, the elevation pumps located upstream pump the quota of water released in the canals and channels before reaching downstream, where elevation pumps are also installed to raise the water to the field. Therefore, the Bahārī must ensure that the pumps installed upstream the canals do not pump water before the canals and the channels are filled. Afterwards, the peasants start to pump their needs of water and the irrigation operation begins, allowing all the pumps to raise water at the same time and ensuring an equal distribution of water upstream and downstream the canals and channels.

However, the distribution of water and the water turn often generate problems between the peasants, and with the authorities. For example, during the preparatory operations for the cultivation of a new crop, especially rice, the owners of agricultural land located upstream the canals may start pumping the water as soon as the sluices is opened. As a result the rest of the peasants, whose land is located downstream, would be deprived of water. In some cases, the Bahārī removes parts of the upstream pumps to oblige the peasants to wait for their water turn. In other cases, if there is an urgent need for irrigation when the sluices is closed, the peasants break the lock of the sluices at night. Such attempts are rare and are considered to be criminal acts. According to the Bahārī, there have been two such incidents during rice cultivation over a period of ten years.
However, the Irrigation Authority seems to be rather flexible concerning the opening of the sluice. When peasants miss their water turn during the period of irrigation, they present a demand to the irrigation engineer in charge of the area, who grants a specific permission to open the sluice for this case. Thus, in the context of this indirect irrigation system, the peasants have developed adaptive forms of organization for the access to water.

3.1. The Organisation of Access to Water between the Peasants in Sectors A and B

Rag Sidqi is an owner of two feeders in Nuri Khanubari, and 12 qanats in Nuri ‘Uum Nasir, in sectors A and B. Both plots are irrigated from al-Sahil canal, and both basins have been transferred in recent years from compulsory crop to free cash crop cultivation. (Fig. III.5) In general, peasant owners of agricultural land in the same basin share the ownership of a mobile irrigation pump which they fix on the Miṣṣa, an irrigation canal, with the permission of the Irrigation Authority, which determines the size of the pipe according to the surface, and the type of cultivation. It should be pointed out that the number of shareholders in the irrigation pump is determined by the location of the plots and by the capacity of the pump, as the land must be located in the same block in order to synchronize the water turn on the different plots. This system is entirely managed and organized by the peasants, the shareholders.

Before the introduction of the mobile pump, the irrigation was done by using a Tehta, a variety of a water wheel, and each holder of agricultural land irrigated by the same Tehta had a share of ownership in the machine proportional to his holding (Hamza, 1968:61-64,66). When the sluice of Eltea and the gates are opened, each holder in his turn attacks a water buffalo, camel, or a donkey to
the Tahut for a day or two, to irrigate his land. Prior to the 1970's, i.e. before the completion of the High Dam, the water was insufficient in winter, during low water, and the irrigation of one field with the Tahut took more than two days. According to Hay Siddqi, the irrigation with a Tahut or a Saqira, water virtual, generated problems and disputes between the peasants. Stealing the time of irrigation from a neighbour was a frequent incident which affected the entire village during the low water season.

After the completion of the High Dam, in 1965, this situation changed and water was available for the entire village and the annual flood no longer threatened the peasants and the fields. Thus, since the achievement of the High Dam, there are no longer disputes over water as was the case previously. According to Hay Siddqi and others, water is available on a regular basis, in winter as in summer, with the exception of one month a year during which the cleaning and digging of canals takes place. Similarly, the shift from using a Tahut to a mobile irrigation pump has reduced considerably the time needed for the irrigation of one field to an average time of one hour. The reduction in the time needed for irrigation, and the regular availability of water, has allowed the peasants longer periods of time to accommodate their water turn.

Hay Siddqi and his neighbours in Nuri, Khamdehri, use an engine of 11 horse power fixed on a Tahut, previously operated by an animal. The machine irrigates nearly 30 hectares, held by 48 holders. Thus, each holder owns a share of the motorised Tahut proportional to the size of the holding. The motorised Tahut is managed by a mechanic who organizes the water turn and the distribution of the water to each holding. The mechanic charges the holders the costs of irrigation, the maintenance and the repair of the machine, in exchange of a monthly salary divided among the holders according to the size of their holdings.
Usually, this form of organisation is respected by the holders, yet disagreements on the accountancy occur occasionally and are normally solved immediately and do not take serious dimensions. The costs of irrigation are calculated per hour, covering the price of fuel, the use of the motorised Tahut, and the salary of the mechanic. The price per hour varies between £E 0.60 and £E 1, and increases according to the price of fuel on the market. When the engine of the Tahut is out of order, the peasants use the engine of a tractor which they attach to the Tahut for pumping the water from the canal, until the engine is repaired. In such emergency cases, the cost of an hour of irrigation with a tractor is highly expensive rising to £E 25 per work day. Thus, assuming that a day rest of a tractor is for eight hours, and on the basis that a fadda is irrigated in half an hour, the tractor will irrigate 16 faddas for £E 1.33 each. Hay Sidqi argues that in cases of emergencies, when the pump is out of order and irrigation must take place, they cannot borrow a mobile irrigation pump, because most peasants irrigate during the opening days of the season; therefore, the tractor becomes a the only alternative.

As for Hay Sidqi’s plot located in Hur ‘Um Nasser, in sector E, it is irrigated from another fixed water pump located on al-Sabil canal. (Fig. III.5) This pump has a capacity of 32 horse power and irrigates nearly 100 faddas held by 140 holders. Before the installment of this motorised pump, Hay Sidqi and 40 other neighbours, holders of agricultural land in the block, were sharing the ownership of a Tahut for the irrigation of 30 faddas. When the Tahut was replaced by a pump, the partnership had to be expanded in order to cover the costs of a larger engine over a larger surface. The shareholders adopt the same organisation as the one mentioned above, and the cost of irrigation of one fadda also varies between £E 0.60 and £E 1.

However, because the pump is directly located on al-Sabil canal, the irrigated land does not fall under the water turn of five days of opening and ten days of closure.
As long as the level of water remains part of the pipe, the pump can raise it to the fields at any given time, with the exception of the month of January when the water is completely cut from the canals. Thus, at this level the distribution of water and the organisation of the water turn is managed and controlled by the mechanic, and does not correspond to government control.

These various forms of organisation reflect the capacity of the peasants to adjust to the various ecological conditions and to government restrictions. The ability of the peasants to coordinate their efforts and to cooperate among themselves in order to draw the maximum benefit from the prevailing conditions, illustrates the adaptive strategies based on the local resources, to meet the needs for production without having to rely on government intervention. On the contrary, government intervention and control have been countered by a number of methods, such as the adaptation of the tools and the machines to the local conditions in order to ensure a regular distribution of water. Since the completion of the High Dam, the availability of water on a permanent basis has allowed a higher flexibility with regard to the water turn and the crop rotation cycle. Similarly, the use of the pump instead of the Taht enabled the peasants to utilise even the lowest level of water in the canal.

Although the irrigation system in sector A is mostly done through indirect means, i.e. through gates and water pipes, and the distribution of water is organised accordingly by the peasants, sector B combines a number of means and forms of access to water for irrigation from various sources. al-Sabil canal, as mentioned earlier, the Damietta branch of the Nile, and the drainage water from sector C are the main sources of water for irrigation in sector B. Thus, the source of irrigation varies according to the location of the plot.
4. The Direct Forms of Access to Water for Irrigation

Most of the irrigation pumps in Batra are either small mobile motorised pumps or engines fixed on a Irrigation Authority, the pumps fixed on al-Sabil canal are used on a permanent basis, and are considered a direct form of irrigation. However, the areas irrigated by the same pump, normally, follow the same rotation cycle in order to synchronise the water requirements. This type of irrigation covers most of sectors A and B.

As for the other parts of sector B, such as Mird, Dayr al-Nebiyya Qibli and some parts of Mird al-Nebiyya, located parallel the dyke of the Nile, they are subject to a different irrigation organisation. They draw their water requirements from the Damiata branch through three fixed water pumps located directly on the Nile: Wahr al-Shihr, and two other fixed pumps owned by large landowners. These pumps irrigate the agricultural land in sector C directly, and parts of sector B through water pipes installed under the main dyke.

Wahr al-Shihr, the pump of the company, is located in the territory of Dijjel, a village on the west borders of Batra(Fig.III.5) The pump was installed, at the beginning of the century, by the Behara Land Company and a few absentee landowners. The pump was originally conceived to irrigate nearly 420 feddahs owned by the owners of the pump. With the partition and the fragmentation of the agricultural land in this area, as discussed in chapter III, the ownership of the pump was divided among the new owners proportionally to their holding, under a partnership. The management of the pump is undertaken by a mechanic and the
costs of irrigation and maintenance of the pump are divided among the owners, and vary between £.E 0.60 and £.E 1 per feddan.

Unlike the mobile pump and the Tantur, the fixed pump irrigates agricultural land cultivated by different crops with different water requirements over the year. This has been made possible because the water in the Damietta branch is permanently available, and the present can pump as much water as they need. The Irrigation Authority can only control the quantity of water pumped through the diameter of the pipe of the pump, which has been fixed at ten inches.

Usually the holders cultivating the same crop organise irrigation of their land at the same time. Such an arrangement is normally cheaper than if each holder irrigated his land independently. For example, if the mechanic puts on the pump for the irrigation of one feddan in sector E, the time needed for the water to fill the canals and to reach the plot will take at least three hours, which means that the cost of irrigation of one feddan will reach between £.E 2 and £.E 4. But if it irrigates in its course four or five feedans, the cost of the time needed to fill the canals and reach the plot will be divided among a larger number of holders.

According to a holder of 12 qanats in sector E, the distribution of the water from this pump is done by appointment in advance, and priority is usually given to the larger owners, who own agricultural land around the pump. However, this form of organisation does not cause disputes between the holders as water is available permanently. When the pump is out of order, the owners usually hire several mobile pumps for irrigation, in which case costs are increased. Another alternative would be the use of the nearest fixed irrigation pump, yet this formula is not often adopted for a number of reasons. In one case, the fixed pump was out of order and needed repair, when six holders had to proceed with the irrigation of their land on time. They attempted to use one of the two fixed pumps in sector C,
but the owner refused to allow them to use it, fearing that they might acquire the right of irrigation on permanent basis.

Similarly, on a large property in sector C, a family of absentee landowners have established a private irrigation system based on a fixed water pump installed directly on the bank of the Nile. The pump was conceived to irrigate 140 feddans which constituted their ownership before the agrarian reform laws. However, during the 1950’s when their excess of agricultural land was sold to peasants under the agrarian reform law, their ownership was reduced to 85 feddans. The new owners of the 55 feddans sold acquired automatically the right of irrigation from this pump. Despite this fact, they are not considered shareholders in the ownership of the pump since they did not participate in the initial capital invested, and since the pump is located on the property of the large landowner. The licence of the pump is thus in the name of the owner of the large property, but the holders who acquired the right of irrigation from it pay the costs of irrigation and of maintenance of the machine.

Although the irrigation is done directly from the Nile, the absentee landowner has established a meticulous organisation for irrigation, by which he can control the owners of the 55 feddans. There are 19 holders who acquired the right of irrigation from this pump. The 55 feddans are divided among the 19 holders: 15 feddans are owned by a field merchant of citrus fruit, 10 feddans and 16 qirnas are owned by a merchant of fruits and potatoes, three owners own two to three feddans, six owners own one to two feddans and eight owners own less than one feddan. In addition to these owners, other holders of agricultural land located directly on the bank of the Nile have acquired the right of irrigation from the pump. This agricultural land is called al-Mavadi land, which refers to the land that was constituted from the alluvial deposits of the Nile during the flood. It is a narrow strip of land, parallel to al-Ghara land, and along the river, constituting
the bank of the Damietta branch. The level of the soil of this land is lower that the level of al-Gizeira land and both areas are separated by a dyke which used to prevent the flood from submerging al-Gizeira land. (Fig. III.4)

According to the inhabitants of Basta, the word Mavadi designates the place where the boats use to unload their cargoes which were transported by donkeys. This strip use to disappear during the flood and was only used when the level of the Nile was low. Over the years, the peasants divided this land among them and acquired the right of its cultivation. It became their ownership by seizure and was officially registered in their names in the 1970's. However, it is beyond the scope of this chapter to examine this form of access to land, since it will be discussed in detail in the following chapter.

The acquisition of the right of irrigation of the al-Mavadi landowners took place progressively over the years, when the owner of the pump allowed a few holders to use the pump instead of the elevation machines. Thus, the right of irrigation became, ex aequo facto, with the expansion of the use of this strip of land, and at the present time this strip covers two hundred and six qanats. The owner of the pump fixed the costs of irrigation in this part at a rate of £ 0.20 over the rate in the other parts, as it is an exclusive service offered to these holders.

Access to water is the most vital factor in agriculture, therefore, to ensure a regular irrigation system, the owner of the pump installed two engines working on fuel, each of 52 horse power and an electrical engine of 50 horse power. The landowner shifts accordingly from one system to another, depending on the price of electricity and the price of fuel, but until recently the electrical engine was the main supplier of water and the fuel engines were only used during electrical failures. However, with the increase in the price of electricity the fuel engines became the major supplier of energy for irrigation. It should be pointed that the
quantity of water raised by the electrical engine is higher than the quantity raised
by the fuel engines, this is due to the difference in the power of each. Thus, the
cost of one hour of irrigation from the electrical pump varies between £E 1.40
and £E 1.60, whereas the costs of one hour of irrigation from the fuel machine
varies between £E 0.60 and £E 1. Before the installment of the electrical engine,
the costs of irrigation from the fuel were clear, but the introduction of the
electrical engine created problems because of the high price of irrigation.

Before discussing the problems facing the small holders from the use of the
electrical engine for irrigation, it is necessary to describe the difference in the
organisation of irrigation on a large property and on a small plot of land.

4.1. The Organisation of Access to Water on a Large Property in
Sector C

The property of the absentee landlords is of 85 feddans, cultivated mostly by
citrus fruit and bananas. The land is divided into blocks of approximately ten
feddans each. During irrigation, each block is simply flooded with water. Each
block is surrounded by a Marwa, channel, which receives the water from a major
cemented irrigation canal, Marwa. Thus, the water pumped from the Nile is
distributed to a network of cemented canals which are distributed to the main
blocks of the property. The distribution of the water to the blocks is done through
manual gates which direct the water to the channels, Marwa, in each block of land.
Once the water reaches the channels, it floods the different parts of the field. The
irrigation operation under such a synchronised system requires only the control of
the level of the water in the channel and the channels through the gates. On the other
hand, the drainage operation is done in most of the basins naturally through the
soil into the Nile. This is due to the fact that the level of the soil is higher than the
level of the Nile and to the fact that the soil is porous.

Thus, the irrigation operation under these conditions and on such a scale does not require intensive labour work, in fact one man alone can control the irrigation of one block of ten fields. A strong pressure of water flow is required to submerge the blocks in a short period of time; this is achieved through the electrical pump. It should be pointed out that the organisation of irrigation in this form takes place only when the land is irrigated by pumps; yet under an irrigation system based on drippers, which has been introduced recently in this property, the entire system is converted and a strong water flow is not useful nor is it recommended.

4.2. The Organisation of Access to Water on a Small Holding in Sector C.

The above mentioned system of irrigation is not appropriate on a small plot cultivated by field crops, which follows a different calendar for agricultural operations. The water requirements are totally different. For example, a plot of one field, cultivated by vegetables is divided into three or four sections for the cultivation of a variety of crops. (Fig. IV.1) In this case, the irrigation and drainage channels are dug around the entire plot and along each ridge dividing the land into sections. On each channel surrounding the plot, there is a gate made of mud which the peasant uses for the control of the quantity and the direction of the water. Thus, under a strong water flow the gates break, the water overflows the ridges and channels, and the vegetables can be damaged as a result of excess water which generates an environment conductive to diseases.

Therefore, the irrigation operation under these conditions becomes complicated, as it requires a rapid, synchronised control in order to avoid flooding the ridges.
The plot is surrounded by an irrigation channel, which moves the water from the canal, Misqa, and distributes it to a number of plots of land. (Fig. IV. 1) When the water fills the channels, Misqa, the peasant has to open the gate of his plot to allow the water to fill the Zarqa, a smaller channel. Finally, the peasant opens the gates of the Zarqa, connecting the channel with the three or four sections divided on the plot. When the first ridges are irrigated, the peasant quickly closes the gate between the irrigated section and the Zarqa, and opens it to the following section and so forth. Once the plot is irrigated, the peasant closes the gate between the Zarqa and the Misqa in order to stop the flow of water into his plot, and starts opening the gate connecting his plot with the drainage canal, Misqa. (Fig. IV. 1)

This operation takes at the most one hour and should be undertaken carefully, in order to control the quantity, the level, and the direction of the water. The irrigation operation of one fikdaa requires the work of two men for work over an hour's time; however, the time required for irrigation depends on the preparation of the soil and the type of the crop cultivated. (Fig. IV. 1) According to the peasants working under these conditions, it is preferable to irrigate from the fuel pump rather than from the electrical pump for a number of practical reasons. First, because the cost of irrigation from the electrical pump is double the cost of irrigation from the fuel pump, although the electrical pump provides a larger volume of water during the same time. This, means that one fikdaa is irrigated in half the time required by the fuel pump. However, the difference in the price of irrigation between the electrical pump and the fuel pump is not completely compensated for by the difference in the time required. The price averages £. E 0.80, which is nearly £. E 0.20 more for each irrigation, due to the high price of electrical energy. But more important is that the irrigation from an electrical pump requires more intensive labour over a shorter period of time, as a result of the stronger flow of water, in which case more than two men are required to control the opening and the closure of the gates and the direction of the water.
Figure IV.1. The Irrigation System on Open Fields

Canal for irrigation.
Canal for drainage.
Direction of the water.
Gates.
Cultivated lands.
(cotton & potatoes).
For these reasons, the installment of the electrical pump and its use was not welcomed by most peasant holders of small plots of land cultivated by field crops. According to an employee of the large property who organizes the water turn for the holders and collects the cost of irrigation, accounting of irrigation has become difficult to calculate since they started using the electrical pump. This is due to the fact that a plot of land can be irrigated for ten minutes by the electrical pump and for 20 minutes from the fuel pump, given the frequency of the electricity failure. As a result of this shift, peasants start negotiating their costs in order to reduce them, this removes the control over the costs of irrigation of the 19 holders complicated. Furthermore, most holders tend to find an arrangement with the mechanic to irrigate from the fuel pump to reduce their costs and their labour expenditure. Despite this disagreement, there are no serious disputes between the absentee landlord and the holders concerning the cost of irrigation.

In general, it is difficult to estimate the cost of irrigation of a unit of one jildan as it varies according to the crop, the type of the soil, and the stage during which the irrigation takes place. For example, certain crops need to be cultivated on a dry soil, Shermi, a soil which had been deprived of water for a long period of time, in which case the irrigation operation takes a longer period of time than if the land has been previously irrigated and divided by ridges.

4.3. The Use of Drainage Water for Irrigation

In addition to the previously mentioned forms of access to water in the three sectors in Batra: the indirect irrigation, the direct irrigation, the use of mobile or fixed pumps, and the use of electrical and fuel pumps, another form of access to water takes place through the drainage water. This form is used in Hur al-Halfaya, sector B, and is adopted by five holders of ten jildans located parallel to
The Nile.

Figure IV.2. Barbakh, the Water Pipe under the Dyke.
the main dyke of the Nile. (Fig. III.5) The ten fields are located in a large area of 50 feddans, cultivated by compulsory crops and irrigated by a final pump fixed on a Talut, which raises the water from al-Sabik canal. Similarly, the ten fields are located opposite a water pipe, Bardakht, fixed on the main dyke of the Nile, which raises the drainage water from sector C to the main drainage canal in sector B. (Fig. IV.2) The drainage canal, Mersaf al-Khina, crosses the basin of al-Hafayya where the ten fields are located, and in its course the holders of the ten fields use the drainage water for the irrigation of their plots instead of irrigating from the Talut.

The process of this operation is rather simple, when the drainage water fills the water pipe, the Bardakht, on the other side of the dyke in sector C, the peasants close the gate of the Bardakht from the side of sector C and hold the water in the drainage canal surrounding their land in sector B by using gates made of mud. (Fig. IV.2) Meanwhile, they raise the water in their fields by using a Talut they own in a partnership. Thus, each holder in his turn close the gates of the Bardakht and attacks a water buffalo, Graphus, or a donkey to the Talut and raises the needed water for irrigation.

By using this system, the costs of irrigation are confined to the use of the animal, which is already being used for other agricultural operations, and the labour required for the control of the distribution of water to the different sections of the plot. More importantly, this system allows the ten holders a freedom of irrigation whenever it is needed without having to comply with a water turn or to synchronise their water turn with their neighbours. It also enables them to escape from the control of the larger landowners who, in most cases, control a larger share of the pump given the size of their holding. Similarly, it enables them to escape completely from government intervention in the control of water. Yet, this form is not necessarily cheaper if calculated in terms of cash, but it is a system by
which peasants use their personal and collective resources to benefit from the permanent availability of water without being subject to the authority of other peasants or the control of the administration. In this case, the first objective becomes the escape from any form of control and the use of the local resources and, thus, minimising the expenditure of cash, while relying on unpaid labour and the available resources.

On the other hand, this system affects to a great extent the agricultural land located in sector C, on the other side of the dyke. The problem is that the level of the land in this part of sector C is lower than the level of the opposite land in sector B, and for this reason a water pipe Barahkh was installed in this location. Thus, when the holders in sector B close the gates of the Barahkh the drainage water accumulates in Mezra' al-Hies, the drainage canal, and infiltrates the cultivated land surrounding it, in sector C. The permanent accumulation of water has, therefore, caused serious problems concerning the low level areas. (Fig.IV.2) Complaints have been made by the holders of these plots against the holders of the ten holdings in sector B. But the problem has never been solved and the village's authorities seem unable to control those who benefit from this free of charge irrigation source.

In conclusion, the brief description of the irrigation system in the sectors of Batra reflect the various forms of adaptation for the access to water. The variety in the adaptive forms of access to water is essentially based on a collective and communal organisation based on the local resources. For example, certain machines, Tahrut, were modified in a convenient way to meet the various water requirements. However, the distinction between the three sectors on the level of the forms of access to water seems to be difficult to establish, given the variety of the organisation which depends largely on the type of cultivation and the available facilities. Thus, areas which were irrigated indirectly have been irrigated directly
after the reorganisation of the irrigation system on the national level, the completion of the High Dam, and the adaptation of the producers' local organisation to the new irrigation structure. This is clearly seen in the case of the irrigation from al-Sabil canal. Similarly, the adaptive forms of access to water in the three sectors are means to escape from government control and directives over the water turn which is fixed according to the crop rotation of each basin.

Within these forms of organisation of access to water the differences in the forms of control over water and the differences in the location of the land in relation to the source of irrigation have generated differences between the holders in the various sectors and within the same basin. This is clearly illustrated in the case of the use of the drainage water or in the ways in which a few peasants, whose land is located upstream the irrigation canal, raise most of the water before it reaches the plots located at the end of the canal.

Thus, from the above, it can be argued that the coordination of the irrigation operations, the flexibility of the various categories of producers to adapt their water requirements in space and in time to their surrounding conditions and to government annual directives, are essential strategies for ensuring a regular agricultural production. These strategies are constantly developed, changed, and modified in a number of forms within the three sectors of the territory of Beira. As also shown, the government relies on the capacity of the producers to organise their irrigation system, and the government employees show a certain tolerance to infringements against regulations. Thus, external relations established between the government employees in charge of the irrigation system and the canals, and the producers are being adapted to local conditions under state directives.

Therefore, the interaction between the government policies and the local structures in the village is one of the important aspects in ensuring a certain balance in
production, and a means of making use of the local structures for the implementation of state policies. However, within the diversified forms of relations implied in the various strategies adopted between the producers, the differentiated socio-economic structure of the producers is reflected. In fact, these strategies bear different meanings for the different groups. For example, the strategies adopted by the peasants for the cultivation of rice, which essentially involved a considerable expenditure of cash, for the installation of a new irrigation pump, and the necessary works for the preparation of the land, was necessary for the household consumption of the small peasants, and was important for the merchants of grains. In other words, the objective of this form of organisation was aimed at providing the necessary elements for the reproduction of the various households, specifically the small peasants households, and important for the commerce of the merchants of grains. Since the small peasants and the merchants share their holdings in the same basin, they had recourse to both commodity and non-commodity relations for irrigation for the organisation of their production according to their different conditions. Thus, the combination of commodity and non-commodity relations is adopted by the various producers for their reproduction, but also for the accumulation of the merchants. Yet these various forms of organisations are not confined to irrigation. In fact, they are more evident on the level of access to land which constitutes the main factor, along with the access to water, in the process of agricultural production.
1- For additional details on the water wheel system in Egypt, see Mónaca, Leila and Pierre Laforetire, 1974.
CHAPTER V

The Form of Access to Agricultural Land

Like the forms of access to water for irrigation, the access to agricultural land in Betra takes a number of forms. These forms, in their variety, reflect both the specificity of the region and the strategies adopted by the different social groups, under the state policies, for the organization of the economic and social reproduction. These forms, as will be discussed in the following pages, vary constantly according to the prevailing political and economic conditions. They may be officially registered, or may be based on verbal agreements between the parties concerned. They may entail monetary relations and non-monetary ones, as they may be newly introduced forms, or reminiscent of the past. In any case, the different forms of access to land are not static as they appear in the aggregate data and statistics. Their dynamic lies in their constant change according to the conditions at the village level and according to the changes of the wider system.

As mentioned in the previous chapters, over the last two decades state policies have been enhancing the process of commoditisation in rural areas, and have been orientating production towards the demands of international markets. (Chapter II)
The changes in agricultural policies affected a number of aspects at the village level, among which are the forms of access to land. The historical development of the forms of access to land, as will be illustrated in the course of this chapter, are intimately related to market conditions as well as to the requirements, and the conditions of the unit of production and consumption organising the agricultural production on the land. Thus, with the increasing process of commodification, the external relations established between the holders and the government institutions have been expanded to control the maximum size of holding a family is allowed to possess, the implementation of registration fees, and taxes on inheritances, along with other factors related to agricultural production. Therefore, externalisation on the level of the forms of access to land is, in most cases, with the government employees for the imposition of taxes and the control over the size of ownership and, in their turn, the holders tend to escape from such a control through the diversification of the forms of access to land.

However, the diversification of the forms of access to land takes place on various sizes of holdings. It may be on a few plots, as it may be on large holdings exceeding fifty holdings. Similarly, the diversification of the forms of access to land varies between monetary and unofficial agreements, and non-monetary agreements, or may encompass both relations in the same form. However, a number of factors determine the forms of access to land adopted by the various groups in the village. The ecological conditions of the land in relation to the source of irrigation and consequently its impact on the types of crops cultivated, are important elements considered in the form of access to land. Likewise, the conditions of the unit of production and reproduction organising the agricultural operation on the land, and their capacity to mobilise unpaid labour from the family and from other social relations, or hire wage labourers, are essential factors determining the forms of access to the land, and the size of the holding. Finally, the means by which access to credit and inputs is achieved, the marketing
conditions of the crops at the national and the international levels, and the government agricultural policy, affect directly the forms of access to land.

Yet the various forms of access to land have differing emphasis on the various units of production and reproduction. For example, the diversification of the forms of access to land for the category of the field worker is, in most cases, for the expansion of marketing. Whereas the diversification of the form of access to land for a small peasant household is for survival, and mostly for the provision of the basic elements for the household consumption, and for providing cash through the marketing of parts of the crop. Therefore, the various forms of access to land adopted in a specific socio-economic setting under certain historical conditions reflect the complex relations adopted by the different social groups for survival and for expansion which cannot be grasped on the basis of aggregate statistics. On the contrary, in their dynamics and in their different forms they translate the socio-economic differentiation of the society which is not based on the size of the land, but rather on the capacity of certain categories to accumulate wealth and power through the access to markets.

In this context, this chapter will first discuss the official figures advanced by the government institutions concerning the forms of access to land and their categorisation in Betra, in order to show the limited static information they provide. This will be followed by a general historical review of the development of the forms of access to land in the village. A number of case studies will be presented illustrating the dominant forms of access to land in the various sectors, and the reasons behind the prevalence of a certain form rather than another in each part of the village, within the historical development. On the other hand, a specific case study of the expansion of agricultural land in recent years will be presented as an exclusive form, since it is not a common practice in this area given the limited size of the agricultural land. Finally, from the study of the prevalent
forms of access to land, and the complex socio-economic relations they encompass, a schematic categorisation of the different socio-economic groups emerging in Botra will be derived.

1. A Discussion of the Aggregate Data of the Forms of Access to Land in Botra

The forms of access to land in Botra are officially based on ownership and rent. They are the only two forms registered in the government and on which the holder is allowed all legal rights of utility. However, around these two forms others have been practiced, in the three sectors on specific agreements, but which remain officially un-registered. The ecological variety which have largely favoured the cultivation of certain crops rather than others, have also determined the forms of access to land prevailing in each sector.

According to the registers of the Local Agricultural Cooperative in Botra, there are 1,160 holders of 2,649 fudihas of agricultural land1. The categorisation of holders of agricultural land is based on the two official forms: ownership and rent, and includes a third category of ownership and rent. The distribution of holdings in each form is divided among the following categories: holders of less than one fudhid, holders of between one and three fudihas, holders of between three and five fudihas, holders of between five and ten fudihas, and holders of more than ten fudihas. It should be pointed out that this categorisation was established by the British in the early twentieth century for the collection of taxes, and continues to be the official form of registration in the government. (Gianaris and Gianaris, 1983:12) Therefore, since the only available official figures of the size of
Holdings and the number of holders are categorised in this form, we are compelled to present them as such. (Tab. V.1-2)

However, the division of the official forms of access to land into ownership and rent does not differentiate between the various forms of rent, such as tenancy and sharecropping. Each category implies different terms of agreement and different conditions of land exploitation. Law no. 17 of 1933 states that contract of rent, being tenancy or sharecropping, should be in a written form regardless of the value of the rent and should be deposited in the local agricultural cooperative of the village in which the land is located. (Abdil Tavsh, 1984:233) This means that both sharecropping and tenancy are regarded as one form of rent and that the agricultural cooperative does not differentiate between sharecropping and tenancy, as taxes on agricultural land are collected in both cases on the same basis.

However, the terms of agreement in both cases are totally different: in the case of sharecropping the owner provides the needed capital for the agricultural production, while the sharecropper provides the labour, and at the end of the season the value of the crop is divided equally between both after deducting the costs of production. In the case of tenancy, the tenant pays an annual rent equivalent to seven times the value of the tax on agricultural land, in exchange for directly exploiting the land. In both cases, the tenant or the sharecropper is the direct holder of the land, and the owner cannot evict him from the plot unless the rent is not paid as agreed upon in the contract. Moreover, the rent of the plot is inherited by the members of the family of the holder, and the land is sold with the holder on it. This factor reduces by half the value of the land on the market. Most of the regulations concerning the relationship between the owner and the tenant or the sharecropper were formulated during the 1950's by the agrarian reform laws. Prior to this period, the tenant or the sharecropper had no rights over the land they exploited and the owner decided almost all matters concerning
Table V.1: The Distribution of Holdings in Bani, per Feddan

<table>
<thead>
<tr>
<th>Categories</th>
<th>% of</th>
<th>% of</th>
<th>% of</th>
<th>% of</th>
<th>% of</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>farmers</td>
<td>owners</td>
<td>holders</td>
<td>rent holders</td>
<td>holdings</td>
</tr>
<tr>
<td>%ship</td>
<td>%mixed</td>
<td>%fixed</td>
<td>%form</td>
<td>%form</td>
<td></td>
</tr>
<tr>
<td>Less than 1 feddan</td>
<td>26%</td>
<td>4%</td>
<td>17%</td>
<td>6%</td>
<td>9%</td>
</tr>
<tr>
<td>Between 1 and 3 feddans</td>
<td>12%</td>
<td>10%</td>
<td>9%</td>
<td>8%</td>
<td>5%</td>
</tr>
<tr>
<td>Between 3 and 5 feddans</td>
<td>9%</td>
<td>15%</td>
<td>4%</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>Between 5 and 10 feddans</td>
<td>4%</td>
<td>13%</td>
<td>-</td>
<td>-</td>
<td>1%</td>
</tr>
<tr>
<td>More than 10 feddans</td>
<td>1%</td>
<td>17%</td>
<td>-</td>
<td>-</td>
<td>0.2%</td>
</tr>
<tr>
<td>Total</td>
<td>52%</td>
<td>60%</td>
<td>30%</td>
<td>121%</td>
<td>18%</td>
</tr>
</tbody>
</table>
Table V.2: Size of Each Category of Holders in the Total Surface of Agricultural Land

Ownership

<table>
<thead>
<tr>
<th>Categories</th>
<th>Number</th>
<th>Size (faddans)</th>
<th>Percentage of Ownership</th>
<th>Percentage of Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 feddan</td>
<td>300</td>
<td>105.08</td>
<td>50%</td>
<td>7%</td>
</tr>
<tr>
<td>Between 1 and 3 feddans</td>
<td>135</td>
<td>271</td>
<td>23%</td>
<td>17%</td>
</tr>
<tr>
<td>Between 3 and 5 feddans</td>
<td>100</td>
<td>400</td>
<td>17%</td>
<td>25%</td>
</tr>
<tr>
<td>Between 5 and 10 feddans</td>
<td>50</td>
<td>359.08</td>
<td>8%</td>
<td>22%</td>
</tr>
<tr>
<td>More than 10 feddans</td>
<td>15</td>
<td>449.12</td>
<td>3%</td>
<td>28%</td>
</tr>
<tr>
<td>Total</td>
<td>600</td>
<td>1576.04</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Rent

<table>
<thead>
<tr>
<th>Categories</th>
<th>Number</th>
<th>Size (faddans)</th>
<th>Percentage of Rent</th>
<th>Percentage of Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 feddan</td>
<td>200</td>
<td>155.16</td>
<td>57%</td>
<td>26%</td>
</tr>
<tr>
<td>Between 1 and 3 feddans</td>
<td>100</td>
<td>200</td>
<td>29%</td>
<td>37%</td>
</tr>
<tr>
<td>Between 3 and 5 feddans</td>
<td>50</td>
<td>200.06</td>
<td>14%</td>
<td>36%</td>
</tr>
<tr>
<td>Total</td>
<td>350</td>
<td>1563.22</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Mixed Forms: Ownership and Rent

<table>
<thead>
<tr>
<th>Categories</th>
<th>Number</th>
<th>Size (faddans)</th>
<th>Percentage of Ownership</th>
<th>Percentage of Holdings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 feddan</td>
<td>103</td>
<td>109.16</td>
<td>49%</td>
<td>49%</td>
</tr>
<tr>
<td>Between 1 and 3 feddans</td>
<td>60</td>
<td>100.14</td>
<td>29%</td>
<td>33%</td>
</tr>
<tr>
<td>Between 3 and 5 feddans</td>
<td>39</td>
<td>199.06</td>
<td>19%</td>
<td>37%</td>
</tr>
<tr>
<td>Between 5 and 10 feddans</td>
<td>6</td>
<td>53.16</td>
<td>3%</td>
<td>19%</td>
</tr>
<tr>
<td>More than 10 feddans</td>
<td>2</td>
<td>43.02</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Total</td>
<td>210</td>
<td>507.01</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: The Local Agricultural Cooperative of Batra, 1984
the value of the rent and the terms of agreement of the relationship.

On the other hand, the official figures do not reflect the effective size of holdings and the effective number of holders in the third form. (Tab.V.1) Essentially, it includes holders who combine ownership and rent at the same time. Yet, it does not show the share of each category of holders in ownership and rent, which means that it is impossible to distinguish the size of holdings and their forms for 18% of the holders of 19% of agricultural land in Batra. (Tab.V.2) Similarly, discussion with several holders showed that peasants tend to avoid registering their inherited ownership or rent to escape taxation, and to maintain a large holding in order to receive a higher loan from the Bank of the Village, as bank loans are given to holders proportionally to the size of their holding. Therefore, these figures will only be used, in this chapter, as general indicators of the size of holdings and the number of holders in Batra, while the focus will, essentially, be on the forms and the process of access to land, and the reasons behind the prevalence of certain forms over others.

According to the figures of the Local Agricultural Cooperative of Batra, the total number of holders represents 7% of the population, who are holders of 85% of the total territory. According to the categorisation adopted by the agricultural cooperative, 52% of the holders own 60% of agricultural land, 30% of the holders rent 21% of agricultural land, and 18% of the holders own and rent 19% of the agricultural land in Batra. (Tab.V.2) By focusing on the different categories of holders, one can notice that the highest concentration of holders is among the owners, the rents, and the holders of mixed forms- ownership and rent -of less than one feddan. (Tab.V.2) The highest concentration of agricultural land in ownership is among the holders of more than ten feddans who represent the smallest number of holders in ownership, and in the mixed form, while they are absent in the rent form. The highest concentration of agricultural land in the rent
form is among the holders of between one field and three fields. Finally, in
the mixed form the concentration of the holdings is among the holder of between
three and five fields. (Tab.V.2)

Similarly, these figures show that ownership is the prevailing form of access to
land for all categories of holders reaching 600 owners, while rent exists only
among the holders of less than one field and among the holders between three
and five fields, who represent the majority of holders in all the forms of access
to land in Batra. (Tab.V.1) The differences in the concentration of agricultural
land is an indicator of the portion of holders who have a direct right of utility over
a certain proportion of land. But, it does not illustrate the existence of other
forms, nor does it show the distribution of the size and the forms of the access to
land on the different parts of the territory, which comply with a variety of
different agricultural conditions. However, un-registered forms of access to
agricultural land exist among the peasants; they are frequent and vary from one
sector to the other; they are concluded on specific terms and follow the market
conditions of agricultural production.

The prevailing official forms of access to land in Batra were, historically, based on
ownership. However, the various political, economic, and social changes that took
place over the century led to the emergence of other forms which have been
adapted and modified according to the prevailing conditions. These new forms led
to the rise of certain social groups and the decomposition of others, and implied
different economic and social relations between the different groups in the village.
Thus, in order to understand the mechanism and the process of this development
and its implications on the present time, it is necessary to trace its historical
development since the beginning of twentieth century, when agricultural land
started to be sold in the form of ownership to individuals2.
Thus, the next section of this chapter will deal with this aspect through several case studies, many of which are interrelated, and most of which took place on the three sectors. Therefore, it will be difficult to present them according to the location of the holding in each sector. It would, also, be difficult to present each category of holders in separation from the others, as they are interrelated and the development of each category depended on the development of the others.

In this context, the following pages will focus on the following aspects:

a) The historical development of the forms of access to land and the rise of the different social groups.

b) The dominant forms of access to land in the three sectors, in relation with the agricultural production and the marketing network in each sector.

c) The expansion of reclaimed land in the early 1970's in al-Mawati land, sector C.

2. The Historical Development of the Forms of Access to Land in Betra

Until the end of the nineteenth century, most of the territory of Betra was the property of Muhammad 'Ali's family, after which it was sold to a land reclamation company: The Betra Land Company. (Chapter III) The company played an important role in the distribution of agricultural land to absentee landowners. In the beginning of the twentieth century, the majority of the purchasers of agricultural land in the village were absentee landowners. However, many factors prevented peasants from buying agricultural land, mainly the high price of the land, and an article in the contract giving the state the right to acquire the agricultural land from the owners for public use. (Murai, 1976:10) These
conditions confined the purchase of agricultural land to absentee landowners who had the needed capital and the means to cultivate the land.

The majority of the purchasers of agricultural land in sectors A and B were essentially investing in the production of cotton and its marketing. In sector C, the purchasers were either investing in the increasing value of newly reclaimed agricultural land as cotton could not be cultivated in this area, or investing in the production of new crops such as potatoes in the beginning, and citrus fruit as they were introduced later on, in the 1930's. Thus, the historical development of ownership in each sector was largely determined by the type of agricultural production in each sector. It is not a coincidence to find, in the course of the field work study, that the location of the eight 'Fatha is essentially concentrated in sector A and only two are located in sector B, while they do not exist in sector C.(Fig.III.5-6) Nor is it coincidence that sharecropping is the prevailing form of access to land in sector A after ownership, and that tenancy follows ownership in sector B. Similarly, ownership remains the basic form of access to land in sector C, while tenancy exists on a very small scale and sharecropping is almost non-existent.

2.1. The Purchase of Agricultural Land by Absentee Landowners

Absentee landowners, originally living in provincial cities or in Cairo, began to buy agricultural land in Beira in 1912. However, those who purchased agricultural land in sectors A and B were usually involved in the works of the company, and many of them bought the land in the course of the works, as they were able to pay the price over several years. The value of the agricultural land in the two sectors varied between £.E 40 and £.E 60 per 'Fatha, and was cultivated by cotton. Given the high profits made on cotton cultivation and marketing, the
owners purchased large plots of agricultural land which reached 700 feddans, in one case. With such large properties and with the intensive agricultural operations required by cotton plantation, the owners could not undertake directly the exploitation of the land. Instead, they turned to the system of 'Ihsah, by which they settled agricultural labour with their families on their property, provided them with accommodation, and gave them a proportion of the crop for the consumption of the household, in return for their work on the land.

In sector C, on the other hand, the purchase of agricultural land was differently conceived by the absentee landlords: the land was newly reclaimed and cotton plantation was not possible, therefore, investment was made on the basis of the value of the land or in the new crops that could be eventually introduced in the sector. Moreover, the value of the agricultural land in the sector was fixed at a higher price than the value in the other sectors, reaching £E 120 per feddan. The price covered the works undertaken by the company consisting of the adjustment of the level of the land, its preparation for cultivation, and the creation of irrigation and drainage canals. The purchasers of agricultural land were not only established in the cities, but among them were many foreigners living in Egypt. Selling contracts showed that, a few years later, foreigners sold their agricultural land to Egyptians and, thus, made profits of the difference between the buying price and the selling price.

The size of ownership in this sector was smaller than in the other sectors, because of the price of the land, and because of the small size of the sector itself, which does not exceed 550 feddans. Given the type of agricultural production in the sector, based on vegetables requiring less intensive labour than cotton, and given the small size of the holdings as compared to the size of ownership in the areas cultivated by cotton, the owners did not have recourse to the 'Ihsah system. Instead, they hired wage labour on seasonal terms and they exploited the land directly
without the existence of intermediaries, such as sharecroppers.

Within these two systems, established by the absentee landowners in the three sectors, peasants from Betra started progressively to have access to agricultural land through different means and in different forms.

2.2. The Access to Land by the Peasants of Betra

It was not until the early 1930’s that peasants from Betra started to purchase small plots of agricultural land in both sectors A and B, while sector C remained owned by absentee landowners. This period corresponds to the economic crisis on the world market, which affected large landowners and cotton producers. Therefore, land for sale was located only in sectors A and B; while the owners in sector C were not as much affected by the cotton crisis. On the other hand, given the large surface of the properties, a few peasants and their families working as wage labourers became progressively involved in a variety of economic activities on the property, such as the marketing of crops and livestock rearing. Progressively, these families were able to get involved directly in production and in marketing, and were able to raise cash for buying agricultural land when the opportunity occurred. The purchase of agricultural land by peasants took place on a very small scale not exceeding four or five feddans per family, which they cultivated by cotton, grains, and winter vegetables. Their activities, progressively, expanded in the marketing of vegetables and grains. Similarly, livestock rearing represented an important factor in the agricultural operations, as well as an important source for the supply of meat and for the provision of dairy products for the household consumption.

This was the beginning of the emergence of influential social groups in the village.
It was from these groups that the position of Umra and Shikh al-Balad were held for many years. Although, the ownership of agricultural land was in the name of one member of the family, all the members participated in the price of the land, in the agricultural operations, and at the end of the season the income was distributed to each. Therefore, given the fact that government positions in the village were also based on the family's ownership, the members regarded the position of Umra or Shikh al-Balad as a family inheritance. (Chapter III)

By the end of the 1940's, the increase in cotton prices on the world market had a direct impact on the value of agricultural land, and land lease became a means of increasing the profits from agriculture, as the rental value of land increased with the cotton prices. Amoury Abdel-Malek explains this phenomenon in the following terms:

The first group - the largest owners - was composed of those magnates who managed their property by leasing it to third parties, or compradors. Before 1952 such a lease was made in either of the two following ways: a lease to one person, who in his turn subleased small parcels of one to five faddans to working small holders; or a lease made through a succession of intermediaries in such a way as to enforce the best price. (Abdel-Malek, 1958: 58-59)

Under these conditions, peasants who were already owners of agricultural land expanded their holdings by leasing agricultural land from the absentee landowners, and in their turn often subleased the same plot to landless workers who were hired as wage labourers on the property. Similarly, landless labourers who were working on permanent terms on large properties managed to rent a small plot from the owners, to whom they paid the rent at the end of the year. It should be pointed out that lease of agricultural land took place in sectors A and B where cotton, vegetables, and grains were cultivated, whereas the areas cultivated by permanent crops in sector C remained exploited and managed directly by the owners as the marketing of these crops was not yet established in the village, and
as they were not considered as profitable as cotton.

In the course of the 1930's, the situation changed as a result of the state intervention in the agricultural sector through its direct control over agricultural production and its monopoly on the marketing of cotton. All these factors compelled many absentee landlords to sell the excess agricultural land they owned under the agrarian reform law.

In Batra, the first category to be affected by these measures were the absentee landlords, who not only had large ownerships exceeding the ceiling fixed by the law, but also lost the value of cotton on the market, as the government became the only buyer of the crop. Furthermore, the other strategic crops, such as wheat, maize, and rice, which were bought by the government. Moreover, events turned against their speculations, the agrarian reform reformulated the relationship between the owner and the tenant, it gave the tenants all rights of utility over the land and fixed the value of the rent at seven times the value of the tax. This meant a considerable reduction of the annual rent, to about £20 per fadlan in Batra. As a result of these measures, most of the absentee landlords sold their excess of agricultural land to peasants from Batra. Since a large proportion of their agricultural land was rented, part of it was sold to the tenants, previously landless, at half the value of the land. On the other hand, a proportion of the land sold was bought by peasants who were previously owners of agricultural land and who were at the same time lessors of agricultural land owned by the absentee landlords. The lessors, in their turn, were leasing the rented land to landless labourers in return of a share of the crop. This system of subleasing led to the establishment of sharecropping as an official form of access to land.

Despite the conditions under which agricultural land was sold, many absentee landlords tried to counter the system by registering their ownership in the name
of their children. Others tried to gather their ownership in one area and group the rented plots in another area by making arrangements with the tenants to be moved from a location to another. All these developments took place in sectors A and B where agricultural land was cultivated by vegetables, grains, and cotton; while in sector C these measures affected only landowners whose property exceeded the ceiling fixed by the law. Most of the land sold in sector C was cultivated by vegetables, as the absentee landowners tried to gather their ownership cultivated by fixed crops in one area. Similarly, a few peasants working on the properties cultivated by fixed crops started to get involved in the marketing of free cash crops: citrus fruit and potatoes, and by the time the owners had to sell their land they managed to raise cash to buy plots of over ten feddans. However, with the exception of the ownership of field merchants, the rest of the land was sold into small plots to landless labourers working on the property who were given payment facilities by the owners.

In conclusion, this review of the historical development of the forms of access to land in the three sectors of Betra illustrated the different conditions under which the various forms of access to land were modified and adapted to meet the national and the local economic and political conditions. Similarly, within this historical development different social groups held important positions in the village, and others lost their positions. Therefore, in order to understand how and why certain forms prevail at the present time in each sector rather than others, and how they are related to the conditions of both production and marketing, it is necessary to present specific case studies through which these aspects can be understood. Likewise, through the case studies the social changes that occurred in the village and in the process of this development will be illustrated.
3. The Prevalent Forms of Access to Land in Batra

3.1. The Formation of 'Izah al-'Inq Khalil, in Sector A

Sector A includes in its surface seven of the eight 'Izah in Batra, one of which is a group of seven 'Izah known as 'Izah al-'Inq Khalil, located five km north east of the centre of the village. Each 'Izah of the seven holds the name of its owner, and in their totality they represent the highest agglomeration of inhabitants of the eight 'Izah of Batra, with 1,415 inhabitants constituting 301 families living in 184 houses.

In the early 1910's, when the Batra Land Company started the irrigation works in al-Sebil canal, Hag Khalil, originally from Upper Egypt, was hired by the company as a contractor for the digging of the canal. In 1920, he bought a large plot of land in the sector for £E 30 and £E 40 per feddan, and by the end of the 1940's, Hag Khalil owned 700 feddans. The property covered a large area of sector A and extended into sector B. Although Hag Khalil was living in Batra, he did not exploit directly his land, instead he hired labourers to undertake the works, given the large surface of the property. He brought peasants with their families from the villages of Babvah and Dhibna, located in the surroundings of Batra, who migrated from their villages hoping to find better working conditions with Hag Khalil. A large number of labour with their families worked the land cultivated by cotton, wheat, rice, and barisim. The property was divided into small plots and each family exploited a plot in the form of sharecropping. Similarly, he gave them small plots opposite the land they cultivated to build houses for their families. By that time sharecropping was a form adopted by most landowners of large properties cultivated by cotton and requiring intensive labour. Since labour
in cotton cultivation is the most important factor in production and the most expensive item in the cost of production, the owner controls it by rendering the labour, whom he takes in charge with their families, totally dependent on him and his capital through the form of sharecropping.

According to the terms of sharecropping, the land remained in the name of the owner who provided the necessary capital for the agricultural operations, while the sharecropper undertook the agricultural operations and supplied the needed labour from his household, hence the necessity of providing the peasants with accommodation near the plot. At the end of the season, the owner distributed to the sharecroppers a proportion of the crop for the consumption of their households in the case of wheat, rice, and maize cultivation. During this time, sharecropping was not based on any written form of agreement as the owner was the holder of the land and the sharecropper’s family was present only as long as it provided the necessary labour in exchange of a share of the product of the land. This meant that the sharecropper had no insurance, the owner had the right to evict him, at his convenience, and replace him by another labour family without any reasons.

After the death of Hag Khalil, a total of 620 faddans6, were distributed to his heirs according to the Islamic law of inheritance7. Hag Khalil had one son and seven daughters, in addition to his wife. The son and the wife each inherited 115 faddans, and the rest of the property was divided between the seven daughters. The share of each varied between 50 and 60 faddans. Four daughters took plots of 60 faddans, and three took plots of 50 faddans. The difference in the inheritance of the two groups was represented by a difference in the value of the plots of land. The value of the land of those who inherited 60 faddans is lower than the value of those who inherited 50 faddans.
After the death of Mag Khalil and the partition of the property to the heirs, a new structure took place in the area. Instead of having several 'Ishaq named after the father of the large family, each 'Ishaq carried the name of its new owner. The eight children of Mag Khalil settled in different parts of the country and thus could no longer supervise regularly the works on the property. Under these conditions, the owners needed to find a way to control the management of the property and ensure a regular income in their absence.

3.1.1. The sublease of agricultural land before the agrarian reform

In the lifetime of Mag Khalil, two labour families, among those who were brought from other villages, progressively gained the confidence of the landowner and became the labour supervisors on the property. The Yusuf family is originally from the village of Beita, and the Yasir family moved from Dimona village, both families settled in Beita, where they were hired by Mag Khalil for the installment of a water pump on his property. After the death of Mag Khalil, and in the absence of the owners, these two families held important positions among the peasants of the 'Ishaq and offered to rent the land from the absentee landowners on the basis of three-year contracts. Starting from that time, they expanded their activities in the region and became the largest families in the sector, competing with each other in the marketing of crops in the sector.

Although the property was directly cultivated in sharecropping, the owners rented the land to these two families, who managed the agricultural operations, sold the crop, paid an annual rent to the owners and gave the sharecroppers their share from the crop. The lease of the property used to take place in auctions, every three years. However, the property remained in the hands of these two families and the competition was always between them in a way that no third party was
allowed to enter into their domain. It is told that the day of the auction was a great event in the Jask, as the result affected all the peasants for three years.

These two families, progressively, had a monopoly over the marketing of the production of the property, in exchange for paying an annual rent which did not exceed £E 30 per holding. They controlled the peasants, who remained sharecroppers on the land, provided them with the needed capital for production, and the sharecroppers undertook the agricultural operations. At the end of the agricultural season, they collected the crop from the peasants, sold it to merchants in the cities, and less than half the crop was distributed to the sharecroppers. Even when the sharecroppers attempted to feed cows for fattening during barley cultivation they charged them half the value of the animal on the assumption that the animal consumed part of their share in the crop. Under the system of subleases, the peasants suffered a great deal from this monopoly. Many cases of theft were reported as peasants could not live off of their share of the crop, and the inhabitants of this part of the territory were known in the village to be the least privileged groups. After the promulgation of the agrarian reform law and the abolition of agricultural land subleases, the owners had to supervise and directly control the works on their property. This period coincided with the monopoly by the government on the marketing of cotton, which affected tremendously the merchants of cotton. By that time, these two families had accumulated great wealth and reoriented their activities toward the marketing of the various crops, mainly grains and vegetables.

In the course of the 1930's, the heirs of Hag Khalil progressively sold their ownership because they could not supervise the land as absentee landowners, but mostly because they feared being subject to the agrarian reform laws which limited the landownership to 50 feddans per holder. (Abdil Tawah, 1984:239) Thus, instead of waiting for the commission of the agrarian land reform to sequestrate
the excess property they owned, they started selling the land to peasants. The price of the agricultural land in this part of Bata'ra is known to be very low as compared to the value of land in sectors B and C. The price of a qadlan reached £ E 500 at the most and peasants used to pay it by installment as they could not afford to pay in cash.

A considerable part of the property was bought by the Yasin and the Yusuf families, and the rest was sold to peasants who were sharecroppers on the land. The Yasin family bought part of the property extended in sector B, and build a large house in the area for their family. Similarly, the small peasants who bought land in this area built their houses in this extension. Thus a new Jala was added holding the name of the family who owns the largest part of the area. At the present time these two families became the leaders of 'Jalal al-MAq Khalil, claiming the separation of the 'Jalal from Bata'ra to become an independent village, their claims are supported by their membership in the ruling political party. (Chapter III)

Concerning the distribution of the remaining land of MAq Khalil's property, only three grandchildren kept their properties, a son who owns 85 feddahs cultivated by compulsory crops, another 60 feddahs are owned by a grandson living in Marsa, 40 feddahs are still in the name of a granddaughter married to a member of a large family in Upper Egypt, and 26 feddahs are owned by another grandson. Out of 700 feddahs, the property was reduced to 211 feddahs of which all are rented to peasants: 185 feddahs are cultivated by peasants in the form of sharecropping and 26 feddahs are in the form of tenancy.

3.1.2. Sharecropping

MAq 'Adbhun is a sharecropper on three feddahs in sector A. He and his family
have been cultivating the same plot for over 40 years. Originally, the land was owned by Hay Khalil’s family but like the rest of the property, the plot was rented on a three year contract to Hay Yunis Yasin until the agrarian reform in the 1950’s. During this period, Hay Yunis used to buy the share of cotton of Hay ‘Adham and sell it on the stock market. Despite the high fluctuation of cotton prices on the stock market, Hay Yunis made a considerable fortune on the difference between the buying price and the selling price of cotton, which allowed him to buy agricultural land. Hay ’Adham adds that despite the fact that he was cultivating the land, his share of the net profit was lower than half the crop and there was no way to protest against these conditions as the owner could have replaced him with another labour family. However, with the promulgation of the agrarian reform laws and the abolition of the sublease system, Hay Yunis Yasin bought the plot and Hay ’Adham remained as a sharecropper on the same land.

The agrarian reform law forbids the owners to evict the tenants or the sharecroppers from the land, instead it stated that the rent should be registered officially. The holder, thus, acquired an official status and the rights of utility over the land he cultivated. However, Hay ’Adham tried to convert the sharecropping rent into tenancy, as the law gave the right to both parties, on their agreement, to change the form of the registered rent, but the owner refused categorically. The reasons for this refusal are evident: first the value of the rent of agricultural land reaches at the most ££ 50 annually (at the present time) and its increase depends on the increase of the value of the tax on agricultural land. While in the form of sharecropping, the owner receives half the crop produced in exchange of providing the capital for the costs of production. Under such conditions the owner and the sharecropper share the product of the land, but the owner directly controls the sharecropper.

From the owner’s position, the revenue from sharecropping is higher than the
revenue from tenancy because he receives half the crop of three cultivations annually, which value exceeds by far the amount of the rent in the case of tenancy. In this case, the value of the crop on the market is subject to increase, whereas the value of the rent is fixed and is not subject to increase unless the tax on agricultural land is raised, which is not likely to happen. Thus, depending on the position of each party, the evaluation of the forms of access to land changes, for the holder the form of tenancy is certainly more advantageous than sharecropping as it turns out to be almost like ownership. But from the owner’s position, sharecropping is a more profitable form as long as he receives part of the production. However, in both cases, the value of the agricultural land on the market drops by half as compared to the value of an empty plot.

Hag 'Adham has three sons who are peasants and did not receive school education. The three sons and their families are working on full time basis with their father on the plot and their only income is from the production of the land. The three fields follow a triennial rotation cycle comprising cotton, wheat, maize, basma, and rice. Thus, with a low income from the production of compulsory crops, and after deducting the owner’s share of the crop, very little is left for the family. Therefore, to overcome this low income, Hag 'Adham divides the land into two plots of one fadlan and a half on which these crops are alternatively cultivated annually. However, on the basis of this division one of the two plots is cultivated every two years, in summer, by tomatoes. According to Hag 'Adham, the cultivation of tomatoes is the most important crop of the year as it is a free market crop on which they can make high profit as compared to the income from the compulsory crops. Therefore, in order to make the most out of the land during the cultivation of tomatoes, and to keep the entire profit made on the crop, Hag 'Adham rents the plot from the owner, Hag Yusuf Yasin, on a seasonal term.
3.1.3. Seasonal rent

The seasonal rent is a form of access to land that takes place between an owner and a peasant over a specific period of time during which the peasant has the right to cultivate one crop in exchange of a rent fixed by the two parties. It is a verbal agreement between the two, in which the peasant pays half the rent at the beginning of the cultivation and the rest at the end of the season. The value of the rent is fixed according to the quality of the soil, to the value of the crop on the market and to the time needed for the plantation, but in general, the rent of one field varies between £ E 250 and £ E 400.

The seasonal rent takes place, usually, for the cultivation of free cash crops, tomatoes in sector A, summer potatoes in sectors B and C, and haricot in the three sectors. Under this system, the peasant renting the plot use it only for a specific period of time and has no right over the land as no official papers are signed. On the other hand, the reason the contract is not officially declared is to avoid any form of taxation and to avoid any intervention of the state or the law. Thus, the owner protects the right of ownership of the land, and avoids, thus, the possibility of a permanent stay of the peasant on the land, which can be justified on the basis that the owner has no right to evict the tenant.

This system is frequently adopted between the owners and landless or the holders of agricultural land, in order to overcome the restrictions imposed by the law on the owner if his land is rented in a tenancy form, or on the sharecropper who is obliged to share the product with the owner. In any case, seasonal rent is also a means of access to land for the cultivation of free cash crops, and seldom does it take place for the cultivation of compulsory crops, as their revenue cannot cover the costs of the high rent.
The case of Hag 'Adham illustrates many aspects implied in the seasonal rent. By renting the land cultivated by tomatoes on a seasonal basis, Hag 'Adham is no longer a sharecropper and the deal is concluded with the owner on this basis. From the owner's position, the deal is convenient because he receives a total sum of £ 450 for the rent of one field and a half over six months during the period of tomato cultivation without sharing the costs of production and without having to take care of the marketing of the crop. In his turn, Hag 'Adham assumes all the expenses needed for the cultivation with the exception of the cleaning of the irrigation and the drainage canals, but still participates at the end of the season in these costs as a sharecropper.

Two sons of Hag 'Adham migrated to Libya and Iraq in the 1970's to work in the construction sector as wage labourers. Thus, with the remittances of their sons, the family started to expand the seasonal rent. Hag 'Adham and his wife supervise the production of tomatoes on the plot on which they are sharecroppers as it is near their house. The three sons undertake the works on five and half fields they rent in different parts of the sector. At the end of the season, they collect the crop, higher trucks to transport the merchandise to different market places in the cities, where they deliver it to a commission merchant who sells it whenever the price is convenient. The commission merchant charges a commission of 7% on the value of the sold merchandise, in exchange of providing the space on the market. Thus, the seasonal rent allows Hag 'Adham to expand his activities and to get involved in the marketing of agricultural production.

The seasonal rent allows Hag 'Adham and his family to raise a considerable income that covers the costs of living of the three families throughout the year and counterbalances the low income raised from the production of the compulsory crops. He adds that his share of the compulsory crops cultivated over the year is used for the household consumption, with the exception of cotton. The
household's expenses in cash are paid from the income of the cultivation and the
marketing of tomatoes on a seasonal rent. In fact, the income is shared between
four families: Hay 'Adham and his wife, his three sons' and their families, as each
member contributes with his labour in the agricultural works of the land. Hay
'Adham believes that without the participation of the members of his sons'
families, he would have never been able to cover both the agricultural production
on separated plots of land, and the marketing of tomatoes. However, this does not
exclude the fact that they hire wage labour for the agricultural operations of cotton
and tomatoes.

Many sharecroppers in this sector take recourse to seasonal rent as their revenue
from the compulsory crops is already low. There are always possibilities of
having access to a plot cultivated by tomatoes on a seasonal rent basis because the
distribution of the crops on each basis allows the cultivation of tomatoes every
year in the sector. Even on a small level of one holding, the peasants divide their
plots into two parts in a way that tomatoes can be cultivated every two years on
one of the two plots instead of every four years.

Seasonal rent requires a considerable capital for the payment of the rent, for the
costs of production, especially since in this form of access to land the peasant who
rents the land is not entitled to buy the inputs from the Bank of the Village at the
official price because he is not a holder. Thus, he is compelled to purchase them
from the market at a higher price. Meanwhile, the owner buys his quota of inputs
to be used for another cultivation or to be sold at a higher price on the market.
Often the peasants cannot provide the needed capital, in which case a group of two
or three peasants participate together in the rent of the land, and the cash required
is divided equally among them. This formula takes place depending on the
financial conditions of each and on the available member of the members of the
family who can work on the land. Therefore, as tomato cultivation requires a
large number of workers, the provision of unpaid labour from the members of the household is an important factor which contributes to the reduction of the cost of production.

Seasonal rent, is a form of access to land that has emerged from the necessity of counterbalancing the low income raised from the compulsory crops. It may also take place for the purpose of raising cattle, in the case of herain cultivation. In any case, seasonal rent is a costly and expensive means of access to land which is compensated by the reduction of the share of paid labour through the use of unpaid labour from the members of the family. Hence, a large family is necessary to undertake as much as possible the needed work in exchange of sharing part of the net profit.

In conclusion, the types of agricultural production prevailing in sector A have determined the forms of access to land. The existence of the largest ownerships in Batra in this sector was directly related to the cultivation and the marketing of cotton. Similarly, the existence of Leh is also related to the existence of large ownerships which the landowners could not manage without the existence of the necessary labour. Furthermore, the prevalence of sharecropping as an official form of access to land, rather than simple tenancy, is the outcome of the development of ownership based on cotton cultivation. These phenomena are a specificity of sector A, while the forms of access to land prevailing in sectors B and C are determined by different ecological and agricultural conditions.

3.2. The Emergence of Landownership by Peasants from Batra, in Sectors A and B

It was not until the 1930's that peasants from Batra started to purchase agricultural
land, when large landowners sold agricultural land to cover their losses from the drop in the cotton prices. The first peasant families to purchase agricultural land in this period were living in Beira, and bought small plots located in the same sector. Among these families, are the 'Umar family and Sheikh al-Balān's family. Therefore, it would be interesting to follow the development of their holdings and the economic activities revolving around agriculture which contributed in their access to these positions. Among these families are the Husamani, and the Hamman family who at the present time hold important positions in the village.

3.2.1. The Husamani family

Haj Husam is one of the members of the Husamani family and is regarded as one of the most important figures in the village, although he does not occupy an official position. The members of his family are, originally, peasants from Beira, involved in agricultural production only. At the beginning of the century, one of its members was hired by the company as a supervisor of agricultural labour. Progressively, he was able to purchase a small plot, as he was given payment facilities by the company. The grandfather of Haj Husam was able to expand his property during the inter-war period, and after his death his son, the father of Haj Husam, inherited six faddhas in sector B and six cows.

During this period, many conflicts took place in the village on the position of 'Umar, because more than one family had access to agricultural land in the form of ownership. In fact, the political conflicts on the national scene were reflected on the village level and translated in the conflict between these families on the position of 'Umar (Chapter III). The Girgis family maintained this position for over 40 years, as they were supported by the Wafd Party. Therefore, when the Husamani family presented one of their members as a candidate to the position, they had to be supported by another important political party that had access to power.
Thus, the Hussein became a member of the Sa'idi Party, and registered the family's property in his name in order to reach the fixed ceiling of ten feddans. After ensuring both a considerable size of ownership and political support from Cairo, and after gaining the confidence of the people in Beira, he presented himself for the position. Given the political instability of the Egyptian regime, Hussein maintained his position as long as the Sa'idi Party was in power, and he was removed when the Wafd party was in the government. However, this led to the division of the village into two parties: the Hussein party and the Girgis party. Meanwhile, the Hussein family began to expand its economic activities and by the late 1940's started to get involved in the marketing of crops, in particular tomatoes.

The expansion of their commercial activities together with their agricultural production was made possible because of the presence of the eldest son, Hag Hussein Hussein, who took in charge his father's affairs and supervised his younger brothers. The latter understood that agricultural production cannot be separated from the marketing of crops and that profit was essentially made in the marketing process. Thus, he related the agricultural production directly to the market conditions. The cultivation followed a rotation cycle which allowed the shift from one crop to the other depending on the market prices. Moreover, the fact that he undertook directly both the production of the crops and their marketing allowed him to make a higher margin of profit, and this was also made possible by the presence of a large number of family members who were working with him. Until the early 1950's he was involved in both the production of cotton and grains, and was starting to cultivate tomatoes. Therefore, when the state intervened directly in the production and the marketing of crops in the 1950's, he was able to shift to the cultivation of vegetables: potatoes and tomatoes, as both are free cash crops cultivated in both sectors A and B where his ownership is located. On the other hand, as a field merchant, he, progressively, started to store his merchandises
After the death of the father in the 1980s, the climate of the village, he was to...

With changes and adjustments to the short term

Hence, the share owners of good health because of the high ranking people.
facing social problems.

3.2.2. The Hammam family

The Hammam family is an important family in Beira, which in the past few years had access to the position of 'Ummah after the refusal of Hag Husni. The Hammam family is a large family whose total ownership exceeds 150 holdings at the present time, registered in the name of its members. Parts of their ownership were bought in the middle of 1930's, in sector B, when landowners sold parts of their ownerships. Like many peasants in the village, they had access to agricultural land in the form of tenancy, in sector B, in the 1940's which they bought during the agrarian reform laws. They also bought agricultural land in sector C, cultivated by free cash crops, from the absentees landowners in the course of the 1950's. In addition to their purchase of agricultural land, they expanded their activities to cover a poultry station and the marketing of agricultural crops in the 1950's. In fact, one of its members became in the course of the 1970's a field merchant of citrus fruit, but his activities remain on a small scale when compared to other field merchants in the village.

The family expanded its economic activities in Beira, and became the first supporter of the Husmani. Marriage alliance between the two families was a means of consolidating this support against their rivals. Although they reached the highest official position in the village, the Hammam family is not influential as the Husmani or as other families who do not hold government positions or have such large ownerships. Yet, they acquired their social status through their connection and with their support of the families in power. (Chapter III)
3.3. Investments in Reclaimed Land, Sector C

The historical development of ownership in sector C finds its origins in the distribution of agricultural land by the Bahara Land Company. Sector C was a fallow region, covered by reeds and inundated annually by the flood. It was not until the early twentieth century, when the company established its works in sector A for the digging of al-Sahil canal, and for the purchase of land for improvement, that the works for the adjustment of the land and the creation of irrigation and drainage networks started in sector C. With the accomplishment of the works, the company sold the reclaimed land to absentee landowners. (Chapter III)

According to a contract of property partition, dated on the 24th of February 1914, signed by the company and three buyers, a surface of 351,01.08 feddans was sold by the company to an Egyptian living in Disuk, a Greek living in Mansura, and an Egyptian living in Cairo. The first bought 175,12.16 feddans, the second and the third each bought 87,18.08 feddans. The contract showed that the value of the agricultural land varied between £.E 65 and £.E 115 per feddan. Similarly, the inhabitants of Betra confirmed that the agricultural land sold by the company in sector C was only bought by foreigners or by Egyptians living in the cities, who were either involved with the company's works or were absentee landowners investing in agricultural land and in the marketing of crops.

As compared to sector A, the purchase of agricultural land in sector C took place on a smaller scale not exceeding 200 feddans at the most. Because there was a limited surface of reclaimed land and cotton cultivation was not possible, investments in agricultural production and in marketing had to be based on other crops. Under these conditions, the forms of access to land in this sector followed a different course than the rest of the sectors. They were related to the cultivation
of vegetables, in particular potatoes and fruit. This factor largely determined the prevalence of certain forms of access to land, especially after the agrarian reform laws, when peasants acquired agricultural land. After the abolition of the cotton stock market and the monopoly of the state over its marketing, merchants oriented their activities to the marketing of free cash crops.

In this respect, the following section will focus on the development of one of the largest family ownerships of agricultural land in the sector, which invested its capital in the production of vegetables—potatoes—and citrus fruit, and managed to maintain a large proportion of its ownership during the agrarian reform laws. However, in the course of the 1960's, parts of the property were sold to peasants from Batra as a measure of avoiding sequestration. This allowed a small group of peasants and merchants to expand their production of free cash crops and their commercial activities, and progressively establish themselves in the village as an influential group.

3.3.1 Ownership

'Abdul Raziq Fakhri, originally an owner of a large property in Disuk, a region based on the cultivation of cotton, rice and, wheat, was one of the first buyers of agricultural land in the sector. The purchase of land in reclaimed regions was not only related to investments in agricultural land, but was essentially related to the cultivation of potatoes, as that was becoming an important commercial crop by the early twentieth century.

Potato cultivation was first introduced in the early nineteenth century under Muhammad 'Ali, but it was not successful as the plants were affected by many diseases. By the end of the nineteenth century, with the high taxaton imposed by the state on producers of tobacco, an important export crop in Egypt, the
cultivators had to replace it by another export crop. It was under these conditions that 'Abdil Razîq Fakhri, together with another tobacco producer travelled to France where they imported potato seeds in an attempt to reintroduce its cultivation in the Delta. In the beginning, its cultivation covered small areas located on the banks of the Nile. But by 1914, with the beginning of the First World War and the increasing number of British troops based in Egypt, a new market for potato producers was created and they became the first suppliers of the British army, which led to the expansion of its cultivation. (Sirki: 20)

It was in this perspective that Fakhri purchased 175 feddans of agricultural land in Batra: 120 feddans were located in sector C and the rest was located in sector B. The land located in sector C was cultivated by potatoes, summer vegetables, and bananas. Citrus fruit were introduced later on in the early 1930's. In sector B, the land was rented to peasants from Batra under tenancy where cotton was the main summer crop. However, agricultural production in sector C faced many problems as a result of the annual flood that submerged the banks of the Nile for almost three months in summer and rendered summer plantation very difficult. In summer, many measures were adopted to reduce as much as possible the effects of the flood on the plants. The property was divided into small basins, dykes were made parallel to the Nile on different levels of the land to prevent water from submerging the land, and water pumps were installed on the banks to pump the excess water during the flood. All these measures required a large number of wage labourers, working night and day, to control the dykes and the water leakages. It also required a high capital to cover the high costs of production. Despite all these difficulties and the high costs of production, the quality of the land allowed a high margin of profit as the production and the marketing of the crops were successful.

Fakhri had a daughter and three sons, one of whom was in charge of the land in
Batra; the two others were in charge of the land in Disuk. After the death of Fakhri in 1932, the ownership was distributed among the heirs. Zaki, the one in charge of the ownership in Batra, concluded an agreement with his sister and his brothers to group his inheritance of agricultural land in Batra and thus he inherited the largest part of the ownership. While each of his two brothers and sister owned an average of 20 feddans.

In the course of the second half of the twentieth century, the agricultural production of the property was intensified and diversified according to the marketing conditions. Citrus fruit plantation expanded gradually to replace potatoes, as peasants became acquainted with its cultivation, and as it proved to be highly profitable on the market. Yet, it was only cultivated in the inner parts of the property protected by dykes, as the flood would have destroyed the trees. However, banana cultivation was conditioned by its market price in a way that it was not cultivated on regular basis like orchards. Moreover, because bananas are not permanent crops and the trees are removed annually to make space for the new ones to grow, their plantation on the banks of the Nile was not as risky as orchards. Thus, the agricultural production on the property was oriented to the cultivation of free cash crops based on a diversification of the crops according to the marketing conditions. On the other hand, the management of the property was highly controlled as the owner supervised directly the agricultural operations.

The ownership of the Fakhri in sector B covering 55 feddans remained under tenancy as it was cultivated by cotton and winter vegetables. Thus with the introduction of new crops in the region: citrus fruit and bananas, the local marketing channels started to grow. The emergence of citrus fruit and banana field merchants in Batra and the expansion of their activities was directly related to their access to agricultural land cultivated by permanent crops. The progressive rise of field merchants in Batra, as an important group, took place in a very
complex way and over a long period of time. It was directly related to the period when large landowners had to sell their excess agricultural land under the agrarian reform laws.

In the late 1940’s, the sister of Zaki Fakhri, sold her share of 21 faddans located on the borders of Zaki’s land. In the beginning, the brother and the sister tried to reach an agreement over the selling price of the land, but she was offered a higher price by one of the members of the Gavdat family in Batra. The selling of the plot, to this family from Batra, created endless disputes between the brother and the sister which reached the courts of law. This meant that nearly 21 faddans were sold and the remainder 154 faddans were left to the three brothers. Two brothers were not married, and after the death of one of them in the late 1950’s, his share was taken by Zaki to be added to his original ownership. By that time, agrarian reform laws began to be promulgated restricting the ownership per family. Zaki started by selling 55 faddans under tenancy to the tenants. The 55 faddans were sold to 46 persons who were originally holders of the plots. The price was paid on installment, and the value of the land was reduced by half because it was already occupied by tenants. In an attempt to avoid the sequestration measures, as the size of Zaki’s holding still exceeded the ceiling fixed by the agrarian reform laws, he tried to register the plot acquired from his late brother in the name of his daughter and son. But the process of registration took more than one year, because of the administrative procedures, which allowed the committee of sequestration time to investigate the question and to claim the right of sequestration over the land.

Under these conditions, he sold an additional 15 faddans in sector C as a preventive measure against the agrarian reform laws. The ownership was, thus, reduced to 85 faddans, located in sector C, gathered in the same area and cultivated by citrus fruit, bananas, and other fruit. After the death of Zaki in 1959, the property was divided between his daughter and his son, who became the manager of the
property. However, despite efforts at maintaining the property under direct
management by the owners, one feddan out the 35 feddans constituting the
ownership of the Fakhri, has remained under tenancy until the present time.

3.3.2. Tenancy

As previously explained, tenancy is a form of access to land officially registered in
the local agricultural cooperative under the name of the holder. Under the tenancy
form, the tenant has the right of utility over the agricultural land in exchange for a
rent fixed at seven times the value of the tax on the land. Under this system, the
owner has no right to evict the tenant unless he stops paying the rent or mis-uses
the land. On the other hand, the owner has the right to change the rent contract
from tenancy to sharecropping, if the tenant transforms the agricultural
production from a rotation cycle to a permanent crop cultivation or free cash
crops without the agreement of the owner. Thus, under ordinary conditions, an
owner of a plot would not have recourse to this system given the terms of the
contract which limits the direct use of the land by the owners.

In the case of Fakhri, the rent of one feddan in tenancy took place under specific
conditions due to ecological factors. Every year, a large part of the bank of the
Nile was flooded by water in summer. During this time, the land was cultivated
by bananas with the exception of a long narrow strip which was cultivated by
vegetables. This specific area was annually submerged with water as it is lower
than the rest of the area. After a strong flood one summer of the early 1950's,
Zaki Fakhri decided to rent this plot to the gardener of bananas who was in charge
of the entire area. The idea was that Nigma, the gardener of bananas, would rent a
feddan parallel to the Nile that would be long enough to border a large part of of
the property, so that when the flood arrived, Nigma would take the necessary
measures to protect his own plantation, and would consequently protect the land
located behind it. In other words, it was a means of ensuring a regular and permanent protection from the flood without undertaking the necessary work. It would be done by a worker who is in charge of the land in the area, and who would, also, benefit from the production of the winter crops.

However, as the effects of the High Dam were felt after the agrarian reform laws, the owner did not pay attention to the rented faddan located in the middle of his ownership. Under the pressure of selling his excess land, Fakhrī concentrated his efforts on selling land in other areas, forgetting, thus, about this faddan. Meanwhile, the children of Nīma inherited the rent of the plot. In the same time, it was too late to exchange the rent of this plot to another which would have not been in the middle of the property. It was not until the late 1950's, and the early 1970's, that the flood stopped and it was possible to cultivate citrus fruit and bananas. By that time, the tenants had begun to transform their cultivation from a rotation cycle based on potatoes to banana plantation. However, the owners did not attempt to transform the rent from tenancy to sharecropping because the holder had become the field merchant of the product of the property, and thus mutual interests were involved.

Over the years, as the price of bananas increased on the market, the holders started to make considerable profits from its cultivation, while the owner received a rent of £.E 70 annually, the latter began to negotiate the value of the rent with the holders who agreed to increase it to £.E 1,000 a year. However, the main reason the holder agreed to increase the price was that he had an interest in maintaining good relations with the owners as their property was the largest property from which he bought the merchandise.

In conclusion, despite the partition of land due to inheritance and despite the agrarian reform laws which compelled the owners to sell their excess land instead
of having it sequestrated, the ownership of Fakhri remained gathered in one area and was exploited directly by them through hired wage labour. The main difference between the development of Hag Khalil’s property and the Fakhri’s ownership is that the first was divided and progressively liquidated by Hag Khalil’s heirs over a period of 50 years. This was the result of the absence of the owners from the region, and the result of the system of subletting the land. Similarly, it was the result of a total dependence on the cultivation of one crop: cotton. Therefore, in the absence of the owners and with the promulgation of the agrarian reform laws, together with the monopoly of the state over cotton, the ownership was divided and the owners had no economic interest in holding it.

While in the case of Fakhri’s ownership, the owners were constantly present in the area, although they were living in the cities. They attempted to gather the ownership whenever partition occurred and they directly managed the agricultural production. Moreover, they immediately reacted during the 1950’s to avoid sequestration, proceeding by eliminating the spreaded plots and the less fertile areas, while gathering in the same besie the best agricultural land.

However, in the course of this process, the Fakhri were certainly affected by the low selling price of the land, as it was sold under cas de force majeure. The land sold, in sector C, was mostly cultivated by free cash crops, from which 20 feddans were cultivated by citrus fruit and the rest was cultivated by vegetables. During this time, these crops had already been commercialised under favourable conditions as the system of government monopoly over strategic crops: cotton, rice, wheat, maize, onions, garlic, sugar cane, etc, have been strongly established and peasants were looking for more profitable crops. On the other hand, the cultivation of fixed crops was not common among small holders because it was basically cultivated in sector C, where most of the land was owned by large absentee landlords. Therefore, in a period when the local marketing channels of
free cash crops began to be established, and in a period when Fakhri as well as other owners in the same sector began to sell their excess agricultural land already producing highly profitable crops, many peasants took the opportunity of purchasing agricultural land in the sector. Thirty-five feddans of the Fakhri’s ownership were sold in sector C to 19 peasants, either to landless workers, or to holders of small plots or to merchants of citrus fruit and tomatoes from Baita. The land was sold in small plots, with the exception of two large orange merchants who bought more than ten feddans each.

Three peasants bought between 2.05 and 2.23 feddans, seven families bought between 1 and 1.18 feddan each, and seven other families bought between 0.11 feddan and 0.22 feddan. Out of the 19 peasants who bought agricultural land from the Fakhri, seven of them were working on the property as wage labourers hired on seasonal terms, or hired on the basis of a monthly salary. As mentioned earlier, the 35 feddans were sold gradually over six or seven years beginning in the middle of the 1950’s, and the price of one feddan of agricultural land in the area reached £ E 900 by 1958-59. Yet, the price was paid on installment over three years, which allowed the small peasants to cover the price. Although the plots were bought in the name of one holder, several members of one family contributed to the purchase of the land; women sold their jewelry, brothers gathered together to raise the capital required, and friends participated in the purchase of the land.

3.4. The Expansion of Landownership by Peasants in Sectors B and C

3.4.1. Ownership by peasants

'Azat has been working for Fakhri since 1942. He started as a bookkeeper, and learned, gradually, the accounts of the land. At the present time, he is responsible
for the purchase of chemicals and fertilisers, the storage of inputs, and their
distribution on the land. 'Izat did not own agricultural land until the late 1950's,
but he was a tenant on one and a half fadad in sector B cultivated by winter
potatoes and maize.

During the agrarian reform, when Fakhri was selling his rented plots in the sector,
'Izat bought his rented holding for £.E 900, for which he paid the price over three
years time. Part of the price of the land was paid in cash which he borrowed from
his friends, another part was raised from selling his wife's jewelry, and the rest of
the price was paid from the profit made on winter potatoes. He, also, managed to
buy a small plot of one fadad and 17 qirats in sector C from the Fakhri property,
during the agrarian reform. This plot is located in the inner parts of sector C,
near the dyke, in a basin lower than the rest of the land surrounding it. This
location has generated serious water problems which have affected, considerably,
the productivity of the land and its price. (Chapter III) Furthermore, the shape of
the land was a problem for undertaking the agricultural operation, because it is a
long narrow rectangle which cannot allow a tractor to turn on it during ploughing.
In fact, the owners sold this plot because it was not cultivated by permanent crops,
a nd it was a weak area given the accumulation of water during drainage. (Chapter
IV) (Fig. IV.2)

However, 'Izat managed to expand his ownership in the same basin in order to to
achieve, more easily, his agricultural operations. His neighbour, Hag Husni
Husnani, was selling one fadad and six qirats, which he offered to 'Izat to buy.
'Izat found in Hag Husni's offer a good opportunity to reach his objectives. It
would be a means of grouping his ownership in an area where it was possible to
cultivate permanent crops, especially since he had acquired a very long experience
in their cultivation from his position on Fakhri property. Moreover, given the
fact that the plot is located near the property of Fakhri where he is working daily,
it would be easier for him to undertake its cultivation and it would allow him to use the facilities of the property. Finally, the contacts he established during his work for Fakhri with the field merchants, permitted him to find marketing channels for his citrus fruit. With such ideas in mind, 'Izat sold his plot of one feddan and a half in sector B to a peasant from the village, for £E 16,000. With the price of the land, he bought the plot of Hag Husni and, thus, expanded his ownership in the sector to two feddans and 23 qirats.

'Izat started the cultivation of orchards in the early 1980's, and for nearly four years he maintained the cultivation of winter and summer potatoes and onions, until the trees started producing. The marketing of potatoes is undertaken by a field merchant from Batra who is specialised in the marketing of potatoes, oranges and bananas. The same field merchant had been buying the product of Fakhri's property for over 15 years. As for the onions, 'Izat used to sell them in Alexandria, but after two bad seasons during which the crop was destroyed as a result of climatic conditions, he stopped cultivating them. Thus, he concentrated his efforts on summer potatoes and, progressively, converted his cultivation to orchards.

In addition to the land he bought in the 1950's, his wife inherited from her father 21 qirats in sector B. His wife is the daughter of the 'Umida's brother and her family was involved in the marketing of vegetables. After her death, the land remained registered in the cooperative of Batra under her name, but in reality it was added to 'Izat's ownership, which amounted to two feddans and 23 qirats in sector C, and 21 qirats in sector B. In fact, 'Izat did not register the land his sons and daughter inherited from their mother in their names to avoid paying the fees of registration and the taxes on inheritance. Although he inherited the smallest portion of the inheritance, since his children are the first heirs of their mother, 'Izat remains the only direct beneficiary of the land.
Like 'Isat, Rushdi has been working for the Fakhri since 1937. He started as an assistant clerk, and was promoted until he progressed to supervisor of the property. Rushdi was landless until the early 1950's, when he bought one feddan and six qirats, in sector B at the borders of the village, for £E 400 from an absentee landowner. This part of the territory is known to be a weak land. A few years later, in 1955, he was offered to buy one feddan and 12 qirats in sector B, near the centre of the village. The price of the land was paid from the annual income of the crop cultivated on his ownership. However, by 1957, when Fakhri was selling parts of his ownership in sector C, Rushdi offered to buy two feddans and six qirats, and the price was fixed at £E 1,800 per feddan because the land was not rented. He sold the plot located on the borders of the village for £E 1,500, with which he paid the deposit on the land, and the rest was paid over three years in installments of £E 850 annually. Thus, by the early 1970's, Rushdi owned three feddans and 18 qirats located in separated basins and sectors.

Like many other holders in sector C, he converted his plantation to permanent crops, because they require less labour over the year than vegetables, and their marketing channel is already established with the citrus fruit field merchant of the Fakhri's property. However, the other plot, located in sector B, remained under the cultivation of summer potatoes in winter, and maize, rice, or cotton in summer. Rushdi rents out the plot located in sector B on seasonal terms, as he cannot undertake the agricultural operations. This is due to the fact that the land is located far from his house and his work, and that he cannot provide unpaid labour from his household, as Rushdi has only one son who graduated from university and is working at the present time in the Bank of the Village. However, until two years ago he used to rent the plot to peasants from the village, but since the return of his son from Lebanon, where he was working on a farm, he now rents the plot to his son for the cultivation of summer potatoes.
'Abdil-'Aziz and Mahmud followed a different way to buying their plot. Both of them have been working on the property of Fakhri since the 1950's. Mahmud is responsible for the household work of the owner's house, and 'Abdil-'Aziz was responsible for the cattle station. Both were working on a permanent basis for Fakhri. Each one of them is the head of a large family comprising nine members. In the 1960's, there was one feddan and one qirat on sale by Fakhri; they decided to buy it together and divided between the two of them. The price of the feddan was estimated at £.E 1,800. However, the main problem they faced was the presence of a tenant on the land. On the one hand, this situation was in their favour because it meant that the value of the feddan was reduced by half. But, on the other hand, they had to find a means of evicting the tenant from the land.

Mahmud and 'Abdil-'Aziz managed to pay the owner £.E 400 as a deposit, and the rest was to be paid on installment. In the same time, they rented half the land from the tenant on a seasonal rent agreement for the plantation of green peppers for which they paid £.E 50. At the end of the season, not only did they refuse to deliver the 12 qirats rented to the tenant, but they claimed their right of ownership over the rest of the land. This meant that they became at the same time the holders of a seasonal rent of half the land, and the owners of the entire plot.

The tenant presented a complaint against them to the Local Agricultural Cooperative, claiming that he was the holder of the land and that they were trying to evict him. A committee constituted of important members of the village was formed to investigate the dispute. The committee decided that both owners should pay the tenant the sum of £.E 150, in exchange for evicting him from the land. It was not until a dispute took place between Mahmud's and 'Abdil-'Aziz's families, ten years after they purchased the land, that the ownership was divided between them. The main problem they faced, in the division of ownership, was the
unevenness of the level of the land which rendered part of it lower than the other. Given this factor, the division took place on the basis that the lower level is equivalent to a larger part than the higher one. Because of this 'Abdil-'Aziz took 11 qirats representing the higher level, and Mahmoud took 12 qirats, one qirat more than his friend to compensate for the difference in the quality of the land.

3.4.2. Ownership by field merchants

In addition to the peasants who purchased small plots of agricultural land in sector C, field merchants of fruit and potatoes were the first buyers of agricultural land in the sector. This took place in the late 1950’s and the early 1970’s, when peasants or ex-cotton merchants turned to the marketing of profitable crops.

Hag Latif Nigma was among the purchasers of agricultural land in the sector. He is the son of Nigma, the gardener of bananas on the Fakhri property, who expanded his activities to cover the marketing of citrus fruit. By the purchase of land in sector C cultivated by vegetables, he acquired some of the best agricultural land in the territory and expanded his lucrative business. Through the purchase of land in this area, Hag Latif ensured his regular presence on the Fakhri property, the largest field from which he buys his merchandise. Therefore, the buying of land in this sector was an indirect means of having access to the property of Fakhri, located on the borders of his land, and a means of producing free cash crops.

It is to be noted that, indirectly, the location of his land near the property was an important factor in his commercial affairs, allowing him to maintain his relations with the owners through, for example, irrigation or other aspects of agricultural production that joins the interests of the landowners in the same basin. Likewise, the fact of being in the neighbourhood allows him to be informed of what is
happening on the property concerning the selling of the crop or other matters affecting the marketing of the production. Although this factor may seem unimportant, but it is to be considered given the high competition between the small number of citrus fruit field merchants who monopolize the small number of large properties cultivated by citrus fruit.

It was in the late 1960's, when Hag Latif bought nearly ten feddans from Fakhri cultivated by vegetables. The ownership was bought with the capital he raised from the marketing of bananas of the Fakhri property, and like the rest of the purchasers he was given payment facilities. Hag Latif is the head of a large family including four brothers who work on permanent terms with him; together they were able to expand their activities through the marketing of agricultural crops. Starting from the 1970's, Hag Latif bought the entire annual production of the Fakhri property, and thus over the years he monopolised the marketing of their crop. Given the large size of the property and its high production, Hag Latif could not afford to pay the total price on his own. Through his connections with the small peasants in Batra from whom he buys the crop, he collects from each a share of cash, with which each participates in the buying price of the crop. At the end of the season, each participant in the capital receives a proportional share of the profit.

Through marketing and commerce, Hag Latif expanded his holdings to reach at the present time 30 feddans located in sectors C and B cultivated by free cash crops. Furthermore, in the early 1980's, he started investing in the food security projects promoted by the Bank of the Village. On two feddans of agricultural land located in sector B, he constructed a cow station for meat and dairy products, in addition to a large poultry station. These projects were financed through loans provided by the Bank of the Village on the guaranty of his ownership.
Hag Latif Nigama has become one of the largest field merchants in the village, and one of the largest owners of agricultural land in Batra, on whom many small peasants' and paddlers merchants' households depend for their economic activities. Through his connections in the village institutions, through the job opportunities he offers to many landless workers, through the marketing possibilities he offers to paddle merchants from the remainder of his merchandizes, and through the marketing channels he offers to small peasants involved in free cash crops, Hag Latif acquired an important position in the village. Many peasants' families are devoted to him and his family, in exchange for his financial business and his social support.

Hag Lutfi Kataha and his family are considered the richest family in Batra and the major competitor of Hag Latif Nigama on the market. Originally they were peasant owners of small plots of agricultural land, and during the agrarian reform laws three brothers bought together 12 faddans cultivated by citrus fruit in sector C from Fakhri. The purchase of the land cultivated by permanent crops introduced them into the markets, as they undertook the direct marketing of their crops in the cities. Although Hag Lutfi and his brothers are partners in the land he is the head of the family and the manager of their financial affairs. Their commerce expanded as peasants and large landowners in Batra, and in other governorates, oriented their production toward fruit, and their ownership increased to reach 75 faddans located in the three sectors of Batra.

In the 1980's, Hag Lutfi and his relatives turned to investment in food security projects. They built a large egg factory in the centre of the village, with a capacity of 15 million eggs annually. Given the size of the project, which was constructed by an Italian company, part of the cost was provided by the Bank of the Village in Batra by a loan in the amount of £.E 1,110,000 and representing 30% of the total loans provided by the bank in Batra in 1982. The rest of the capital was provided
by other banks in the cities with the participation of other members of the family working in Cairo (Chapter IV).

Thus, with the size of his financial affairs, his marketing and his ownership, together with his connections in the cities, Hag Lutfi became an influential figure in the village. Given the potential of his affairs, he became the first rival of Hag Latif in the market in Batra, as Hag Latif cannot compete with him on his own. On several occasions, they were confronted with each other in open auctions for the selling of fruit in the fields; and Hag Latif had to collaborate with other field merchants, whom he brought from other governorates, to compete with Hag Lutfi's prices. However, Hag Lutfi Hataba is not a figure often seen in the village streets or on social occasions, unlike Hag Latif who maintains his public and social relations in the village.

4. The Expansion of Access to Land in Reclaimed Land: al-Mayati Land, Sector C

In addition to the access to land in sectors A, B, and C, the peasants of Batra had access over the years to a narrow long strip located below the bank of the Nile called al-Mayati land (Chapter III). This particular area covers nearly 15 feddans and is subject to specific ecological conditions and is located directly on the Nile below the dyke (Fig. III.4). This location rendered this area subject to the flood of the Nile, to the extent that it disappeared under the surface of the water. This land borders the territory of Batra along the Nile and is some of the best agricultural land in the area because of the alluvial deposits of the river. For a very long time, it was only cultivated twice a year, and used as a landing stage for the boats on the Nile.
It is difficult to estimate the size of this area because of the effect of the Nile on it, the width of the land changed from one year to the other depending on the conditions of the flood. However, after the construction of the High Dam, its width depended on the peasants' possibility of expanding the land from the side of the river. The use of this section of agricultural land took place over a very long period of time, during which a number of peasants seized small plots, not exceeding four or five qirats, on which they cultivated vegetables twice a year. They progressively expanded the width of the land whenever the level of the Nile was low until the annual flood stopped permanently. After the completion of the High Dam, the holders officially rented the land from the government.

Muhammad is an irrigation pump mechanic, and is in charge of two large water pumps in sector C. He and his brother inherited the job from their father, who worked on an irrigation pump located on the dyke of the Nile. As the father was usually stationed in this area, he cultivated a plot of four qirats in al-Mayyati land, in the early 1950's. Whenever the level of the Nile dropped, he expanded the width of the land by adding soil and leftovers of bananas and oranges to the water. Despite these efforts, the flood of the Nile used to destroy the agricultural work in summer. However, this expansion was meant to increase the surface of the land cultivated for two seasons.

Starting in the 1960's the government charged the users of agricultural land in these parts an annual rent equivalent to seven times the tax on the basis of the surface. In the late 1960's, when the flood was permanently stopped, Muhammad progressively expanded the four qirats to reach, by early 1981, 16 qirats. This corresponds to the time when the government allowed the holders to buy the plots of land they used. The government price of Muhammad's 16 qirats was fixed at £.E 6,400, on the basis of £.E 400 per qirat, which was to be paid over ten years
time. Nevertheless, ownership of the land did not stop the holders from expanding their plots on an average of one qirat annually.

Every year, Muhammad covers ready areas of the river next to his land with soil, until it reaches the level of the land. The cost of expanding four qirats reaches £ 450, which is spent on soil, on labour, and on the rent of a tractor for leveling the land. In fact, the four qirats he added were not included in the price of the 16 qirats he bought from the government. Instead, they are considered rented land on which he pays an annual rent to the government. Every year a government commission measures the surface of the plot for each holder in this area, and registers the additional land on which they are to pay an annual rent. With the stopping of the annual flood, and with the expansion of the size of the land, most of the holders have converted their cultivation from vegetables into fixed crops and bananas. There is no government control on the agricultural production in this area, as the government has no control over there source of irrigation.

Nevertheless, the main problem lies between the holders of these plots, and their neighbours whose agricultural lands constitute their borders. al-Mawati land is located two or three metres below the dyke and the neighbours' land is located on the dyke. (Fig. III.4) In the process of expanding their plots, the al-Mawati holders take the soil they use from under the dyke, thus saving the high price of buying soil from the market. However, the removal of the soil from under the dyke affects the agricultural land above the dyke, which soon becomes subject to collapse. In other words, not only do they expand their land at the expense of the river, but at the expense of their neighbours.

These occurrences have provoked many disputes between the two sets of holders but the problem has not yet been resolved. In the beginning the 15 fields that constituted the al-Mawati land, were taken in small plots of less than 12 qirats.
The peasants who seized the land were either working in the neighbourhood as waged labourers, or were fishermen who had a permanent access to this area. However, when the owners of agricultural land on the dyke felt the effect of the removal of soil from under their land, they tried to buy the land from the holders; but the latter refused or demanded high prices reaching £ E 70,000 per feddan.

In conclusion, the examples given of the development of the forms of access to land in Batra by the different social groups show that, until the early 1950’s, only absentee landowners and small groups of peasants, who were initially involved in the works of the company and later on expanded their activities to cover the marketing of crops, had access to agricultural land in the form of ownership. Whereas, tenancy and sublease were a form of access to land adopted by absentee landowners for the cultivation of cotton. However, ownership was the prevailing form of access to land in sector C, where fixed crops were cultivated, as the absentee landowners were the only beneficiaries of the product of the land.

After the agrarian reform laws and after the direct intervention of the government in the agricultural production, many absentee landowners who depended on cotton production and who expanded their ownership on this basis were the first to be affected by these changes. As a result, the small landowners and holders became the main beneficiaries of the agrarian reform laws, as they were able to raise the needed cash to buy the land. Landless labourers who were working for absentee landowners also had the possibility to purchase agricultural land as they were given payment facilities. Furthermore, because of the direct control of the government over the majority of the agricultural production, the peasants turned to the cultivation of free cash crops. Within this context most of the owners or holders of agricultural land cultivated by compulsory crops turned to seasonal rent as a means of producing free cash crops.
Seasonal rent is a form of access to land adopted in sectors A and B for the plantation of profitable crops, such as tomatoes, potatoes, and barsum. Moreover, this form is often adopted by the holders of agricultural land in the form of sharecropping in sector A, as, in addition of cultivating compulsory crops, they share the profit with the owner. In this case, the sharecroppers receive half the net profit of a compulsory crop, which price is fixed by the government at a lower price than the market price. Finally, as the marketing network of free cash crops has been established in the village and many channels have been created through individuals, seasonal rent remains the primary means by which the peasants can increase their income from the land. Therefore, seasonal rent becomes an alternative form of access to land for the holder, rather than landownership. From the owners’ position, it is a means of having a high rent without commitments, and without the intervention of the government. Meanwhile, his legal rights over the land are maintained.

Given the fact that seasonal rent is not a registered form, and given the fact that it takes place on seasonal terms, it is very difficult to estimate its size. Yet, its existence reflects the importance attributed to the marketing of agricultural production under specific state policies. According to peasants adopting the seasonal rent form, in many cases the size of the land rented on a seasonal term exceeds the size of the peasant’s initial ownership. Moreover, the high monetary circulation in the village, due to the expansion of trade and to the seasonal labour migration to Arab oil countries, allows seasonal rent to take place on a considerable scale, as it requires an outlay of cash. Similarly, many peasants and merchants, owners of agricultural land, found in the promotion of food security projects, especially in the increasing number of cattle stations, an opportunity to rent their plots in a seasonal rent form for the cultivation of barsum. In this particular case, where the land is rented for green fodder, the rent is not necessarily given to peasants from the village. Owners of cattle stations come
from different villages in the surroundings of Batra to rent plots for the cultivation of barson.

The importance attributed to the seasonal rent, and its prevalence in certain areas more than in others, was as an adaptation by the peasant under certain state policies at a given historical time. This was also the case with the formation of the 'izba system, in certain areas, which was a form related to the cultivation of cotton. As shown in the course of this presentation, the variety of forms of access to land prevailing in Batra reflects both the specificity of the region and the strategies adopted by the landholders and peasants to counter government policies. Therefore, it is possible to conclude that by no means can aggregate data and statistics reflect the dynamics of peasant strategies with regard to the wider economic system, nor can it illustrate the specificity of the land which to a large extent, in conjunction with state policies, determines the form of access to land.

Furthermore, it has been shown how the household members and the availability of unpaid wage labour contribute in conditioning the form of access to land and the choice of the cultivated crop. All these factors cannot be considered in isolation as they are intertwined, and each factor conditions, in one way or another, the rest of the factors. Taken in their totality these factors contribute to the reproduction of the peasant's households, and to the accumulation of wealth through marketing. As has been shown, the rise of field merchants, who constitute the richest category of peasants in Batra, was not related to the size of their ownerships; instead, it was directly related to their access to highly profitable crops on the market. The changes in government policies with regard to both the pricing policy of crops and to the control of crop rotation, led to the orientation of most peasants to free market crops, and consequently the economic position of the field merchants was promoted.
5. A Preliminary Socio-economic Categorisation of Batra

From the previous account on the development of the forms of access to land in Batra, a preliminary categorisation of the socio-economic groups can be drawn. The following categorisation is based on figures advanced by the Local Agricultural Cooperative concerning the distribution of holdings in their various legal forms in Batra. (Table V.1-2) Despite the fact that these figures lack accuracy, as stated earlier, and despite the fact that they do not illustrate the various informal forms of access to land, they can still provide an approximate indication of the different categories of holders. Similarly, these indications, as well as the observations conducted during the fieldwork study, can be used to estimate the size of each category, including those who are not officially registered.

By examining tables V.1-2, three categories of holders can be identified within different sizes of holdings. (Table V.3) However, it should be pointed out, that within this categorisation the holders of between one and three feddans, and those of between three and five feddans, were grouped in table V.3 under the category of holders of between one and five feddans, as they are the main group in the rent form. Similarly, the category of between five to 10 feddans, and those of more than 10 feddans, identified in tables V1-2, are grouped under the category of more than five feddans, as they are absent in the rental form and are close enough numerically in the two other categories.
Table V.3: *The Distribution of Official Holdings in Batra in Percentage*

<table>
<thead>
<tr>
<th>Category</th>
<th>Total Holders</th>
<th>Total Holdings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 feddan</td>
<td>52%</td>
<td>14%</td>
</tr>
<tr>
<td>Between 1 &amp; 5 feddans</td>
<td>42%</td>
<td>49%</td>
</tr>
<tr>
<td>More than 5 feddans</td>
<td>6%</td>
<td>34%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>97%</td>
</tr>
</tbody>
</table>

* These figures are based on tables V.1-2

According to the above table and to tables V.1-2, the total number of registered holdings in Batra comprises of 1160 holders. Similarly, on the basis of the average size of the household, which numbers 5.5 members according to the Local Health Unit in Batra, the total number of inhabitants having official access to agricultural land reaches 6380 inhabitants. This number represents 41% of the entire population of Batra, counting 15,697 inhabitants, as stated previously. (Chapter III)

On the other hand, it has been established by previous studies, that nationally those having access to land unofficially and living under the worst economic and social conditions, range between 20% and 28% of the total Egyptian rural population. (Hansen & Radwan, 1983:151-152) If this figure is taken into consideration, given the lack of recent figures concerning Batra, it can be argued that nearly three fifths or 60% of the population has in one form or another a direct access to land. If this is the case the effective proportion of the various categories in Batra having access to land in various forms would certainly exceed the number provided officially, and is estimated to reach 9519.

From the above figures it can be argued that of the total number of those having access to land in Batra, approximately 70% have access to land officially and unofficially in the category of less than one feddan, i.e. 6466 inhabitants, and they
constitute 41% of the total population. On the other hand, the category of between one and five feddans constitutes approximately 25% of the total number of those having access to land, and represents 17% of the total population of Batra. Finally, those having access to land of more than five feddans represent 4%, and constitute 2.5% of the entire population.

From the rest of the population it can be deduced, on the basis of the fieldwork, the official statistics advanced by the C.A.P.M.A.S. and the previous chapters, and given the fact that Batra is a highly commercialised area, that nearly one fifth of the population is involved in marketing on various scales and in different networks. Thus, the remaining fifth is estimated to be working in private enterprises, in government positions, pursuing their education, serving in the military service, or migrating to Arab oil countries. (C.A.P.M.A.S, 1987)

In fact the figures concerning the categories of those who have access to land in its various forms, show that the agrarian reform did not reduce the size of the small peasant households as claimed. (Chapter II) Contrary to previous expectations, these figures are close to those advanced by Hassan Riaz prior to the first agrarian reform, in which the size of the official landless labourers and those exploiting less than one feddan reaches 79%. Likewise, those who exploited between one and five feddans constituted 15% of the rural population, and finally those who exploited more than five feddans represented 5% of the rural population. (Riaz, 1964:15-17) This means that the impact of the changes in state policies during the last three decades has been to promote middle sized units of production and reproduction, and that the position of the privileged units production and reproduction of more than five feddans has been consolidated through a number of forms of market relations.

After presenting a rough estimate on the various socio-economic categories of the
village, it is plausible to focus on the characteristics of each category involved in the different forms of access to land in Batra.

1) Small peasant producers: this category includes the small peasant household of less than one feddan who have most access to land following the agrarian reform, and who were previously wage labourers working for absentees landowners. In most cases, they do not live from the income of the land, but continue to work as wage labour. The land they exploit is located in areas where there is direct control by the government over the type of production, but they adopt various means to produce for the household consumption, and partly for the free market. They do not necessarily legally own the plot they cultivate, as they may have the right of utility over the land in the form of tenancy or sharecropping or in through some other unofficial arrangement. The members of the household perform directly the agricultural operations on the land. On the other hand, credits in cash are scarce given their low income from the fixed prices of agricultural production, and the limited sources of income from their daily wages in agriculture. Although they have limited links with external institutions and markets, they remain integrated in the marketing network through their occasional production of free market crops, and through their incorporation into the labour market.

For the category of small peasant households, both non-commodity and commodity relations are essential for their production and reproduction. Yet there is very little possibility of expansion given their lack of necessary resources and, therefore, the limited economic diversification on the level of production or in non-agricultural activities can only contribute to the survival of the household.

2) Petty peasant commodity producers/merchants: This category includes those who have access to between one and five feddans. They emerged after the
agrarian reform as they were tenants on the properties of the large absentee landowners. During their work on these farms, they had access to agricultural land producing free cash crops. This category is based on a family household enterprise which is involved in the marketing network. The form of access to land is diversified, varying between ownership and tenancy, and it may include sharecropping, and occasional seasonal rent. They manage and work directly the land on the basis of the available members of the household. In some cases, when family members are not available for the agricultural operations, they have recourse to other forms of arrangements in which the land can be leased in a seasonal rent form, or exploited in a sharecropping arrangement taking place on seasonal terms.

Agricultural production is characterised by an intensive diversification of production dominated by free cash crops. The members of the household work the land, and hired labourers are engaged when extensive agricultural operations are required. Cash may be scarce, therefore it is provided through the reduction of cash expenditure, through the use of non-commodity relations, and through loans supplied from various sources. They are largely involved in market relations, though on a small scale, but these relations determine largely the type of production. They are also involved in non-agricultural activities, namely in the marketing of crops. They rely on non-monetary and monetary relations for agricultural production and marketing, yet their capacity for expanding their enterprise remains limited given the limited access to credits and the high competition on the free market.

3) Farmers / field merchants: This socio-economic category is divided into two sub-categories:

a) Farmers-field merchants: This category includes the holders of more than five fields. It encompasses small peasant merchants who were able to expand
their activities during the agrarian reform when the absentees landowners sold their agricultural land. They are extensively involved in the marketing of agricultural production, and most of their wealth derives from market transactions. Their access to land is mostly in the form of ownership, but involves extensive seasonal rent for the expansion of the production of free cash crops. They rely extensively on the family members, and on their loyalty to the head of the family for the management of their enterprises. This category includes the most influential figures in the village, and those who manipulate the political scene. They may not be appointed to official posts, but control those who occupy these positions. Their external relations are extensive covering regional areas, government employees and high ranking officials. A few of them are involved politically in the ruling party, and their external political and economic relations are indispensable for the expansion of their enterprises. Thus, the diversification of their economic activities within commodity and non-commodity relations is high, and the diversification of the forms of access to land is necessary for the expansion of their enterprises. Therefore, non-commodity and commodity relations are equally important for their economic expansion, and for the consolidation of their political position.

b) Farmers (absentee): This group includes a very limited number of absentee landowners families, within the category of more than five feddans, who succeeded in retaining part of their property after the agrarian reform. They were able to save part of the property by distributing their ownership to other members of their families, by diversifying their production, and relating it to free cash crops. Ownership is the dominant form of access to land, and the expansion of their agricultural enterprises are basically vertical through the increase of production and the marketing under the best conditions. This type of enterprise is managed by a manager with a few permanent workers, and the use of seasonal hired labourers. Finally, this category is no longer influential in the village, as was the
case before the agrarian reform, nor does it assume a political role. It only maintains the necessary relations in order to assure a secured regular production and marketing. In fact, these relations are necessary given their absence from the village.

From the above discussion, it can be concluded that the persistence of the small peasant households, representing the dominant socio-economic category living under harsh conditions, was possible under a highly commercialised socio-economic setting because of the extensive use of non-commodity relations. However, for the other categories the use of these relations bears different significance. Similarly economic diversification takes different forms according to their socio-economic position. Therefore, and as will be shown in the following chapters, the combination of commodity and non-commodity relations adopted by the various categories under a highly commoditised economy reflect the numerous strategies adopted to cope with external conditions related to state policies, and to internal conditions related to the unit of production.

Nevertheless, the forms of access to land represent one level in the process of agricultural production. The various relations underlying the forms of access to land reflect one side of the relations which cannot be seen in their different aspects unless the organisation of agricultural production on the level of the unit of production is examined in detail. Therefore, the following two chapters will be devoted to the study of the organisation of agricultural production within the forms of access to land presented in this chapter.
1- Based on the figures provided by the Local Agricultural Cooperative in Batra, 1984.

2- Given the difficulty of following the historical development of the forms of access to land in Batra over a relatively long period of time, and in the absence of documents, the information gathered on this question is based on oral accounts.

3- The effect of the world economic crisis of the late 1920's on Egyptian cotton producers will be discussed in the following chapters.

4- The author further elaborates on the question in the following terms:

The tendency to lease became widespread after the Second World War, rising from 1.73 percent of the land in 1939 to 60.7 percent in 1949 and then to 75 percent in 1952. In fact, the average yield per feddan was £.E 17 in 1947-48, while the average rental was £.E 40! The result, of course, was a skyrocketing of rentals- 472 in 1950-51, based on an index of of 100 for 1938-39 -and of land prices, the feddan rising to £.E 800, although its real value was in the neighborhood of £.E 200. There was a host supplementary means of exploiting the peasants: multiple taxes and tolls, a rise in rentals to match the rise in the price of cotton, short-buying of crops at prices below those on the market, the sale of fertilizer, the rental of machinery, and usurious loans to the peasants. (Abdel-Malek, 1968: 58-59)

5- Source: the Local Health Unit in Batra, 1985.

6- The reduction of the property was probably due to selling, because Hag Khalil died long before the agrarian reform laws. However, people in the village could not remember what happened to the remaining 100 feddans.

7- The Islamic law of inheritance gives the man double the share of a woman, and the wife is given one eighth of the inheritance. However, it seems that Hag
Khalil's wife was given a larger share than what is fixed by the law.

8- It should be pointed out that the price of the seasonal rent is not based on the effective size of one feddan, which is of 29 qirats or 4,200 m², instead it is measured on 20 qirats or 3,500 m². The difference of 700 m² represents the alleys, the irrigation and the drainage canals that are not cultivated. This is due to the fact that the rent is paid on the basis of the effective cultivated surface and on the value and the quantity of crop produced on the land and not according to the size of the plot.

9- Disuk is a centre located in the north of the Delta, and attached to the governorate of Kafr al-Shikh.
CHAPTER VI

The Organisation of Agricultural Production in Batra, Sector C

The forms of organisation of the different units of agricultural production imply a variety of monitory and non-monitory relations, under the state policy. As argued previously, the three sectors of Batra reflect a regional diversity resulting from the ecological specificity of the territory. Thus, within this specificity, and under the state policies, differences among the agricultural producers have been generated. The state agricultural policy, in its two facets, has contributed in increasing these differences, as one aspect of the policy is concerned with the compulsory crops, and the other with free cash crops. These aspects are not separated, nor are they applied independently; they are part of the larger framework of the state economic policies.

It has been established that state economic policies in the agricultural sector are enhancing commoditisation and, in the process, external relations to the unit of production at the village level has been increased. (Chapter II-III) These external relations take a number of forms, and the extent to which the various categories of producers are involved in external relations depends upon a number of factors
related to internal organisation and to state policies. Likewise, the various categories of producers adopt different forms of strategies to counter government directives and marketing conditions. These strategies, as will be shown, are characterised by extensive forms of diversification in production, which bears different significances for the various categories. As such, these strategies combines both commodity and non-commodity relations, generated from external and internal conditions, and are essential to the reproduction process. The present chapter will attempt to show how changing state agricultural policies affect the local production relations, and how it contributes in increasing socio-economic differentiation. This will be shown through the various forms of agricultural organisation and production relations, and through the strategies adopted by the various categories for countering these constraints.

In this context, the following two chapters will examine the implications of state policies on the organisation of production in the three sectors of Batra. This chapter will, first, examine the production of free cash crops concentrated in sector C, while the following chapter will examine the organisation of production of compulsory crops concentrated in sectors B and A. The division of this discussion into two chapters is technical, given the length of the detailed information gathered on these questions.

In order to examine the process of agricultural production of the various crops, a detailed examination of specific case studies is required. Similarly, in order to depict the relations of production implied in the organisation of production, covering both non-monetary and monetary relations, it is necessary to embark on a discussion of the significance of the different aspects of this organisation. Therefore, the examination of the process of agricultural production and its organisation, in these chapters, will be based on the unit of production, the household, and not on the examination of a crop on a unit of land. In fact, a
number of factors determines the relations of production: mainly the participation of the members of the household unit in the production of specific types crops on a specific unit of land. These factors are interrelated with the prevailing market forces and state policies.

In this perspective, this chapter will first examine the impact of the state policies over the agricultural production on the national level. The crop composition in Barra and its distribution among the three sectors constitutes the framework within which the case studies will be located. A detailed discussion of the organisation of production under different conditions will be presented through three different case studies. The first case study presents the organisation of production on a small plot cultivated by one type of permanent crop, where members of the household do not participate extensively. The second case study illustrates the organisation of production, on a small scale, by a large household unit where the members are extensively mobilised to undertake the cultivation of a variety of crops, including permanent ones. Finally, the third case study describes the organisation of production on a large farm owned by an absentee landowner, who produces for the local and the international markets.

1. State Policy in the Organisation of Agricultural Production

Among the changes that altered the agricultural sector during the 1970's and the early 1980's, were the transformation and the reorganisation of the crop pattern in order to meet the needs of the open-door economic policy. The basic idea was to diversify the Egyptian agricultural production, and to promote agro-industrial projects that would attract foreign investments. Gradually, the private sector was
given a large opportunity to invest in such fields through the credit and the subsidy system, while state control over many aspects of agricultural production, marketing, and pricing systems was reduced. (Chapter II)

Fruit, vegetables, flowers, medicinal and aromatic plants as well as fodder for meat and poultry production gained ground over the surface cultivated by strategic crops, controlled by the state, for the supply of the emerging agro-industrial projects. The credit and the financial system, became reoriented towards the promotion of private projects and highly profitable agricultural investments on the short term, the agricultural crop pattern as well as the pricing policy were, thus, modified accordingly. (Chapter III) The government encouraged the plantation of free cash crops: fruit, vegetables, and barsim, without any constraints until 1985, when restrictions were imposed to protect the areas cultivated by strategic crops. Meanwhile, the government determined the area cultivated by strategic crops: cotton, wheat, onions, and maize, and maintained its monopoly over the marketing of cotton and rice at specific prices based on the local inputs.

Under the slogan of “qualitative change”, the 1970’s and the 1980’s witnessed a considerable decline in the area devoted to compulsory crops in favour of free cash crops. Figures show that cotton, a summer crop, was the first crop subject to decrease; while vegetable cultivation witnessed a noticeable increase during the same period. (Tab. VI.1.2) The increase in the surface devoted to vegetables is the result of the marketing policy. Vegetables are sold on the free market and, therefore, replace the area devoted to a number of compulsory crops. Vegetable production is not subject to government restrictions, nor does it comply with a compulsory crop rotation cycle or a condition pricing policy. Nevertheless, the cultivation of vegetables can only be undertaken in specific areas, due to climate and soil conditions, and to market forces. Therefore, many peasants who are unable to cultivate vegetables turn to green fodder cultivation, barsim, for meat
production, given its high profitability. Barsim is always marketable, as meat production has been one of the major projects promoted by the food security policy.

Dry fodder for animal growing was to a large extent imported by the private sector and sold on the market at a subsidised price. However, under the economic crisis and with the difficulty of raising hard currency, the government reduced the quota of imports of dry fodder and subsidies were removed. As a result, the quantity of summer fodder available on the market could not cover the demand of the animal producers. Meanwhile, peasants who could not cultivate free cash crops turned to the cultivation of wheat and maize to be partly sold on the free market as fodder, in order to counterbalance the low prices fixed by the government. Despite this fact, the surface of wheat was slightly reduced as compared to cotton, and to rice from 1979 to 1984. (Tab.VI.1.1-1.3)

A contradictory situation, thus, emerged due to government pricing policy: instead of using wheat as flour for human consumption, peasants sell a proportion of the crop on the free market as fodder, since the price of the subproduct of wheat, straw, is sold at a higher price on the free market than the price of wheat fixed by the government.

On the other hand, the expansion of maize cultivation took place, to a large extent, at the expense of rice in the Delta. Both rice and maize are summer crops cultivated predominantly in the Delta during the same period, yet they are not under the same government pricing policy. Although rice represents one of the most important elements of nutrition in Egypt, figures show that the area devoted to its cultivation decreased as a result of the government intervention in fixing the price of the crop at a a lower rate than the market price, while the price of maize remained free on the market. (Tab.VI.1.3)
Table VI.1.1: Surface of Cultivated Winter Crops in Egypt

The area cultivated by major crops between 1952 and 1984, by 1,000 feddans:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Durum</td>
<td>11,402</td>
<td>11,305</td>
<td>11,391</td>
<td>11,326</td>
<td>11,400</td>
<td>11,374</td>
<td>11,320</td>
<td>11,178</td>
<td>-7.00</td>
<td>-15.97%</td>
</tr>
<tr>
<td>Beans</td>
<td>355</td>
<td>330</td>
<td>288</td>
<td>276</td>
<td>282</td>
<td>314</td>
<td>326</td>
<td>307</td>
<td>-1.50</td>
<td>-8.02%</td>
</tr>
<tr>
<td>Barley</td>
<td>137</td>
<td>N.A</td>
<td>107</td>
<td>96</td>
<td>91</td>
<td>108</td>
<td>121</td>
<td>151</td>
<td>-0.30</td>
<td>-8.02%</td>
</tr>
<tr>
<td>Lentils</td>
<td>58</td>
<td>47</td>
<td>22</td>
<td>151</td>
<td>121</td>
<td>121</td>
<td>151</td>
<td>181</td>
<td>-1.25</td>
<td>-68.96%</td>
</tr>
<tr>
<td>Flax</td>
<td>13</td>
<td>69</td>
<td>681</td>
<td>52</td>
<td>371</td>
<td>391</td>
<td>321</td>
<td>321</td>
<td>+0.50</td>
<td>+146.15%</td>
</tr>
<tr>
<td>Onions</td>
<td>26</td>
<td>21</td>
<td>281</td>
<td>23</td>
<td>211</td>
<td>31</td>
<td>251</td>
<td>251</td>
<td>-0.03</td>
<td>-3.84%</td>
</tr>
<tr>
<td>Barism</td>
<td>12,202</td>
<td>12,748</td>
<td>12,777</td>
<td>12,711</td>
<td>12,778</td>
<td>12,705</td>
<td>12,737</td>
<td>12,807</td>
<td>+18.90</td>
<td>+27.47%</td>
</tr>
<tr>
<td>Garlic</td>
<td>91</td>
<td>N.A</td>
<td>131</td>
<td>161</td>
<td>121</td>
<td>111</td>
<td>141</td>
<td>151</td>
<td>+0.18</td>
<td>+66.66%</td>
</tr>
</tbody>
</table>

* Includes full season and short season barism.

Sources:
1. Collected and calculated according to the figures of the Department of Statistics - Agricultural Economic Research Centre. (Al-Ahram Iktisadi, 1982:19-21)
Table VI .1.2: Surface of Cultivated Summer Crops in Egypt

The area cultivated by major crops between 1952 and 1984, by 1,000 feddans:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cotton</td>
<td>11,967</td>
<td>11,627</td>
<td>11,196</td>
<td>11,245</td>
<td>11,178</td>
<td>11,066</td>
<td>1098</td>
<td>984</td>
<td>-30,701% -49.97%</td>
</tr>
<tr>
<td>Rice</td>
<td>374</td>
<td>1,142</td>
<td>1,040</td>
<td>972</td>
<td>956</td>
<td>926</td>
<td>903</td>
<td>983</td>
<td>+19,001% +162.83%</td>
</tr>
<tr>
<td>Barley</td>
<td>11,704</td>
<td>11,504</td>
<td>11,885</td>
<td>11,907</td>
<td>11,923</td>
<td>11,935</td>
<td>11,952</td>
<td>11,975</td>
<td>+8,401% +15.90%</td>
</tr>
<tr>
<td>Sorghum</td>
<td>433</td>
<td>500</td>
<td>471</td>
<td>410</td>
<td>413</td>
<td>383</td>
<td>393</td>
<td>365</td>
<td>-2,101% -15.70%</td>
</tr>
<tr>
<td>Soybeans</td>
<td>N.A.</td>
<td>31</td>
<td>100</td>
<td>83</td>
<td>109</td>
<td>144</td>
<td>147</td>
<td>125</td>
<td>+8,701% +406.66%</td>
</tr>
<tr>
<td>P energia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INERG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sugar</td>
<td>92</td>
<td>186</td>
<td>249</td>
<td>253</td>
<td>251</td>
<td>254</td>
<td>250</td>
<td>244</td>
<td>+4,701% +165.21%</td>
</tr>
<tr>
<td>Sugarcane</td>
<td>252</td>
<td>747</td>
<td>1,021</td>
<td>1,074</td>
<td>1,027</td>
<td>1,036</td>
<td>997</td>
<td>1,024</td>
<td>+24,501% +306.34%</td>
</tr>
<tr>
<td>Vegetables</td>
<td>231</td>
<td>342</td>
<td>361</td>
<td>368</td>
<td>390</td>
<td>404</td>
<td>434</td>
<td>10,601% 361.70%</td>
<td></td>
</tr>
</tbody>
</table>

** Includes summer and winter potatoes.

Sources:
1. Collected and calculated according to the figures of the Department of Statistics - Agricultural Economic Research Centre. (Al-Ahram Iktisal,1982:19-21)
Table VI:3: Average Rate of Change in the Surface of Cultivated Crops from 1952-1984

<table>
<thead>
<tr>
<th></th>
<th>Average</th>
<th>Rate of Change</th>
<th>Average</th>
<th>Rate of Change</th>
<th>Average</th>
<th>Rate of Change</th>
<th>Average</th>
<th>Rate of Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wheat</td>
<td>-5.30</td>
<td>-6.91%</td>
<td>-9.07</td>
<td>-9.73%</td>
<td>-42.60</td>
<td>-15.31%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beans</td>
<td>-1.30</td>
<td>-7.04%</td>
<td>0.06</td>
<td>-6.96%</td>
<td>3.80</td>
<td>+6.59%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barley</td>
<td>N.A</td>
<td></td>
<td>N.A</td>
<td></td>
<td>N.A</td>
<td>+3.80</td>
<td>+17.75%</td>
<td></td>
</tr>
<tr>
<td>Lentils</td>
<td>0.60</td>
<td>-23.40%</td>
<td>-2.07</td>
<td>-61.70%</td>
<td>-0.80</td>
<td>-18.18%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flax</td>
<td>N.A</td>
<td></td>
<td>N.A</td>
<td></td>
<td>N.A</td>
<td>+7.40</td>
<td>-59.63%</td>
<td></td>
</tr>
<tr>
<td>Onions</td>
<td>N.A</td>
<td></td>
<td>N.A</td>
<td></td>
<td>N.A</td>
<td>+0.80</td>
<td>+19.04%</td>
<td></td>
</tr>
<tr>
<td>Barley</td>
<td>+30.30</td>
<td>+24.79%</td>
<td>+4.21</td>
<td>+2.14%</td>
<td>+6.00</td>
<td>+1.08%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Garlic</td>
<td>N.A</td>
<td></td>
<td>N.A</td>
<td></td>
<td>N.A</td>
<td>+0.40</td>
<td>+15.38%</td>
<td></td>
</tr>
<tr>
<td>Summer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cotton</td>
<td>-18.80</td>
<td>-17.28%</td>
<td>-45.92</td>
<td>-39.52%</td>
<td>-42.40</td>
<td>-17.72%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rice</td>
<td>+42.60</td>
<td>+205.34%</td>
<td>-11.35</td>
<td>-13.92%</td>
<td>-11.40</td>
<td>-13.92%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Halze</td>
<td>-11.10</td>
<td>-11.73%</td>
<td>+33.64</td>
<td>+31.31%</td>
<td>+18.00</td>
<td>+4.77%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sorghum</td>
<td>3.70</td>
<td>+15.47%</td>
<td>-9.64</td>
<td>-27 %</td>
<td>-8.40</td>
<td>-10.31%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soya</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beans</td>
<td>N.A</td>
<td></td>
<td>N.A</td>
<td>+8.71</td>
<td>+4066.6%</td>
<td>+5.00</td>
<td>+25 %</td>
<td></td>
</tr>
<tr>
<td>Pervia-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fruits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sugar</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cane</td>
<td>5.20</td>
<td>+102.17%</td>
<td>+4.14</td>
<td>+31.18%</td>
<td>-1.00</td>
<td>-2 %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vegeta-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fruits</td>
<td>27.50</td>
<td>+196.42%</td>
<td>+19.78</td>
<td>+37.08%</td>
<td>+0.80</td>
<td>+0.39%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fruits</td>
<td>8.20</td>
<td>+158.51%</td>
<td>+13.64</td>
<td>+78.60%</td>
<td>+18.40</td>
<td>+26.90%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sources:

1. Collected and calculated according to the Department of Statistics - Agricultural Economic Research Centre. (Al-Ahram Iktsadi, 1982:19-21)
Table VI.2: Production, Inputs, and Prices of Compulsory Crops from 1965 to 1981

Table VI.2.1: Wheat

<table>
<thead>
<tr>
<th>Year</th>
<th>Average Product</th>
<th>Average Inputs</th>
<th>Average</th>
<th>Yearly In 'Ardab of Production</th>
<th>Price of 1 Feddan</th>
<th>Price of 1 'Ardab</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965</td>
<td>7.41</td>
<td>30.890</td>
<td>4.530</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1969</td>
<td>6.79</td>
<td>39.220</td>
<td>4.910</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1973</td>
<td>9.82</td>
<td>42.190</td>
<td>5.720</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1977</td>
<td>9.37</td>
<td>75.880</td>
<td>8.120</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1981</td>
<td>9.23</td>
<td>152.700</td>
<td>13.770</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Total Price</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1965</td>
<td>33.567</td>
<td>+2.677</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1969</td>
<td>33.330</td>
<td>-5.890</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1973</td>
<td>56.170</td>
<td>+13.980</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1977</td>
<td>76.084</td>
<td>+0.294</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1981</td>
<td>127.097</td>
<td>-25.029</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* 1 'Ardab = 150 kg

Table VI.2.2: Beans

<table>
<thead>
<tr>
<th>Year</th>
<th>Average Product</th>
<th>Average Inputs</th>
<th>Average</th>
<th>Yearly In 'Ardab of Production</th>
<th>Price of 1 Feddan</th>
<th>Price of 1 'Ardab</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965</td>
<td>5.52</td>
<td>29.505</td>
<td>4.910</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1969</td>
<td>5.60</td>
<td>31.490</td>
<td>6.460</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1973</td>
<td>6.51</td>
<td>36.370</td>
<td>8.350</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1977</td>
<td>5.96</td>
<td>64.580</td>
<td>16.330</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1981</td>
<td>5.64</td>
<td>148.750</td>
<td>36.380</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Total Price</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1965</td>
<td>27.103</td>
<td>-2.401</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1969</td>
<td>36.692</td>
<td>+5.292</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1973</td>
<td>54.359</td>
<td>+17.988</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1977</td>
<td>97.326</td>
<td>+32.746</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1981</td>
<td>205.183</td>
<td>+56.433</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* 1 'Ardab = 150 kg
Table VI.2.3: Barley

<table>
<thead>
<tr>
<th>Year of Production</th>
<th>'Ardab</th>
<th>Price of 1 Feddan</th>
<th>Price of 1 Feddan/£</th>
<th>'Ardab/£</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965</td>
<td>8.65</td>
<td>27.732</td>
<td>3.100</td>
<td></td>
</tr>
<tr>
<td>1969</td>
<td>8.44</td>
<td>39.120</td>
<td>3.300</td>
<td></td>
</tr>
<tr>
<td>1973</td>
<td>9.59</td>
<td>29.350</td>
<td>4.720</td>
<td></td>
</tr>
<tr>
<td>1977</td>
<td>9.75</td>
<td>61.060</td>
<td>7.240</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Price</th>
<th>Margin of</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year of Production</td>
<td>Income of</td>
</tr>
<tr>
<td>1 Feddan</td>
<td>1 Feddan</td>
</tr>
<tr>
<td>/ £</td>
<td>/ £</td>
</tr>
<tr>
<td>1965</td>
<td>26.815</td>
</tr>
<tr>
<td>1969</td>
<td>27.852</td>
</tr>
<tr>
<td>1973</td>
<td>44.840</td>
</tr>
<tr>
<td>1977</td>
<td>70.590</td>
</tr>
<tr>
<td>1981</td>
<td>125.457</td>
</tr>
</tbody>
</table>

= 1 'Ardab = 150 kg

Table VI.2.4: Lentils

<table>
<thead>
<tr>
<th>Year of Production</th>
<th>'Ardab</th>
<th>Price of 1 Feddan</th>
<th>Price of 1 Feddan/£</th>
<th>'Ardab/£</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965</td>
<td>4.39</td>
<td>54.042</td>
<td>11.220</td>
<td></td>
</tr>
<tr>
<td>1969</td>
<td>3.23</td>
<td>35.240</td>
<td>15.410</td>
<td></td>
</tr>
<tr>
<td>1973</td>
<td>5.18</td>
<td>41.410</td>
<td>17.980</td>
<td></td>
</tr>
<tr>
<td>1977</td>
<td>3.11</td>
<td>69.590</td>
<td>26.710</td>
<td></td>
</tr>
<tr>
<td>1981</td>
<td>2.69</td>
<td>143.890</td>
<td>67.370</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Price</th>
<th>Margin of</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year of Production</td>
<td>Income of</td>
</tr>
<tr>
<td>1 Feddan</td>
<td>1 Feddan</td>
</tr>
<tr>
<td>/ £</td>
<td>/ £</td>
</tr>
<tr>
<td>1965</td>
<td>48.246</td>
</tr>
<tr>
<td>1969</td>
<td>49.774</td>
</tr>
<tr>
<td>1973</td>
<td>92.618</td>
</tr>
<tr>
<td>1977</td>
<td>83.068</td>
</tr>
<tr>
<td>1981</td>
<td>181.225</td>
</tr>
</tbody>
</table>

= 1 'Ardab = 150 kg
<table>
<thead>
<tr>
<th>Year of Product</th>
<th>Feddan</th>
<th>Total Price</th>
<th>Margin of</th>
<th>Feddan</th>
<th>Total Price</th>
<th>Margin of</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965</td>
<td>150</td>
<td>31.513</td>
<td>3.517</td>
<td>150</td>
<td>39.809</td>
<td>6.622</td>
</tr>
<tr>
<td>1969</td>
<td>150</td>
<td>33.059</td>
<td>3.040</td>
<td>150</td>
<td>40.756</td>
<td>5.754</td>
</tr>
<tr>
<td>1973</td>
<td>150</td>
<td>41.840</td>
<td>6.070</td>
<td>150</td>
<td>45.040</td>
<td>5.040</td>
</tr>
<tr>
<td>1977</td>
<td>150</td>
<td>74.410</td>
<td>9.840</td>
<td>150</td>
<td>85.000</td>
<td>10.660</td>
</tr>
<tr>
<td>1981</td>
<td>150</td>
<td>182.400</td>
<td>12.110</td>
<td>150</td>
<td>174.150</td>
<td>13.130</td>
</tr>
</tbody>
</table>

*1 'Ardab = 150 kg*
### Table VI.2.7: Cotton

<table>
<thead>
<tr>
<th>Year of Production</th>
<th>Average Product</th>
<th>Average Income</th>
<th>Average Price per Peddan</th>
<th>Feddan</th>
<th>Kantar</th>
<th>Margin of Total Price</th>
<th>Year of Production</th>
<th>Average Product</th>
<th>Average Income</th>
<th>Average Price per Peddan</th>
<th>Feddan</th>
<th>Kantar</th>
<th>Margin of Total Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965</td>
<td>5.02</td>
<td>64.375</td>
<td>16.120</td>
<td>5.02</td>
<td>64.375</td>
<td>+16.120</td>
<td>1969</td>
<td>104.451</td>
<td>80.922</td>
<td>+23.529</td>
<td>5.02</td>
<td>64.375</td>
<td>+5.79</td>
</tr>
<tr>
<td>1971</td>
<td>5.43</td>
<td>76.500</td>
<td>19.510</td>
<td>5.43</td>
<td>76.500</td>
<td>+19.510</td>
<td>1975</td>
<td>105.939</td>
<td>80.922</td>
<td>+24.017</td>
<td>5.43</td>
<td>76.500</td>
<td>+4.91</td>
</tr>
</tbody>
</table>

# 1 Kantar of cotton = 157.5 kg

### Table VI.2.8: Rice

<table>
<thead>
<tr>
<th>Year of Production</th>
<th>Average Product</th>
<th>Average Income</th>
<th>Average Price per Peddan</th>
<th>Feddan</th>
<th>Dariba</th>
<th>Margin of Total Price</th>
<th>Year of Production</th>
<th>Average Product</th>
<th>Average Income</th>
<th>Average Price per Peddan</th>
<th>Feddan</th>
<th>Dariba</th>
<th>Margin of Total Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965</td>
<td>2.24</td>
<td>41.960</td>
<td>20.119</td>
<td>2.24</td>
<td>41.960</td>
<td>+20.119</td>
<td>1969</td>
<td>67.727</td>
<td>64.251</td>
<td>+3.476</td>
<td>2.24</td>
<td>41.960</td>
<td>+5.79</td>
</tr>
</tbody>
</table>

# 1 Dariba = 45 kg

Source:
1. Research Centre of Agricultural Economy, Ministry of Agriculture. ('Amin, 1982:35–36)
Similarly, the area cultivated by *barsim*, the winter green fodder, increased during the same period. However, the increase in the surface of *barsim*, as shown, is not as expected, taking into consideration the expansion of the total surface of green fodder annually. (Tab.VI.1.1,1.3) This is due to the fact that the area cultivated by short season *barsim*\(^6\), which usually precedes cotton, was reduced in 1970 from 1,227 million feddans to 990 thousands feddans in 1980, as a result of the drop in the cotton area. Meanwhile, the area devoted to full season *barsim* increased from 1,521 million feddans to 1,722 million feddans. (Al-Ahram Ittisad, 1982:34-36)

Within the logic of the pricing policy in the 1970's, fruit, in its turn, witnessed the highest expansion, as its cultivation represents a means of escape for the peasants from the compulsory crop rotation cycle and a way to have access to the free markets. (Tab.VI.1.2-1.3)

Thus, the figures mentioned above illustrate a noticeable decline in the areas devoted to strategic crops in favour of an increase in the areas cultivated by free cash crops. This phenomena has resulted from the pricing policy adopted by the government that generated differences among the producers of the different crops. The state have fixed the specific price of the compulsory crops which changes slightly from one year to the other, according to the demands of both the world market and the local market. The prices fixed by the government for these crops are close, if not almost identical, to the inputs of production estimated by the government. In some cases, moreover, the prices are below the inputs of production which means that the producer is losing by cultivating the crop. (Tab.VI.2.1-2.8)

One of the most illustrative examples of this situation, is the case of wheat in 1980-81. The the government fixed its price at £.E 13.770 per *Ardab*, which means an average total of £.E 127.697 per feddan, while the inputs of production during the same period reached an average of £.E 152.700, thus a loss of £.E 25.029 per
feddan (Tab.VI.2.1). In fact, the inputs of production of wheat doubled, while the fixed price on the market remained almost stable. This explains, to a large extent, why the areas devoted to wheat decreased by 9,07 thousand feddans from 1970 to 1984 (Tab.VI.1.3) Furthermore, while the government fixed the price of wheat on the local market at a lower price than the inputs of production in 1981, the state imported wheat at nearly double that price, than the local one, reaching £.E 23 per 'Ardab (Amin, 1982:34-36)

Likewise, cotton has been subject to the same policy. Figures show that the average margin of income per feddan varied between £.E 16 and 115 from 1955 to 1981 (Tab.VI.2.7) However, these figures can be misleading because the government's estimations of the inputs of production are based on official figures in which inputs, labour, and rent are supposed to be subsidised prices. In reality, the inputs of production exceed the estimations of the government, which means a decrease in the effective margin of profit (Wali, 1983:18-21)

Thus, the government pricing policy concerning the compulsory crops is based on official figures of the inputs of production, therefore, reducing the margin of income of the producer in order to extract a surplus value. For example, the figures of the Ministry of Agriculture show that the margin of income of a producer of rice per feddan was £.E 19.8, in 1981, while the income of the national economy reached £.E 346.2 per feddan during the same year, a surplus of £.E 326.4 (Wali, 1983:18) On the other hand, a producer who is not confined to the compulsory crop rotation cycle and produces for the free market raises a larger margin of income reaching in the case of oranges, for example, £.E 1,000, or £.E 400 in the case of vegetables. It should be pointed out that the rotation cycle of vegetables is often shorter than the cycle of cotton and rice. Therefore, the cultivation of fruit and vegetables seems to be more advantageous to the peasants than compulsory crops, due to the fact that the price on the free market
covers the effective inputs of production and complies with the fluctuation of the market over a shorter period of time.

The pricing policy, thus, has generated strong gaps among the free market prices and the government prices, and has led to the existence of a double sided system. As a result, the producers try to find ways and means of escape from the compulsory crop rotation cycle which, in its turn, leads to a considerable decrease in certain export crops. The exports of rice dropped from 750 thousand tons to 20 thousand tons. The exports of onions followed the same course dropping from 180 thousand tons to five thousand tons, thus, losing ground on the world market where competition is already strong. (Amin, 1982:36)

Finally, in the light of these policies, a question needs to be asked: how do the peasants organise their production within the agricultural system established by the government which has generated noticeable gaps between the peasants producing different crops?

2. The Organisation of the Agricultural Production in Batra

Like all agricultural areas in Egypt, Batra follows an annual crop rotation fixed by the Ministry of Agriculture that changes annually according to the national needs. In the beginning of the agricultural year, October, the local agricultural cooperative distributes the agricultural requirements of the Ministry of Agriculture over the territory of Batra, with the exception of the urban areas and the basins cultivated by permanent crops. The crop rotation comprises compulsory crops controlled by the state such as rice, maize, cotton, wheat, soya
beans, green beans, flax, and onions. It also comprises free cash crops, which are not directly controlled by the government in terms of marketing, including barqim, and vegetables.

As mentioned previously, an area of 2,403 feddans is cultivated from the territory of Batra. However, the distribution of these crops over the different parts of the territory of Batra is largely determined by the quality of the soil and the access to the irrigation source. Moreover, only the land cultivated by permanent crops is exempted from the crop rotation cycle. According to the 1985 agricultural census, there were nearly 523 feddans cultivated by potatoes, which represent almost 21% of the total cultivated area; and 393.22 feddans cultivated by cotton representing 16%. Wheat covers nearly 335.02 feddans representing 13% of the total cultivated area; followed by barqim covering 321.13 feddans, thus reaching 13%; and citrus fruit covering 269.02 feddans, representing 11%. (Fig.VI.1) Vegetables occupy 198.17 feddans, nearly 8%, and bananas cover 96.13 feddans representing almost 4% of the cultivated area. Soya beans cover only 87.14 feddans, representing 3.6%, and green beans 74.01 feddans, reaching almost 3%. Finally, flax covers 55.01 feddans, representing 2.2%, and onions 48.04 feddans, representing 1.9% of the cultivated areas, with the smallest surface.

It should be pointed out that maize replaces, in summer, the area cultivated by wheat and part of the vegetable cultivation, thus reaching 471.15 feddans, and representing 19.5% approximately. Moreover, rice is cultivated every two years, and replaces cotton to cover 483.01 feddans, representing 20% of the cultivated area. In this case, rice not only replaces cotton but also replaces short season barqim, which precedes cotton. (Fig.VI.1) Although the government’s pricing policy regarding the categorisation of the crops into free cash crops and compulsory ones is rigorous concerning cotton and rice, it seems quite flexible concerning maize and wheat. Their marketing and their prices change from one
year to the next and the peasants are usually not notified until the last moment. So it seems that the government has not yet decided whether they are classified under the compulsory crops or the free cash crops.

Moreover, the figures mentioned above do not match exactly with the figures registered in the local agricultural cooperative in Batra and both in their turn do not match exactly with the surface cultivated in the territory of Batra, namely in sector C. Therefore, one of the important points that should be raised from the previous figures is the distribution of the different crops on the three sectors of the territory of Batra, and the concentration of certain crops rather than others in specific sectors. For instance, by comparing the cultivation of sector A, which covers 50% of the territory of Batra, with the cultivation of sector B, which represents nearly 30% of the total territory, and the cultivation of sector C, which covers almost 20% one will notice that the cultivation of green beans covers 55.01 feddans in sector A, while the rest, 18.21 feddans, is cultivated in sector B.

On the other hand, the cultivation of wheat is concentrated in sector A. Moreover, the share of cotton cultivation in sector A reaches nearly 339.09 feddans, while the remaining surface, of 54.01 feddans, is cultivated in sector B; and the same proportions are valid for the cultivation of rice. Similarly, the cultivation of soya beans and flax are concentrated in sector A. As for the cultivation of barsim, nearly two-thirds of its surface is concentrated in sector A, 221.05 feddans, and the rest, 111.20 feddans, is cultivated in sector B. (Fig.VI.2) Finally, almost half of the cultivation of vegetables is concentrated in sector A, reaching 333.05 feddans, and the rest is distributed between sector B, with 261.20 feddans, and sector C, with 125.20 feddans. (Fig.VI.2) However, the expansion of the cultivation of vegetables in sector A, as mentioned, is quite recent, due to the fact that the holders of a part of basin no. 6 and no. 7, Hud Thabit and Hud al-Ginina, located directly on the main road that joins Mansura with Damietta, made a
Figure VI.1. Crop Distribution in Batra

(Source: Department of Agriculture in Daqahliya)
Figure VI.2. Crop Composition in Batra
demand two years ago to transform the cultivation of their plots from a compulsory crop rotation cycle to a free cash crop rotation cycle based on vegetables. (Fig. III.5) (Fig. VI.2) The permission was granted by the Ministry of Agriculture on the basis of their location in relation to the marketing centre in Batra and on the main road; and only this portion of the basin is cultivated by vegetables, covering almost 42.10 feddans. However, as mentioned earlier, the cultivation of maize replaces wheat in sector A in summer, covering an area of 334.09 feddans and a large part of the vegetable plantation in sector B, reaching 136.23 feddans. On the other hand, the small area devoted to onion cultivation, 41.06 feddans, is concentrated in sector B. Finally, orchards and banana cultivation is entirely concentrated in sector C, and together they cover 365.15 feddans. The rest of the sector, 125.20 feddans, is devoted to the cultivation of vegetables. (Fig. VI.2)

Thus, from what was stated, it is evident that most of the compulsory crop cultivation is concentrated in sector A, while sector B is predominantly cultivated by free cash crops with a small area devoted to compulsory crops, and sector C is basically cultivated by permanent crops and vegetables, both free cash crops. The distribution of the different crops among the three sectors as such, has generated differences among the producers depending on the location of their plots in relation to the source of irrigation. Such differences have in their turn provoked different means, developed and adopted by the peasants depending on their conditions, to fill the gaps and to counterbalance the system. These means vary according to the local conditions of production, of marketing, and mainly according to the government policies that have been characterised for the last decade by their constant change.

In the light of the above, the following section of this chapter will examine how the application of these policies variously affects the peasants producing in sector
C. Similarly, it will examine the means adopted by the peasants for counterbalancing the system. The means adopted differ depending on the conditions of each case study.

3. The Organisation of Agricultural Production in Sector C

This sector is the most fertile in the territory of Batra. It occupies a particular position regarding the type of agricultural production because of its direct location on the Nile. Given this ecological factor, sector C has escaped from the crop rotation cycle controlled by the government. Instead, it is classified under permanent crops, citrus fruit, and bananas, in addition to a vegetable rotation, based on potatoes. (Fig.VI.2) This means that this sector is exempted from the cultivation of cotton. It should be noted that previous attempts at cotton cultivation proved to be a failure as the quality of the soil is not adequate for it. Thus, one of the most common features in this area is the diversification of agricultural production and the possibility of mixed cropping and intercropping during the same season, within the range of the crops cultivated. All these factors have made it possible for the peasants to produce directly for the free market and to shift from one crop to another depending on the market conditions, and the consumption needs.

The crop distribution in sector C shows that the cultivation of citrus fruit and bananas occupies nearly two-thirds of the total surface covered by the sector located parallel the Nile, and the rest of the sector is cultivated by vegetables. (Fig.VI.2) The expansion of these crops on such a scale started gradually in the early 1950’s with the agrarian reform, during which the large
landowners in this sector turned to highly profitable crops, not controlled by the state, as a means of overcoming the losses endured from the measures of the land reform. Citrus fruits were quite profitable and less risky than vegetables. Yet, because the agrarian reform laws were promulgated on different phases, and over a period of ten years, the large landowners were allowed to sell their excess of agricultural land to peasants instead of being sequestrated. Despite the fragmentation of the agricultural land in many parts of this sector, the plantation of citrus fruit not only was maintained by the peasants but expanded to cover plots which were previously cultivated by vegetables. Therefore, this part will focus on the cultivation of citrus fruit on different plots, in which the agricultural operations are undertaken differently. This presentation will attempt to understand how and why peasants transform their cultivation from vegetables into permanent crops. Similarly, it will examine different processes of production and its organisation on different scales, and under different marketing conditions.

3.1. The Cultivation of Orchards on Twenty-Two Qirats

Sa'ed and his brother own a plot of 22 qirats, bought in 1968 from a large landowner. Because they were tenants on the plot, and according to the land reform law the owner has no right to evict the tenant in case of selling the land, they bought the land for half the price at £E 700.

When they bought the plot it was cultivated by potatoes, watermelon, and maize, but they replaced it with oranges, because the plot was surrounded by orange trees, and their cultivation was highly profitable in comparison with other free cash crops. During this time, in the early 1970’s, there were no restrictions controlling such a shift. For four years, until the trees started producing, they grew vegetables under the trees to cover the total expenditure of the oranges cultivation;
this process can be called intercropping. Because Sa'id's neighbour also grows
oranges, the agricultural operations of both are synchronised, especially the
harvesting, since it requires a large number of labourers. With the difficulty of
controlling this number of workers and with the fear of exposing the crop to theft,
both neighbours undertake this operation at the same time to ensure the security of
the crop.

The annual agricultural operations of oranges begin after the end of the
harvesting, in February, after which the trees are pruned. According to Sa'id, the
pruning of 22 qirats on which he planted 130 trees, requires five men and five
women in addition to the brother and himself. Similarly, it requires 300 Ghabit of
manure\(^9\), from which 100 Ghabit were bought from the market at £E 0.50, and
the remainder 200 Ghabit were taken from the ruins of his old house built with
mud. The transport of the 300 Ghabit to the plot was done over six trips for £E
20, including the input of wage labour. The spreading of manure on the land
requires three men, three donkeys, and three children to accompany the donkeys,
in addition to one woman and three men for spreading the fertilisers. Sa'id starts
in June, hoeing the land after it has been left dry for a while; and this operation is
called hoeing on Shari\(\text{\'}ji\) land\(^10\). The hoeing operation on a Shari\(\text{\'}ji\) plot makes
the soil harder and requires seven men. This is immediately followed by the
spreading of chemical fertilisers before the first irrigation.

Concerning the provision of chemical fertilisers from the local cooperative, Sa'id
is entitled to a quota of fertilisers on the basis of his holding card. As the delivery
of the quota is seldom provided on time, he must purchase it directly from the
market at a higher price or use whatever he has been able to save from a previous
cultivation. When he receives his quota from the local cooperative he sells it back
on the market at a higher price in order to cover his expenses. The chemical
fertilisers are put on three times a year; the first time he puts 350 kg of nitrates in
June, followed by 200 kg in September, and finally 200 kg of superphosphate in March. Each time, the spreading is done by one man, either his brother or himself. In September, he sprays pesticides on the trees with a spraying engine which he rents on his holding card from the cooperative at £.E 4.50 a day, in addition to £.E 2.50 for the transport to the plot. But if the cash is not available, or if the engine is not available at the cooperative, he rents it from a field merchant whom he pays at the end of the season. In most cases, the spraying operation is undertaken simultaneously by his brother, his neighbour, and himself, the three of them sharing the price of the rent and of the transport of the engine to reduce the inputs.

The irrigation of the plot is done every 15 days for half an hour to an hour each time, depending on the conditions of the land. If the land is left dry for a long time, as in the case of the first Sharqul irrigation, it would take nearly an hours time; but if it is irrigated regularly, it would require only half an hour. Similarly, the duration of the irrigation depends on whether Sa'id is irrigating alone or with his neighbours. In the first case, the water takes a longer time to fill the canals until it reaches the plot; in the second case, the time taken by the water to fill the canals from the source to the basin is divided among several owners. Sa'id irrigates his land from the pump of a large landowner in the sector. The price of irrigation is calculated per hour, fixed at £.E 1.40 if it is done by the electrical pump; if it is done through the gas pump he is charged £.E 0.60 per hour. The irrigation operation is, usually, undertaken by the neighbour who is more often present in the field than Sa'id and his brother, in exchange, they help him in other tasks on his plot or in administrative procedures at the cooperative.

By the end of December Sa'id starts harvesting. This operation takes two days for which time he hires 12 men for picking the oranges from the trees, and 15 women for carrying the oranges. It should be noted that the picking can be done over a
long period of time depending on the merchant. Sometimes the merchants store
the crop on the trees until the price increases on the markets. But if the time of
the harvesting operation is calculated, it takes two days for the 22 qirats. Sa'id
used to sell his crop to a field merchant from Batra; in 1985 the crop amounted to
two tons of tangerines sold for £.E 0.15 per kg, two tons of sweet oranges sold for
£.E 0.15 per kg, seven tons of Balsid oranges for £.E 0.12 per kg, and seven tons
of naval oranges sold for £.E 0.23 per kg. However, Sa'id and his brother
decided to sell their crop directly on the market starting from the following
season. The idea was to avoid the underestimation of the price by the orchard
field merchant, and to save the share of the intermediary merchant which reaches,
according to their estimations, 10% or more. Nevertheless, according to the
figures estimated by Sa'id, the revenue from the raw product reached £.E 3,050,
and the total expenditure of production including the fixed inputs, evaluated on the
basis of the rent value of the land on the market, reached £.E 705.50. Thus, the
net income was £.E 2,343.50 over twelve months.

The figures of the inputs of production show that the share of inputs: fertilisers,
pesticides, and manure, represent almost 42.58%, amounting to £.E 300.85,
followed by the share of labour, representing 40.09% with £.E 281.25 and,
finally, the share of irrigation and the fixed inputs represents 17.32%, reaching
£.E 122.40. (Tab.VI.3.1-3.2)

As argued, Sa'id relies to a large extent on his brother to undertake the
agricultural operation, as he relies on the coordination of certain agricultural
operations with his neighbours. However, he depends on hiring wage labour, as
the members of his household are not mobilised for the works. Sa'id has two
daughters who moved to their husbands' houses and are no longer part of his
household. Therefore, the neighbour is an important factor for reducing his
expenditure of cash. Cooperation in work and the coordination of certain
agricultural operations becomes indispensable. However, in other cases, as will be shown, the contribution of a large number of household members in the agricultural operations allows a diversification of the production.

Sa'id is not the only one in this sector who has converted his plantation from a vegetable rotation to permanent crops; many other peasants turned to the cultivation of citrus fruit in order to increase their incomes. In the process of conversion, a number of various organisations take place to exploit to the maximum the capacity of the land. Therefore it would be interesting to present another case showing the process of conversion, and the form of organisation adopted in that process.
<table>
<thead>
<tr>
<th></th>
<th>UNIT</th>
<th>NUMBER OF UNITS</th>
<th>CASH EXPENSE</th>
<th>TOTAL EXPENSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. RAW PRODUCT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tangarines</td>
<td>kg</td>
<td>2,000.00</td>
<td>0.15</td>
<td>300.00</td>
</tr>
<tr>
<td>Sweet oranges</td>
<td>kg</td>
<td>2,000.00</td>
<td>0.15</td>
<td>300.00</td>
</tr>
<tr>
<td>Baedi oranges</td>
<td>kg</td>
<td>7,000.00</td>
<td>0.12</td>
<td>840.00</td>
</tr>
<tr>
<td>Navel</td>
<td>kg</td>
<td>7,000.00</td>
<td>0.23</td>
<td>1,610.00</td>
</tr>
<tr>
<td>Total of raw product</td>
<td>kg</td>
<td>18,000.00</td>
<td></td>
<td>3,050.00</td>
</tr>
<tr>
<td>2. VARIABLE INPUTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Man for pruning the trees</td>
<td>Day</td>
<td>7.00</td>
<td>5.00</td>
<td>35.00</td>
</tr>
<tr>
<td>Woman for pruning</td>
<td>Day</td>
<td>5.00</td>
<td>2.50</td>
<td>12.50</td>
</tr>
<tr>
<td>Man for hoeing</td>
<td>Day</td>
<td>10.00</td>
<td>5.00</td>
<td>50.00</td>
</tr>
<tr>
<td>Manure</td>
<td>Ghabit</td>
<td>300.00</td>
<td>0.50</td>
<td>150.00</td>
</tr>
<tr>
<td>Transport of the manure</td>
<td>NA</td>
<td>NA</td>
<td></td>
<td>20.00</td>
</tr>
<tr>
<td>Rent of donkey</td>
<td>Day</td>
<td>3.00</td>
<td>2.00</td>
<td>6.00</td>
</tr>
<tr>
<td>Child for the donkey</td>
<td>Day</td>
<td>3.00</td>
<td>2.50</td>
<td>7.50</td>
</tr>
<tr>
<td>Man for unloading the donkey</td>
<td>Day</td>
<td>3.00</td>
<td>4.50</td>
<td>13.50</td>
</tr>
<tr>
<td>Man for spreading manure</td>
<td>Day</td>
<td>3.00</td>
<td>4.50</td>
<td>13.50</td>
</tr>
<tr>
<td>Woman for spreading manure</td>
<td>Day</td>
<td>1.00</td>
<td>2.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Fertilisers</td>
<td></td>
<td></td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Nitrates</td>
<td>kg</td>
<td>50 kg</td>
<td>11.00</td>
<td>51.70</td>
</tr>
<tr>
<td>Superphosphate</td>
<td>kg</td>
<td>50 kg</td>
<td>4.00</td>
<td>7.20</td>
</tr>
<tr>
<td>Man for spreading fertilisers</td>
<td>Day</td>
<td>1.50</td>
<td>4.50</td>
<td>6.75</td>
</tr>
<tr>
<td>Irrigation</td>
<td>Hour</td>
<td>16.00</td>
<td>1.40</td>
<td>22.40</td>
</tr>
<tr>
<td>Man for irrigation</td>
<td>Day</td>
<td>4.00</td>
<td>4.50</td>
<td>18.00</td>
</tr>
<tr>
<td>Spraying engine</td>
<td>Day</td>
<td>0.50</td>
<td>4.50</td>
<td>2.25</td>
</tr>
<tr>
<td>Transport of the engine</td>
<td>NA</td>
<td>NA</td>
<td></td>
<td>2.50</td>
</tr>
<tr>
<td>Man for spraying</td>
<td>Day</td>
<td>3.00</td>
<td>4.50</td>
<td>13.50</td>
</tr>
<tr>
<td>Pesticides</td>
<td>Litre</td>
<td>120.00</td>
<td>0.56</td>
<td>67.20</td>
</tr>
<tr>
<td>Man for harvesting</td>
<td>Day</td>
<td>12.00</td>
<td>5.00</td>
<td>60.00</td>
</tr>
<tr>
<td>Woman for the collection</td>
<td>Day</td>
<td>15.00</td>
<td>3.00</td>
<td>45.00</td>
</tr>
<tr>
<td>Total variable expenditure</td>
<td></td>
<td></td>
<td></td>
<td>606.50</td>
</tr>
<tr>
<td>3. Expenditure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed Inputs</td>
<td></td>
<td></td>
<td>100.00</td>
<td></td>
</tr>
<tr>
<td>Variable Inputs</td>
<td></td>
<td></td>
<td>606.50</td>
<td></td>
</tr>
<tr>
<td>Total Expenditure</td>
<td></td>
<td></td>
<td>706.50</td>
<td></td>
</tr>
<tr>
<td>4. INCOME</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total price of raw product</td>
<td></td>
<td></td>
<td>3,050.00</td>
<td></td>
</tr>
<tr>
<td>Total Expenditure</td>
<td></td>
<td></td>
<td>706.50</td>
<td></td>
</tr>
<tr>
<td>Net Income</td>
<td></td>
<td></td>
<td>2,343.50</td>
<td></td>
</tr>
</tbody>
</table>
### Table VI.3.2: Breakdown of the Inputs of Production of Twenty-two Qirats of Orchards

<table>
<thead>
<tr>
<th>Labour Origin</th>
<th>Item</th>
<th>Labour</th>
<th>Irrigation &amp; Fixed Inputs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>q</td>
<td>Man for pruning</td>
<td>35.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>q</td>
<td>Woman for pruning</td>
<td>12.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>q x</td>
<td>Man for hoeing</td>
<td>50.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>q</td>
<td>Transport of the manure</td>
<td></td>
<td>150.00</td>
<td></td>
</tr>
<tr>
<td>q</td>
<td>Rent of donkey</td>
<td>6.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>q</td>
<td>Child for the donkey</td>
<td>7.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>q</td>
<td>Man for unloading the donkey</td>
<td>13.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>q</td>
<td>Man for spreading manure</td>
<td>13.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>q</td>
<td>Woman for spreading manure</td>
<td>2.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Man for spreading fertilisers</td>
<td>6.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Nitrate</td>
<td></td>
<td>51.70</td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Superphosphate</td>
<td></td>
<td>7.20</td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>Man for irrigation</td>
<td>18.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>Irrigation</td>
<td></td>
<td>22.40</td>
<td></td>
</tr>
<tr>
<td>o x</td>
<td>Spraying engine</td>
<td></td>
<td>2.25</td>
<td></td>
</tr>
<tr>
<td>o x</td>
<td>Transport of the engine</td>
<td></td>
<td>2.50</td>
<td></td>
</tr>
<tr>
<td>o x</td>
<td>Pesticides</td>
<td></td>
<td>67.20</td>
<td></td>
</tr>
<tr>
<td>q</td>
<td>Man for harvesting</td>
<td>60.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>q</td>
<td>Woman for harvesting</td>
<td>45.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed inputs</td>
<td>Total expenditure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>283.25</td>
<td>300.85</td>
<td>706.50</td>
</tr>
</tbody>
</table>
|               | Share in 2                         | 40.09% | 42.58%                    | 17.32%| 100.00%

- Unpaid labour provided from the neighbours
- Unpaid labour provided from the household unit
- Paid hired labour

3.2. Intercropping and Mixed Cropping on Twelve Qirats

Mahmud followed the same course as Sa'id, 14 years later. However the process of organising the conversion of cultivation is rather complex, since he exploits all...
the maximum 12 qirats during the growth period of the orchards. Therefore, this section of this chapter will deal basically with the process of transforming the plot from vegetable plantation to permanent crops.

Mahmud is an owner of 12 qirats, in sector C, cultivated by oranges, tangerines, pears, barium, winter and summer potatoes, courgettes, and green peppers. He bought the plot in 1969, for L.E. 900 from a large landowner for whom he works on a permanent basis. With the expansion of orchard plantation in the early 1980's, Mahmud found that their cultivation was more convenient in terms of the agricultural operations, marketing, and storage, than vegetables. In 1984, Mahmud began the necessary preparation for the planting of 50 orange trees, 55 tangerine trees, and 60 pear trees, which were supposed to produce within four or five years' time. Meanwhile, he cultivated vegetables under the trees. He divided the 12 qirats into three parts: two parts of two qirats and the third of eight qirats. On the first two qirats he cultivated, in 1985, short season barium, from October to January, followed by summer potatoes until May, and courgettes until September. On the second two qirats he cultivated winter potatoes from October to January, and summer potatoes, followed by courgettes. On the remaining eight qirats he cultivated long season barium from October to May, followed by green peppers. (Fig.VI.3)
Mahmud follows an intensive rotation cycle distributed over the three parts of the plot, which are alternated every year. In other words, it is a biennial rotation cycle covering two years and comprising five different crops. In the three parts, summer potatoes are the major cultivation in winter, courgettes, and green peppers are the major ones in summer. As for long season b茨im, it is cultivated because it is a source of nitrogen, an important element for the soil, and the requirements for its plantation are minimum. Finally, short season b茨im and winter potatoes are cultivated as transitory crops, i.e. crops which are cultivated to fill the gap of time between the summer crop and the winter plantation, and it allows Mahmud to use the land during this period. In addition to all these crops, orange, pear, and tangerine trees are permanent cultivations during the vegetable rotation cycle. It should be pointed out that vegetable plantation remains in the soil as long as the trees are not producing.

Because of the large variety of crops cultivated on such a small scale, we will attempt to describe in detail the agricultural operations required by each crop during the different seasons, and study the inputs of production of each according to Mahmud’s calculations. On the other hand, we will show how the revenue of
certain crops is distributed on the expenses of production of others. In other words, we will attempt to understand the logic behind the diversification of the agricultural production in this specific case and to explain how it operates over a period of one year. However, it should be noted that the discussion of the mentioned crops will not exceed the agricultural operations because aspects related directly or indirectly to the production process such as the storage and the marketing will be discussed in the last chapter of this thesis.

3.2.1. Short and long season barley

Within the partition of the plot, Mahmud starts the cultivation of barley in October in P1. and P3. Both parts are cultivated at the same time by the same quality of seeds. The cultivation of barley in P1. remains in the soil until January, whereas the cultivation of P3. remains in the soil until the month of April, hence the difference between short season and long season barley. The cultivation of barley in P1. and P3. starts in the middle of October on a surface of ten quirats, requiring almost five kg of seeds. (Fig.VI.3) Mahmud usually gets the seed from the previous crops, by leaving the final cut of barley in the soil for 15 days without watering, after which he cuts it and gets yellow seeds. In general, the price of 12.5 kg of seeds on the market, or one Kila the unit of weight of barley seeds, is sold for £13, and sometimes reaches £20 when the climate is hot, or when there is a shortage of fodder on the market, as it was the case in 1985. In any case, the required barley seed for ten quirats costs £5. One of the advantages of the cultivation of barley is that it requires a minimum of preparation because the seeding does not require the partition of the plot into small dykes or ridges like many other crops. The land is submerged with water and the seeding is done on a plain watered soil. This means that only one man is needed for seeding, either one of Mahmud’s sons or his wife.

Barley remains in the soil without watering for 15 days after its cultivation, after
which it is irrigated every 15 days. The ten girees require 85 kg of superphosphate, and Mahmud receives a quota of only 42 kg of fertiliser, as fixed by the local cooperative, for £E 1.80 per 50 kg. (Tab.III.2-3) He must thus purchase the rest from the market for £E 3.60 per 50 kg, which means that the average price of the superphosphate was £E 2.70 per kg. The entire quantity is put on the plot in three times before the three first cuts. The distribution of the fertilisers is undertaken by one of Mahmud’s sons, as it requires one man each time. After 50 or 55 days, his son undertakes the first cut, which is usually the worst in terms of quality and is sold on the market for half the price of the three other cuts.

Bersim produces four consecutive cuts per season: the first is taken 55 days after sowing, and the three others are done at intervals of 40 days. However, they are not cut on regular schedule; instead Mahmud takes parts of the cut whenever it is needed. Bersim cannot be left standing indefinitely, however, because the next cut starts to appear. The cultivation of short and long season bersim over the ten girees produce a total of four cuts on eight girees and two cuts on two girees, requiring a total of seven men for cutting. According to Mahmud, it is very difficult to estimate the quantity produced per giree in each cut, therefore, bersim is not sold to the field merchant per quantity of weight, it is sold per giree. Last season Mahmud sold the eight girees of long season bersim for £E 20 each for a total of £E 160. The two cuts of short season bersim were sold on different terms; the first cut was sold for £E 3 per giree, and the second was sold for £E 5 per giree. He, thus, took in a total of £E 16 for the two girees of short season bersim, and the cutting of the two girees was done by the buyer, whereas the rest was undertaken by Mahmud and required five men. One of the advantages of bersim plantation, is the constant demand for the crop on the market. It can also be stored at the end of the season by drying it to be used as dry green fodder for animals in summer, especially with the shortage of dry fodder. (Tab.VI.4.1-4.2)
### Table VI.4.1: Inputs of Production of Eight Circums of Long Season Barsim and Two Circums of Short Season Barsim

<table>
<thead>
<tr>
<th></th>
<th>Unit</th>
<th>Number of Units</th>
<th>Cash Expenditure C.E</th>
<th>Total Expenditure C.E</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. RAW PRODUCT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short season barsim</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First cut</td>
<td>Qirat</td>
<td>2.00</td>
<td>3.00</td>
<td>6.00</td>
</tr>
<tr>
<td>Second cut</td>
<td>Qirat</td>
<td>2.00</td>
<td>5.00</td>
<td>10.00</td>
</tr>
<tr>
<td>Long season barsim</td>
<td>Qirat</td>
<td>8.00</td>
<td>20.00</td>
<td>160.00</td>
</tr>
<tr>
<td><strong>Total of raw product</strong></td>
<td></td>
<td></td>
<td></td>
<td>176.00</td>
</tr>
<tr>
<td><strong>2. VARIABLE INPUTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barsim seeds</td>
<td>kg</td>
<td>5.00</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Man for seeding</td>
<td>Day</td>
<td>0.50</td>
<td>4.50</td>
<td>2.25</td>
</tr>
<tr>
<td>Fertilisers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Superphosphate</td>
<td>50 kg</td>
<td>1.70</td>
<td>2.70</td>
<td>4.59</td>
</tr>
<tr>
<td>Man for spreading the fertilisers</td>
<td>Day</td>
<td>0.50</td>
<td>4.50</td>
<td>2.25</td>
</tr>
<tr>
<td>Irrigation</td>
<td>Hour</td>
<td>6.00</td>
<td>1.40</td>
<td>8.40</td>
</tr>
<tr>
<td>Man for irrigation</td>
<td>Day</td>
<td>1.00</td>
<td>4.50</td>
<td>4.50</td>
</tr>
<tr>
<td>Man for cutting the barsim</td>
<td>Day</td>
<td>5.00</td>
<td>4.50</td>
<td>22.50</td>
</tr>
<tr>
<td><strong>Total of variable inputs</strong></td>
<td></td>
<td></td>
<td></td>
<td>49.49</td>
</tr>
<tr>
<td><strong>3. EXPENDITURE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed Inputs</td>
<td></td>
<td></td>
<td></td>
<td>40.00</td>
</tr>
<tr>
<td>Variable Inputs</td>
<td></td>
<td></td>
<td></td>
<td>49.49</td>
</tr>
<tr>
<td><strong>Total Expenditure</strong></td>
<td></td>
<td></td>
<td></td>
<td>89.49</td>
</tr>
<tr>
<td><strong>4. INCOME</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total price of raw product</td>
<td></td>
<td></td>
<td></td>
<td>176.00</td>
</tr>
<tr>
<td>Total Expenditure</td>
<td></td>
<td></td>
<td></td>
<td>89.49</td>
</tr>
<tr>
<td><strong>Net Income</strong></td>
<td></td>
<td></td>
<td></td>
<td>86.51</td>
</tr>
</tbody>
</table>
Table VI.4.2: Breakdown of the Inputs of Production of Eight Quintals of Long Season Barsim and Two Quintals of Short Season Barsim

<table>
<thead>
<tr>
<th>Labour Origin</th>
<th>Item</th>
<th>Labour Inputs</th>
<th>Irrigation &amp; Fixed Inputs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Barsim seeds</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Man for seeding</td>
<td>2.25</td>
<td></td>
<td>5.00</td>
</tr>
<tr>
<td></td>
<td>Fertilisers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Superphosphate</td>
<td></td>
<td></td>
<td>4.59</td>
</tr>
<tr>
<td></td>
<td>Man for spreading fertilisers</td>
<td></td>
<td></td>
<td>2.25</td>
</tr>
<tr>
<td></td>
<td>Irrigation</td>
<td></td>
<td></td>
<td>8.40</td>
</tr>
<tr>
<td></td>
<td>Man for irrigation</td>
<td>4.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Man for cutting the barsim</td>
<td>22.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fixed Inputs</td>
<td></td>
<td></td>
<td>40.00</td>
</tr>
<tr>
<td></td>
<td>Total Inputs</td>
<td>31.50</td>
<td></td>
<td>48.40</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9.59</td>
<td></td>
<td>89.49</td>
</tr>
</tbody>
</table>

Labour provided from the neighbours
Labour provided from the household unit
Hired labourers

3.2.2. Summer potatoes

After short season barsim in P1, and after winter potatoes in P2, Mahmood cultivates summer potatoes on a surface of four qirats, from January to May. He bought a ton of imported potato seeds for £E 450, i.e. £E 0.45 per kg, from the Specialised Cooperative of Potato Producers. He paid a deposit of £E 50 per ton, which was deducted after the payment of the total price. On the basis of his holding card, he bought a larger quantity of seeds than was needed for the cultivation, which he shared with a friend. Together, they used 250 kg of seeds for cultivation, and the remainder 750 kg were sold on the market for £E 0.60 per kg. Thus, they made a total income of 450 £E on the quantity sold, which they divided equally. There is always a demand for imported potato seeds because the Specialised Cooperative of Potato Producers has a monopoly over the
importation of the seeds, and only registered members of the specialised cooperative are entitled to buy a quota. The potato producers who are not registered in the specialised cooperative purchase the seeds from the market at higher prices.

Although the Bank of the Village of Beitra offers loans amounting to £.E 400 per feddan at a 4% interest rate for buying the potato seeds, Mahmud prefers not to use the loan, as he raises the cash from the revenue of his previous crops, green peppers and winter potatoes. But if the savings are not enough, he borrows the money from the field merchant who buys the crop. The borrowed sum is deducted from the price of the crop without interest rate.

The preparation of the plot consists of ploughing the land with a hoe three times. The reason Mahmud uses a hoe to plough the land is that the plough cannot operate on his land without destroying the trees and the other vegetable plants. The first two ploughings are done consecutively and the third is done a few days later. The first ploughing requires one and a half day's work by one man and the two others each require half a day's work by one man, a total of two and a half days of man work. After ploughing, the plot is divided into small ridges, this operation requires one man, whom Mahmud hires if his eldest son is not available. This is followed by putting on 50 Ghabit of manure, after which the plot is irrigated. Two or three weeks after the seeding, the plot is hoed for the first time, after which the fertilisers are put in the soil. They consist of 50 kg of urea which he puts just before the second irrigation so it can be dissolved in the water. Both the spreading of fertilisers and the irrigation are done by one man in a day, and the price of 50 kg of urea from the Bank of the Village is fixed at £.E 6.75, including the transport.

After that, the plot is irrigated every ten or 12 days, depending on the climate
conditions. However, in between, Mahmud sprays the plants with poison for the rats, which costs him £E 1.20. Hoeing is undertaken once again and is followed by the spraying of the plants. Similarly, 50 kg of nitrates are put in the soil at a cost of £E 4.70, after which the plot is sprayed with insecticides by his eldest son with a manual sprinkle, and his wife weeds the land. Between the weeding of the grass and the harvesting the plot is hoed for the last time. Finally, harvesting begins in the month of May, the digging of the potatoes from the soil is done with a hoe instead of a plough, because the latter, in this particular case, cannot go through the citrus fruit trees without damaging them. The picking of potatoes is done by two men assisted by two women for harvesting. The four girres produced, during that season, one and a half tons, from which 100 kg were kept as seeds for the winter potato cultivation. The rest was stored in straw on Mahmud's land until the price increased on the market, after which he sold it to a field merchant for £E 230 per ton. (Tab. VI.5.1) Inputs comprise the highest share in the total expenditure of production, reaching 54.78%, followed by the share of labour representing 33.29%, and the lowest shares are those of the fixed inputs and the inputs of irrigation reaching together 11.93%. (Tab. VI.5.2)
Table VI.5.1: Inputs of Production of Four Quarts of Summer Potatoes

<table>
<thead>
<tr>
<th></th>
<th>UNIT</th>
<th>NUMBER of UNITS</th>
<th>CASH EXPENDITURE C.E.</th>
<th>TOTAL EXPENDITURE C.E.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. RAW PRODUCT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summer potatoes</td>
<td>Ton</td>
<td>1.50</td>
<td>230.00</td>
<td>345.00</td>
</tr>
<tr>
<td><strong>2. VARIABLE INPUTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preparation of the field</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Man for ploughing</td>
<td>Day</td>
<td>1.50</td>
<td>5.00</td>
<td>7.50</td>
</tr>
<tr>
<td>Man for the division of the plot</td>
<td>Day</td>
<td>1.00</td>
<td>4.50</td>
<td>4.50</td>
</tr>
<tr>
<td>Manure</td>
<td>Ghabit</td>
<td>50.00</td>
<td>0.40</td>
<td>20.00</td>
</tr>
<tr>
<td>Rent of donkey</td>
<td>Day</td>
<td>0.50</td>
<td>2.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Child for the donkey</td>
<td>Day</td>
<td>0.50</td>
<td>2.50</td>
<td>1.25</td>
</tr>
<tr>
<td>Man for spreading manure</td>
<td>Day</td>
<td>0.50</td>
<td>4.50</td>
<td>2.25</td>
</tr>
<tr>
<td>Seeds</td>
<td>kg</td>
<td>125.00</td>
<td>0.45</td>
<td>56.25</td>
</tr>
<tr>
<td>Man for seeding</td>
<td>Day</td>
<td>1.00</td>
<td>4.50</td>
<td>4.50</td>
</tr>
<tr>
<td>Fertilisers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urea</td>
<td>50 kg</td>
<td>1.00</td>
<td>6.75</td>
<td>6.75</td>
</tr>
<tr>
<td>Nitrates</td>
<td>50 kg</td>
<td>1.00</td>
<td>4.70</td>
<td>4.70</td>
</tr>
<tr>
<td>Man for spreading fertilisers</td>
<td>Day</td>
<td>0.50</td>
<td>4.50</td>
<td>2.25</td>
</tr>
<tr>
<td>Poison for rats</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>1.20</td>
</tr>
<tr>
<td>Man for spraying the poison</td>
<td>Day</td>
<td>0.50</td>
<td>4.50</td>
<td>2.25</td>
</tr>
<tr>
<td>Pesticides</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>2.00</td>
</tr>
<tr>
<td>Man for spraying the pesticides</td>
<td>Day</td>
<td>0.50</td>
<td>4.50</td>
<td>2.25</td>
</tr>
<tr>
<td>Woman for weeding</td>
<td>Day</td>
<td>1.00</td>
<td>2.50</td>
<td>2.50</td>
</tr>
<tr>
<td>Man for hoeing</td>
<td>Day</td>
<td>1.00</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Irrigation</td>
<td>Hour</td>
<td>2.00</td>
<td>1.40</td>
<td>2.80</td>
</tr>
<tr>
<td>Man for irrigation</td>
<td>Day</td>
<td>1.00</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Man for harvesting</td>
<td>Day</td>
<td>2.00</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Women for harvesting</td>
<td>Day</td>
<td>2.00</td>
<td>2.50</td>
<td>5.00</td>
</tr>
<tr>
<td><strong>Total variable inputs</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>148.95</strong></td>
</tr>
<tr>
<td><strong>3. EXPENDITURE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed Inputs</td>
<td></td>
<td></td>
<td></td>
<td><strong>17.00</strong></td>
</tr>
<tr>
<td>Variable Inputs</td>
<td></td>
<td></td>
<td></td>
<td><strong>148.95</strong></td>
</tr>
<tr>
<td><strong>Total Cash</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>165.95</strong></td>
</tr>
<tr>
<td><strong>4. INCOME</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total price of raw product</td>
<td></td>
<td></td>
<td></td>
<td><strong>345.00</strong></td>
</tr>
<tr>
<td><strong>Total Expenditure</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>165.95</strong></td>
</tr>
<tr>
<td><strong>5. INCOME</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net income from raw product</td>
<td>kg</td>
<td>375.00</td>
<td>0.60</td>
<td>179.05</td>
</tr>
<tr>
<td>Net income of seeds</td>
<td>kg</td>
<td>375.00</td>
<td>0.60</td>
<td>225.00</td>
</tr>
<tr>
<td>Net Income</td>
<td>kg</td>
<td>375.00</td>
<td>0.60</td>
<td><strong>404.05</strong></td>
</tr>
</tbody>
</table>
### Table VI.5.2: Breakdown of the Inputs of Production of Four Girints of Summer Potatoes

<table>
<thead>
<tr>
<th>Labour Origin</th>
<th>Item</th>
<th>Labour</th>
<th>Inputs</th>
<th>Irrigation &amp; Fixed Inputs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>*</td>
<td>Preparation of the field</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Man for ploughing</td>
<td>7.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Man for the division of the plot</td>
<td>4.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Manure</td>
<td></td>
<td>20.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Rent of donkey</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Child for or the donkey</td>
<td>1.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Man for spreading manure</td>
<td>2.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Seeds</td>
<td></td>
<td>56.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Man for seeding</td>
<td>4.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fertilisers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Urea</td>
<td></td>
<td>6.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nitrates</td>
<td></td>
<td>4.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Man for spreading fertilisers</td>
<td>2.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Poison for rats</td>
<td></td>
<td>1.20</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Man for spraying the poison</td>
<td>2.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pesticides</td>
<td></td>
<td>2.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Man for spraying the pesticides</td>
<td>2.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Woman for weeding</td>
<td>2.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Man for hoeing</td>
<td>5.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Irrigation</td>
<td></td>
<td>2.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Man for irrigation</td>
<td>5.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>**</td>
<td>Man for harvesting</td>
<td>10.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Woman for harvesting</td>
<td>5.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fixed Inputs</td>
<td></td>
<td>17.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Expenditure</td>
<td>55.25</td>
<td>90.90</td>
<td>19.80</td>
<td>165.95</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>55.25</td>
<td>90.90</td>
<td>19.80</td>
<td>165.95</td>
</tr>
<tr>
<td>Share in %</td>
<td></td>
<td>33.29%</td>
<td>54.78%</td>
<td>11.93%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

- o Labour provided from the neighbours
- * Labour provided from the household unit
- H Hired labourers

### 3.2.3. Winter Potatoes

Winter potatoes are cultivated on two girints at the same time as short season tomatoes in P2. Mahmoud chooses 100 kg of the smallest and cheapest summer potatoes produced from his plot to be used as seeds, and their estimated price on the market is £E 1.00 per ton. Winter potatoes are cultivated in the beginning of October and remain in the soil until January. Most of the agricultural operations of winter potatoes are similar to those of summer potatoes; yet, a few details
differ. Winter potatoes require only one hoeing, 25 days after the seeding. They also require less manure than summer potatoes, as well as less fertilizers and only 25 kg of nitrates are put once on the two qirats. Two or three irrigations at most are done during the period of vegetation depending on climatic conditions. Finally, Mahamud starts harvesting in the beginning of January. The two qirats produced 700 kg, which he sold to a field merchant for £.E 175, at £.E 0.25 per kg. (Tab.VI.6.1) Unlike summer potatoes, the share of labour in the total expenditure of production is the highest, reaching 46.28%, followed by the share of inputs representing 40.43%. The share of the inputs of irrigation and those of the fixed inputs cover 13.36%. (Tab.VI.6.2)
### Table VI.6.1: Inputs of Production of Two Quintals of Winter Potatoes

<table>
<thead>
<tr>
<th></th>
<th>Unit</th>
<th>Number of Units</th>
<th>Cash Expenditure C.E</th>
<th>Total Expenditure C.E</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Raw Product</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Winter potatoes</td>
<td>kg</td>
<td>700.00</td>
<td>0.25</td>
<td>175.00</td>
</tr>
<tr>
<td><strong>2. Variable Inputs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preparation of the field</td>
<td>Day</td>
<td>0.50</td>
<td>5.00</td>
<td>2.50</td>
</tr>
<tr>
<td>Man for the first hoeing</td>
<td>Day</td>
<td>0.50</td>
<td>4.50</td>
<td>2.25</td>
</tr>
<tr>
<td>Man for the division of the plot</td>
<td>Day</td>
<td>0.50</td>
<td>4.50</td>
<td>2.25</td>
</tr>
<tr>
<td>Manure</td>
<td>Ghab</td>
<td>15.00</td>
<td>0.40</td>
<td>6.00</td>
</tr>
<tr>
<td>Rent of donkey</td>
<td>Day</td>
<td>0.50</td>
<td>2.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Child for the donkey</td>
<td>Day</td>
<td>0.50</td>
<td>2.50</td>
<td>1.25</td>
</tr>
<tr>
<td>Man for spreading manure</td>
<td>Day</td>
<td>0.50</td>
<td>4.50</td>
<td>2.25</td>
</tr>
<tr>
<td>Seeds</td>
<td>kg</td>
<td>100.00</td>
<td>0.18</td>
<td>18.00</td>
</tr>
<tr>
<td>Man for seeding</td>
<td>Day</td>
<td>0.50</td>
<td>4.50</td>
<td>2.25</td>
</tr>
<tr>
<td>Fertilisers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrates</td>
<td>50 kg</td>
<td>0.50</td>
<td>4.70</td>
<td>2.35</td>
</tr>
<tr>
<td>Man for spreading fertilizers</td>
<td>Day</td>
<td>0.50</td>
<td>4.50</td>
<td>2.25</td>
</tr>
<tr>
<td>Poison for rats</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>0.60</td>
</tr>
<tr>
<td>Man for spraying the poison</td>
<td>Day</td>
<td>0.50</td>
<td>4.50</td>
<td>2.25</td>
</tr>
<tr>
<td>Pesticides</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>1.00</td>
</tr>
<tr>
<td>Man for spraying the pesticides</td>
<td>Day</td>
<td>0.50</td>
<td>4.50</td>
<td>2.25</td>
</tr>
<tr>
<td>Woman for picking the grass</td>
<td>Day</td>
<td>0.50</td>
<td>2.50</td>
<td>1.25</td>
</tr>
<tr>
<td>Man for hoeing</td>
<td>Day</td>
<td>0.50</td>
<td>5.00</td>
<td>2.50</td>
</tr>
<tr>
<td>Irrigation</td>
<td>Hour</td>
<td>0.50</td>
<td>1.40</td>
<td>0.70</td>
</tr>
<tr>
<td>Man for irrigation</td>
<td>Day</td>
<td>0.50</td>
<td>5.00</td>
<td>2.50</td>
</tr>
<tr>
<td>Man for harvesting</td>
<td>Day</td>
<td>1.00</td>
<td>5.00</td>
<td>2.50</td>
</tr>
<tr>
<td>Woman for harvesting</td>
<td>Day</td>
<td>1.00</td>
<td>2.50</td>
<td>2.50</td>
</tr>
<tr>
<td>Total variable inputs</td>
<td></td>
<td></td>
<td></td>
<td>60.65</td>
</tr>
<tr>
<td><strong>3. Expenditure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed Inputs</td>
<td></td>
<td></td>
<td></td>
<td>8.50</td>
</tr>
<tr>
<td>Variable Inputs</td>
<td></td>
<td></td>
<td></td>
<td>60.65</td>
</tr>
<tr>
<td>Total Expenditure</td>
<td></td>
<td></td>
<td></td>
<td>69.15</td>
</tr>
<tr>
<td><strong>4. Income</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total price of raw product</td>
<td></td>
<td></td>
<td></td>
<td>175.00</td>
</tr>
<tr>
<td>Total Expenditure</td>
<td></td>
<td></td>
<td></td>
<td>69.15</td>
</tr>
<tr>
<td>Net Income</td>
<td></td>
<td></td>
<td></td>
<td>105.85</td>
</tr>
</tbody>
</table>
Table VI.6.2: Breakdown of the Inputs of Production of Two Quirats of Winter Potatoes

<table>
<thead>
<tr>
<th>Labour Origin</th>
<th>Item</th>
<th>Labour</th>
<th>Inputs</th>
<th>Irrigation &amp; Fixed Inputs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Preparation of the field</td>
<td>2.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Man for the first hoeing</td>
<td>2.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Man for the division of the plot</td>
<td>2.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Manure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rent of donkey</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Child for the donkey</td>
<td>1.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Man for spreading manure</td>
<td>2.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Seeds</td>
<td>18.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Man for seeding</td>
<td>2.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fertilisers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nitrates</td>
<td>2.35</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Man for spreading fertilisers</td>
<td>2.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Poison for rats</td>
<td>0.60</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Man for spraying the poison</td>
<td>2.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pesticides</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Man for spraying the pesticides</td>
<td>2.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Woman for weeding</td>
<td>1.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Man for hoeing</td>
<td>2.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Irrigation</td>
<td></td>
<td></td>
<td></td>
<td>0.70</td>
</tr>
<tr>
<td></td>
<td>Man for irrigation</td>
<td>2.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Man for harvesting</td>
<td>5.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Woman for harvesting</td>
<td>2.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fixed Inputs</td>
<td></td>
<td></td>
<td></td>
<td>8.50</td>
</tr>
<tr>
<td></td>
<td>Total Expenditure</td>
<td></td>
<td></td>
<td></td>
<td>69.15</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>32.00</td>
<td>27.95</td>
<td>9.20</td>
<td>69.15</td>
</tr>
</tbody>
</table>

| o | Unpaid labour provided from the neighbours |
| * | Unpaid labour provided from the household unit |
| q | Paid hired labour |

3.2.4. Courgettes

After the cultivation of summer potatoes in P1 and P2, Mahamud plants courgettes on the four quirats. The cultivation begins in May and remains in the soil for three and a half months. The preparation of the plot begins by hoeing the soil and its division into strips, after which 250 gm of seeds are put in. Courgettes require at least three hoeing during their vegetation, and sometimes as many as four or five depending on the conditions of the soil, but in general Mahamud counts three
Mahmud applies 17 kg of nitrate for £.E 2.30 to the 50 kg, and irrigates the land every 15 days. Mahmud manages to synchronize most of the agricultural operations of both green peppers and courgettes in order to reduce cash expenditure. Sixty days after the cultivation of courgettes, the picking of the crop begins and continues for almost two months. During this time, the picking of courgettes is done every two days because they cannot be stored in the field. The picking requires half a day’s work of a woman, and last season’s harvest reached 800 kg, sold by his wife for £.E 0.40 per kg, totaling approximately £.E 320. (Tab.VI.7.1) However, because both courgettes and green peppers are cultivated at the same time and are sold to the same merchant, Mahmud often puts the total expenditure of certain common operations, such as the spraying and the price of insecticides on the account of green peppers because they cover the largest surface. According to Mahmud’s calculations, if he was to pay in cash all the inputs of production, the share of labour would have represented the highest share, reaching 54.44%, followed by the share of inputs at 23.68%, and irrigation and fixed inputs would have been the lowest share at 21.88%. (Tab.VI.7.2)
Table VI.7.1: Inputs of Production of Four Quarts of Courgettes

<table>
<thead>
<tr>
<th></th>
<th>UNIT</th>
<th>NUMBER of UNITS</th>
<th>CASH EXPENDITURE C.E</th>
<th>TOTAL EXPENDITURE C.E</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. RAW PRODUCT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Courgettes</td>
<td>kg</td>
<td>800.00</td>
<td>0.40</td>
<td>320.00</td>
</tr>
<tr>
<td><strong>2. VARIABLE INPUTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preparation of the field</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Man for the first hoeing</td>
<td>Day</td>
<td>0.50</td>
<td>5.00</td>
<td>2.50</td>
</tr>
<tr>
<td>Man for the division of the plot</td>
<td>Day</td>
<td>0.50</td>
<td>4.50</td>
<td>2.25</td>
</tr>
<tr>
<td>Manure</td>
<td>Ghabit</td>
<td>50.00</td>
<td>0.40</td>
<td>20.00</td>
</tr>
<tr>
<td>Rent of donkey</td>
<td>Day</td>
<td>0.50</td>
<td>2.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Child for the donkey</td>
<td>Day</td>
<td>0.50</td>
<td>2.50</td>
<td>1.25</td>
</tr>
<tr>
<td>Man for spreading manure</td>
<td>Day</td>
<td>0.50</td>
<td>4.50</td>
<td>2.25</td>
</tr>
<tr>
<td>Seeds</td>
<td>Gms</td>
<td>250.00</td>
<td>NA</td>
<td>1.15</td>
</tr>
<tr>
<td>Woman for seedling</td>
<td>Day</td>
<td>0.50</td>
<td>2.50</td>
<td>1.25</td>
</tr>
<tr>
<td>Fertilisers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrates</td>
<td>kg</td>
<td>17.00</td>
<td>NA</td>
<td>1.80</td>
</tr>
<tr>
<td>Man for spreading fertilisers</td>
<td>Day</td>
<td>0.50</td>
<td>4.50</td>
<td>2.25</td>
</tr>
<tr>
<td>Irrigation</td>
<td>Hour</td>
<td>3.00</td>
<td>1.40</td>
<td>4.20</td>
</tr>
<tr>
<td>Man for irrigation</td>
<td>Day</td>
<td>0.50</td>
<td>5.00</td>
<td>2.50</td>
</tr>
<tr>
<td>Woman for harvesting</td>
<td>Day</td>
<td>15.00</td>
<td>2.50</td>
<td>37.50</td>
</tr>
<tr>
<td><strong>Total variable Inputs</strong></td>
<td></td>
<td></td>
<td></td>
<td>79.90</td>
</tr>
<tr>
<td><strong>3. EXPENDITURE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed Inputs</td>
<td></td>
<td></td>
<td></td>
<td>17.00</td>
</tr>
<tr>
<td>Variable Inputs</td>
<td></td>
<td></td>
<td></td>
<td>79.90</td>
</tr>
<tr>
<td>Total Expenditure</td>
<td></td>
<td></td>
<td></td>
<td>96.90</td>
</tr>
<tr>
<td><strong>4. INCOME</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total price of raw product</td>
<td></td>
<td></td>
<td></td>
<td>320.00</td>
</tr>
<tr>
<td>Total Expenditure</td>
<td></td>
<td></td>
<td></td>
<td>96.90</td>
</tr>
<tr>
<td>Net Income</td>
<td></td>
<td></td>
<td></td>
<td>223.10</td>
</tr>
</tbody>
</table>
Table VI.7.2: Breakdown of the Inputs of Production of Four Qirats of Courgettes

<table>
<thead>
<tr>
<th>Labour Origin</th>
<th>Item</th>
<th>Labour</th>
<th>Inputs</th>
<th>Irrigation &amp; Fixed Inputs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>*</td>
<td>Preparation of the field</td>
<td>2.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Man for the first hoeing</td>
<td>2.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Man for the division of the plot</td>
<td>20.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Manure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Rent of donkey</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Child for the donkey</td>
<td>1.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Man for spreading manure</td>
<td>2.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Seeds</td>
<td></td>
<td>1.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Woman for seeding</td>
<td>1.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Fertilisers</td>
<td></td>
<td>1.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Nitrates</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Man for spreading fertilisers</td>
<td>2.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Irrigation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Man for irrigation</td>
<td>2.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sq</td>
<td>Woman for harvesting</td>
<td>37.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sq</td>
<td>Fixed Inputs</td>
<td></td>
<td>17.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Expenditure</td>
<td>52.75</td>
<td>22.95</td>
<td>21.20</td>
<td>96.90</td>
</tr>
<tr>
<td></td>
<td>Share in %</td>
<td>54.44%</td>
<td>23.68%</td>
<td>21.88%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

- Unpaid labour provided from the neighbours
- Unpaid labour provided from the household unit
- Paid hired labour

3.2.5. Green Peppers

After the fourth cut of long season barsim in April, Mahmud starts the cultivation of green peppers in P3. The eight qirats require 10,000 seeds, which he buys for £E 5. Before the sowing, the plot is irrigated by one man, usually his neighbour; this is followed by the first hoeing and, generally, the plot is held six times during the period of vegetation. Before the first hoeing, 100 Chabit of organic fertilisers are put in the soil, and bought for £E 40 including the transport by tractor. The spreading of manure requires half a day's work of one man, one donkey for the transport of manure to the different areas, and one child for the donkey. The plot is divided into strips and the seeding is done by his wife and his daughter.
After the seeding operation, Mahmud puts on chemical fertilisers, consisting of 250 kg of nitrates and 150 kg of superphosphate. Although Mahmud has a holding card on which he receives a quota of fertilisers, his quota is usually delivered in delay. He purchases his needs of chemical fertilisers from the market at a higher price until he receives the quote, and after the delivery he sells it back on the market to cover the difference of both prices.

Fifteen days after the seeding, Mahmud’s daughter and wife start to wead the land. This operation is done once a month for six months or as long as green peppers are in the field, and requires almost 12 days of women’s work. Irrigation is done twice a month, and fertilisers are put on the plot once a month for the same period. In addition to these monthly requirements, Mahmud has to spray the vegetables twice a month with a manual sprayer which he borrows. The pesticides and the insecticides he uses are not provided from the Bank of the Village, and if they are sold their prices are not subsidised, so he buys them directly from the market, for £E 7 the 400 gm, making the inputs of the entire required quantity £E 120.05.

The harvesting begins three months after the seeding and continues for almost three months. It is done once or twice a week depending on the quantity produced, but in average it is done once a week. Each picking is done by Mahmud’s wife and the children help her if there is a large quantity. The picking is done in one day, usually on Wednesdays to be sold at Thursday market in Batra, and in other markets during the week. The crop is sold to a field merchant and its price fluctuates according to the daily price on the market and the quantity offered during the different periods of the season. However, there is always a demand for green peppers in every market as it is an important ingredient in cooking, and can always be stored for a long period of time when treated.
The first two pickings were done by the members of the family. The first time, they picked 200 kg, which sold for £E 0.40 per kg; the second picking reached 250 kg, which sold for £E 0.30. But the third and fourth time they picked 450 kg, which sold at £E 0.25, and at £E 0.15. Given the large quantity of the harvest over the season they had to hire three women for £E 2.50 a day. However, because this period was the peak season of green peppers the price of the fourth picking fell to £E 0.15 per kg, whereas the third picking was sold for £E 0.25 as it was still the beginning of the high season. The fifth picking reached 350 kg and was sold for £E 0.15. The sixth reached 400 kg sold for £E 0.15. By the seventh picking the production started to decline gradually not exceeding 320 kg, and the price started to increase slightly on the market reaching £E 0.18. The eighth picking showed a considerable decline in the average quantity amounting to 250 kg and the price continued to increase to reach £E 0.20 per kg. The ninth picking was of 100 kg sold for £E 0.25, and finally the tenth and the eleventh reached together 170 kg sold for £E 0.30 per kg. (Tab.VI.8.1) Like summer potatoes, the share of the fertilisers and pesticides in the inputs of production are the highest, reaching 53.55%, followed by the share of labour at 34.73%, and finally, the lowest share is of the inputs of irrigation and the fixed inputs representing 11.78%. (Tab.VI.8.2)

In late September, after the last picking, the green pepper trees are removed by two men and the wood is used for backing and cooking. The preparation of the different parts of the plot starts for the following year in a reverse rotation cycle to the one described. The eight qirats, previously planted by long season bursin and green peppers, are divided in their turn into two parts of four qirats. The first is prepared to be cultivated by short season bursin, followed by summer potatoes, and courgettes, and the second by winter potatoes, summer potatoes, and courgettes. As for the remaining four qirats, they are prepared to be cultivated by long season bursin followed by green peppers.
### Table VI.8.1: Inputs of Production of Eight Quarts of Green Peppers

<table>
<thead>
<tr>
<th></th>
<th>UNIT</th>
<th>NUMBER of UNITS</th>
<th>CASH EXPENDITURE £.E</th>
<th>TOTAL EXPENDITURE £.E</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. RAW PRODUCT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First picking</td>
<td>kg</td>
<td>200.00</td>
<td>0.40</td>
<td>80.00</td>
</tr>
<tr>
<td>Second picking</td>
<td>kg</td>
<td>250.00</td>
<td>0.30</td>
<td>75.00</td>
</tr>
<tr>
<td>Third picking</td>
<td>kg</td>
<td>450.00</td>
<td>0.25</td>
<td>112.50</td>
</tr>
<tr>
<td>Fourth picking</td>
<td>kg</td>
<td>450.00</td>
<td>0.15</td>
<td>67.50</td>
</tr>
<tr>
<td>Fifth picking</td>
<td>kg</td>
<td>350.00</td>
<td>0.15</td>
<td>52.50</td>
</tr>
<tr>
<td>Sixth picking</td>
<td>kg</td>
<td>400.00</td>
<td>0.18</td>
<td>72.00</td>
</tr>
<tr>
<td>Seventh picking</td>
<td>kg</td>
<td>320.00</td>
<td>0.18</td>
<td>57.60</td>
</tr>
<tr>
<td>Eighth picking</td>
<td>kg</td>
<td>250.00</td>
<td>0.20</td>
<td>50.00</td>
</tr>
<tr>
<td>Ninth picking</td>
<td>kg</td>
<td>100.00</td>
<td>0.25</td>
<td>25.02</td>
</tr>
<tr>
<td>Tenth picking</td>
<td>kg</td>
<td>95.00</td>
<td>0.30</td>
<td>28.50</td>
</tr>
<tr>
<td>Eleventh picking</td>
<td>kg</td>
<td>70.00</td>
<td>0.30</td>
<td>21.00</td>
</tr>
<tr>
<td><strong>Total of raw product</strong></td>
<td>kg</td>
<td>2,935.00</td>
<td></td>
<td>641.62</td>
</tr>
<tr>
<td><strong>2. VARIABLE INPUTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preparation of the field</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Man for hoeing</td>
<td>Day</td>
<td>3.00</td>
<td>5.00</td>
<td>15.00</td>
</tr>
<tr>
<td>Man for the division into strips</td>
<td>Day</td>
<td>1.00</td>
<td>4.50</td>
<td>4.50</td>
</tr>
<tr>
<td>Seeds</td>
<td>Seed</td>
<td>10,000.00</td>
<td>NA</td>
<td>5.00</td>
</tr>
<tr>
<td>Woman for seeding</td>
<td>Day</td>
<td>1.00</td>
<td>2.50</td>
<td>2.50</td>
</tr>
<tr>
<td>Manure</td>
<td>Habit</td>
<td>100.00</td>
<td>0.40</td>
<td>40.00</td>
</tr>
<tr>
<td>Rent of donkey</td>
<td>Day</td>
<td>0.50</td>
<td>2.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Child for the donkey</td>
<td>Day</td>
<td>0.50</td>
<td>2.50</td>
<td>1.25</td>
</tr>
<tr>
<td>Man for spreading manure</td>
<td>Day</td>
<td>0.50</td>
<td>4.50</td>
<td>2.25</td>
</tr>
<tr>
<td>Fertilisers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrates</td>
<td>50 kg</td>
<td>5.00</td>
<td>4.70</td>
<td>23.50</td>
</tr>
<tr>
<td>Superphosphate</td>
<td>50 kg</td>
<td>3.00</td>
<td>1.80</td>
<td>5.40</td>
</tr>
<tr>
<td>Man for spreading fertilisers</td>
<td>Day</td>
<td>0.50</td>
<td>4.50</td>
<td>2.25</td>
</tr>
<tr>
<td>Woman for weeding</td>
<td>Day</td>
<td>12.00</td>
<td>2.50</td>
<td>30.00</td>
</tr>
<tr>
<td>Irrigation</td>
<td>Hour</td>
<td>6.00</td>
<td>1.40</td>
<td>8.40</td>
</tr>
<tr>
<td>Man for irrigation</td>
<td>Day</td>
<td>1.00</td>
<td>4.50</td>
<td>4.50</td>
</tr>
<tr>
<td>Pesticides</td>
<td>kg</td>
<td>6.86</td>
<td>17.50</td>
<td>120.05</td>
</tr>
<tr>
<td>Man for spraying the pesticides</td>
<td>Day</td>
<td>0.50</td>
<td>5.00</td>
<td>2.50</td>
</tr>
<tr>
<td>Woman for harvesting</td>
<td>Day</td>
<td>22.00</td>
<td>2.50</td>
<td>55.00</td>
</tr>
<tr>
<td>Man for removing the plants</td>
<td>Day</td>
<td>1.00</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td><strong>Total variable Inputs</strong></td>
<td></td>
<td></td>
<td></td>
<td>328.10</td>
</tr>
<tr>
<td><strong>3. EXPENDITURE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed Inputs</td>
<td></td>
<td></td>
<td></td>
<td>34.00</td>
</tr>
<tr>
<td>Variable Inputs</td>
<td></td>
<td></td>
<td></td>
<td>328.10</td>
</tr>
<tr>
<td><strong>Total Expenditure</strong></td>
<td></td>
<td></td>
<td></td>
<td>362.10</td>
</tr>
<tr>
<td><strong>4. INCOME</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total price of raw product</td>
<td></td>
<td></td>
<td></td>
<td>641.62</td>
</tr>
<tr>
<td>Total Expenditure</td>
<td></td>
<td></td>
<td></td>
<td>362.10</td>
</tr>
<tr>
<td>Net Income</td>
<td></td>
<td></td>
<td></td>
<td>279.52</td>
</tr>
</tbody>
</table>
Table VI.2.2: Breakdown of the Inputs of Production of Eight Crops of Green Pepper

<table>
<thead>
<tr>
<th>Labour Origin</th>
<th>Item</th>
<th>Labour</th>
<th>Inputs</th>
<th>Irrigation &amp; Fixed Inputs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Preparation of the field</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Man for healing</td>
<td>15.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Man for the division into strips</td>
<td>4.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Seeds</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Woman for seeding</td>
<td>2.50</td>
<td></td>
<td>5.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Manure</td>
<td></td>
<td></td>
<td>40.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rent of donkey</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Child for the donkey</td>
<td>1.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Man for spreading manure</td>
<td>2.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fertilisers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nitrates</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Superphosphate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Man for spreading fertilisers</td>
<td>2.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Woman for weeding</td>
<td>30.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Irrigation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Man for irrigation</td>
<td>4.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pesticides</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Man for spraying the pesticides</td>
<td>2.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Woman for harvesting</td>
<td>55.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Man for removing the plants</td>
<td>5.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fixed inputs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Expenditure</td>
<td></td>
<td></td>
<td></td>
<td>362.10</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>125.75</td>
<td>193.95</td>
<td>42.40</td>
<td>362.10</td>
</tr>
<tr>
<td></td>
<td>Share in %</td>
<td>34.73%</td>
<td>53.56%</td>
<td>11.71%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

○ | Unpaid labour provided from the neighbours
* | Unpaid labour provided from the household unit
q | Paid hired labour

3.3. The Logic of Organisation for Production on Twelve Qirats

This brief presentation of the agricultural operations and the inputs of production of the five crops cultivated on the 12 qirats, shows that Mahmud's annual income reaches approximately £E 1,099, the highest from summer potatoes reaching £E 404.05, followed by green peppers representing £E 279.10, courgettes amounting to £E 223.10, winter potatoes to £E 105.85, and barsum at £E 85.51. (Tab.VI.4.1-8.2)
Although the cultivation of summer potatoes seems to be highly profitable, it remains a highly costing crop in which seeds and labour are the most expensive items. By focusing on the share of the different categories constituting the total expenditure of production of summer potatoes, one will notice that the share of the price of inputs: seeds, fertilisers, and pesticides amounts to £.E 90.90, representing 54.78% of the total expenditure, and the one of labour reaches £.E 55.25, representing 33.29%. While the share of the irrigation and the fixed inputs reaches £.E 29.80, representing 11.93%. These figures represent the effective inputs that Mahmud should be paying in cash.

However, in this specific case, several items of the inputs of production were not paid in cash, such as the inputs of labour, because most of the agricultural operations were undertaken by the members of his household comprising ten persons. Similarly, the fixed inputs were not in reality paid and were not included in Mahmud's calculations. On the other hand, the inputs of production show that more than half of the net revenue of summer potatoes is from the marketing of the imported seeds, which exceeds the net income of the raw product (Tab. VI.5.1). Moreover, the field work study in Batra revealed that, in most cases, summer potato cultivation was seldom planted for the revenue of the raw product only. The marketing of the seeds represents an important source of income, reaching double the net revenue from the production. Thus, the cultivation of summer potatoes is often accompanied by the marketing of seeds, in addition to the storage and the marketing of the crop. Although the cultivation of summer potatoes is risky because of its high sensitivity to climatic changes and diseases, and the quality of the crop depends largely on the quality of the imported seeds, most peasants in Batra undertake its cultivation as a means of penetrating the marketing network through the commerce of seeds, or through the marketing and the storage of the crop on behalf of others in exchange of an interest rate.
Given these facts, Mahmud makes a higher income from the crop than what is mentioned, sometimes double the figure advanced, if the unpaid labour and the fixed inputs were excluded from the inputs as calculated. Thus, the unpaid labour of his household unit is rewarded in non-monetary terms, and therefore their share in the inputs of production are not included in Mahmud’s calculations. His calculations are based on the amount of cash spent on the land. With regard to the price of the crop, Mahmud negotiates the price, at this level, according to market prices and on the basis of a rough estimate of the effective amount of cash that he would have spent. Finally, the cultivation of summer potatoes represents an important source of income to the household after a long winter season during which the plantation of hervisn and winter potatoes barely covers the household expenses. Therefore, the marketing of seeds occurs during a period when cash is low and easily covers the inputs of production of potatoes during vegetation. As for the income made on the raw product, Mahmud receives it, usually, in May or even in June. Part of it is spent on the inputs of the following summer crops during the period of vegetation, covering almost two months, during which they are sold progressively on the market. The rest of the income is used for the household expenses in cash.

Green peppers and courgettes represent a weakly regular source of cash, and are thus considered as the major crops on which Mahmud depends in summer. Unlike summer potatoes, there are no commercial activities revolving around their cultivation besides the selling of the crops to a field merchant. This is due to the fact that these vegetables cannot be stored. The basic advantage of growing these crops is that they are easily sold on the market and their production covers almost three months, which means a regular income over a long period of time.

Green peppers are a highly costly crop in which the share of inputs: seeds,
fertilisers, and pesticides reaches £E 193.75, representing 53.53% of the total expenditure. The price of pesticides alone is of £E 120.05, followed by the price of manure amounting to £E 40. (Tab.VI.8.2) Like summer potatoes, green peppers require intensive labour due to the fact that they remain in the soil for a long period of time, reaching almost six months. During this time, a large number of workers is needed on regular basis for weeding and for picking.

However, because of the sexual division of labour in the agricultural operations, most of the work is undertaken by women, which reduces the input of labour by half, since a woman's day of work is paid at half the wage of a man's day of work. Thus, the share of labour reaches £E 125.75 representing 34.73% of the total expenditure, followed by the share of irrigation and the fixed inputs amounting to £E 42.40, representing only 11.78% of the total expenditure. The fact that Mahmud relies on members of his family to undertake the agricultural operations, especially his wife, his two daughters and his daughter in law, reduces the expenses. Likewise, the fact that the income from the green peppers is received on regular basis with each picking allows Mahmud to meet regularly the expenses of the cultivation and to support the family. Moreover, because the agricultural operations of both courgettes and green peppers are synchronised, the expenses of both are shared and thus reduced. For example, instead of irrigating a plot of four qirates in half an hour each time for £E 0.70, he irrigates 12 qirates in half an hour or perhaps in 45 minutes at most. In fact, this difference in time is the time taken by the water to fill the canals from the water pump to the plot, and this lapse of time is almost the same for a smaller or a larger plot of this scale, only a fraction of time makes the difference, as long as the land on this small scale is located in the same place.

The same logic is often adopted for many other operations, such as the weeding, or the spreading of fertilisers. For instance, even if Mahmud hires a man for
spreading fertilizers on four qirats only, and even if this operation takes less than half a day, which is often the case, he cannot pay less than half a day's wage to the worker, to cover at least the trip to the field. Since the hired worker can work more than eight qirats in half a day, Mahmuri synchronizes his operations in order not to pay twice the wage for the same labour. In other words, the combination of mixed cropping in summer allows Mahmuri in a way to reduce his inputs. But the basic idea of mixed cropping is that it prevents him from having to rely on one crop for the cash. The diversification of the source of income allows him to overcome, partly, any drop in the market price or to avoid complete loss in case of unexpected failure in the production of one of the two crops.

On the other hand, bursim and winter potatoes are considered transitory crops, in the sense that they are planted instead of leaving the plot empty while waiting for the major winter crops. Mahmuri cultivates short and long season bursim which provides the soil with the necessary nitrogen after a long season of intensive cultivation, meanwhile making income. Similarly, the cultivation of winter potatoes is largely used for the household consumption and is a means of raising cash until the following crop, especially that the seeds are already available from the previous summer potato crop.

Thus, the diversification of agricultural production concerning the major crops is a way of ensuring a regular income of cash. For example, two years ago the production of courgettes was very low because of climatic conditions. The losses resulting from the crop failure were supported by the revenues from the green peppers. Similarly, the diversification of production allows Mahmuri to counterbalance the fluctuations of the price on the market. For example, the price of summer potatoes, in 1984, dropped on the market due to the fact that most peasants in the region turned to cultivating potatoes when they found out that the producers of the previous season had made high incomes. Thus, the price of
summer potatoes dropped during that season because the supply exceeded the demand at a specific time, and most peasants who relied only on summer potatoes faced financial problems. In Mahmud's case the losses of summer potatoes were partly counterbalanced by the income from winter potatoes, barsim, and by the income of the following crops.

The share of the price of inputs of the five crops, complies with the requirements of each crop, regardless the size of the plot. For example, although barsim covers the largest surface, ten qirats, its price of inputs are the lowest, whereas green peppers and summer potatoes are the highest. This is because these two crops require larger quantities of fertilisers and pesticides; and if the summer potatoes were cultivated on the same size of plot as the green peppers they would have had almost the same inputs. On the other hand, winter potatoes, with the smallest size of two qirats, requires more inputs than courgettes cultivated on a larger plot, yet this might not be very accurate because Mahmud synchronises the agricultural operations of green peppers and courgettes.

On the other hand, by focusing on the share of labour of the five crops one will notice that it varies according to both the type and the intensification of the agricultural operations, on the basis of the size of the plot, and on the sexual division of labour. However, barsim remains an exception, as it covers the largest surface with the lowest inputs of labour, because it does not require labour intensive work. In addition, in this particular case, two cuts of short season barsim were undertaken by the buyer. But in general, the share of labour in the inputs of production of green peppers and summer potatoes are lower that the share of inputs, whereas it is higher concerning winter potatoes, courgettes, and barsim, given the organisation of the agricultural production adopted by Mahmud.

The share of the input of irrigation varies for each crop according to their water
requirements under different climatic conditions. Similarly, the figures show that the inputs of irrigation of the five crops are largely proportional to the size of the plots within the water requirements of each during the season. The input of irrigation of ten qirats of bassem is similar to that of green peppers cultivated on eight qirats, and that of four qirats of courgettes is higher than the input of irrigation of four qirats of summer potatoes. The inputs of irrigation are largely determined by the climate, and by the duration of vegetation. The water requirements of two qirats of winter potatoes are the lowest because they cover the smallest surface, and they are cultivated in winter when the weather is rather cold. On the other hand, since the fixed inputs are set at seven times the value of taxes, this means that their share in the inputs are directly proportional to the size of the plot and are a constant.

Finally, the diversification of agricultural production on a small plot of 12 qirats comprising a large variety of crops has been made possible because of the quality of the soil, and because the needed unpaid labour, of men, women, and children is available. Moreover, this organisation allows Mahmud to diversify his products according to the requirements of the markets and prevents him from depending on the product of one crop. However, even with the shift toward permanent crops, Mahmud diversified the type of the trees among oranges, tangerines, and pears. Thus, what emerges from this specific case is the complex way in which the organisation of agricultural production is carried out on a small surface. The most interesting feature of this type of organisation is the underlying logic which cannot be understood on the basis of a simple numerical calculation. A number of interrelated elements enter into the equation: the type of the crop and its requirements, the size and condition of land, and the organisation of the works between the household members.

Thus, the estimated figures of the inputs of production and of the net revenue do
not reflect the reality of the organisation of the agricultural production. They were only provided to illustrate certain aspects of production to the reader, and to provoke the argument on the hidden logic of the process of production in a specific household unit. Therefore, this aspect cannot be illustrated on the basis of figures, nor can it be understood on the basis of a generalised description of the pattern of cultivation of certain types of crops on a unit of land. Furthermore, the previous description covered only one aspect of Mahmoud’s agricultural organisation, the free cash crops, in which market forces play an important role in determining the cash return.

However, as will be shown in the following chapter, Mahmoud devotes part of his cultivation to the production of compulsory crops, which are essentially produced for the household consumption, such as rice, maize, and wheat. This aspect is crucial for understanding the process of production on the level of a household unit, which produces both for consumption and for the market. In each case, the common factor is the reduction of expenditures through various means, among which is the use of unpaid labour.

3.4. The Cultivation of Orchards on a Large Scale

The following section of this chapter is an attempt to describe the system adopted on a large scale for the cultivation of orchards, as a different form of organisation of production in which marketing largely determines the process of agricultural operations.

The Fakhr family is one of the largest owners in Beira, and one of the largest producers of oranges and bananas in the region. The property is extended over a long strip located on the bank of the Nile. The long heritage of the family in
agricultural activities, and the high quality of the soil, allowed the Fakhri family to introduce new crops in the region and to expand the variety of their production according to the conditions and the demands of the market. This flexibility enabled them to overcome many crises over a long period of time.(Chapter V)

The distribution of the various crops on the land is undertaken as such: 54 feddans are cultivated by oranges, 12 feddans by apples, pears, and grapefruit, and 18 feddans by bananas. This distribution remains almost constant for the oranges. Yet, it changes occasionally over the years concerning grapefruit, apples, pears, and bananas depending on the marketing conditions. The distribution of the production on such a large scale requires large channels of marketing, and any slight alteration on the market affects the revenue. However, until the present time, the changes that took place in the type of cultivation were minor because the market conditions were advantageous for these crops.

The logic behind the production on this scale is based on the expansion and the intensification of a quasi-specialised production, which ultimately contributes to the reduction of the inputs of production. Nevertheless, this system can be double edged, in the sense that the concentration of production on one or two permanent crops can be risky if the crop is not sold under good conditions. Similarly, if government policies regarding these plantations change to the disadvantage of the producer, the shift toward other crops becomes, then, a costly operation as it requires the removal of the trees. For example, a few years ago, the Egyptian grapefruit could no longer compete on the world market, and the channels of marketing were confined to the local ones where the demand could not cover the supply. The Fakhri family, like many others, had to remove the trees to replace them with other crops and, as a result, many producers faced serious losses.

Thus, orange trees remain the major crop of the Fakhri's property; whereas apple,
pear, and grapefruit trees are considered subordinated ones, which are cultivated
to offset any crisis that may occur concerning oranges. On the other hand, the
plantation of bananas has not been on regular basis because their production was
weak and the variety of the trees was not improved for a very long time.
However, lately, when the Ministry of Agriculture introduced new varieties of
trees which proved to be more productive, the Fakir family expanded the surface
of bananas. Despite the variety of crops cultivated on the Fakir's land, the
organisation of the production of oranges will constitute the focus of this
discussion, as it represents a different form of organisation than the ones examined
previously.

The 54 feddans cultivated by oranges are divided into several small basins varying
between five and ten feddans and surrounded by a main irrigation canal. Most of
the basins are cultivated by a variety of oranges comprising navels, with the
highest prices on the market, followed by Valencia, Baladi and 'Ashmuni. There
are almost 150 trees per feddan producing an average of 120 kg per tree. When
the trees are newly planted, they are placed in a square of four orange trees on
seven square metres, and in the middle of the square one tangerine tree is planted.
The reason why this system is adopted, is that the orange trees require five years
before producing, while tangerine trees require only four years. This means that
over a period of five years, there are four years of unproductiveness and one year
during which fourth of the feddan produces tangerines.

The type of agricultural operations needed for the cultivation of oranges is the
same as the one mentioned previously for the cultivation on a small scale.
However, the difference lies in the size, the intensity, and the way the agricultural
operations are undertaken, which is reflected in the inputs of production and the
productivity per feddan. There is also a difference in the size of marketing and
specific market conditions which largely determine the agricultural operations.
The Fakhrī family manage their farm with the intention of making the highest income on the basis of the quantity and quality of the product. This is achieved through the expansion of the production and the intensification of the productivity as well as the improvement of the quality of production in order to compete on the biggest markets. The Fakhrī's produce for a specific market in which the quantity and the quality of the product is the major factor in determining the final price. Thus, in order to achieve the highest price on the market, the agricultural operations must be done on time and accurately. This is made possible because the needed capital for running the operations is available.

To a certain extent, the agricultural operations are determined by the marketing conditions, under which certain specifications and criteria must be met. The terms of selling of the Fakhrī's crop are different from those of a small plot in the sense that the crop is sold in advance, i.e., before it is produced or even appears on the trees. Usually the selling takes place at the end of the month of May, just after the harvest of the previous season, on which basis, the price of the following crop is estimated. There are many conditions and considerations taken into account by the Fakhrī family before selling the crop of the farm to a merchant. According to this type of selling, the field merchant is in charge of the harvest and of transporting the crop to the markets. This means that he has to provide the wage labourers, and has to ensure the security of the fields during the harvesting. On the other hand, the field merchant takes advantage of the size of the property to store the crop as he gradually sells it on the market.

Thus, by signing a contract for the selling of the crop, the Fakhrī's are involved with a field merchant from Betra for an entire year, during which he is present on the property on regular basis, and his men are involved in many agricultural operations taking place on the farm. Therefore, not only the price offered by the
field merchant is taken into account, but also his reputation in the market in terms of his dealings with the owners. This factor is quite important and bears a double significance depending on the position of each party. The field merchant, a peasant from Bera, usually has more influential relations with the workers and the responsible persons on the farm than the absentee landlord. Because of this, he can control the workers and put pressure on the owner through his relations with the workers to reach his objectives. Thus, a relation of power is established between the buyer and the seller, which is a considerable drawback for the absentee landowners. On the other hand, the Fakhr family takes into account the fact that the field merchant stores the crop on the trees until the price increases on the market. This factor is considered by the owner to be a disadvantage, because more time is then spent in the harvesting operation, and the post-harvest agricultural operations are delayed and postponed, in which case the conditions of the farm are not appropriate, in May, for increasing the price of the following season.

The agricultural operations on the farm are not totally synchronised because each crop, specifically pears, apples, and bananas, follows a different cycle than the others, and the landowner is partly conditioned by the timing of selling the product in May. This means that the landowner must make sure that the field merchant accomplishes the harvesting at the right time, unless the contract between the same two parties is renewed. Similarly, the landowner must maintain if not increase the productivity of the trees in order to open the doors for negotiating the price of the following season. Many factors contribute in attracting the orchard field merchants to buy the product of the Fakhr family, among which is the large size of the property gathered in one area near most commercial centres of the Delta, and near the major communication networks. In addition is the fact that the farm is managed directly by one member of the family, and no disputes over ownership or other matters concerning the organisation of production have been reported.
Taken in their totality, these factors contribute to increasing the final price offered by the field merchants.

Table VI.9.1: Inputs of Production of One Fodden of Naval Oranges on a Large Scale

<table>
<thead>
<tr>
<th></th>
<th>UNIT</th>
<th>NUMBER of UNITS</th>
<th>CASH EXPENDITURE C.E</th>
<th>TOTAL EXPENDITURE C.E</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. RAW PRODUCT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Naval oranges</td>
<td>kg</td>
<td>18,000.00</td>
<td>0.25</td>
<td>4,500.00</td>
</tr>
<tr>
<td><strong>2. VARIABLE INPUTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Man for pruning the trees</td>
<td>Day</td>
<td>15.00</td>
<td>4.00</td>
<td>60.00</td>
</tr>
<tr>
<td>Woman for pruning</td>
<td>Day</td>
<td>20.00</td>
<td>2.00</td>
<td>40.00</td>
</tr>
<tr>
<td>Tractor for the transport of the wood</td>
<td>Day</td>
<td>2.00</td>
<td>25.00</td>
<td>50.00</td>
</tr>
<tr>
<td>Man for loading the tractor</td>
<td>Day</td>
<td>2.00</td>
<td>4.00</td>
<td>8.00</td>
</tr>
<tr>
<td>Woman for loading the tractor</td>
<td>Day</td>
<td>1.00</td>
<td>2.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Manure</td>
<td>Ghabiti</td>
<td>300.00</td>
<td>0.50</td>
<td>150.00</td>
</tr>
<tr>
<td>Man for spreading manure</td>
<td>Day</td>
<td>5.00</td>
<td>4.00</td>
<td>20.00</td>
</tr>
<tr>
<td>Woman for spreading manure</td>
<td>Day</td>
<td>1.00</td>
<td>2.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Fertilizers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrates</td>
<td>50 kg</td>
<td>24.00</td>
<td>3.25</td>
<td>78.00</td>
</tr>
<tr>
<td>Superphosphate</td>
<td>50 kg</td>
<td>6.00</td>
<td>1.80</td>
<td>10.80</td>
</tr>
<tr>
<td>Man for spreading the fertiliser</td>
<td>Day</td>
<td>3.00</td>
<td>4.00</td>
<td>12.00</td>
</tr>
<tr>
<td>Irrigation</td>
<td>Hour</td>
<td>19.00</td>
<td>1.40</td>
<td>26.60</td>
</tr>
<tr>
<td>Man for irrigation</td>
<td>Day</td>
<td>2.00</td>
<td>4.00</td>
<td>8.00</td>
</tr>
<tr>
<td>Annual Inputs of mechanic for the pump, of gardener, and guard</td>
<td>Day</td>
<td>NA</td>
<td>NA</td>
<td>40.00</td>
</tr>
<tr>
<td>Fuel for the engine</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>5.00</td>
</tr>
<tr>
<td>Woman for spraying</td>
<td>Day</td>
<td>1.00</td>
<td>2.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Man for spraying</td>
<td>Day</td>
<td>5.00</td>
<td>4.00</td>
<td>20.00</td>
</tr>
<tr>
<td>Pesticides</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>217.25</td>
</tr>
<tr>
<td>Taxes</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>18.00</td>
</tr>
<tr>
<td><strong>Total of variable Inputs</strong></td>
<td></td>
<td></td>
<td></td>
<td>769.65</td>
</tr>
<tr>
<td><strong>3. EXPENDITURE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed Inputs</td>
<td></td>
<td></td>
<td></td>
<td>100.00</td>
</tr>
<tr>
<td>Variable Inputs</td>
<td></td>
<td></td>
<td></td>
<td>769.65</td>
</tr>
<tr>
<td><strong>Total Expenditure</strong></td>
<td></td>
<td></td>
<td></td>
<td>869.65</td>
</tr>
<tr>
<td><strong>4. INCOME</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total price of raw product</td>
<td></td>
<td></td>
<td></td>
<td>4,500.00</td>
</tr>
<tr>
<td><strong>Total Expenditure</strong></td>
<td></td>
<td></td>
<td></td>
<td>869.65</td>
</tr>
<tr>
<td>Net Income</td>
<td></td>
<td></td>
<td></td>
<td>3,630.35</td>
</tr>
</tbody>
</table>
Given the fact that the majority of the land is cultivated by orchards, most of the activities undertaken on the farm revolve around the production of citrus fruit. Cattle fattening has been for a very long time part of the activities of the farm, from which organic fertiliser is extracted, and through which a revenue is realised from selling the cows on the market. Similarly, the cultivation of *baram* under banana trees is a means of providing green fodder for cattle fattening and a way of providing an important element for the fertility of the land. The construction of apicultural station, though on a small scale, was undertaken for the pollination of
the orange trees, which also produces honey that is sold on the market. Thus, the management of the farm is conceived on the basis of extracting the maximum capacity of the soil, and of the space, in order to increase the productivity of the land. Similarly, the diversification of production comprising a number of kinds of fruit has enabled the Fakhri family to have access to different marketing networks, both locally and internationally.

Taking into account all the factors that have contributed in increasing the price of the product of the farm on the market, the organisation of the agricultural operations remains an important factor behind the efficiency of the management, and an important aspect in understanding the process of production on such a scale.

The share of labour and the share of the transport of the leftovers from the pruning constitute a considerable share in the total expenditure of production (Tab.VI.9.2) This is due to the fact that the maintenance operations of one feddan under such conditions and on such a scale, increase. Because of the high requirements of wage labour for the agricultural operations per feddan, the Fakhri's have adopted a system of hiring a contractor of wage labour who provides the necessary number of workers over the year, at a specific daily wage regardless the seasonal demand on the labour market. In return, the contractor charges 10% on each daily wage paid. When major operations are required on the farm, the contractor, on the basis of a verbal agreement for a specific price, takes charge of the entire operation, which is to be accomplished at a specific date. However, because most of the agricultural operations are labour intensive and are extended over a large area, the inputs of labour and transport occupy almost the same position as the share of inputs. Nevertheless, this type of agreement between the landlord and the contractor of wage labour does not reduce the price of wage labour as it first may seem. Instead, the price of the daily wage per labour is the same as on the market, if the 10% of the contractor are added. Yet, the contractor
offers the landowner the service of providing and controlling the labour throughout the entire year, regardless of the seasonal demands and the type of operations. The intensity and the variety of the agricultural works throughout the year, and the large area of land cultivated, where the number of workers needed for each operation exceeds that required on a smaller plot, renders this farm an attractive employment opportunity for wage labourers, despite the relatively low wages offered by the contractor.

Agricultural production on such a scale and with all the work that is involved, requires intensive operations and sometimes certain skills. For example, the pruning of the trees is extensive given the quality and the quantity of the product that is produced. In some cases, the trees need special maintenance, as they date from the late 1930's. Similarly, the large amount of leftovers from pruning requires workers for their removal and means of transport. Moreover, the large quantity of fertilisers is sprayed by a mobile machine that requires three men to handle: one for spraying, one for mixing the ingredients, and the third for pushing the engine. Whereas, on a small plot the manual sprinkler for the spraying of one feddan is handled by one man.

The share of pesticides and fertilisers in the total expenditure of production, represents 54.48%, amounting to £ 501.05 per feddan, almost equivalent to the share of labour and transport. Although the inputs are bought at lower prices than the market ones, the amount purchased is nearly double the quota delivered by the cooperative. The reason for the intensive use of pesticides and fertilisers is the replacement of certain intensive labour operations by chemical treatment such as the weed operation, and ploughing.

In fact, by using this system, the Fakhri's reduce their dependency on wage labour for the major agricultural operations; they reduce the inputs of production and
they have direct control over the operations. This is illustrated by the total control over the weed infestation on the land. This system was made possible by the availability of the needed cash and storage areas. The landowner buys and stores large quantities of fertilizers and pesticides to cover his needs for a year. This enables him to escape from the increases of the price of fertilizers. Thus, by storing the inputs the landowners reduce the price within the margin of consumption, as was the case with nitrates, purchased at £.E 3.25 per 50 kg instead of £.E 4.70, with a difference of £.E 1.45 per 50 kg. If they had been purchased at £.E 4.70 per 50 kg the total price would have reached £.E 112.80, instead of £.E 78. By comparing the price and the quantity of nitrates purchased by the Fakhri family, and those purchased by Said, one will notice that Said bought almost half the quantity of the Fakhri’s, and paid £.E 51.70. Whereas, the Fakhri’s paid only £.E 25.30 over the price of Said’s for almost double the quantity. (Tab.VI.9.1)

Finally, the share of the inputs of irrigation remains low, and any additional charges paid for the maintenance of the water pump are distributed equally over the 84 feddans. The lowest charges, however, are those of taxes and of the fixed inputs; together with the inputs of irrigation they represent only 15.72% of the total expenditure, reaching £.E 144.6. (Tab.VI.9.2)

Nevertheless, if the Fakhri family was to take charge of its own harvesting, the inputs would have increased considerably, as harvesting requires certain skills and continues for a long period of time, up to three months or more on irregular basis. Yet, because in this specific case the inputs of harvesting are undertaken by the field merchant, they will be discussed in detail from the marketing aspect and from the labour market side in other chapters. But briefly, many factors determine the ways and the timing of the harvesting operation. The climatic conditions in winter sometimes intervene delaying the operation. Similarly, the marketing conditions,
depending on the orders and the prices, determine the timing of the harvesting operation. The information gathered about this question was taken from the merchant who bought the crop. In this particular case, the crop was sold to a government export company of orchard produce. In its turn, the conditions of export impose certain criteria on the quality, the size, and the shape of the exported product. This requires a specific way of cutting the fruit from the tree and the timing of the harvest depends largely on the shipping conditions and on the orders from foreign markets. Therefore, it would be preferable to continue the discussion of this operation in detail as related to the marketing of crops in order to understand the implications of the marketing system on different aspects of the process of production, such as the labour market in Batra, and the impact of the introduction of a government export company, as an external body, on the established marketing network in Batra.

As argued in this chapter, sector C combines the plantation of both permanent crops comprising citrus fruit, and rotation crops including vegetables and fruit. Within a biennial rotation cycle a large variety of crops are cultivated in an intercropping or a mixed cropping form. This has been made possible by the adequate quality of the land which allows a number of combinations for cultivation, and the direct access of the sector to the source of water, allowing a regular permanent irrigation.

Mixed cropping, one of the forms of production, is adopted proportionally to the size of the holding covering a variety of permanent free cash crops sold on the free markets. By adopting this system the holders break with the specialisation of production, often adopted for large scale production. The intensification of the production of the land is the objective for both large and small scale production. Similarly, the flexibility of shifting and adapting the production to the demands of the markets, at any given time, is also a logic adopted for both scales of
production, as long as the product is sold on the market under appropriate conditions.

The cultivation based on intercropping, during the period of converting a plot from a rotation crop to a permanent one, is one of the characteristics of the organisation of production on a small holding of one feddan or less, in sector C. Within this organisation, the diversification of the agricultural production is highly intensive under a rotation cycle. Although the intensification of the agricultural production may affect the quality of the final product, it has been made possible because the product is sold on the local markets and does not comply with rigid specifications. Similarly, this system allows the peasant a high flexibility of shifting from one crop to the other according to market and household conditions. However, this flexibility is determined by the size of the land for the production of permanent crops. This is due to the fact that once the trees reach their full maturity, it becomes difficult to cultivate any crop under them, as the branches prevent sunlight from reaching the plants. Therefore, under permanent crop cultivation, only a horizontal diversification becomes possible.

Despite this disadvantage, many peasants transform their cultivation to permanent crops, because the labour requirements are concentrated over a certain period of time, which allows a better control of the agricultural operations, as compared to the crop rotation, which in its turn allows the peasant to get involved in a number of other activities. But mostly, because the government encouraged this shift through the pricing policy. However, the problem that may face these producers in the future is the eventual change in the government pricing policy regarding these crops. Or, the prices may drop on the market, when the supply exceeds the demand. In this case, the producers would be stuck with their crop and their trees.

The producers of sector C are considered to be the most privileged holders in the
territory of Batra. They benefit from the best agricultural land and the best location of the land in relation to the source of water, as compared with the two other sectors. The specificity of the ecological conditions of this sector have been exploited to the maximum by the peasants. A variety of forms of organisations have been adopted, according to market and household conditions. These forms translate a specific logic elaborated by the peasants to use their maximum ability and the potential offered by the household. A rational that cannot be understood or apprehended on the basis of concepts derived from capitalist relations. Unlike, the forms of organisation adopted by the peasants, the form of organisation established on a large scale production, complies with the logic of the market, where the minimisation of labour and the full exploitation of the land, horizontally and vertically, are the means of achieving the highest monetary incomes. Even at this level, the structural limitations of the land is the basic constraint for the expansion of the large enterprises.

Finally, in the context of the above, it can be advanced that the various forms of organisation of agricultural operations can only be understood on the level of the household unit. Concerning production on a large scale, we find that it operates according to the logic of the market, and once again can only be understood on the level of the organisation of production and under the specific market conditions. In this kind of organisation, a relation of power is established between the absentee landowner and the merchant, a peasant from the village, and only those peasants involved on permanent basis in the process of production can benefit from the facilities of the farm, each according to his social status and his position in work.
1- Strategic crops are wheat, cotton, rice or any crop considered by the government as important for the national economy.


3- The agricultural year is divided into two crop rotation cycles, the winter cycle, from October to February, and the summer cycle, from March to September. The winter crops usually comprise the following: wheat, lentils, beans, full season barqum, and short season barqum. As for the summer cycle it includes: cotton, rice, maize or Shamiiyyah, sorghum or Rafiah, sesame, peanuts, and soya beans. However, these do not include vegetables which are considered in most cases as free cash crops cultivated in specific areas and under different rotation cycles, thus complying to different conditions of cultivation. As for the permanent crops, i.e. the crops that do not follow an annual rotation cycle such as oranges and sugar canes, they are cultivated in certain areas and are not followed or preceded by other crops.

4- Full season barqum is the cultivation of barqum from December to May, during which four cuts are taken, whereas short season barqum is the cultivation of barqum as an intermediary crop usually preceding cotton, and only two cuts are taken from it, after which it is removed and the land is ploughed for the new crop.

5- The Minister of Agriculture explained that the official figures of the inputs of production used for fixing the price of the compulsory crops do not correspond to the effective inputs of production, and in most cases are lower. This is due to the fact that the official figures of the Ministry of Agriculture are based on the official prices of inputs and of the rent value of the land based on seven times the tax, as fixed and subsidised by the government. (Wali, 1983:18-21) It should be pointed out that the subsidy system is not often received by the farmers as expected.

6- The territory of Batra covers 2,897 feddans of which 494 feddans are constructed on and the rest, 2,403 feddans, is cultivated.

7- Source, the Department of Agriculture in the Governorate of Deyahliayya, 1987.
8- The sum of the figures of the cultivated area of vegetables, orchards, and banana in sector C, does not correspond to the total surface of the sector representing 550 feddans. This is due to the inaccuracy of the official figures advanced by the government institutions.

9- The Ghabit is a large container made of straw used for transporting things on the back of donkeys. One Ghabit constitutes a unit of measure used for weighing the organic fertilizers, each unit is sold on the market for £ E 0.50.

10- When the agricultural operations are done on a dry soil as in this case, the presents qualify the land as Sharqi.

11- In this area there are three types of oranges cultivated: naval oranges or 'Abusea, Valencia or Sayfi, Balafi known as such on the markets, and Shamuni or 'Asmuni.

12- The equivalent of 5.2 kg of barson seeds is almost half a tila.

13- It should be pointed out that there are two types of potato cultivation, the first is called summer potato and is cultivated from January to March. The seeds are imported and the product is destined for export, and only the Specialised Cooperative of Potato Producers provides the imported seeds. The second type is called winter potato, it is cultivated from October to January and the product is sold on the local markets only. The seeds of the winter potatoes are provided from the harvest of the summer potatoes and they are sold on the free market.

14- The preparation of the plot for potato cultivation requires ploughing, except that ploughing in this specific case is impossible to do with a tractor or a plough because it can destroy the orange trees, therefore, hosing replaces ploughing.
CHAPTER VII

The Organisation of the Agricultural Production in ETA, Sectors B and A

Within the same theoretical approach as in the previous chapter, the following chapter will examine the organisation of the agricultural production in sectors A and B. The first part will be devoted to the study of the crop distribution and composition in sector B. The organisation of maize production and of courgettes, by a large household, will be examined and compared, as the first crop is produced for consumption and for marketing, while the second is for commerce only. In both cases, unpaid family labour represents an essential factor in the process of organisation. This will be followed by the examination of onion cultivation by one single landowner who hires the necessary labour. Finally, rice cultivation will be examined in detail as it represents an important crop for consumption by the peasant's households and as an export crop for the national economy. Therefore, a number of complex forms of organisations take place, entailing different relations of production.

The second part of the chapter will focus on agricultural production in sector A
which is characterised by compulsory crops. Wheat, a strategic crop, will be first examined through the state policies under which the peasants organise their production. The case study of wheat cultivation by a merchant of grains, will illustrate one of the adaptive strategies of peasants on the level of production and marketing to government constraining measures, in order to supply the household with its needs for consumption.

Cotton, the national export crop, cannot be apprehended without understanding its role in the national political economy. Thus, a historical review of the changes in state policies regarding its production and its marketing will focus on the impact of the world market in orienting the national economy. This will be illustrated through the 1921 economic crisis in Egypt, as an example reflecting the role of merchant capital in increasing the dependency of Egypt on the world market. This will followed by the study of various state policies adopted from the 1950's, when the monopoly of the state was exercised, to the 1980's under the open-door economic policy, during which cotton witnessed a decline to the lowest levels in its production and marketing. Under these policies, the local organisation of cotton production by the peasants will be examined, highlighting the various strategies adopted, based on informal relations, to reduce or escape from the government constraints. Finally, the organisation of tomato production, the only free cash crop grown in sector A, which is cultivated every three years, will be studied, as it represents a means of counterbalancing the low income from the compulsory crops.
1. Sector B

1.1. The Crop Distribution in Sector B

Sector B covers a surface of 735 feddans, from which 489 feddans are agricultural land and the rest, 246 feddans, are occupied by the centre of the village which expanded at the expense of the agricultural land. Sector B is the heart of commerce and trade in Batra. The choice of agricultural production has been partly directed toward the demands of the local marketing network. However, the effects of this expansion were reflected on the drainage and the irrigation systems of many fields. (Chapter III)

Sector B is divided administratively into four basins, nos. 8, 9, 10 and 11. (Fig.VI.2) Each basin comprises a combination of different crops complying with different rotation schedules and only 25 feddans are cultivated by permanent crops. This sector is under a compulsory crop rotation, because the access to the irrigation source, varying between the Nile and al-Sabil canal, has enabled the government, through the water turn in basins nos. 8 and 9, to control the type of agricultural production. On the other hand, only the plots irrigated from the Nile and located around the commercial centre are cultivated by free cash crops, and the holders are not entitled to convert them to permanent crops. Several peasants said that they prefer the cultivation of vegetables based on a rotation, rather than permanent crops, because it allows them a higher flexibility for adaptation to market fluctuations and a frequent access to the market centre. The rotation of vegetables provides a more regular monetary circulation throughout the year, whereas the cultivation of permanent crops provides cash once a year.
Figure VII.1. Crop Rotation Cycle in Sector B

- Short Season
- Barley
- Winter
- Potatoes
- Onions
- Summer
- Potatoes
- Tomatoes
- Maize
- Rice
- Cotton
- Vegetables
- Compulsory Crops
- Intercropping: Compulsory Crops & Free Cash Crops
Depending on the location and the quality of the soil of each basin, the type of cultivation is determined on a biennial rotation cycle. Basins nos. 8 and 9 are cultivated by compulsory crops based on cotton and rice, which are alternated every three years by tomatoes. Basins nos. 10 and 11 are cultivated by vegetables in a rotation based on winter and summer potatoes, in addition to a small area cultivated by onions. The crop distribution shows that out of 489 feddans registered officially as agricultural land, nearly 226 feddans are cultivated by compulsory crops, almost 263 feddans are cultivated by free cash crops, and 25 feddans by permanent crops. Moreover, according to the same distribution, the closer a plot is to a commercial centre, the more likely the area is to be cultivated by free cash crops. Thus, basin no. 10 comprises free cash crops only. Finally, basin no. 8, the smallest basin known for the bad quality of its soil, is partly cultivated by green beans, a compulsory crop, and vegetables, specially tomatoes, occupying the area surrounding 'Izba(t) al-Flag Khalil.(Fig.VI.2)

1.2. The Crop Composition in Sector B

The crop composition in sector B, is characterised by a large variety of crops combined intensively in a biennial rotation cycle, over a period of 12 months. Depending on the location of the plot in each basin, the rotation cycle is determined by the agricultural cooperative. From October to January winter potatoes are cultivated in basins 10 and 11, or short season barley in basins 9 and 8. This is followed by summer potatoes in 10 and 11 and parts of 9. Wheat is also cultivated in 8 and 9 and is regarded as a compulsory crop. Summer cultivation covers cotton, maize, and rice as compulsory crops, and tomatoes as free cash crops. However this division is not as accurate as it may seem, because the rotation cycle and its distribution change from one year to the other, and the categorisation of the crops as free cash or compulsory ones changes according to
political and economic conditions. Therefore, the given crop rotation cycle is only valid for the agricultural year 1985-1987, and cannot be regarded as a general rule. (Fig. VII.1)

The important winter crop for the peasants is summer potatoes because of its high income, while wheat is produced for household consumption as a compulsory crop. For the majority of the producers winter potatoes or barima counterbalance the low profits made on wheat. Similarly, for most peasants the important summer crop is tomatoes or maize, but from the government's position cotton and rice represent important export crops. As a result, the peasants undertake varied means to raise higher incomes or acquire a larger proportion of the delivered quota of crops. For example, one of the most common ways adopted by the peasants whose plots fall under cotton cultivation, is to plant summer potatoes from January to April, and to put the cotton seeds in the middle of the potato plants in March. (Fig. VII.1) Thus, during a period of time both crops are articulated on the same land. Moreover, those who plant cotton and want to start an early winter plantation in the end of September, or in the beginning of October, remove the cotton plants before the second picking and deliver to the government a smaller quantity than the estimated quota. These actions are the result of government pricing policy which fixes the price of cotton three times lower, if not more, than the market price.

In general, the crop distribution and the rotation cycles adopted in this sector have generated differences among the producers according to the location of their land, in the sense that in one basin a peasant can grow, throughout the year, free cash crops, and make a higher income than his neighbour who is confined to growing compulsory crops. In other cases, when both categories of crops are cultivated, one crop is often cultivated at the expense of the other, depending on the fluctuations of the market prices. In addition, the existence of the commercial
centres in the surroundings encouraged most peasants of sector B to be involved in
commercial activities related directly or indirectly to agricultural production. The
high monetary circulation in the sector, and the expansion of all sorts of economic
activities, have also enabled the peasants to have access to cash in order to intensify
their production or get involved in the marketing of agricultural production
directly. All these factors have contributed to creating a clear distinction between
the peasants producing in sector B and their neighbours in sector A who do not
benefit from the same conditions.

However, because there is a large variety of crops cultivated in this sector many of
which were examined in detail in the previous chapter, such as short and long
season bessim, and winter and summer potatoes, this part will only deal with
maize, rice, and onions. The choice of these crops is not arbitrary, as the first is
subject, at different periods, to different government policies and constitutes an
important element for the household consumption, and a valuable product on the
market. The second, rice, is subject to government control in terms of production
and marketing. Similarly, rice represents a basic element of consumption for the
household and its cultivation is highly recommended every now and then. Finally,
onions are cultivated between October and January, and are considered by many
peasants as a cash crop filling the gap between two major seasons.
2. The Organisation of Agricultural Production in Sector B

2.1. The Cultivation of Maize on One Feddan

Hag Mahmoud and his brother are owners of five feddans distributed in two basins in sectors B and C. (Fig. VI.2) Three feddans are located in basin no. 11 in sector B, and the rest is located in sector C. The first plot is under a compulsory crop rotation, while the second is under a free cash crop rotation. However, it should be pointed that the rotation fixed for 1986-1987 in sector B, based on vegetables, represented an exceptional year, because he is allowed to cultivate free cash crops every two years only.

Hag Mahmoud divided the three feddans into two plots: the first is of one feddan and the second is of two feddans. In the first plot of one feddan he planted maize after summer potatoes, and on the second he cultivated courgettes. Although, that year, he had the choice of cultivating free cash crops, he maintained the cultivation of maize, a compulsory crop. Hag Mahmoud was always involved in the production and the marketing of maize even when it was directly controlled by the state. Although he thinks that the policy regarding maize production will always be subject to changes depending on the market conditions, he argues that it is an important crop on which his household depends for consumption for bread and for animal and poultry raising. Therefore, he finds different means to reduce the delivered quota to the government, and sells part of the product on the free market.

Maize can be stored for a long period of time during which the market price fluctuates. Similarly, maize is sold in different forms and each form is priced
differently, which ensures different incomes from the grains and from the straw. The cultivation of courgettes, on the other hand, provides Hag Mahmud with a weekly income from which he pays the inputs of production of maize sold long after the end of the season. Thus, the cultivation of maize is basically for the household consumption and for marketing purposes, whereas courgettes are cultivated for the cash. The ownership of the five faddans is in the name of both Hag Mahmud and his brother without any division, and both brothers live together in the same house with their families. Thus, the basic labour requirement of women and men is available. The agricultural operations, the consumption, and the commerce of the product is shared by both families including women who are in charge of the marketing.

Hag Mahmud started the cultivation of maize and courgettes at the end of June to synchronise the basic agricultural operations of both crops. Courgettes start producing 40 days after seeding, while maize is harvested five months later. In the beginning of the season the plot is ploughed with a tractor which he rents from individuals, and the land is divided into ridges of 40 cm each. Both Hag Mahmud and his brother themselves undertake the agricultural operations required as they do not combine other economic activities with agriculture, and most of the work revolving around agricultural production such as marketing, is shared by the members of the household. This operation is followed by the seeding of maize, and the seeds are put in small holes made in the ridges. Under ordinary circumstances, Hag Mahmud gets the seeds from his previous crop, but this year the Bank of the Village received a large quantity of seeds to be sold to the peasants.
### Table VII.1.1: Inputs of Production of One Feddan of Maize

<table>
<thead>
<tr>
<th></th>
<th>UNIT</th>
<th>NUMBER of UNITS</th>
<th>CASH EXPENDITURE C.E</th>
<th>TOTAL EXPENDITURE C.E</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Raw Product</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maize delivered to the bank</td>
<td>Kila</td>
<td>22.40</td>
<td>3.12</td>
<td>69.89</td>
</tr>
<tr>
<td>Maize used for consumption</td>
<td>Kila</td>
<td>56.00</td>
<td>6.50</td>
<td>364.00</td>
</tr>
<tr>
<td>Maize sold on the market</td>
<td>Kila</td>
<td>67.20</td>
<td>6.50</td>
<td>436.80</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>Kila</td>
<td>145.60</td>
<td></td>
<td>870.69</td>
</tr>
<tr>
<td><strong>2. VARIABLE INPUTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preparation of the field</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tractor for ploughing</td>
<td>Day</td>
<td>1.00</td>
<td>15.00</td>
<td>15.00</td>
</tr>
<tr>
<td>Seeds</td>
<td>Kilo</td>
<td>16.00</td>
<td>1.65</td>
<td>26.40</td>
</tr>
<tr>
<td>Man for seeding</td>
<td>Day</td>
<td>2.00</td>
<td>4.50</td>
<td>9.00</td>
</tr>
<tr>
<td>Woman for seeding</td>
<td>Day</td>
<td>2.00</td>
<td>2.50</td>
<td>5.00</td>
</tr>
<tr>
<td>Man for hoeing</td>
<td>Day</td>
<td>12.00</td>
<td>5.00</td>
<td>60.00</td>
</tr>
<tr>
<td>Irrigation</td>
<td>Hour</td>
<td>27.00</td>
<td>0.60</td>
<td>16.20</td>
</tr>
<tr>
<td>Man for irrigation</td>
<td>Day</td>
<td>9.00</td>
<td>4.00</td>
<td>36.00</td>
</tr>
<tr>
<td>Man for thinning</td>
<td>Day</td>
<td>2.00</td>
<td>5.00</td>
<td>10.00</td>
</tr>
<tr>
<td>Fertilisers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urea</td>
<td>50 kg</td>
<td>7.00</td>
<td>9.00</td>
<td>63.00</td>
</tr>
<tr>
<td>Man for spreading the fertilisers</td>
<td>Day</td>
<td>4.50</td>
<td>0.50</td>
<td>2.25</td>
</tr>
<tr>
<td>Insecticides</td>
<td>Litre</td>
<td>0.90</td>
<td>10.85</td>
<td>9.77</td>
</tr>
<tr>
<td>Man for spraying the insecticides</td>
<td>Day</td>
<td>1.00</td>
<td>4.50</td>
<td>4.50</td>
</tr>
<tr>
<td>Woman for weeding</td>
<td>Day</td>
<td>8.00</td>
<td>3.00</td>
<td>24.00</td>
</tr>
<tr>
<td>Man for harvesting</td>
<td>Day</td>
<td>4.00</td>
<td>5.00</td>
<td>20.00</td>
</tr>
<tr>
<td>Rent of camel for the transport</td>
<td>Day</td>
<td>3.00</td>
<td>6.00</td>
<td>18.00</td>
</tr>
<tr>
<td>of maize with a man</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Woman for peeling the grains</td>
<td>Day</td>
<td>3.00</td>
<td>3.00</td>
<td>9.00</td>
</tr>
<tr>
<td>Total variable Cash</td>
<td></td>
<td></td>
<td></td>
<td>328.12</td>
</tr>
<tr>
<td><strong>3. Expenditure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed Inputs</td>
<td></td>
<td></td>
<td></td>
<td>60.00</td>
</tr>
<tr>
<td>Variable Inputs</td>
<td></td>
<td></td>
<td></td>
<td>328.12</td>
</tr>
<tr>
<td><strong>Total Expenditure</strong></td>
<td></td>
<td></td>
<td></td>
<td>388.12</td>
</tr>
<tr>
<td><strong>4. INCOME</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total price of raw product</td>
<td></td>
<td></td>
<td></td>
<td>870.69</td>
</tr>
<tr>
<td>Total Expenditure</td>
<td></td>
<td></td>
<td></td>
<td>388.12</td>
</tr>
<tr>
<td><strong>Net Income</strong></td>
<td></td>
<td></td>
<td></td>
<td>482.57</td>
</tr>
</tbody>
</table>
Thus, the peasants were compelled to buy the maize seeds from the bank as a precondition to receiving the quota of inputs for its cultivation. As a result, not only Hag Mahmoud had to buy the seeds from the bank at £.E 1.65 per kg, but he had to start seeding from his own grains because the Bank of the Village was not able to deliver the seeds at the fixed date for cultivation. Although the productivity of the seeds sold by the Bank of the Village is higher than those provided from a previous crop, estimated by Hag Mahmoud to reach one ton more, he still had a waste of nearly £.E 19.80 and a waste of maize seeds because he could not sell them on the market.

<table>
<thead>
<tr>
<th>Labour Origin</th>
<th>Item</th>
<th>Labour</th>
<th>Inputs</th>
<th>Irrigation &amp; Fixed Inputs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Preparation of the field</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tractor for ploughing</td>
<td>15.00</td>
<td></td>
<td></td>
<td>26.40</td>
</tr>
<tr>
<td></td>
<td>Seeds</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Man for seeding</td>
<td>9.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Woman for seeding</td>
<td>5.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Man for hoeing</td>
<td>60.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Irrigation</td>
<td></td>
<td></td>
<td></td>
<td>16.20</td>
</tr>
<tr>
<td></td>
<td>Man for irrigation</td>
<td>36.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Man for thinning</td>
<td>10.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fertilisers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Urea</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Man for spreading the fertilisers</td>
<td>2.25</td>
<td></td>
<td></td>
<td>63.00</td>
</tr>
<tr>
<td></td>
<td>Insecticides</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Man for spraying the insecticides</td>
<td>4.50</td>
<td></td>
<td></td>
<td>9.77</td>
</tr>
<tr>
<td></td>
<td>Woman for picking the grass</td>
<td>24.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Man for harvesting</td>
<td>20.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rent of camel for the transport of maize</td>
<td>18.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>with a man</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Woman for peeling the grains</td>
<td>9.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fixed Inputs</td>
<td></td>
<td></td>
<td></td>
<td>60.00</td>
</tr>
<tr>
<td></td>
<td>Expenditure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>212.75</td>
<td>99.17</td>
<td>76.20</td>
<td>388.12</td>
</tr>
</tbody>
</table>

Share in %: 54.62%, 25.55%, 19.63%, 100.00%
After the seeding of maize, the plot is irrigated a week later for L.E 1.80. He pays more than the cost of one hour irrigation in sector C, because the plot is irrigated from a water pump covering an area of 160 feddans, owned by 300 persons. Thus, he follows a water turn and pays for every hour of irrigation, fixed at L.E 0.60, an extra hour representing the time needed by the water to reach his plot, as it is located far from the water source. In addition to the inputs of irrigation, he pays an annual a total of L.E 44 for the mechanic and the maintenance of the water pump which he divides among the three feddans. After the first irrigation, the plot is left to dry for 20 days, and it is hoed on Sharagi by six men for L.E 5 each. Ten days after the second irrigation, the land is hoed again by the same number of workers. This operation is followed by the thinning of the excess plants by two men, to allow the growth of maize in a larger space.

The Bank of the Village gives Hag Mahmud a quota of fertilisers consisting of 200 kg of urea at L.E 6.40 per 50 kg, to which he adds 150 kg more, bought from the market at L.E 12.50 per 50 kg. The fertilisers are spread on two times, after which the land is hoed and irrigated. In general, Hag Mahmud irrigates the feddan of maize 14 times, on average intervals of ten days, with the exception of the second irrigation done, on Sharagi, 20 days after the first irrigation. After spreading the fertilisers, eight women and children from the household weed the plot, thus, he does not hire wage labour.

At the end of August, Hag Mahmud sprays the land with insecticide against wood worm. Yet, the problem he faces each time is that the insecticide is not sold by the Bank of the Village to maize producers, but only sold for orchard cultivation. He buys the same quantity from the free market for three times the price fixed by the Bank of the Village. Sometimes, he shares with a friend, who cultivates citrus fruit, the buying of the quota of insecticide in exchange of paying him a higher
price than the original price. The price of one litre at the Bank of the Village is sold for £ E 3.25, while the price of 300 cl on the free market is sold for £ E 3.50.

Hag Mahmud starts harvesting the maize earlier than usual, in the beginning of September, in order to prepare the land for onions. He and his brother, in addition to two hired men, undertake the harvesting of maize in one day, after which it is peeled and the grains are transported to the roof of the house where they are left to dry and stored. According to Hag Mahmud, the production of one feddan of maize reaches 13 'Ardab of maize grains and 16 Himl of straw sold to camel merchants for £ E 1 per Himl. The merchant sells it back on the market as fodder for animals or for backing at £ E 3 per Himl².

The marketing of maize was subject for a very long time to government control. Fixed prices were lower than the market price, reaching in 1981 £ E 12.11 per 'Ardab, and the income of one feddan was below the inputs of production by £ E 45.55. (Tab. VII.1.4) When cattle breeding stations expanded and the government forbade the importation of dry fodder for animals, a market crisis emerged. As a result, the government gradually increased the fixed prices of maize, and by 1985, it decided to release its prices on the free market in order to match its official price with the free market and to attract the peasants to grow it. According to Hag Mahmud, in 1985, the Ministry of Agriculture reduced the quota of compulsory delivery. However, the compulsory distribution of maize seeds by the Bank of the Village was a sign of change in the government policy, according to many peasants. Will this measure be a means of reestablishing the compulsory delivery system as it is expected by most peasants?

Despite all the changes in government policies concerning maize cultivation, Hag Mahmud still prefers to grow maize and deliver a quota to the Bank of the Village than to cultivate his entire plot with free cash crop and buy his needs of maize
from the market. Thus, after delivering the quota, he stores the rest and sells part of it on the free market at different stages and in different forms whenever the price is suitable. The 1985 crop, reached 13 'Ardah from which five 'Ardah were saved for the household consumption. Two 'Ardah were delivered to the Bank of the Village at L.E 35 per 'Ardah, and the rest were stored and sold per Kila in the spring when the price was at its highest, at L.E 7 per Kila, after the harvesting of harvest.

Women are responsible of selling the maize in spring because they are more often present at home than their husbands to negotiate the price with the buyers. The buyers are in most cases women buying the grains to use it for baking bread, and as dry fodder for poultry. It is known that each house has to buy the grains of the following year in advance, to prevent a shortage if there is a crisis on the market. Hag Mahmud, like many other peasants, has a storage place on the roof of the house, therefore he prefers to sell his own crop directly to the customer to make a higher income from the fluctuations of prices and to avoid the extra charges added by the field merchant.

Figures show that, over a period of five months, the margin of income made on one feddan was L.E 482.57. However, the figures of the inputs of production are only the estimation of the amount of cash spent on the crop and the amount received from the product, which does not correspond to Hag Mahmud's actual expenses. As mentioned earlier, the household provides the labour requirements, the highest item in the inputs of production, which reduces the cash expenditure. Similarly, he does not calculate or pay in reality the fixed inputs or the rent. However, the delivery of 22.40 Kila of maize to the Bank of the Village at a lower price than the market price reduces the margin of income. (Tab. VII.1.1-1.2)

On the other hand, the cultivation of courgettes is essentially undertaken for
financing the cultivation of maize. Figures show that the income from two feddans of courgettes reached £E 2,880 over a period of five months, from which the net income amounted to £E 2,027.35. (Tab.VII.2.1-2.2) It should be noted that the income from courgettes is quite high when compared to that from the cultivation of maize. On the basis of the inputs of production of courgettes, the income of one feddan would reach £E 1,013.75, almost double the net income made on maize. The difference in the incomes made from the two crops on the same unit of land results from the pricing policy.

Therefore, mixed cropping becomes a means of counterbalancing the income made on the two crops and a way of supplying the household with the basic needs for consumption. But if the total income from both crops is added, it would amount to £E 2,509.92 over five months. It should be pointed out that mixed cropping was possible to undertake because the members of both families are involved in agricultural production only without combining any other activity not related to agriculture. Unlike many other families in Batra, they were able to live on the income from agricultural production and marketing because they have a rather large holding and the necessary unpaid labour, and are directly involved in the marketing of their crops, thus, saving from the entire income of the field merchant.
### Table VII.2.1: Inputs of Production of Two Fields of Courgettes

<table>
<thead>
<tr>
<th></th>
<th>UNIT</th>
<th>NUMBER of UNITS</th>
<th>CASH EXPENSE</th>
<th>TOTAL EXPENSE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. RAW PRODUCT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Courgettes</td>
<td>kg</td>
<td>9,600.00</td>
<td>0.30</td>
<td>2,880.00</td>
</tr>
<tr>
<td><strong>2. VARIABLE INPUTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preparation of the field</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Man for the first hoeing</td>
<td>Day</td>
<td>6.00</td>
<td>5.00</td>
<td>30.00</td>
</tr>
<tr>
<td>Man for the division of the plot</td>
<td>Day</td>
<td>5.00</td>
<td>4.50</td>
<td>22.50</td>
</tr>
<tr>
<td>Manure</td>
<td>Day</td>
<td>400.00</td>
<td>0.40</td>
<td>160.00</td>
</tr>
<tr>
<td>Rent of donkey</td>
<td>Day</td>
<td>4.00</td>
<td>2.00</td>
<td>8.00</td>
</tr>
<tr>
<td>Child for the donkey</td>
<td>Day</td>
<td>4.00</td>
<td>2.50</td>
<td>10.00</td>
</tr>
<tr>
<td>Man for spreading manure</td>
<td>Day</td>
<td>4.00</td>
<td>4.50</td>
<td>18.00</td>
</tr>
<tr>
<td>Seeds</td>
<td>Kg</td>
<td>3.00</td>
<td>4.60</td>
<td>13.80</td>
</tr>
<tr>
<td>Woman for seeding</td>
<td>Day</td>
<td>2.00</td>
<td>2.50</td>
<td>5.00</td>
</tr>
<tr>
<td>Fertilisers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrates</td>
<td>50 kg</td>
<td>4.00</td>
<td>4.50</td>
<td>27.00</td>
</tr>
<tr>
<td>Man for spreading the fertilisers</td>
<td>Day</td>
<td>1.50</td>
<td>4.50</td>
<td>6.75</td>
</tr>
<tr>
<td>Irrigation</td>
<td>Hour</td>
<td>36.00</td>
<td>0.60</td>
<td>21.60</td>
</tr>
<tr>
<td>Man for irrigation</td>
<td>Day</td>
<td>7.00</td>
<td>5.00</td>
<td>35.00</td>
</tr>
<tr>
<td>Woman for harvesting</td>
<td>Day</td>
<td>150.00</td>
<td>2.50</td>
<td>375.00</td>
</tr>
<tr>
<td><strong>Total variable Inputs</strong></td>
<td></td>
<td></td>
<td></td>
<td>732.65</td>
</tr>
<tr>
<td><strong>3. Expenditure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed Inputs</td>
<td></td>
<td>120.00</td>
<td></td>
<td>120.00</td>
</tr>
<tr>
<td>Variable Inputs</td>
<td></td>
<td>732.65</td>
<td></td>
<td>732.65</td>
</tr>
<tr>
<td><strong>Total Expenditure</strong></td>
<td></td>
<td></td>
<td></td>
<td>852.65</td>
</tr>
<tr>
<td><strong>4. INCOME</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total price of raw product</td>
<td></td>
<td>2,880.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Expenditure</td>
<td></td>
<td>852.65</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Net Income</strong></td>
<td></td>
<td></td>
<td></td>
<td>2,027.35</td>
</tr>
</tbody>
</table>
Table VII.2.2: Breakdown of the Inputs of Production of Two Fields of Courgettes

<table>
<thead>
<tr>
<th>Labour Origin</th>
<th>Item</th>
<th>Labour</th>
<th>Inputs</th>
<th>Irrigation &amp; Fixed Inputs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>*</td>
<td>Man for the first hoeing</td>
<td>30.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Man for the division of the plot</td>
<td>22.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Manure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rent of donkey</td>
<td>8.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Child for the donkey</td>
<td>10.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Man for spreading manure</td>
<td>18.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Seeds</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Woman for seeding</td>
<td>5.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fertilisers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nitrates</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Man for spreading the fertilisers</td>
<td>6.75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Irrigation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Man for irrigation</td>
<td>35.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Woman for the collection</td>
<td>375.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fixed Inputs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Inputs</td>
<td>852.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>510.25</td>
<td>200.80</td>
<td>141.60</td>
<td>852.65</td>
</tr>
<tr>
<td>Share in %</td>
<td></td>
<td>59.84%</td>
<td>23.55%</td>
<td>16.61%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Unpaid labour provided from the neighbours

* Unpaid labour provided from the household unit

Paid hired labour

2.2. The Cultivation of Sixteen Qirats of Onions

Like Hag Mahmoud, Rushdi is an owner of 16 qirats in basin no.11, but is registered in the agricultural cooperative under a free cash crop rotation based on vegetables. Summer potatoes are Rushdi's important winter crop and his major summer crop changes from one year to the next depending on the market prices. During the autumn of 1986 he cultivated onions as a catch crop, between watermelon cultivated in summer and summer potatoes in winter.

The cultivation of onions, in early September, requires certain field preparation before seeding. Rushdi first irrigates the plot and then ploughs it intensively four
times, and the fifth plough is for the division of the plot. The 16 qirates require one ton and 100 kg of onion seeds bought on the free market for £.E 130. The sowing of 16 qirates of onions is done by 10 women paid £.E 3 daily. However, because Rushdi is an old man whose son, a government employee, lives in a separate house and is involved in different occupations, and because Rushdi is working on permanent terms on the Fakhri farm, he hires the needed labour for the agricultural operations. In autumn, the wages of labour increase because of the high demand for labour for the agricultural operations of rice, maize, cotton, and summer vegetables. Therefore, he then pays the woman’s wages £.E 0.50 over their daily wage, and men are paid £.E 1 over their daily wage.

After sowing, the plot is hosed three times by four men each time, and the third hosing is followed by the spreading of 100 kg of nitrates bought from the Bank of the Village at £.E 4.75 per 50 kg. Like many other peasants, Rushdi had to borrow the fertilisers from a friend, who had an extra quota. After the spreading of fertilisers, the plot is irrigated for the second time, and each irrigation requires two hours, because it is irrigated from a water pump located in the neighbour village, Diyest. This means that the water takes a long time to reach the plot. The spraying of onions with insecticide is done with a manual sprinkler which he borrows from friends and the insecticide is bought from the free market at £.E 3.30 the 100 gm.

In December the onions are picked in three or four weeks depending on the demand on the markets. However, they cannot be stored in the ground, especially during this time of the year, because the humidity and the rain damages the crop. Unlike most vegetables, onions are sold to the field merchant per kilogram, and the field merchant sells them to the retail merchant per bunch of 30 or 40 onions for £.E 0.40 or 0.45 each. In his turn, the retail merchant then sells a Shirsh or bunch of five onions for £.E 0.10³. (Tab. VII.3.1)
Rushdi realised a net income of £E 153.50 over three months from the onions. The share of labour in the expenditure of production is the highest, followed by the share of inputs, which is almost the same as labour due to the high price of seeds. Finally, the share of the fixed inputs and the price of irrigation occupies the lowest share, although the cost of irrigation is almost the double that of other plots in sectors B and C. (Tab.VII.3.2) Rushdi pays in cash the entire inputs of agricultural operations with the exception of the fixed inputs that are not calculated. The main reason is that his household cannot provide the needed workers, and, therefore he depends totally on hired labour. This means that it is very difficult for him to undertake intensive agricultural works based on mixed cropping or intercropping. Therefore, he often rents the plot to another peasant on seasonal terms, in exchange of a rent proportional to the size of the plot and to the type of cultivation.
### Table VII.3.1: Inputs of Production of Sixteen Quarts of Onions

<table>
<thead>
<tr>
<th></th>
<th>Unit</th>
<th>Number of Units</th>
<th>Cash Expenditure</th>
<th>Total Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. RAW PRODUCT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Onions</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>500.00</td>
</tr>
<tr>
<td><strong>2. VARIABLE INPUTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preparation of the field</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tractor for ploughing</td>
<td>Day</td>
<td>1.50</td>
<td>15.00</td>
<td>22.50</td>
</tr>
<tr>
<td>Seeds</td>
<td>Kilo</td>
<td>1,081.66</td>
<td>0.12</td>
<td>129.80</td>
</tr>
<tr>
<td>Woman for seeding</td>
<td>Day</td>
<td>10.00</td>
<td>3.00</td>
<td>30.00</td>
</tr>
<tr>
<td>Man for hoeing</td>
<td>Day</td>
<td>12.00</td>
<td>5.00</td>
<td>60.00</td>
</tr>
<tr>
<td>Irrigation</td>
<td>Hour</td>
<td>5.00</td>
<td>0.60</td>
<td>3.00</td>
</tr>
<tr>
<td>Man for irrigation</td>
<td>Day</td>
<td>1.00</td>
<td>4.50</td>
<td>4.50</td>
</tr>
<tr>
<td>Fertilisers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrates</td>
<td>50 kg</td>
<td>2.00</td>
<td>6.45</td>
<td>12.90</td>
</tr>
<tr>
<td>Man for spreading the fertilisers</td>
<td>Day</td>
<td>0.50</td>
<td>4.50</td>
<td>2.25</td>
</tr>
<tr>
<td>Insecticides</td>
<td>100 gm</td>
<td>1.00</td>
<td>3.30</td>
<td>3.30</td>
</tr>
<tr>
<td>Man for spraying the insecticides</td>
<td>Day</td>
<td>0.50</td>
<td>4.50</td>
<td>2.25</td>
</tr>
<tr>
<td>Woman for harvesting</td>
<td>Day</td>
<td>12.00</td>
<td>3.00</td>
<td>36.00</td>
</tr>
<tr>
<td><strong>Total variable Inputs</strong></td>
<td></td>
<td></td>
<td></td>
<td>306.50</td>
</tr>
<tr>
<td><strong>3. Expenditure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed Inputs</td>
<td></td>
<td></td>
<td></td>
<td>40.00</td>
</tr>
<tr>
<td>Variable Inputs</td>
<td></td>
<td></td>
<td></td>
<td>306.50</td>
</tr>
<tr>
<td><strong>Total Expenditure</strong></td>
<td></td>
<td></td>
<td></td>
<td>346.50</td>
</tr>
<tr>
<td><strong>4. INCOME</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total price of raw product</td>
<td></td>
<td></td>
<td></td>
<td>500.00</td>
</tr>
<tr>
<td><strong>Total Expenditure</strong></td>
<td></td>
<td></td>
<td></td>
<td>346.50</td>
</tr>
<tr>
<td><strong>Net Income</strong></td>
<td></td>
<td></td>
<td></td>
<td>153.50</td>
</tr>
</tbody>
</table>
Table VII.3.1: Breakdown of the Inputs of Production Sixteen Circles of Onion

<table>
<thead>
<tr>
<th>Labour Origin</th>
<th>Item</th>
<th>Labour</th>
<th>Inputs</th>
<th>Irrigation &amp; Fixed Inputs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>q</td>
<td>Preparation of the field</td>
<td>22.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>q</td>
<td>Tractor for ploughing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>q</td>
<td>Seeds</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>q</td>
<td>Woman for seeding</td>
<td>30.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>q</td>
<td>Man for hoeing</td>
<td>60.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>q</td>
<td>Irrigation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>q</td>
<td>Man for irrigation</td>
<td>4.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>q</td>
<td>Fertilisers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>q</td>
<td>Nitrates</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>q</td>
<td>Man for spreading the fertilisers</td>
<td>2.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>q</td>
<td>Insecticides</td>
<td>3.30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>q</td>
<td>Man for spraying the insecticides</td>
<td>2.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>q</td>
<td>Woman for the collection</td>
<td>36.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>q</td>
<td>Fixed Inputs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>q</td>
<td>Total Expenditure</td>
<td>157.50</td>
<td>146.00</td>
<td>43.00</td>
<td>346.50</td>
</tr>
<tr>
<td>q</td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>q</td>
<td>Share in %</td>
<td>45.45%</td>
<td>42.14%</td>
<td>12.41%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

- Unpaid labour provided from the neighbours
- Unpaid labour provided from the household unit
- Paid hired labour

2.3. The Position of Rice in the Agricultural Policy

Rice represents par excellence the category of compulsory crops. Thus, in order to study the organisation of its production by the peasants in Batra, it is necessary to examine state policy concerning its production and its marketing as it generates problems and debates regarding the decline of the surface.

Rice production is considered by both the government and the peasants to be an important crop for commercial and for consumption purposes. Since the completion of the High Dam, in 1965, rice has been the second major export crop after cotton. The area cultivated by rice depends on the available quantity of water in summer, therefore, it was only stabilised when the level of water in the Nile was
controlled and perennial irrigation expanded in the north of the Delta and the oasis of Fayum. It was only at that time, that the area cultivated by rice grew to one million feddans (Hamdan, 1984:73-75) From the government’s positions both cotton and rice are summer crops, cultivated in the north of the Delta, which compete on the world market. Yet, from the peasant’s position, they are not considered comparable; cotton is not a consumption crop and is used for industrial purposes. Whereas, rice is an important food, consumed by all classes in almost all meals, and the straw is used as fodder for animals when mixed with basmar, or used as a combustible for cooking. Furthermore, rice is the appropriate crop for salted soil, for newly reclaimed land, and for washing the soil. Its high water requirements absorb the salinity of the soil and washes it, and it is recommended after the cultivation of cotton which exhausts the soil (Hamdan, 1984: 82-83)

Thus, cotton and rice compete for the same surface of land, because they are from the government’s and from the peasant’s positions, two opposing crops sharing the same geographical location, and the same governmental policies, but, which cannot be cultivated at the same time. Therefore, they are alternated every two years in the north of the Delta. Figures show that the governorate of Daqahliyya is the primary area of rice production, producing almost 25% of the national rice production 4, especially in the north where the level of the land is rather low, and where the soil suffers from high salinity. However, despite these facts which have favoured the cultivation of rice, figures also show that the area of its cultivation has declined in the 1970’s and the 1980’s (Tab. VII. 1.2-1.3)

Different reasons contributed to this decrease: mainly the government pricing policies, and the adopted plans for increasing the productivity per feddan. Moreover, a further decline is expected in the near future due to ecological conditions related to the decrease in the level of water in the Nile. Questions have been raised lately regarding the effect of the drought of the Nile river on the area
devoted to rice, given its high water requirements.

On the other hand, the price of one Dariba of rice, fixed by the state, did not rise at the same rate as the inputs of production. The producer of one feddan of rice receives an average income of £E 22 over five months. (Tab.VII.2.8) Moreover, since rice is regarded as a national strategic crop for both consumption and export, the government compels the peasants to deliver half the production of their land at a fixed price. Furthermore, the owners of less than one feddan are compelled to deliver a minimum of one and a half tons of rice even if the land produced less than the fixed quantity. As a reaction to the decrease in the area cultivated by rice, the Ministry of Agriculture introduced new varieties of rice seeds, IRRI-Philippines, imported from the USA and Japan, with a 25% higher estimated productivity. (Plépé and Richard, 1983:123)

Thus, the government's intervention was extended over the production as it compelled the owners of more than three feddans to cultivate half their plots with the new varieties, which proved to be inappropriate for the Egyptian taste. As a result, a limited number of peasants' households consume it and most of them use it as fodder for chicken. These factors created conflicts between the rice producers and the government, concerning the delivery system, the quality of seeds, and the pricing policy.

2.3.1. The cultivation of one feddan of rice

In 1986, almost the entire area designated for compulsory crops in Batra was cultivated, in summer, by rice instead of cotton. This meant an adaptation of the quota of water delivered in al-Sebil canal and a longer water turn for each peasant producing rice. (Chapter IV)
Both Mahmud and 'Abdu are owners of 12 qirats each, in basin no. 9, registered in the cooperative under compulsory crop cultivation based on cotton5. Initially, both had to cultivate cotton instead of rice. That year the owners and the tenants of plots in basin no. 9 made an exceptional demand to the cooperative to cultivate rice, and the cooperative granted them a permission on the condition that they would receive the quota of inputs for cotton, and that the additional requirements should be supplied from private sources. According to Mahmud, the reason they applied that year for rice was that they had been cultivating cotton for nearly five years and that they needed to wash the soil. Additionally, that year almost the entire area of cotton cultivation in sector A was replaced by rice, and the quota of water was available in al-Sabil canal for rice. Moreover, despite the compulsory delivery of rice, it remains an indispensable element for the household’s consumption.

Thus, many collective preparations for rice were undertaken by the owners of sector B. Among these preparations, was the installation of an elevatory water pump on al-Sabil canal to ensure a regular strong flow of water to the level of the fields, which is higher than the level of the canal. Each owner participated, proportionally to the size of his holding, in the price of the pump and of its installation. Since Mahmud is working on permanent basis on the Fakhri’s farm, he cannot assume on his own the intensive operations of rice. 'Abdu, his neighbour, rents the plot during the season on the basis of a seasonal sharecropping arrangement6. 'Abdu starts the cultivation of rice, in early July, by soaking the rice seed bags in the water canal for three days to wash them7. During this time the plot is ploughed and left to dry for a while, after which it is submerged with water. This is followed by an operation consisting of passing over the land with a long wooden trunk pulled by two calves, to render the soil less porous and turn it into a reservoir of water8.
'Abdu puts 75 kg of rice seeds bought from the free market at £.E 8, almost two and half times the subsidised price, because they were not entitled to a subsidised quota of rice seeds. However, the difference between the two prices could have been largely compensated and a higher income could have been made on the crop by buying the new varieties of seeds. Yet, they preferred to use the local seeds, Giza 172, at a higher price, and produce less for their consumption, than produce more of an unsuitable quality of crop. According to 'Abdu, the most important and the most intensive agricultural operation for rice is irrigation; one feddan requires an average of 60 hours of water for four months, fixed at £.E 0.50 per hour. The water is released in the canals during four days and cut off for four days to allow the peasants to irrigate the rice at proper intervals. On the other hand, it requires a moderate quantity of fertilisers consisting of 150 kg of sulphate of ammonia and 100 kg of super phosphate put at intervals of 20 days from seeding. The plants are treated with herbicides to prevent weeds from growing in the middle of rice, this operation requires one kg of herbicides and one day of a man's work.

Harvesting starts at the end of October and coincides with the picking of cotton. This, of course, increases the labour wages on the market at this period of the year. Harvesting starts by cutting the rice with a sickle, Sharshara, by three men, and three children tie it into sheaves. The rice is transported to the barn where it is first put in the threshing machine and cleaned by two men. It is then put into a winnowing and sifting machine to separate the straw from the grains. The owner of the barn charges for each operation according to the type of the machine used. The price of an hour's work with the threshing machine is £.E 5, and the crop of one feddan requires one hour and a half. The cost of using the machine for winnowing and sifting is charged in kind, the rate is fixed at three Kila of rice per ton, or approximately 60 kg per ton, amounting to £.E 24 on the free market. This means that 'Abdu paid for three tons, 9 Kila or 180 kg, costing £.E 72.
The reason the owner of the barn wishes to be paid in kind, is because he stores the rice and sells it back at a higher price when market supply is exhausted. Moreover, at this time of the year, rice becomes a valuable commodity on the market because the government forbids its transport from the location of production until the peasants deliver their fixed quotas. This is due to the fact that many peasants sell the rice on the free market as soon as it is harvested. In their turn, the merchants transport it to another governorate where it is not produced, and sell it at higher prices. Thus, in order to control the delivery system, strict measures are adopted: the transport of rice is regarded as a crime, the roads are controlled, and the trucks are searched night and day. Therefore, by charging the peasants in kind the owner of the barn receives a valuable product without any trouble or without paying any taxes or duties.

The delivery of the quota of rice to the government is the most problematic issue in the process of marketing, and at this point the conflicts begin between the peasants and the Bank of the Village. The delivered quota of rice is fixed at half the crop, but with a minimum ceiling of one ton and a half per feddan, on the basis that an average production of one feddan is three tons for the local variety. This means that if a feddan produced less than two tons the owner will deliver all his crop, and will purchase his needs for consumption from the free market at a higher price than the one fixed by the Ministry of Agriculture. It is only after the delivery that the holder can make an appeal to the Bank of the Village, after paying £.E 10, to reestimate the quantity of the crop and reduce the delivered quota. This is an endless procedure for many peasants due to the bureaucratic system. The average fixed price for the local variety is £.E 150 per ton, and the price of the newly introduced varieties is fixed at £.E 25 over the price of the local varieties.
The distribution of the three tons between Mahmud, 'Abdu, and the Bank of the Village is quite complex. The share of 'Abdu from the crop is of one ton and a half on the basis of his share of 12 qirats in the land, and the initial share of Mahmud is of one ton and a half. But, because 'Abdu is a sharecropper on Mahmud's plot, he receives from Mahmud's share 750 kg in exchange for the labour, which means that Mahmud receives in reality 750 kg. Concerning the share delivered to the Bank of the Village, each has to deliver 750 kg on the basis of the ownership of 12 qirats. Thus, 'Abdu delivers 325 kg from the crop of his 12 qirats, and another 325 kg from what he received in exchange for sharecropping, which leaves him with 750 kg. Mahmud in his turn delivers only 325 kg, and the rest, 325 kg, is used for his consumption. The estimation of the quality of the crop fixed the price of their crop at £.E 150 per ton, but in fact they extract only 162.5 kg of leached rice and the rest is straw used in cooking.

The price fixed by the Bank of the Village is by far lower than the price of the free market. The first fixes the price at £.E 0.15 per kg of paddy, and the free market price reaches £.E 0.40 per kg, this difference in price is over 150%. Two thirds of the gross income is from the free market price, and one third of the revenue, for the same quantity, is from the price of the delivered quote. Furthermore, since the government buys the crop from the producers at a subsidised rate, the latter should be compensated by receiving subsidised prices for the major agricultural operations, namely for the winnowing, the sifting, the threshing operations, and the transport of the crop to the delivery station.

All these inputs are assumed by the producer who is not even compensated by the government's fixed price. Moreover, most of these operations are done by machines and require electricity or fuel subject to regular annual increases, which is not included in the government pricing policy of agricultural production, the same government that increases the price of inputs.
| Table VII.4.1: Inputs of Production of One Feddan of Rice |

<table>
<thead>
<tr>
<th></th>
<th>UNIT</th>
<th>NUMBER of UNITS</th>
<th>CASH EXPENDED E.</th>
<th>TOTAL EXPENDED E.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. RAW PRODUCT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rice delivered to the bank</td>
<td>Kg.</td>
<td>1,500.00</td>
<td>0.15</td>
<td>225.00</td>
</tr>
<tr>
<td>Rice used by the household</td>
<td>Kg.</td>
<td>1,500.00</td>
<td>0.40</td>
<td>600.00</td>
</tr>
<tr>
<td>Total</td>
<td>Kg.</td>
<td>3,000.00</td>
<td></td>
<td>825.00</td>
</tr>
<tr>
<td><strong>2. VARIABLE Inputs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preparation of the seeds</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seeds</td>
<td>Kg.</td>
<td>75.00</td>
<td>0.32</td>
<td>24.00</td>
</tr>
<tr>
<td>Soaking the rice bags</td>
<td>Day</td>
<td>0.50</td>
<td>4.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Preparation of the plot</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tractor for ploughing</td>
<td>Day</td>
<td>1.00</td>
<td>15.00</td>
<td>15.00</td>
</tr>
<tr>
<td>Placage</td>
<td>Day</td>
<td>1.00</td>
<td>10.00</td>
<td>10.00</td>
</tr>
<tr>
<td>Man for planage</td>
<td>Day</td>
<td>1.00</td>
<td>4.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Man for seeding</td>
<td>Day</td>
<td>0.50</td>
<td>4.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Herbicides</td>
<td>Kg.</td>
<td>1.00</td>
<td>NA</td>
<td>9.00</td>
</tr>
<tr>
<td>Spraying the rice</td>
<td>Day</td>
<td>0.50</td>
<td>4.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Irrigation</td>
<td>Hour</td>
<td>60.00</td>
<td>0.50</td>
<td>30.00</td>
</tr>
<tr>
<td>Man for irrigation</td>
<td>Day</td>
<td>30.00</td>
<td>4.00</td>
<td>120.00</td>
</tr>
<tr>
<td>Fertilisers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amonium Sulphate</td>
<td></td>
<td>50 kg</td>
<td>3.00</td>
<td>7.00</td>
</tr>
<tr>
<td>Super phosphate</td>
<td></td>
<td>50 kg</td>
<td>2.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Man for spreading the fertilisers</td>
<td>Day</td>
<td>1.00</td>
<td>4.50</td>
<td>4.50</td>
</tr>
<tr>
<td>Man for harvesting</td>
<td>Day</td>
<td>3.00</td>
<td>5.00</td>
<td>15.00</td>
</tr>
<tr>
<td>Child for harvesting</td>
<td>Day</td>
<td>3.00</td>
<td>3.00</td>
<td>9.00</td>
</tr>
<tr>
<td>Removal of plants</td>
<td>Day</td>
<td>2.00</td>
<td>5.00</td>
<td>10.00</td>
</tr>
<tr>
<td>Transport of the crop by camel</td>
<td>Transport</td>
<td>4.00</td>
<td>6.00</td>
<td>24.00</td>
</tr>
<tr>
<td>Threshing machine</td>
<td>Hour</td>
<td>5.00</td>
<td>1.50</td>
<td>7.50</td>
</tr>
<tr>
<td>Winnowing and sifting machine</td>
<td>Kila</td>
<td>9.00</td>
<td>8.00</td>
<td>72.00</td>
</tr>
<tr>
<td>Carrier bags</td>
<td>Bag</td>
<td>18.00</td>
<td>1.50</td>
<td>27.00</td>
</tr>
<tr>
<td>Transport to the delivery station</td>
<td>Transport</td>
<td>1.00</td>
<td>10.00</td>
<td>10.00</td>
</tr>
<tr>
<td><strong>Total variable inputs</strong></td>
<td></td>
<td></td>
<td></td>
<td>426.00</td>
</tr>
<tr>
<td><strong>3. EXPENDITURE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed Inputs</td>
<td></td>
<td></td>
<td>50.00</td>
<td></td>
</tr>
<tr>
<td>Variable Inputs</td>
<td></td>
<td></td>
<td>426.00</td>
<td></td>
</tr>
<tr>
<td>Total Expenditure</td>
<td></td>
<td></td>
<td>476.00</td>
<td></td>
</tr>
<tr>
<td><strong>4. INCOME</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total price of raw product</td>
<td></td>
<td></td>
<td>825.00</td>
<td></td>
</tr>
<tr>
<td>Total Expenditure</td>
<td></td>
<td></td>
<td>476.00</td>
<td></td>
</tr>
<tr>
<td>Net Income</td>
<td></td>
<td></td>
<td>349.00</td>
<td></td>
</tr>
</tbody>
</table>
### Table VII.4.2: Breakdown of the Inputs of Production of One Feddan of Rice

<table>
<thead>
<tr>
<th>Labour Origin</th>
<th>Item</th>
<th>Labour</th>
<th>Inputs</th>
<th>Irrigation &amp; Fixed Inputs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Preparation of the seeds</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>Seeds</td>
<td>24.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>Soaking the rice bags</td>
<td>2.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>Preparation of the plot</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>Tractor for ploughing</td>
<td>15.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Planage</td>
<td>10.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>Man for ploughing</td>
<td>4.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>Man for seeding</td>
<td>2.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>Herbicides</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>Spraying the rice</td>
<td>2.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Irrigation</td>
<td></td>
<td></td>
<td></td>
<td>30.00</td>
</tr>
<tr>
<td>o</td>
<td>Man for irrigation</td>
<td>120.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>Herbicides</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>Sulphate ammonium</td>
<td>21.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>Super phosphate</td>
<td>8.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>Man for spreading the fertilisers</td>
<td>4.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>Man for harvesting</td>
<td>15.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>q</td>
<td>Child for harvesting</td>
<td>9.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*o</td>
<td>Removal of plants</td>
<td>10.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transport of the crop by camel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Threshing machine</td>
<td>24.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Winnowing and sifting machine</td>
<td>7.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Carrier bags</td>
<td>72.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transport to the delivery station</td>
<td>27.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fixed Inputs</td>
<td>10.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>168.50</td>
<td>227.50</td>
<td>80.00</td>
<td>476.00</td>
</tr>
</tbody>
</table>

| Share in %    | 35.40% | 47.79% | 16.81% | 100.00% |

- | Unpaid labour provided from the neighbours
- | Unpaid labour provided from the household unit
- | Paid hired labour

Yet, even if the time required by these machines is less than the time required by the manual machines which compensates the difference in the prices, the prices of fuel and of electricity are increasing in such a way that shortly they will no longer cover the value of the difference in time. (Tab.VII.4.1)

The cost of inputs represents the highest share in the expenditure of production,
due to the operations following the harvesting. This is followed by the share of labour of which the largest portion is spent on labour for irrigation. Finally, the share of the irrigation and the fixed inputs are the lowest. (Tab. VII.1.1.2) However, they remain rather high as compared to their share in other types of cultivation, due to the high water requirements. The inputs of irrigation did not include the installation of the elevatory water pump located on al-Sahil canal, on the assumption that it serves all the crops. This water pump operates on solar power, and it elevates the water from al-Sahil canal to the main irrigation pump located in the middle of basin no. 9 serving 100 faddans, when the level of water is low during the closure days. The price of the elevatory pump reached L.E. 2,150 divided among 50 owners proportionally to their holdings. This means that the share of Mahmud and 'Abdu was of L.E. 10.75 each, divided over the crops of the year.

However, it is very difficult to divide equally the share of the net income between 'Abdu and Mahmud. According to the terms of sharecropping, Mahmud provides the inputs, and 'Abdu provides the labour for the 12 qirats, in exchange for half the crop of Mahmud's ownership. Similarly, it is difficult to calculate exactly the amount spent on labour, because 'Abdu and his two sons work the land. But, the fact is that the initial share of each from the crop was the equivalent of L.E. 174.5, after deducting the inputs of production in cash as estimated by both. 'Abdu took from Mahmud's share 325 kg, leaving Mahmud with 325 kg. Thus, 'Abdu's share was 750 kg, after the delivery of the quota. It should be noted that neither cultivated rice to make a income. In fact, the cash spent in the agricultural operations and inputs was not covered from commerce. The money was covered in their consumption, as they replaced part of their annual expenses on rice by acquiring part of the crop at a lower price than the market price.

According to Mahmud's wife, the family of ten members consumes an average of
2.5 kg of leached rice daily, an annual consumption of 367.25 kg. To extract this quantity of leached rice requires two tons of paddy rice which is sold at L.E 0.40 per kg, a total of L.E 800. From his share of the the paddy rice, Mahmud extracted 325 kg of leached rice or the equivalent of L.E 130. However, for his household’s annual consumption of rice, an additional 1,675 kg is needed, amounting to L.E 670. Under such conditions, Mahmud offered 'Abdu, who has a smaller household, to buy 325 kg of his crop at L.E 0.35, for a total of L.E 113.75.

This offer is lower than the market price, on the basis that Mahmud is offering cash on delivery in a period where most peasants are short of cash, and as rice is forbidden to be sold on the free market, and as the Bank of the Village pays the peasants in delay for the delivered quota. As for the rest of the quantity consumed by the household, Mahmud’s wife purchases it from a merchant in the centre of the village, and it is not a coincidence that rice is the only commodity sold by the retail merchants in Beitra to the peasants on the basis of weekly installments.

Finally, the cultivation of rice in this particular case is basically for consumption since the quantity produced and the household requirements do not allow a surplus for marketing, nor does the government pricing system allow the peasants an appropriate margin of income to purchase their needs at their convenience. This situation results from the restrictions on the free market of rice for a period of time, which raises the price of rice above the effective subsidised price. On the other hand, the subsidised quota of rice for consumption per family sold in the cooperatives for consumption consists of Philippine rice, which is inappropriate for the local taste, but which the government is trying to promote in areas of high consumption. As a result, this subsidised quota for consumption is often given as fodder to chicken, while the local variety is bought at a higher price than what the government charges the peasants. Resulting from this situation, the peasants registered under cotton cultivation in summer, seek for a means to shift to rice for
consumption, despite the constraining measures of marketing.

3. Sector A: The Cultivation of Compulsory Crops

This sector covers an area of 1,600 feddans representing 50% of the territory of Batra. The features of sector A are different from the two other sectors, as it is predominantly an agricultural area, cultivated by compulsory crops. From its total surface only 190 feddans, 12%, are occupied by the 'Izah, and the crops are alternated on the rest of the land as follows: 339.21 feddans are cultivated by cotton representing 24.69%, 334.22 feddans are occupied by wheat representing 23.74%, followed by 311.02 feddans of winter potatos and tomatoes constituting 22.05%, and 221.22 feddans of 'arsim amounting to 15.69%. On the other hand, only 87.14 feddans are cultivated by soya beans representing 6.20%, 61.17 feddans by green beans constituting 4.30%, and 55.11 feddans by flax occupying 3.92% of the distribution of the crop on the land10.(Fig.VI.2)

The given rotation cycle is an example of what is followed in most parts of sector A with minor differences, but with the same objective as to maintain the area cultivated by compulsory crops.(Fig.VII.2) The crop rotation is based on a triennial rotation cycle, constituted mainly of compulsory crops. Thus, over 36 months, nearly 22 months are occupied by cotton, rice11, and wheat. For 14 months winter potatos, long season 'arsim, and tomatoes, free cash crops, occupy the land.
Figure VII.2. Crop Rotation Cycle in Sector A

S.1
Nov.
November
January
March
June
November
Short Season
Bersim
Summer Potatoes
Cotton

S.2
Nov.
Wheat
Rice

S.3
Nov.
Onions
Tomatoes

Legend:
- Compulsory Crops
- Intercropping
Moreover, the crop rotation of sector A is not as intensive as the one adopted in sector B, in the sense that the plot is annually cultivated by two crops instead of three, and one of the two is usually a compulsory crop covering a long period of time. Furthermore, the rotation cycle is extended over a period of three years instead of two, which means that the peasant is compelled to cultivate for three years what has been decided by the local cooperative, while his neighbours in sectors B and C have a higher flexibility in the choice of the crops, in coordination with the cooperative. While sectors B and C are characterised by the production of free cash crops and their direct access to free marketing, sector A is characterised by the cultivation of compulsory crops and a strong intervention of the government in both production and marketing.

The production of the major compulsory crops under government control will constitute the focus of this part. The choice of the crops examined is made on the basis of eliminating the crops previously dealt with, while focusing on wheat, which represents an important winter crop for both the peasant and the government, and cotton, as the important national crop for the government and from which the peasants, under the present economic conditions and under the pricing policy, try to escape because of financial hardship. Finally, tomatoes, a summer free cash crop, represents the official and the common way adopted by the peasants in this sector to counterbalance their low incomes due to the constraints imposed on the production of compulsory crops. This crop can be comparable to the value given to the cultivation of summer potatoes by the peasants in the two other sectors.
3.1. The Crisis of Wheat Production in Egypt: A Contradictory Situation

It is difficult to examine the organisation of wheat production without referring to the political and the economic debates revolving around the decline of its productivity and the increase of its consumption during the 1970's and 1980's. The gap between production and consumption has reached a point where most of the national supplies of wheat depend, today, on foreign aids and imports.

During the first half of the twentieth century, the fluctuation of the area of wheat witnessed a regular slow decline, with the exception of certain periods during which Egypt's incorporation into the international markets was reduced, namely, when the export of cotton was affected on the world market. The fact is that the cultivation of both cotton and wheat is incompatible on the same land in the same year. The main reason is that they share the same geographical location, but their cultivation cannot be preceded nor followed during the same agricultural year. This factor contributed to putting them in a position of competitiveness for the same surface.

During this period, the surface of wheat declined as long as there was a demand on the world market for cotton, but when Egypt could not have access to the world market for exports or for imports, during the Second World War, and with the necessity of providing the basic needs for consumption in a period of crisis, the area of wheat increased from 1.4 million to 1.6 million feddans. The increase was done on the cotton surface, but when the situation changed after the war, the area of wheat was reduced again to be replaced by cotton (Hamdan, 1984:40). This meant that the area of wheat followed the fluctuation of cotton on the world market, and as long as Egypt maintained its incorporation on the world market the
Table VII.5.1: Surface of Wheat Cultivation from 1952 to 1985, per 1,000 Feddans

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1952</td>
<td>11921</td>
<td>13951</td>
<td>13911</td>
<td>13955</td>
<td>13901</td>
<td>13951</td>
<td>13951</td>
<td>13951</td>
</tr>
<tr>
<td>1970</td>
<td>13951</td>
<td>13951</td>
<td>13951</td>
<td>13951</td>
<td>13951</td>
<td>13951</td>
<td>13951</td>
<td>13951</td>
</tr>
<tr>
<td>1979</td>
<td>13951</td>
<td>13951</td>
<td>13951</td>
<td>13951</td>
<td>13951</td>
<td>13951</td>
<td>13951</td>
<td>13951</td>
</tr>
<tr>
<td>1980</td>
<td>13951</td>
<td>13951</td>
<td>13951</td>
<td>13951</td>
<td>13951</td>
<td>13951</td>
<td>13951</td>
<td>13951</td>
</tr>
<tr>
<td>1983</td>
<td>13951</td>
<td>13951</td>
<td>13951</td>
<td>13951</td>
<td>13951</td>
<td>13951</td>
<td>13951</td>
<td>13951</td>
</tr>
<tr>
<td>1984</td>
<td>13951</td>
<td>13951</td>
<td>13951</td>
<td>13951</td>
<td>13951</td>
<td>13951</td>
<td>13951</td>
<td>13951</td>
</tr>
<tr>
<td>1985</td>
<td>13951</td>
<td>13951</td>
<td>13951</td>
<td>13951</td>
<td>13951</td>
<td>13951</td>
<td>13951</td>
<td>13951</td>
</tr>
</tbody>
</table>

Table VII.5.2: Average Annual Change in the Cultivated Area of Wheat from 1952 to 1985, per 1,000 Feddans

<table>
<thead>
<tr>
<th>Average Rate of Cultivated Area</th>
<th>Annual % of Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.39</td>
<td>6.92</td>
</tr>
</tbody>
</table>

Source
1. Collected and calculated according to the figures of the Department of Statistics - Agricultural Economic Research Centre (Al-Ahram Iktisadi, 1982:19-21)
Table VII.5.3: Production of Wheat from 1952 to 1985, per 1,000 Tons

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>1,001,111,553,11,757,11,933,12,017,11,993,11,015,11,6721</td>
<td>23,77</td>
<td>73,19</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table VII.5.4: Rate of Change in the Production of Wheat from 1952 to 1985

<table>
<thead>
<tr>
<th>Average Annual Rate of Change</th>
<th>Average Annual Rate of Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change of 1,000 Tons from 1952 to 1979</td>
<td>Change of 1,000 Tons from 1979 to 1985</td>
</tr>
<tr>
<td>Production per from</td>
<td>Production per from</td>
</tr>
<tr>
<td>1,000 Tons</td>
<td>1952 to 1979</td>
</tr>
<tr>
<td>from 1952 to</td>
<td>from 1979 to</td>
</tr>
<tr>
<td>1979</td>
<td>1985</td>
</tr>
<tr>
<td>Wheat</td>
<td>+ 28.70</td>
</tr>
</tbody>
</table>
### Table VII.5.5: Production, Inputs, and Prices of Wheat from 1945 to 1981

<table>
<thead>
<tr>
<th>Year</th>
<th>Average Production</th>
<th>Average Price of 1 ton Production</th>
<th>Profit of 1 Ardeh</th>
<th>Profit of 1 Fodda</th>
<th>Margins of Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1955</td>
<td>7.00</td>
<td>39.69</td>
<td>4.53</td>
<td>2.677</td>
<td></td>
</tr>
<tr>
<td>1959</td>
<td>6.79</td>
<td>39.22</td>
<td>4.91</td>
<td>-5.943</td>
<td></td>
</tr>
<tr>
<td>1973</td>
<td>9.82</td>
<td>42.19</td>
<td>5.72</td>
<td>19.539</td>
<td></td>
</tr>
<tr>
<td>1977</td>
<td>9.37</td>
<td>75.63</td>
<td>8.12</td>
<td>0.284</td>
<td></td>
</tr>
<tr>
<td>1981</td>
<td>9.23</td>
<td>152.70</td>
<td>13.77</td>
<td>25.029</td>
<td></td>
</tr>
</tbody>
</table>

*Note: 1 Ardeh = 150 kg
(Amin, 1982:35-36)

### Table VII.5.6: Development of the Cultivated Area, Total Production, and Productivity of Wheat, from 1945 to 1983, per Fodda

<table>
<thead>
<tr>
<th>Year</th>
<th>Surface</th>
<th>Total Production</th>
<th>Average Yield per Ardeh</th>
<th>Rate of Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>1945-1949</td>
<td>1,559,102</td>
<td>7,515,929</td>
<td>4.82</td>
<td>103%</td>
</tr>
<tr>
<td>1950-1954</td>
<td>1,571,145</td>
<td>8,789,925</td>
<td>5.95</td>
<td>123%</td>
</tr>
<tr>
<td>1955-1959</td>
<td>1,591,427</td>
<td>9,762,034</td>
<td>6.59</td>
<td>135%</td>
</tr>
<tr>
<td>1960-1964</td>
<td>1,557,111</td>
<td>10,027,019</td>
<td>7.23</td>
<td>159%</td>
</tr>
<tr>
<td>1970</td>
<td>1,334,439</td>
<td>10,109,334</td>
<td>7.75</td>
<td>160%</td>
</tr>
<tr>
<td>1975</td>
<td>1,393,950</td>
<td>13,555,069</td>
<td>9.72</td>
<td>201%</td>
</tr>
<tr>
<td>1977</td>
<td>1,207,633</td>
<td>11,315,967</td>
<td>9.39</td>
<td>190%</td>
</tr>
<tr>
<td>1979/1980</td>
<td>1,391,000</td>
<td>12,373,393</td>
<td>9.17</td>
<td>191%</td>
</tr>
<tr>
<td>1980/1982</td>
<td>1,399,955</td>
<td>12,922,177</td>
<td>9.23</td>
<td>192%</td>
</tr>
<tr>
<td>1982/1983</td>
<td>1,378,613</td>
<td>13,410,615</td>
<td>9.79</td>
<td>203%</td>
</tr>
<tr>
<td>1983/1984</td>
<td>1,320,033</td>
<td>13,370,083</td>
<td>10.00</td>
<td>206%</td>
</tr>
</tbody>
</table>

(al-Zayatl, 1986:71)
Table VII.5.7: Surface Cultivated by Wheat in 1935 as Compared to 1934, per Faddan

<table>
<thead>
<tr>
<th>Year</th>
<th>Surface</th>
<th>Production per</th>
<th>Average</th>
<th>Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>in 'Ardah</td>
<td>'Ardah</td>
<td></td>
<td>'Ardah</td>
</tr>
<tr>
<td>1935</td>
<td>1,165,923</td>
<td>10.53</td>
<td>112,632,601</td>
<td></td>
</tr>
<tr>
<td>1934</td>
<td>1,178,327</td>
<td>10.27</td>
<td>112,101,175</td>
<td></td>
</tr>
</tbody>
</table>

Source: Ministry of Agriculture (al-Zayatl, 1986:71)

Table VII.5.8: Imports of Wheat and Flour from 1980 to 1983

<table>
<thead>
<tr>
<th>Year</th>
<th>Imports Ales</th>
<th>Imports Ales</th>
<th>Imports Ales</th>
<th>Imports Ales</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Thousand Total</td>
<td>Thousand Total</td>
<td>Thousand Total</td>
<td>Thousand Total</td>
</tr>
<tr>
<td>1983/84</td>
<td>3,327</td>
<td>23</td>
<td>3,352</td>
<td>1,021</td>
</tr>
<tr>
<td>1984/85</td>
<td>4,065</td>
<td>&lt;1</td>
<td>4,125</td>
<td>1,032</td>
</tr>
<tr>
<td>1985/86</td>
<td>4,403</td>
<td>175</td>
<td>4,578</td>
<td>1,490</td>
</tr>
</tbody>
</table>

Source: Ministry of Agriculture (al-Zayatl, 1986:71)

Table VII.5.9: Gaps between Production and Consumption of Wheat

<table>
<thead>
<tr>
<th>Year</th>
<th>Production Annual Gaps</th>
<th>Value of the Gaps</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>per Thousand Tons</td>
<td>in Million $</td>
</tr>
<tr>
<td>1983/84</td>
<td>2,114</td>
<td>8,692</td>
</tr>
<tr>
<td>1984/85</td>
<td>2,159</td>
<td>9,339</td>
</tr>
<tr>
<td>1985/86</td>
<td>2,187</td>
<td>9,948</td>
</tr>
<tr>
<td>1986/87</td>
<td>2,224</td>
<td>11,074</td>
</tr>
</tbody>
</table>

(al-Zayatl, 1986:71)
Table VII.5.10: Average Price of One Feddan of Wheat, £.E per 'Ardah

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>4.59</td>
<td>4.91</td>
<td>5.72</td>
<td>6.12</td>
<td>11.37</td>
</tr>
</tbody>
</table>

('Amin, 1982:34-36)

Table VII.5.11: Average Production of One Feddan of Wheat, from 1965 to 1981, in £.E per 'Ardah

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sheet</td>
<td>7.41</td>
<td>6.75</td>
<td>9.82</td>
<td>9.37</td>
<td>9.23</td>
</tr>
</tbody>
</table>

('Amin, 1982:34-36)

Table VII.5.12: Official Inputs of Production of One Feddan of Wheat, from 1965 to 1981, in £.E.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sheet</td>
<td>58.65</td>
<td>59.22</td>
<td>62.15</td>
<td>65.68</td>
<td>65.70</td>
</tr>
</tbody>
</table>

('Amin, 1982:34-36)
surface of wheat continued to decline progressively.

However, the rate of decline reached an alarming stage during the 1970's and the 1980's. After wheat had represented 18% of the total surface of agricultural land in the 1950's, and after Egypt had reached three quarters of self-sufficiency in wheat consumption in 1939, the rate declined to 42% in 1974, and 25% in 1980. (Hamdan, 1984:40) (al-Zayati, 1985:70) This situation was, partly, translated by the decline in the surface of its cultivation since 1970 until 1985. Figures show that the highest rate of decline was between 1979 and 1985, which was accompanied by a slow increase in productivity reaching, however, the lowest rate between 1979 and 1985. (Tab.VII.1.1.1.3) This led to the creation of a profound gap between consumption and production, and the imports accounted for four fifths of the national needs. (Tab.VII.5.9) (Sa'd al-Din and others, 1985:55)

In 1959, the rural areas were self sufficient in wheat consumption, and a surplus of 300 thousand tons was distributed to the cities. By 1975 the situation changed, the rural areas were in shortage of wheat and had to be supplied with 500 thousand tons, and with a double quantity by 1978. (al-Zayati, 1986:70) In 1985, figures show that the area cultivated by wheat did not exceed 1,186 thousand feddans while the area cultivated by barsim reached 2,840 feddans. (C.A.P.M.A.S. 1985:39)

Thus, the competition changed and became between wheat and barsim, instead of between wheat and cotton. Many factors contributed in the emergence of a wheat crisis on the Egyptian market, among which are the following points:

a) The importation of wheat.

b) The shortage of fodder on the market.

c) The government pricing policy.

In reality, the increase in the importation of wheat is not only related to the increase in consumption as it is claimed. It is true that consumption has more than
doubled between 1974 and 1985-1987. However, a large proportion of it does not reflect the effective human consumption. In fact, the problem of wheat on the local market would have not reached this stage, if the local production had followed the same rate as consumption. (Tab.VII.1.3) The decline of the surface devoted to the cultivation of wheat and the slow increase in productivity are two aspects that cannot be separated from the flow of foreign aids in the form of wheat. (Tab.VII.5.1-5.12) This flow pushed the government to neglect its cultivation as long as it was ensured a regular supply, regardless the source, and concentrated its efforts on other agricultural products. Moreover, given the fact that most of the foreign supplies of wheat were in the form of aids usually fixed at a lower price than the local market, the price of the local product was affected. For example, in 1982-83 the government imported 4,403 thousand tons of wheat which amounted to £.E 347,638,000. This meant that the price of one ton reached £.E 78.97, and the price of one 'Ardab, 150 kg, was of £.E 11.84. On the other hand, the government fixed the price of one 'Ardab bought from the peasant at £.E 15 when its actual cost was estimated to reach £.E 17. This means that the local production of wheat is competing on the local market with the imported subsidised wheat fixed at a lower price than the effective cost of production. In his turn, the peasant who is compelled to sell his product at a lower price which does not cover his inputs of production, tends to escape from it and turn to a more profitable crop. But, if the Egyptian government was subsidising the local production of wheat on the levels of production and marketing, the production would have increased and the peasant would have been inclined to cultivate it as long as he received a fair price covering his effective inputs, and allowing him a reasonable margin of income.

The decline in the production of wheat started in the late 1970's when the food security policy was launched promoting free cash crops, such as strawberries, and profitable agro-industrial products such as meat and poultry production, as well as
dairy products. Meanwhile, the gap between the production of wheat and its consumption was covered from imports in the form of aid. Within this political orientation, the production of meat expanded, while the imports of fodder were restricted. This meant a high demand for fodder, and the expansion of maize and barley as green fodder. However, the first cannot be combined with cotton and the latter cannot precede wheat during the same agricultural year (Sa'd al-din and others, 1985:65) Yet, the local production of maize and the imports of grains could not cover the annual needs for consumption. This led to a considerable increase in the price of maize, and in the price of the by-product of wheat, straw, which exceeded the price of the grains. Moreover, under such market conditions, the peasants, turned either to clover cultivation or used wheat as a dry fodder. Thus, man and animal compete on the same land for their food, a phenomena that explains why one third of the total agricultural land is cultivated by green and dry fodder, as it explains why the consumption of wheat per person reaches 200 kg per year, while it is estimated that it should reach a maximum of 150 kg (al-Zayati, 1985:71)

One of the features of the agricultural pricing policy is that it is a dual system, treating each category of crops, compulsory or free cash crops, differently. For example, the inputs of agricultural production doubled between 1977 and 1981, and the prices of compulsory crops, especially wheat, increased by one third (Tab. VII.5.11-5.12) Meanwhile, the prices of the free cash crops followed the same rate of increase as the inputs.

According to the Ministry of Agriculture, the government cannot allow an increase of the prices of wheat alone within the category of compulsory crops. Such an increase would lead to the expansion of wheat production at the expense of the area devoted to cotton, green beans, and lentils, as the cultivation of these crops are related in time and in location. Such a step cannot be afforded in the pricing
policy of the government for this category of crops, as it will mean a further increase in the price of maize and the by-product of wheat, straw. (Wali, 1983:19)

In this context, a contradictory situation was created: the pricing system favoured the production of animal fodder at the expense of man's basic needs for nutrition. Thus, the peasants were led to adopt ways and means of counterbalance their income from the cultivation of wheat, through the selling of their grains as dry fodder for animals, and buying a proportion of their household needs from the imported subsidised wheat.

3.1.1. The cultivation of wheat on one feddan

Hag Sidki is a merchant of grains, rice, maize, and wheat, in Batra. He owns one feddan in basin no. 4, registered under compulsory crops based on cotton every two years in summer, and on wheat in winter. He starts the cultivation of wheat in early December. After, the picking of cotton, in late October, the land is ploughed and is left without cultivation until the end of November. The plot requires six Kila of white seeds which he saves from his previous crop, amounting to £E 15.84, according to the price of the Bank of the Village. The seeding of one feddan is done by half a day's work of one man, and the weeding by five women.

During the period of vegetation of six months, wheat is irrigated five times: the first is in December, the second in January, the third and the fourth in February, and the fifth in March. The second, the third and the fourth irrigation fall with the closure days of water in al-Sahil canal. (Chapter IV) Wheat requires 200 kg of ammonium sulphate which he bought from the free market at double the price of the fixed rate because there was a shortage of fertilisers during this period of the year.

By the end of April or the beginning of May the harvest begins, this operation is
usually done by seven men using sickles. The straw is gathered into sheaves and transported to the barn, where it is separated from the grains by the threshing machine and by the winnower and sifting machine. The transport of the sheaves to the barn is done on camels, because the tractor cannot reach the plot, in which case the inputs of transport are paid in kind fixed at the equivalent of eight Kilo per feddan. The inputs of the winnower and the sifting operations are fixed at £.E 10 per hour.

The electrical machines are owned by three owners from Beira, who rent them to the peasants by the hour. This newly introduced machine costs £.E 23,000, and five owners invested £.E 16,000 from their remittances while working in one of the Arab oil countries. The rest of the price is paid by installments through a loan from the Bank of the Village on the basis of their holding cards. According to Hag Sidiki, their project is promoted by the Bank of the Village under the program of mechanisation. Although they charge the rent in cash in order to pay the installments, and although other machines located in sector B charge the peasants in kind, which is more convenient for the producers at this time of the year as they lack cash, most of the grain producers in sector A now use this machine because it is the nearest one. (Tab.VII.6.1)

The policy regarding wheat marketing changes from one year to the next but the peasant has to deliver a proportion of it to the government at a fixed price. The crop of Hag Sidiki's plot reached eight ‘Ardab of grains and five Himl of straw. From the eight ‘Ardab of grains he had to deliver three to the cooperative at £.E 22 each, and he kept five ‘Ardab of grains with the same price on the market, in addition to five Himl of straw amounting to £.E 35 each. At this stage Hag Sidiki was able to cover the inputs of production of the crop. Theoretically, if he was following the pricing system, he would have received £.E 176 from the selling of eight ‘Ardab of wheat to both the cooperative and on the free market, in addition
to £.E 175 from selling five Biml of straw. Thus, a total of £.E 351, and a margin of income amounting to £.E 39.41 over six months.

According to Hag Sidki, this margin is inconceivable for any peasant knowing that he would have made 20 times over this margin of income, if he was cultivating winter potatoes. Moreover, it would have been cheaper for him to buy his needs of wheat from the market and even mix it with maize, than to sell the crop at this price. However, since he is compelled to cultivate wheat under this pricing system, he counterbalances the low income by mixing four 'Ardab of wheat with five Biml of straw to be sold as fodder for £.E 315 and uses the remaining 'Ardab of wheat for household consumption. (Tab.VII.6.1) This means that Hag Sidki makes, over a period of six months, an income of £.E 91.41, from which 75% is from the selling of both wheat and straw as fodder for animals, and only 25% is made on wheat sold as such for human consumption.

Labour occupies the highest share in the inputs of production, and in the case of Hag Sidki whose household cannot provide the needed labour, he hires wage labour on a daily basis. At this particular time of the year, the wages of labours increase because there is a high demand on the market due to winter and summer potatoes, orchards, and wheat. (Tab.VII.6.2) Thus, under such conditions, together with the pricing policy, the effective inputs of production of wheat cannot be covered. Although the system of mixing straw with wheat is totally illegal and forbidden, many peasants use it to compensate their low income from wheat.
### Table VII.6.1: Inputs of Production of One Feddan of Wheat

<table>
<thead>
<tr>
<th></th>
<th>UNIT</th>
<th>NUMBER of UNITS</th>
<th>CASH EXPENDITURE C.E</th>
<th>TOTAL EXPENDITURE C.E</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. RAW PRODUCT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wheat</td>
<td>‘Ardab</td>
<td>8.00</td>
<td>22.00</td>
<td>176.00</td>
</tr>
<tr>
<td>Straw</td>
<td>Himl</td>
<td>5.00</td>
<td>35.00</td>
<td>175.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td>351.00</td>
</tr>
<tr>
<td><strong>2. VARIABLE INPUTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preparation of the land</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manure</td>
<td>Ghabit</td>
<td>150.00</td>
<td>0.50</td>
<td>75.00</td>
</tr>
<tr>
<td>Rent of donkey</td>
<td>Day</td>
<td>1.00</td>
<td>2.50</td>
<td>2.50</td>
</tr>
<tr>
<td>Child for the donkey</td>
<td>Day</td>
<td>1.00</td>
<td>2.50</td>
<td>2.50</td>
</tr>
<tr>
<td>Men for spreading manure</td>
<td>Day</td>
<td>1.00</td>
<td>4.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Rent of a plough</td>
<td>Day</td>
<td>2.00</td>
<td>10.00</td>
<td>20.00</td>
</tr>
<tr>
<td>Man for ploughing</td>
<td>Day</td>
<td>2.00</td>
<td>4.00</td>
<td>8.00</td>
</tr>
<tr>
<td>Preparation of the seeds</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seeds</td>
<td>Kila</td>
<td>6.00</td>
<td>2.64</td>
<td>15.84</td>
</tr>
<tr>
<td>Man for seeding</td>
<td>Day</td>
<td>0.50</td>
<td>4.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Irrigation</td>
<td>Hour</td>
<td>5.00</td>
<td>0.60</td>
<td>3.00</td>
</tr>
<tr>
<td>Man for irrigation</td>
<td>Day</td>
<td>5.00</td>
<td>4.00</td>
<td>20.00</td>
</tr>
<tr>
<td>Fertilisers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amonium Sulphate</td>
<td>50 kg</td>
<td>4.00</td>
<td>7.00</td>
<td>28.00</td>
</tr>
<tr>
<td>Man for spreading the fertilisers</td>
<td>Day</td>
<td>0.50</td>
<td>4.50</td>
<td>2.25</td>
</tr>
<tr>
<td>Woman for weeding</td>
<td>Day</td>
<td>5.00</td>
<td>3.00</td>
<td>15.00</td>
</tr>
<tr>
<td>Man for harvesting</td>
<td>Day</td>
<td>7.00</td>
<td>5.00</td>
<td>35.00</td>
</tr>
<tr>
<td>Transport of the crop by camel</td>
<td>Kila</td>
<td>8.00</td>
<td>2.00</td>
<td>16.00</td>
</tr>
<tr>
<td>Threshing machine</td>
<td>Hour</td>
<td>5.00</td>
<td>1.50</td>
<td>7.50</td>
</tr>
<tr>
<td>Winnowing and sifting machine</td>
<td>Hour</td>
<td>10.00</td>
<td>1.50</td>
<td>15.00</td>
</tr>
<tr>
<td><strong>Total variable Inputs</strong></td>
<td></td>
<td></td>
<td></td>
<td>271.59</td>
</tr>
<tr>
<td><strong>3. EXPENDITURE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed Inputs</td>
<td></td>
<td></td>
<td></td>
<td>40.00</td>
</tr>
<tr>
<td>Variable Inputs</td>
<td></td>
<td></td>
<td></td>
<td>271.59</td>
</tr>
<tr>
<td><strong>Total Expenditure</strong></td>
<td></td>
<td></td>
<td></td>
<td>311.59</td>
</tr>
<tr>
<td><strong>4. INCOME</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total price of raw product</td>
<td></td>
<td></td>
<td></td>
<td>351.00</td>
</tr>
<tr>
<td><strong>Total Expenditure</strong></td>
<td></td>
<td></td>
<td></td>
<td>311.59</td>
</tr>
<tr>
<td><strong>Net Income</strong></td>
<td></td>
<td></td>
<td></td>
<td>39.41</td>
</tr>
</tbody>
</table>
Table VII.6.2: Breakdown of the Inputs of Production of One Feddan of Wheat

<table>
<thead>
<tr>
<th>Labour Origin</th>
<th>Item</th>
<th>Labour</th>
<th>Inputs</th>
<th>Irrigation &amp; Fixed Inputs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rent of donkey</td>
<td>2.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Child for the donkey</td>
<td>2.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Men for spreading manure</td>
<td>4.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rent of a plough</td>
<td></td>
<td>20.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Man for ploughing</td>
<td>8.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Preparation of the seeds</td>
<td></td>
<td>15.84</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Seeds</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Man for seeding</td>
<td>2.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Irrigation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Man for irrigation</td>
<td>20.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fertilisers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Amonium Sulphate</td>
<td></td>
<td>28.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Man for spreading the fertilisers</td>
<td>2.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Woman for cutting the grass</td>
<td>15.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Man for harvesting</td>
<td>35.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transport of the crop by camel</td>
<td>16.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Threshing machine</td>
<td>7.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Winnowing and sifting machine</td>
<td>15.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fixed Inputs</td>
<td></td>
<td>40.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Inputs</td>
<td>149.75</td>
<td>118.84</td>
<td>43.00</td>
<td>311.50</td>
</tr>
</tbody>
</table>

| Share in %  | 48.06% | 38.14% | 13.80% | 100.00%                   |

Unpaid labour provided from the neighbours
* Unpaid labour provided from the household unit
# Paid hired labour

3.2. Cotton and State Policies since the Nineteenth Century

For over a century, cotton has been the major source of agricultural income for the Egyptian economy. In the early 1980's, the area of its cultivation represented 10% of the total agricultural land, and its production constituted 11% of the total value of national agricultural production. Similarly, the cotton industry and national institutions for its production and its marketing created nearly 300,000 jobs. (Port Said Export Company for Cotton, 1982:1)
Therefore, cotton represents one of the most deeply rooted national institutions in Egypt. Egypt exports 50% of the world production of long staple cotton, 2.18% of the total world production. (al-'Iraqi, 1985:10) Historically, the changes in the cotton area were related to the conditions on the international markets and to the political changes on the world scene. Civil wars, such as the American and the Korean wars, during which the production of American cotton was reduced, increased the demand and the price of the Egyptian cotton on the international markets. The world wars affected its export, and consequently the area of its cultivation. During the second half of the twentieth century, the cotton area witnessed a high rate of fluctuation. Thus, after it had represented 20% to 37% of the total agricultural land in the 1930's, it fell to 10.6% in the late 1970's, and to 9.6% in the 1980's. (Hamdan, 1984:17-20) This fluctuation was the result of state agricultural policies and policies concerned with the national cotton institutions. This fluctuation had a noticeable repercussion on other crops such as the free cash crops, which have expanded with the decrease of cotton area.

Thus, since the incorporation of Egypt into the world market, cotton witnessed changes in state policies, varying between a monopoly over its production and over its marketing, and a free marketing system with state interventions during economic crisis on the market. Different systems have been adopted depending on the political trends of the government, with different political and economic objectives, to which the producers and the peasants reacted differently. Therefore, the problems generated by the state policies of cotton cannot be understood without tracing their historical roots, in which the world market was a constant factor behind the emergence of an economic crisis.
3.2.1. The impact of the incorporation of Egypt into the world market on cotton policies

Egypt knew the expansion of long staple cotton under Muhammad 'Ali who produced it for export purposes. The crop was requisitioned by the state at a fixed price, and sold on the market at a higher prices. (Bezanson, 1967:217) The state monopoly over cotton was undertaken in the context of an ambitious project launched by Muhammad 'Ali aimed at making Egypt one of the strongest countries in the region. The revenue from cotton financed the expansionist policy of the ruler, as well the internal economic development. Imports were reduced by the establishment of national industries, which absorbed 32% of the cotton production, in 1830. However, the new industrial sector could not support the project of economic independence as it turned out to be a drain of money. (Crouchley, 1938:73) Thus, the economy became dependent on the world market and on cotton exports. (Chapter II)

3.2.2. The shift toward the free marketing of cotton

London commercial treaty, in 1838, inaugurated a phase of the free marketing of cotton. From 1854, Egypt became an important supplier of raw material to the Europeans, and a market for their manufactured products. (Crouchley, 1938:74) During the American Civil War, 1860-1864, there was a shortage of American short staple cotton on the market, which created an extensive demand for the Egyptian cotton, and the share of cotton in the total exports reached 90.3% by 1864. (Bezanson, 1964:218)

With the British occupation, further efforts were made to render Egypt a country based on cotton exports, as it was a more valuable commercial crop than sugar or cereals for their industries. However, climatic changes and agricultural conditions
also had direct implications for the economy. A shortage of summer water, in 1900, urged the government to prohibit rice cultivation as it requires large amounts of water, and peasants turned to cotton. (Owen, 1969:186) Similarly, in 1904, the cotton worm destroyed the equivalent of £E 2,000,000 of the crop and many peasants suffered from this catastrophe. (Rothstein, 1921:210-213)

In the beginning of the twentieth century, the area of cotton gradually increased, despite the instability of prices. Cotton became the only crop offering high incomes, covering the increasing rental value of agricultural land. (Owen, 1967:188) Despite the increase in the area of cotton, the productivity did not follow the same rate, and the fluctuations of the prices of American cotton, the primary competitor of the Egyptian cotton, had a direct impact on the prices of long staple cotton. (Owen, 1969:190-194,201-202)

3.2.3. The impact of the economic crisis of 1921 on cotton producers

Between 1918 and 1920, the prices of Egyptian cotton rose considerably, reaching £ 200, which was followed by a dramatic drop to £ 24 by 1921. (Crouchley, 1938:192) This fluctuation led to a serious crisis affecting the large Egyptian cotton producers. A detailed account was published in 1921, by an Egyptian cotton producer, explaining the mechanism of the crisis. The author illustrated the role played by foreign merchants on the local stock market in accelerating the crisis, as they controlled the lending and the marketing systems. He showed how the position of the government and the Egyptian bourgeoisie amplified the crisis. (El Far, 1921:31-35)

By 1920, the political and economic transformation on the world scene, with the new partition of frontiers, made the access to raw material from its source of production difficult for merchants. The American cotton flooded markets lacking
money, and created a high offer for a very low demand, and the prices dropped. In 1921, many factories and export merchants had great losses as they had stored their purchases of the previous year expecting higher prices. Thus, the trend was to lower the prices of raw materials from their source of production, in order to increase the demand for manufactured products at lower prices. Agents of foreign companies in Egypt followed these instructions (El Far, 1921:39-41).

The Egyptian economy was shaken by this policy, especially the large cotton producers who held their crops from the market hoping to sell it at double the price. Moreover, many large producers started to mortgage their crop on the basis of £E 12 per kantar, estimating to sell at £E 30, at the end of the season. But, when the prices fell even more, the value of the mortgage was doubled for the same quantity of cotton at the same price. "Uqala al-Uma", the leading figures of the nation, advised the large producers to save their crops until the end of the season, assuming that it was a temporary artificial drop in prices. The solution was to create a situation of shortage of cotton on the market which would inevitably increase the price.

The author argues that the Egyptian market cannot be considered in isolation of the world market in the absence of national industries. Similarly, the Egyptian market was a crop market rather than a consumption market, in which loans and mortgages were provided by foreign banks in Egypt. In fact, the speculators and the export merchants were the only beneficiaries of this crisis, while the producers were losing on each transaction.

Merchants bought the cotton from the peasants or from the large producers on the basis of contracts, in which the price was fixed at a specific rate, for a specific date determined by the merchant, on the basis of the grade. Meanwhile, the export merchants sold the delivered merchandise to foreign textile companies. But,
because of slow shipping procedures, the merchandise remained in their hands for several months which enabled them to sell the same lot twice or three times to different foreign textile companies, according to different prices on the stock market, with delivery at a much later date. Thus, profits were made on the difference between the selling prices and the closure prices, at the expenses of the producers.

On the other hand, the merchants created a situation whereby raw material was accumulated on the market and exceeded the effective demand. It was at this level that the merchants tried to decrease the price, as instructed, and compensated for the decrease by the quantity sold, to the extent that, by the end of the season, the price had dropped to 85% to 90% lower than the average original price. (El Far, 1921:43-49)

The structure of the marketing system was among the factors accelerating the crisis of the cotton prices. Cotton transactions took place in Egypt on the stock market of Minat al-Basal in Alexandria, where speculations took place on delivery, and on the Sultaniyya stock market in Cairo, where speculations were done over long period of time after the delivery. In Minat al-Basal, in Alexandria, cotton was stored in warehouses of banks, or of commission merchants, who charged the producers 75% of the value of cotton in advance until it was sold to an export merchant. In this way, the producer was made subject to the market instability, while the merchant acted as a middle man.

The marketing in Minat al-Basal was controlled by the A.G.P.A., the Alexandria General Producers Association, the majority of whose members were foreign export merchants. The criteria of grading cotton was not accurate because it was based on the tallness, the strongness, the undulations, the goodness, and the purity of its fibers. On the basis of the finest grade, the "Fully Good Fair", the fibers
were evaluated as lower or equal to this criteria, and the price was fixed accordingly. As a result, the A.G.P.A. was the only authority deciding on such matters. Therefore, the results were often arbitrary, especially for the small peasants who had no influential connections to protect their interests. (El Far, 1921:53-62)

Thus, the 1921 cotton crisis shows the extent to which foreign merchants took advantage of the situation by accelerating the drop in the cotton prices. Therefore, El Far argued, the 1921 crisis was probably going to be repeated as long as the economic system was controlled by foreign merchants, and as long as the Egyptian bourgeoisie did not embark in a national economic project such as Misr Bank. The intervention of the government on the market during economic crisis was only a short term measure which would not prevent future crisis. A new structure of the marketing system, directed by the government, with the participation of the cotton producers, was needed as a long term solution. The cotton producers, in their turn, should have diversified their production in order to reduce the impact of the fluctuations of prices, and to reduce the damages to land that arises from continuous cotton cultivation which reduces the yield.

In conclusion, the author expected more losses, in the following season, for the Egyptians growers as their crops were bought and stored by the merchants. Meanwhile, prices were expected to increase as political stability on the world scene had been reached, and factories started their demands for cotton. (El Far, 1921:65-66, 68-73)

The objective of El Far’s account was to illustrate the internal and the external forces, that generated and accelerated the crisis of a dependent economy on the world market. Many aspects of this crisis showed the necessity of an effective state presence in a strategic economic institution. This argument was supported by the
large producers who were threatened by foreign merchants and by their incapacity to protect their interests under the instability of the world market. In the 1980's, under the dependency of the Egyptian economy, similar debates concerning the intervention or the retreat of the state from the cotton institution took place, reflecting the absence of a planned national policy for cotton.

3.2.4. The state monopoly over the marketing of cotton in the 1960's

It was not until the early 1960's, during the nationalisation of the private sector under Nasir's regime, that cotton production and marketing were restructured in the context of the government monopoly over marketing. The direct intervention of the government in agriculture was extended in 1965 to cover all the Egyptian governorates. The compulsory crop rotation determined the annual area cultivated and the cooperative marketing became compulsory for cotton, wheat, rice, sugar cane, onions, peanuts, and sesame (Abdel Fadil, 1975:85-86).

Cotton became a national institution controlled by the government, and the textile industry, the agricultural and the commercial sectors became the components of this large institution. The expansion of the national textile industry increased the local consumption of the annual production. Between 1965-1975, the exports of raw cotton represented 9.7%, and the share of the textile exports reached 14% from the total national exports. (Husin, 1982:460-461)

The intervention of the government in the production of cotton was achieved through the monopoly of inputs, distributed at a subsidised interest rate, on the basis of the guarantee of the crop. (Abdel Fadil, 1975:86) The monopoly over the marketing of cotton at the level of the producers was achieved through the cooperative marketing system, al-Taswiq al-Ta'avyuni. According to this system, the peasants delivered their entire crops to the collecting centres, controlled by the
agricultural cooperatives, where the cotton was weighed and graded. It was then transported to the ginning mills where it was pressed into bales and sent to the local spinners or exported.

The pricing policy was restructured gradually: from 1953 to 1961, the government controlled the prices at the national level through the Egyptian Cotton Commission (ECC). The ECC limited the fluctuations of prices during this period, with the exception of 1956 when the price rose under the Three Partite war. In 1961, with the nationalisation of cotton commerce, and the closure of the stock market in Minat al-Basal, cotton marketing was put under the direction of the ECC. (Abdel-Fadil, 1975:90) The commission annually fixes a buying price from the producer which is determined according to the effective the value inputs of production. This price is lower than the international one, as the government subsidises the effective inputs of production. On the other hand, the government fixes a selling price for the local industries which was almost constant in the 1960's, while the quota of export changed according to the foreign demand. However, one of the problems generated by this system was that the price paid to the producer did not rise at the same rate as the inputs of production. (Abdel-Fadil, 1975:93) As a result, peasants were not induced to cultivate cotton, and they turned to more lucrative crops.

This policy had a repercussion on the area cultivated by cotton, in 1965 the surface registered the highest increase, and the following years inaugurated phases of regular decline. (Hamdan, 1984:19-20) (Tab.VII.1.2-1.3) However, the decline in the area of cotton cannot be explained in terms of the reluctance of peasants to cultivate a compulsory crop, even if that seems at first to be the direct reason. The constant decline in the area was the result of the government pricing policies in the 1960's, which were exacerbated in the 1970's by the changes in the general economic policy. In the 1980's, recent debates supported the argument that the
3.2.5. The implications of the open-door economic policy on cotton production and its institutions

During the 1960's and the 1970's the largest proportions of cotton exports were sold to socialist countries, which absorbed nearly 86.8% of the Egyptian spinned cotton and 94.9% of the textiles; while Western markets were only able to absorb 12.9% and 4.6% during the same period. (Husin, 1982:461) Under the open-door economic policy and the reduction of government intervention in the economic sector, the cotton institution became a political and economic symbol of the previous regime, which was no longer fitting in the new political orientation.

Under the slogan of "qualitative change", it was claimed that cotton had become a burden on the national economy, and that it was recommended that its cultivation be stopped for the benefit of the national economy. Despite the opposition to this declaration, the area of cotton continued to decline. This decline also affected the local textile industries and the commercial channels controlled by the government. However, many cotton experts, who were not supporters of Nasir's regime, stood against this trend arguing that the monopoly system of cotton might not be the ideal one and that it could be criticised on various aspects, but the only alternative advanced under the present condition is the free marketing based on the stock market. This system had proven, historically, to be a failure and a threat to the political and the economic system. They added, that the return to this system would have serious political impacts, as cotton institutions were strongly established in the society. (Husin, 1982:454-455, 461) This opposition was against the penetration of private and foreign merchants into the marketing network which would increase the economic dependence on international markets.
On the other hand, the socialist countries are the largest importers of Egyptian cotton on the basis of contracts at a fixed price. Such deals limit the competition and the fluctuations of prices on the market, and do not allow the intervention of private and foreign merchants in the market of cotton. Politically, the presence of socialist countries in one of the most important institutions in Egypt was not desirable to the World Bank and the I.M.F., as these countries are considered to be a major threat to Western interests in the region. However, the direct liquidation of cotton institutions was not possible in a short period of time. Millions of workers in the agricultural, the industrial, and the commercial sectors were going to be affected by such measures. Therefore, a new strategy was launched to reduce and limit the weight and the influence of this institution. In the beginning, the general framework of this policy was to increase the quota of local consumption for the textile industries, and reduce the export quota of cotton. In a second phase, with the shortage in the export sector, the production would be again oriented to exports, while reducing to the minimum the share of the socialist countries, and cover the gap of local consumption from the imports of short staple American cotton. (Husin, 1982:464)

In 1975, the area of cotton was reduced by 600,000 faddans, and the share of cotton exports dropped. Consequently, the value of cotton exports fell from $592 million to $275 million in 1978. Nevertheless, the government failed to reduce the quota to the socialist countries as Western markets could not absorb more than 38.6% of the total cotton exports. (Husin, 1982:464, 466) However, the largest proportion of cotton revenues was not in free currency, and was difficult to invest in the imports of basic needs from the West for the textile industries, as its production was deteriorating and was subject to competition from imported textiles flooding the market. As a result, the revenue from cotton exports to the socialist countries was used to pay the Egyptian foreign debts. (Husin, 1982: 467) By 1976-77, a shortage of cotton on the local market was covered by the imports
of 288,300 Kantars, to the textile factories located 30 km from the cotton cultivated areas. Despite the prohibition of cotton importation in Egypt by a law protecting the local production, the imported quantity increased to reach 478,000 Kantars, by 1977-78, through loans granted by the U.S.A.I.D. (Husin, 1982:468)

In the 1980's, the area of cotton continued to decrease, and this drop was translated into losses encountered by the economy as Egypt was unable to meet local and foreign demands. (Tab.VII.1.2-1.3) In 1983-84, the crop was estimated to be 7,883,000 Kantars, from which 5,298,000 Kantars was needed for local consumption, and export deals were already signed for 3,390,000 Kantars. Thus, there was a deficit of 803,000 Kantars, which had to be covered partly from the quota of exports. In fact, the export companies delivered only 2,419,000 Kantars, and the rest was provided to the industrial sector. After this season, suggestions were made to import short staple cotton from the USA, estimated at 870,000 Kantars. (Hana, 1984:32-33)

The following year, 1984-85, the same problem emerged with a slight drop in the area, while the local industrial consumption was expected to reach 6,000,000 Kantars. Thus, the gap was covered by the imports of 650,000 Kantars of short staple cotton from the USA amounting to $57,000,000, and 30,000 Kantars from Sudan amounting to $2,200,000. (Hana, 1985:62-63)

Commenting on the drop in the cotton area, the Minister of Agriculture declared that he could not understand why the peasants insisted on escaping from cotton cultivation, when the government increased its buying price for the producers by £E 20 over the initial price, with an average of £E 100 per Kantar. This meant that the peasant received a total of £E 700, considering that the average production of one feddan is seven Kantars. (Hana, 1985:63)
In 1984, facts on the local market revealed a different situation concerning the cotton prices. The government price for average grades was of £.E 90 per Kantar, the price of one Kantar for upholstery works reached £.E 300, and the one for medical uses, consisting of the lowest grade, reached £.E 400 per Kantar, while the price of one Kantar on the international market was at $ 150 or £.E 300, and the fixed price for factories reached £.E 234.15 per Kantar. (al-Iraqi, 1985:10) Moreover, according to the producers, the effective inputs of production of one fadden reached nearly £.E 726.65, which means that the inputs of production of one Kantar were £.E 103.80, while the fixed price was of £.E 90, hence a loss of £.E 13.80 per Kantar to the producer.

Under such conditions, many peasants try to escape from its cultivation, even after the government increased the price by £.E 20 per Kantar, and those who cannot escape from it neglect its cultivation and tend to ignore the last picking of the harvest, in which 10% to 15% of the crop is wasted and used as fuel. As a result of the pricing policy, the government losses on the wastes in the second picking of the harvest are estimated to reach 1,000,000 Kantars. (al-Iraqi, 1986:10)

Thus, one cannot deal with the Egyptian agrarian question without raising the problem of cotton as related to political and economic issues on the national and the international level. Therefore, the reduction of the area of cotton cannot be regarded as the responsibility of the peasants, as claimed by the government. Peasants react to an established agricultural policy, and adapt consequently their strategies of production. Thus, as long as the government maintains an unprofitable price for peasants, as was the case after 1965, it seems perfectly rational to avoid its cultivation. Especially, since in many cases the neighbours of cotton producers cultivate more profitable crops with a higher income over the same period of time. These factors are behind the reluctance of the peasants to cultivate cotton, and thus, the reasons should be related to a wider economic policy
which tends to reduce the cotton area by limiting the advantages and the facilities for its production.

3.2.6. The cultivation of cotton on twelve qirats

In Batra, cotton cultivation covers 393.22 feddans, representing 16% of the total agricultural land, mostly located in sector A and parts of sector B. Muhammad is an owner of 12 qirats in sector A, registered under a triennial rotation cycle where cotton is cultivated every three years. Muhammad argues that cotton is one of the most demanding crops in terms of labour and agricultural operations. Before the cultivation of cotton in March, Muhammad planted summer potatoes instead of short season bassem, as fixed by the cooperative, because he had had a bad summer crop and wanted to compensate for the low income. The cultivation of summer potatoes ends in April, while cotton starts in early March, which means that the two crops are articulated over a period of time on the same land. (Fig. VII.2) Thus, instead of removing summer potatoes he cultivated cotton in the middle of the plants. This form of cultivation is forbidden by the cooperative and is regarded as an infringement on the rotation cycle. Nevertheless, through his friendly connections in the cooperative, he managed to keep both crops without paying a fine.

Under these conditions, the preparation of the field for cotton had to be done with a hoe, as the plough or the tractor would have damaged the potatoes. The seeding of cotton is done by one man and, 60 days after, the cotton worm campaign starts, while the potato crop is harvested. The campaign requires a large number of women and children for picking the worm, and Muhammad's family is mobilised for this operation. His two daughters and son are officially dismissed from school and registered in the local board office of the cooperative, which is responsible for organising the campaign. According to Muhammad, he is compelled to send his
children to work in the cotton worm picking team or he could be charged by the cooperative.

The collective worm campaign is a system by which the government ensures the supply of necessary labour for those who would not have access to it. The children of the village are gathered under the supervision of a supervisor, al-Khuli, who distributes them on the plots in small groups, and they are officially paid £.E 0.30 for a day’s work. Under this system, in exchange of sending their children as wage labourers, the peasants are supplied with other children to work on their land at a fixed subsidised wage.

In reality, the situation is different, because in order to get the agricultural operation done efficiently the peasants must pay the members of the team a full day’s wage as on the market reaching £.E 1.20 daily, which is not convenient for most peasants like Muhammad. On the other hand, Muhammad does not pay wages to the members of his family. Under this system, not only does he add the effective inputs of labour, but unexpected inputs are added such as tips to the supervisor, tea and tobacco for the workers. Similarly, during this time of the year, a peak season for agricultural operations, it is difficult to control the workers to undertake a full day of work, as there is a high demand for labour because the seasonal migration of men to Arab oil countries starts.

Muhammad is entitled to receive a loan from the bank of £.E 12.49 for his 12 qirats, in exchange for £.E 0.50 interest. But the loan does not even cover the inputs of three days of labour work, and the campaign is done over 40 days during which the 12 qirats require at least two children daily, thus, a total of 80 days’ work costing £.E 120. On the other hand, Muhammad receives a quota of inputs, consisting of seeds and fertilisers, determined according to the cultivated area. (Tab.VII.7.1) The choice of the seed varieties is determined by the
cooperative, the only distributor, according to the national requirements, and each basin is cultivated by a specific variety of seeds. But the quota of seeds is usually not sufficient and it is very difficult to purchase the appropriate variety on the black market.

However, despite the low demand on the seeds as peasants tend to escape from cotton, a few peasants choose to cultivate cotton exceptionally. For example, Muhammad's neighbour was indebted to the Bank of the Village, for £ E 300, after a bad summer crop. Instead of cultivating a free cash crop requiring capital, which was difficult to raise, he preferred to apply for cotton cultivation in order to have access to the facilities granted for its cultivation. But, he had to purchase the seeds from the black market, because he was not registered in the cooperative for its cultivation. At the end of the agricultural year, after deducting his debts to the bank, he received the rest of the price. Cotton cultivation can be a means of a debt payment to the government, as the peasants are sure that the crop will be sold and cash will be acquired.

The estimation of the inputs of production of cotton is controversial. The government's buying price per kanvar is based on the official estimations of the inputs and of the average production per feddan, and by deducting the share of subsidies, the income of the peasant is calculated. (Tab.VII.7.3) According to the official estimations, the government subsidises both inputs and fixed inputs, and the difference between the effective price and the subsidised price constitutes the margin of income of the producer.

However, figures show that the government subsidises only minor details in the long list of the inputs of production in which the share of labour represents more than 70% of the expenditure. Furthermore, if the fixed inputs are subsidised by the government, as it lowered the rents in the early 1960's, the official wages of
labour, on the other hand, do not reflect the real wages paid during this time. (Tab.VII.7.2-3) Therefore, in many respects, these figures do not reflect the real inputs of production, nor do they reflect the actual value of subsidies, because the government estimates the inputs of production on the basis of official prices, especially labour wages. On the same assumptions, the buying price of cotton was increased to a maximum of £.E 30 per kantar in 1985, while the inputs of production almost doubled and the largest share of subsidies, i.e. the fixed inputs remained unchanged. This means that the increase of the buying price was 66.6% per feddan, while the inputs increased by 56% and the subsidies remained almost stable as rents were not increased. However, the deficit of the producer of cotton has also increased, as the buying price does not cover the effective inputs. (Tab.VII.7.1)

This situation is evident in the case of Muhammad's cultivation, as figures show that he had a deficit of £.E 123.59. In fact, the subsidised items: the inputs, the government commissions, and the fixed inputs, occupy the lowest share, while the highest share is occupied by non-subsidised items, the labour wages. In this context, the labour force becomes the determining factor in the inputs of production, as the price of inputs is subsidised and as the rent is only paid, in reality, under tenancy. (Tab.VII.7.2) Therefore, the participation of unpaid labour from the household becomes very important in reducing the expenditure of cash. Muhammad's wife, children, sisters, and brothers are all involved in the cultivation of cotton, and exchange of unpaid work is practiced among the members of the family. This explains why the system adopted by the government in organising the worm campaign is not convenient for many peasants, because it makes family labour a payable service.

The harvesting of cotton is undertaken in two stages. The first picking, from which the best grades of cotton are picked, is done in September, the second
Picking is done in October and is considered to be less important than the first picking because a lower quality and a smaller quantity is picked. Therefore, many peasants tend to eliminate the second picking, and start cleaning the field directly, as it is cheaper than picking it, because each kantar requires eight days of work by women and children, regardless its quality. In other words, it is cheaper for the peasants to eliminate the second picking, which is bought at a lower price of £ E 60 per kantar, rather than pay for 22 days of work at a total of £ E 65. The day work of women reaches at least £ E 3 instead of £ E 2.50, because this time of the year is the peak season for agricultural operations.

The peasants find various means to increase the income of the land from the cotton crop. What Muhammad did, the delay of cotton seeding, enables the peasants to maintain the vegetables with a shorter vegetation cycle, and thus, the income of the winter crop is used by the household during summer. Similarly, most of the peasants store the cotton in their houses for a few days because it becomes humid and weighs more. Those who are renting their land from the same landowners, usually they make a collective delivery to the marketing cooperative on the landowner's holding card. This system enables the landowner to collect the rent from the tenants with the direct delivery of the crop through the cooperative, as many tenants tend to delay their rental payments. Similarly, by making a collective delivery, a larger quantity of cotton is weighed and the tenants have the possibility of mixing the grades and having the entire quantity evaluated on an average of a higher grade. Moreover, if the tenants feel that their cotton was under-graded, a collective complaint is more influential than an individual one. In other cases, non-official agreements take place between the peasants and the employees of the agricultural cooperative, in the beginning of the agricultural year, to exempt them from cotton cultivation in return for personal services. This kind of agreement is probably not frequent but occurs in Betra.
An owner of a plot in sector B, found that he was the only holder registered for cotton cultivation in the basin, this led him to apply for an investigation. He discovered, three months later, that an owner of a plot registered in a neighbour village made an arrangement with the employee of the cooperative to exempt him from its cultivation. In order to cover himself and to maintain a stable area of cotton cultivation, the employee transferred the same area to another basin in Batra through his contacts in the agricultural cooperative. The arrangement was easy to reveal, because there was only one plot, in the middle of a vegetable rotation, registered under cotton. Finally, others prefer to pay a fine and purchase their inputs from the black market rather than cultivate cotton.

In conclusion, cotton cultivation under such a system becomes a heavy burden on the peasants, and they, in their turn, develop many strategies to escape from it, while 50 years ago the government had to make restrictions to limit its cultivation. Therefore, the state policy is totally responsible for the decline in the cotton production and in its area.
### Table VII.7.1: Effective Inputs of Production of Twelve Qirats of Cotton

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>UNIT</th>
<th>NUMBER of UNITS</th>
<th>CASH EXPENDITURE L.E</th>
<th>TOTAL EXPENDITURE L.E</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Raw Product</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cotton</td>
<td>Kantar</td>
<td>4.00</td>
<td>90.00</td>
<td>360.00</td>
</tr>
<tr>
<td>2. VARIABLE INPUTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preparation of the land</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Man for hoeing</td>
<td>Day</td>
<td>1.00</td>
<td>4.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Agricultural operations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seeds</td>
<td>Kila</td>
<td>3.00</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Man for seeding</td>
<td>Day</td>
<td>0.50</td>
<td>4.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Irrigation</td>
<td>Hour</td>
<td>12.00</td>
<td>0.60</td>
<td>7.20</td>
</tr>
<tr>
<td>Man for irrigation</td>
<td>Day</td>
<td>4.00</td>
<td>4.00</td>
<td>16.00</td>
</tr>
<tr>
<td>Fertilisers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrates</td>
<td>50 kg</td>
<td>1.00</td>
<td>7.00</td>
<td>7.00</td>
</tr>
<tr>
<td>Urea</td>
<td>50 kg</td>
<td>1.00</td>
<td>6.65</td>
<td>6.65</td>
</tr>
<tr>
<td>Man for spreading the fertilisers</td>
<td>Day</td>
<td>0.50</td>
<td>4.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Man for hoeing</td>
<td>Day</td>
<td>4.00</td>
<td>4.50</td>
<td>18.00</td>
</tr>
<tr>
<td>Cutting the excess on the plant</td>
<td>Day</td>
<td>2.00</td>
<td>5.00</td>
<td>10.00</td>
</tr>
<tr>
<td>Cotton worm campaign</td>
<td>Day</td>
<td>80.00</td>
<td>1.50</td>
<td>120.00</td>
</tr>
<tr>
<td>Pesticides for the worm</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>25.00</td>
</tr>
<tr>
<td>Harvesting</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Man for harvesting</td>
<td>Day</td>
<td>60.00</td>
<td>3.00</td>
<td>180.00</td>
</tr>
<tr>
<td>Man for storage</td>
<td>Day</td>
<td>0.50</td>
<td>4.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Man for loading</td>
<td>Day</td>
<td>0.50</td>
<td>4.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Donkey for loading</td>
<td>Day</td>
<td>0.50</td>
<td>2.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Cleaning the field</td>
<td>Feddan</td>
<td>0.50</td>
<td>25.00</td>
<td>12.50</td>
</tr>
<tr>
<td>Marketing the harvest</td>
<td>Transport</td>
<td>Kantar</td>
<td>0.75</td>
<td>7.00</td>
</tr>
<tr>
<td>Commission on marketing</td>
<td>L.E 90</td>
<td>0.03</td>
<td>4.00</td>
<td>13.33</td>
</tr>
<tr>
<td>Commission of cooperative</td>
<td>L.E 90</td>
<td>0.02</td>
<td>4.00</td>
<td>6.66</td>
</tr>
<tr>
<td>Total Variable Inputs</td>
<td></td>
<td></td>
<td></td>
<td>443.59</td>
</tr>
<tr>
<td>3. EXPENDITURE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed Inputs</td>
<td></td>
<td></td>
<td>40.00</td>
<td></td>
</tr>
<tr>
<td>Variable Inputs</td>
<td></td>
<td></td>
<td>443.59</td>
<td></td>
</tr>
<tr>
<td>Total Expenditure</td>
<td></td>
<td></td>
<td>483.59</td>
<td></td>
</tr>
<tr>
<td>4. INCOME</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total price of raw product</td>
<td></td>
<td></td>
<td>360.00</td>
<td></td>
</tr>
<tr>
<td>Total Expenditure</td>
<td></td>
<td></td>
<td>483.59</td>
<td></td>
</tr>
<tr>
<td>Net Income</td>
<td></td>
<td></td>
<td>-123.59</td>
<td></td>
</tr>
</tbody>
</table>
Table VII.7.2: Breakdown of the Inputs of Production of Twelve Quintals of Cotton

<table>
<thead>
<tr>
<th>Labour Origin</th>
<th>Item</th>
<th>Labour</th>
<th>Inputs</th>
<th>State Commissions, Irrigation &amp; Fixed Inputs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Preparation of the land</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Man for hoeing</td>
<td>4.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Agricultural operations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Seeds</td>
<td></td>
<td>3.00</td>
<td></td>
<td>7.20</td>
</tr>
<tr>
<td>*</td>
<td>Man for seeding</td>
<td>2.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Irrigation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Man for irrigation</td>
<td>16.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fertilizers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nitrate</td>
<td></td>
<td>7.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Urea</td>
<td></td>
<td>6.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Man for spreading the fertilisers</td>
<td>2.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Man for hoeing</td>
<td>18.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Cutting the excess on the plant</td>
<td>10.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*q</td>
<td>Cotton worm campaign</td>
<td>120.00</td>
<td></td>
<td></td>
<td>25.00</td>
</tr>
<tr>
<td></td>
<td>Pesticides for the worm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Harvesting</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*q</td>
<td>Man for harvesting</td>
<td>180.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Man for storage</td>
<td>2.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>q</td>
<td>Donkey for loading</td>
<td>2.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*q</td>
<td>Cleaning the field</td>
<td>12.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Marketing the harvest</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transport</td>
<td></td>
<td>5.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Commission on marketing</td>
<td></td>
<td>13.33</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Commission of cooperative</td>
<td></td>
<td>6.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fixed Inputs</td>
<td></td>
<td>40.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Inputs</td>
<td></td>
<td>483.59</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Total         | 369.50                        | 48.95  | 65.24  | 483.69                                      |
| Share in %    | 76.39%                        | 10%    | 13.49% | 100.00%                                     |

○ Unpaid labour provided from the neighbours
* Unpaid labour provided from the household unit
q Paid hired labour
3.3. The Cultivation of Tomatoes on a Large Scale

The cultivation of tomatoes in sector A represents the major summer crop for most peasants, as it compensates for the low income raised from the cultivation of compulsory crops over two years. Therefore, it occupies the same position as summer potatoes in sector B. Tomatoes are cultivated every three years on the same land, preceded by wheat in early July. It is mostly undertaken for commercial purposes, as it complies to free marketing prices.

Hag Husni Husnani has been practicing the cultivation and the commerce of tomatoes for over 30 years. According to him, tomato cultivation requires a large number of workers and a large capital for the fertiliser and the pesticide requirements, as the crop is subject to many diseases. Tomatoes are known on the market as “crazy tomato”, because the price jumps from one extreme to the other.
in a very short period of time. This is due to the fact that many peasants cultivate them at the same time if the previous season was profitable, if this was not the case, only a few will cultivate them and the demand exceeds the supply. Moreover, as tomatoes are sensitive to climatic changes, the quantity produced fluctuates according to the weather conditions.

Hag Husni Husnani's family owns over ten faddans in sectors A and B. He rents additional land on seasonal terms, because tomatoes cannot be cultivated every year on the same plot, given the crop rotation (Fig. VII.2). Thus, in order to maintain his commerce on a large scale, he rents several plots in different basins from July to the middle of January. According to Hag Husni Husnani, the value of the seasonal rent is also subject to fluctuations depending on the demand and the offer. During the 1970's and the early 1980's, seasonal rents were rather low as many peasants migrated to Arab oil countries and offered their land for rent on seasonal terms. However, with the final return of many peasants in the middle of the 1980's, and their return to agricultural activities, rents were increased to £.E 350 and £.E 400, instead of £.E 200 per season for vegetables. This increase was reflected in the price of the crop.

Hag Husni Husnani rents plots of 25 faddans located in different basins, as it is difficult to find a large size of land gathered in the same basin. The rental value of the plot depends on the conditions of the land in terms of its quality, the conditions of irrigation, its location in relation to a communication network and commercial centres, and it depends on the type of the crop and the period it occupies. One of the plots Hag Husni Husnani rented was a faddan located in sector A for £.E 350. The value of the rent was moderate in this case because the conditions of the land required intensive operations for the production of a good crop, and the plot was not directly located on a main road. As a merchant, he never rents a good quality of land because it increases the rent.
He starts the preparations of the field, in the middle of July, by ploughing the land twice and cleaning the drainage and the irrigation canals. The plot is then divided into ridges on which the tomato seeds are planted, and the pesticides are spread on three times. It should be noted that under seasonal rent, Haji Husni Husnani uses chemical fertilisers instead of manure because the prices of the second are higher than the first, and because manure is usually used once a year. Thus, as long as he is occupying the land for only six months, he needs fertilisers for only this period of time. Similarly, tomatoes require large quantities of pesticides because they are cultivated at the same time as cotton, and cotton worms have side effects on tomatoes.

The inputs are provided from the market, as he does not have a holding card on which he gets a quota of inputs. In exchange, the holder receives the quota and sells it on the market for a higher price, or uses it for his following crop to compensate for the shortage that occurs often in the cooperative. The plot is hoed at three intervals, and is irrigated 14 times at intervals, over the six months: the first irrigation is done 40 days after seeding, 20 days later the second irrigation takes place, and after that the plot is irrigated every ten days. The picking of tomatoes starts in the middle of November and ends in the end of January. Thus, it is extended over 100 days, and takes place every ten days. However, the period of picking depends upon the weather and the rain, in a way that it can even be extended to the month of February. Haji Husni Husnani hires wage labour for all the agricultural operations, as he cultivates large surfaces spread in different basins, and the members of his family only supervise the works.

Figures show that, over a period of six months, Haji Husni Husnani made an income of £4,157.05. Considering the high inputs of production, and the production on a large scale, the share of labour was the highest in the expenditure, given the paid wages of labourers. The share of the fixed inputs and irrigation are
rather high because of the rental value. In this case, the inputs of production of one feddan are considered to be high as all the items are paid for in cash, including the rent. (Tab.VII.8.1-8.2) On the other hand, the price of the raw product is calculated on the basis of the average price over the period of selling. During the first week of November, the price of one ton of tomatoes reached £.E 300, a week later the price fell to £.E 200, and ten days later it dropped to £.E 78 and by the beginning of December it was £.E 62. Thus, over a period of one month, the price of tomatoes dropped by two thirds. Furthermore, the fluctuation in the price is due to many factors, mainly that tomatoes cannot be stored which means that the producer must sell them as soon as they are picked from the field. This leads to most of the producers offering their merchandise at the same time, which increases the supply at a certain period of time, while the demand cannot absorb the quantity available on the market.

As much as tomatoes are considered to be the major crop in sector A, often compensating the low income provided from compulsory crops over two years, they are considered a risky crop in terms of agricultural and market conditions. Tomatoes are highly sensitive to climatic factors and disease, the final result of the crop can sometimes be devastating. Similarly, the high instability of the market prices are the major problem facing the peasants, unless the crop is sold at appropriate times, during which the price covers the expenditure of production and allows a margin of income. According to Hag Husni Husnani, each season is different from another, in the sense that if there was a high offer of tomatoes on the market, as was the case a few years ago, the price would have dropped to reach £.E 40 per ton from the field. Under these conditions, great losses were made, as tomatoes cannot be stored to be sold later on like summer potatoes can be. Therefore, peasants cultivate them with great caution, bearing in mind that the crop can be a disaster as it can be highly profitable.
### Table VII.3.1: Inputs of Production of One Feddan of Tomatoes

<table>
<thead>
<tr>
<th></th>
<th>UNIT</th>
<th>NUMBER of UNITS</th>
<th>CASH EXPENDITURE C.E</th>
<th>TOTAL EXPENDITURE C.E</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. RAW PRODUCT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tomatoes</td>
<td>Ton</td>
<td>35.00</td>
<td>160.00</td>
<td>5,600.00</td>
</tr>
<tr>
<td><strong>2. VARIABLE INPUTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preparation of the land</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tractor for ploughing</td>
<td>Feddan</td>
<td>25.00</td>
<td>1.00</td>
<td>25.00</td>
</tr>
<tr>
<td>Man for ploughing</td>
<td>Day</td>
<td>4.50</td>
<td>0.50</td>
<td>2.25</td>
</tr>
<tr>
<td>Man for cleaning the canals</td>
<td>Day</td>
<td>4.50</td>
<td>2.00</td>
<td>9.00</td>
</tr>
<tr>
<td>Agricultural operations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seeds</td>
<td>10 grm</td>
<td>1.00</td>
<td>22.50</td>
<td>22.50</td>
</tr>
<tr>
<td>Woman for seeding</td>
<td>Day</td>
<td>2.00</td>
<td>2.50</td>
<td>4.20</td>
</tr>
<tr>
<td>Irrigation</td>
<td>Hour</td>
<td>7.00</td>
<td>0.60</td>
<td></td>
</tr>
<tr>
<td>Man for irrigation</td>
<td>Day</td>
<td>4.00</td>
<td>4.50</td>
<td>18.00</td>
</tr>
<tr>
<td>Fertilisers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Super phosphate</td>
<td>50 kg</td>
<td>15.00</td>
<td>4.50</td>
<td>67.50</td>
</tr>
<tr>
<td>Nitrate</td>
<td>50 kg</td>
<td>15.00</td>
<td>9.00</td>
<td>135.00</td>
</tr>
<tr>
<td>Man for spreading the fertiliser</td>
<td>Day</td>
<td>6.00</td>
<td>4.50</td>
<td>27.00</td>
</tr>
<tr>
<td>Man for hoeing</td>
<td>Day</td>
<td>4.00</td>
<td>5.00</td>
<td>20.00</td>
</tr>
<tr>
<td>Pesticides</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>35.00</td>
</tr>
<tr>
<td>Labour for spraying</td>
<td>Day</td>
<td>4.00</td>
<td>5.00</td>
<td>20.00</td>
</tr>
<tr>
<td>Engine</td>
<td>Day</td>
<td>1.00</td>
<td>15.00</td>
<td>15.00</td>
</tr>
<tr>
<td>Woman for harvesting</td>
<td>Day</td>
<td>165.00</td>
<td>3.50</td>
<td>577.50</td>
</tr>
<tr>
<td>Man for harvesting</td>
<td>Day</td>
<td>22.00</td>
<td>5.00</td>
<td>110.00</td>
</tr>
<tr>
<td><strong>Total variable inputs</strong></td>
<td></td>
<td></td>
<td></td>
<td>1,092.95</td>
</tr>
<tr>
<td><strong>3. EXPENDITURE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed Inputs</td>
<td></td>
<td></td>
<td>350.00</td>
<td></td>
</tr>
<tr>
<td>Variable Inputs</td>
<td></td>
<td></td>
<td>1,092.95</td>
<td></td>
</tr>
<tr>
<td><strong>Total Expenditure</strong></td>
<td></td>
<td></td>
<td>1,442.95</td>
<td></td>
</tr>
<tr>
<td><strong>4. INCOME</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total price of raw product</td>
<td>5,600.00</td>
<td>1,442.95</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Expenditure</strong></td>
<td></td>
<td></td>
<td>1,442.95</td>
<td></td>
</tr>
<tr>
<td><strong>Net Income</strong></td>
<td></td>
<td></td>
<td>4,157.05</td>
<td></td>
</tr>
</tbody>
</table>
Throughout the two previous chapters, the specificity of agricultural production and its organisation under the prevailing state policies has been illustrated. This specificity lies in the different requirements of each crop, in the different ecological conditions, and in the various conditions of the households. Therefore, generalisation about the processes of agricultural production and the relations underlying these various forms of production cannot be valid, as the forms of production adopted by the peasants can only be understood through detailed fieldwork study of the various relations of production under the state policy.
The state agricultural and pricing policies have divided agricultural production into two distinct categories, and each operates on a different basis. Compulsory crops follow a system by which the government directly controls the agricultural operations through the monopoly of inputs and through an imposed rotation cycle. The state directly intervenes at the marketing level through the compulsory delivery of certain crops at a low fixed price, which is based on the estimated official figures of the inputs of production which do not correspond to the effective ones. This is adopted in areas where the control of the government over the source of water is possible, as in sectors A and B.

Free cash crops are cultivated under a system by which the government has only an indirect control over the agricultural operations, through the crop rotation and the banking system. This indirect control is practiced in areas where control over the sources of water is not possible. Under this system, free cash crops are sold on the free market and their prices are subject to fluctuations. Thus, state agricultural policy and the pricing system have created a gap between the peasants producing the different categories of crops. On the one hand, peasants producing free cash crops benefit according to the market conditions from the free prices, and raise an adequate income; whereas peasants producing compulsory crops sell their crops at a low fixed price, which hardly covers the inputs of production. Under this dual system the distribution of each category of crops over the agricultural land is determined by both national requirements and by the ecological conditions of the cultivated area. This situation is evident in the case of Batra, where the producers in sector C and in parts of sector B benefit from the cultivation of free cash crops, while others, specifically in sector A, produce compulsory crops. Therefore, the peasants tend to balance their production for household consumption, as in the case of rice and maize, and for the market, as in the case of tomatoes and potatoes.
The peasants have reacted to this agricultural policy through various means and have developed different systems, which correspond to their household conditions and to the location of their plot. Those who are under a free cash crop rotation developed means of intensifying their production for the reproduction of their households, through intercropping and mixed cropping for the diversification of production. By doing this they avoid the risks of the instability of the market prices and of the agricultural conditions. Others have turned to permanent crops, even on a very small scale. As for those confined to the cultivation of compulsory crops, they have adopted strategies to counter the system. The mixing of the by-product and the main crop to be sold on the free market is often practiced for maize, wheat, and rice. Cotton cultivation is organised in a way to be articulated in the beginning of the season with other free cash crops in order to make the maximum benefit from the land. Similarly, most peasants tend to reduce the long period of harvesting in order to start an early winter cultivation. The use of unpaid labour from the members of the households is another important factor in reducing expenditure of cash, as is cooperation between households for the agricultural operations. Finally, different strategies of adaptation have been developed for the organisation of the agricultural production, according to the household capacities, to the land conditions, and the regional conditions for production and marketing, under the government policies.

It has been shown in the course of the last two chapters that the various categories of producers adopt both commodity and non-commodity relations in the organisation of the agricultural production. Non-commodity relations are essentially adopted at the level of the internal organisation of production within the household unit and in its relations with other households. Commodity relations are adopted at mainly the level of external relations for the purchase of the inputs necessary for production. However, the two spheres of relations - internal and
external— in their different forms are interrelated, and combined are essential for
the reproduction of the different categories of producers, and for the expansion of
the production of others.

Thus, the above mentioned forms of production illustrate the specificity of the
process of agricultural production, as they manifest the variety of informal and
formal relations of production underlying each form. They clearly reflect the
differentiated responses to change adopted by the different categories. Strategies
of adaptation for the reproduction of the household, based on non-commodity and
commodity relations, and conditioned by the regional specificity, are also adopted
on the agricultural labour market, which follows a specific cycle synchronised by
the organisation of agricultural production. In this respect, the following chapter
will focus on the seasonal labour market in Batra, where the combination of non-
commodity and commodity relations are essential strategies adopted by the
labourers for their survival.
Notes

1- One `Ardah of maize before drying is 200 kg, and after drying it weighs 180 kg; and one `Ardah of maize grain weighs only 140 kg.

2- A Himl is a unit of quantity equivalent to what a camel can carry on his back.

3- The wrap of a certain number of onions constituting a unit is called on the market Shirsh. This means that the price of onions on the field is evaluated by weigh, whereas it is priced on the retail market per number, which increases the price for the retail merchant.

4- In 1982, the total area cultivated by rice was 592,611 feddans, with a production of 643,726 tons, representing 26% of the national production (Al-Ahram Iktisadi, 1984:29)

5- Mahmud and `Abdu are also owners of plots in sector C, cultivated by free cash crops. (Chapter VI)

6- The terms of sharecropping concluded that Mahmud provides the necessary inputs and that `Abdu is in charge of the labour, in exchange for half the crop of Mahmud's land. At the end of the season, Mahmud regains his land.

7- In general there are two ways of rice seeding. The first consists of getting the seeds from a nursery done on a small part of the plot in the middle of May. In the middle of June, the plants are removed and planted out in the plot. The second way is the sowing broadcast and is called Badari, it is the ordinary seeding as processed by `Abdu. Yet, the difference between the two is that the first produces more, but requires more fertilisers than the second, and `Abdu adopted the second system because they did not have enough money to buy the necessary quantity of fertilisers.

8- This operation is called Talwit and the long wooden trunk used is called Lawata.

9- The local rice seeds, Giza 172, are called by the peasant Baladi, i.e the local seeds.

10- Source, the local agricultural cooperative in Batra, 1986.
11- It should be pointed out that the area occupied by cotton is replaced every two years by rice cultivation.

12- Source, the Ministry of Agriculture (al-Zayati, 1986:71)


14- Figures collected from the fieldwork interviews, 1984.

15- This type of cultivation is called Khedir, it consists of leaving the plot after ploughing without cultivation for twenty days, during which it is flooded with water and dried out. After that, the seeds are sown broadcast, and the plants start to appear eight days later. This method is the most common one, as opposed to the method called 'Afir, which consists of sowing the plot on dry soil which renders the operation harder. It is usually adopted when the peasant is in delay for the date of cultivation.

16- Hag Sidqi uses a variety of seeds called Giza 45, an Indian variety, that is commonly used and is characterised by the long straw, which represents an advantage for the peasants, as straw is as important as grains. However, the government is trying to introduce a Mexican variety, known for its high productivity but which produces short straw and has a darker colour than the Indian one. It is an inappropriate variety for the peasants, who give it as fodder for chickens, despite the higher buying price fixed by the government reaching £.E 2 or 3 more.
PART THREE
CHAPTER VIII

The Agricultural Labour Market in Batra

This chapter will focus on the relationship between the process of agricultural production and the process of circulation. At this level, the labour force, an indispensable factor for production, is mediated through the labour market in the village. In order to understand the organisation of the labour market, the relations implied in the various aspects of production, and the impact of this organisation on the labourers' households, a detailed fieldwork study of the labour market was required. As will be illustrated in the following chapter, despite the dominance of commodity relations in the labour market, non-commodity relations are essential at the level of the unit of production and reproduction. In their combination both relations allow the labourers households to survive under a seasonal offer and demand for agricultural labourers. Similarly, at the level of the labourers households a number of survival strategies are adopted encompassing interrelated external and internal relations.

Thus, the following chapter will examine the position of the labour force in the
organisation of agricultural production, according to the examples cited in the previous chapters, in order to illustrate the extent to which, and the periods during which, the labour force is required in agriculture. The fluctuation of the wages of labourers will be examined, according to the seasonal calendar and variety of the agricultural operations and according to the sexual division of labour prevailing in Betra.

Having highlighted the main characteristics and specificities of the labour market in Betra, the focus will then be on the various relations between the labourers and their contractors. Thus, a detailed account of the role of the contractor of the agricultural wage labourers will illustrate the process by which the contractor accumulates money and makes income, through his monopoly of labourer on a large farm. On the other hand, a detailed account of various case studies of wage labourers, men and women, working on a seasonal calendar, will illustrate the process by which the labourers organise their survival strategies, under the prevailing working conditions, where the income is basically low and irregular.

It is through these relations, and in the organisation of the household units, that non-capitalist relations are adopted between and among the households for their survival. These non-monetary relations, based on the reciprocity of work, on kinship relations and on a flexible sexual division of labour, in combination with commodity relations become essential for the reproduction of the labourers, and necessary for increasing the income of the contractor and for the expansion of the scale of his work. It should be pointed out that the unit of a day's work per worker, referred to in the course of this chapter, represents an average of five hours of work as established in Betra.
1. The Position of Labour in the Organization of Production of the Major Crops in Batra

In the study of the agricultural operations of the major crops in the three sectors of Batra, the share of the labour force represented the major item in the process of production, and the household unit was, in most cases, the supplier. In fact, the agricultural production in its various operations showed that the share of labour, on the different units of land, varied between 33% and 75% of the total expenditure of production. However, by examining the position of labour in the process of production of each crop, we see that different factors related to the nature of the agricultural operation, to the seasonal calendar of the supply and demand on the labour market, to the different wages fixed in Batra for each operation, and to the proportional relationship between the inputs of labour and the other items of the inputs of production, all determined the position and the share of labour in the inputs of production of each crop. Despite the use of unpaid wage labour in most of the cases as presented previously, these figures, although they illustrate only a proportion of the effective inputs of production, are presented here to show the diversity in the labour requirements of each crop and the significance of the sexual division of labour in reducing the share of labour in the inputs of production.

By focusing on the organization of production of summer potatoes, it is noticeable that labour occupies the lowest share in the inputs of production, only 33.29%, over a short period of time. This is followed by the share of labour in the inputs of production of bazsim and green peppers, occupying 35.20% and 34.73%. In reality, the reasons of the low share of labour in the two cases are totally different. Bazsim is known for its low inputs of production in general, and for its low
requirements for agricultural operations based on labour. Whereas green peppers, in this case, require a large number of labourers for harvesting over a long period of time. Yet, the sexual division of labour is an important factor for the reduction of the share of labour in the expenditure of production. For example, the picking of green peppers is an operation undertaken by women and children, as they are physically smaller than men and can more easily pick the crop without destroying the plants. On the other hand, because the daily wages of women and children are fixed at half the men's wages, the total cost of labour drops by half, as compared to what it would have been if it was undertaken by men.

The share of labour in the inputs of production of rice is rather low - 35.40% - when considering the intensive operations required by rice. This is due to the use of the threshing and the sifting machines for the post-agricultural operations. On the other hand, the share of labour in the expenditure of production of oranges on one holding reaches of 40%, which includes the harvesting, the dressing and the pruning of the trees. These operations are mostly undertaken by men, with the exception of the harvesting in which women participate extensively.

The share of labour in the case of onions, winter potatoes, and wheat, represent 45.45%, 46.23%, and 48.03%, respectively. As mentioned, onions, in this particular case, were considered a transitory crop and most of its agricultural operations revolved around ploughing the land, seeding, and harvesting over a very short period of time. Winter potatoes are also cultivated as transitory crop before summer potatoes. Because their agricultural operations are not highly costly in terms of inputs, as compared to summer potatoes, the share of labour in the inputs of production occupies the highest position. The share of labour in the inputs of production of wheat is high, as the labour requirements include ploughing, seeding, weeding, and harvesting. These operations are divided between men and women according to the sexual division of labour, in which
women undertake mainly the weeding of the land. However, the fact that women undertake one of the highly intensive operations in wheat, reduces considerably the share of labour in the inputs. Moreover, as the post-agricultural operations are done by machines, the inputs of labour become even lower.

The share of labour in the expenditure of courgettes occupies more than half of the expenditure of production, reaching 54.44%, as the harvesting is done over a long period of time and requires intensive labour. In fact, harvesting, the most intensive work in the agricultural operations, is done by women which again reduces by half the share of labour. Similarly, tomatoes require intensive labour over a long period of time, as the picking of the crop is done on intervals for marketing conditions, and is undertaken by both men and women. However, the proportion of hired women is higher than men which again reduces considerably the share of labour, to 54.65%, in the expenditure of production.

Unlike vegetables, maize cultivation does not require intensive inputs or labour during the agricultural operations. However, if the share of labour is the highest in the inputs of production, reaching 59.84%, it is due to the low requirements of inputs and of the inputs of irrigation. Finally, the cultivation of cotton is one of the most demanding crops for labour. Although the intensive operations, the worm campaign and the harvesting, are done mainly by women and children, the share of labour in the inputs of production represents 75.64%.

In this context, the labour force remains the basic and the major factor in the process of production, as other alternatives such as mechanisation exist on a very limited scale in the village. Up to the present time, the machines have only replaced the intensive labour operations undertaken by men, such as the elevator machines for irrigation, the sifting and the threshing machines. While the rest of the intensive operations are undertaken by cheap female labour. Therefore, the
quantitative and the qualitative demand for labour on the market varies during the 12 months of the year on seasonal terms, in which the wages fluctuate according to the supply and the demand within the sexual division of labour in Betra. This specificity of the agricultural production creates a situation whereby the demand and the supply of labour on the market is not always synchronised.

1.1 The Wages of Agricultural Labourers

One of the most noticeable features in the organisation of agricultural operations is the sexual division of labour, in which a number of operations are confined to men, others to women and children, and some are shared by the three. For example, the sowing and the harvesting of certain crops, which do not require the use of tools, are undertaken by the three equally, such as the harvesting of cotton, tomatoes, green peppers and courgettes. On the other hand, several operations are undertaken by men only, such as the spreading of fertilisers, the pruning of the trees, the hoeing and the ploughing of the land, and the harvesting of potatoes which requires the use of a lasso. In their turn, women and men share a few operations which do not involve children, such as loading and the spraying of chemicals. Women undertake most of the transport operations, such as the transport of wood after the pruning of the trees, the transport of the fruit from the fields, while together with children they reap the land with their hands, they pick the cotton worm, and husk the grains.

However, it is important to note that this division is a general one, and is based on the observations and on the information gathered in the course of the fieldwork in Betra. Therefore, certain differences may exist in particular cases and under specific conditions. This sexual division of labour determines the daily wages of each category during the different operations. As a general rule in Betra, the daily
Table VIII.1: Daily Wages of Agricultural Labour for the Major Operations in Hatra, in S.R.

<table>
<thead>
<tr>
<th>Agricultural operations</th>
<th>Han</th>
<th>Mean</th>
<th>Child</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loading</td>
<td>3</td>
<td>2.5</td>
<td>-</td>
</tr>
<tr>
<td>Seeding</td>
<td>4</td>
<td>2.5</td>
<td>2</td>
</tr>
<tr>
<td>Spreading fertilisers</td>
<td>4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Pruning</td>
<td>5</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Transport</td>
<td>-</td>
<td>2.5</td>
<td>-</td>
</tr>
<tr>
<td>Hoeing</td>
<td>5</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Spraying chemicals</td>
<td>4.5</td>
<td>2.5</td>
<td>-</td>
</tr>
<tr>
<td>Harvesting</td>
<td>5</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Irrigation</td>
<td>4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Cotton sowing campaign</td>
<td>-</td>
<td>2.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Weeding</td>
<td>-</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Husking the maize</td>
<td>-</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

Table VIII.2: Annual Seasonal Calendar of the Cultivation of the Major Crops in Hatra

<table>
<thead>
<tr>
<th>Month</th>
<th>Culti-</th>
<th>Culti-</th>
<th>Culti-</th>
<th>Culti-</th>
<th>Culti-</th>
<th>Culti-</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Han</td>
<td>Mean</td>
<td>Han</td>
<td>Mean</td>
<td>Han</td>
<td>Mean</td>
</tr>
<tr>
<td>Nov.</td>
<td>Orchard</td>
<td>Tomato</td>
<td>Barley</td>
<td>Onion</td>
<td>Orchard</td>
<td>Tomato</td>
</tr>
<tr>
<td>Dec.</td>
<td>Orchard</td>
<td>Tomato</td>
<td>Barley</td>
<td>Onion</td>
<td>Orchard</td>
<td>Tomato</td>
</tr>
<tr>
<td>Jan.</td>
<td>Orchard</td>
<td>Tomato</td>
<td>Barley</td>
<td>Onion</td>
<td>Orchard</td>
<td>Tomato</td>
</tr>
<tr>
<td>Feb.</td>
<td>Orchard</td>
<td>Tomato</td>
<td>Barley</td>
<td>Onion</td>
<td>Orchard</td>
<td>Tomato</td>
</tr>
<tr>
<td>Mar.</td>
<td>Orchard</td>
<td>Tomato</td>
<td>Barley</td>
<td>Onion</td>
<td>Orchard</td>
<td>Tomato</td>
</tr>
<tr>
<td>Apr.</td>
<td>Orchard</td>
<td>Tomato</td>
<td>Barley</td>
<td>Onion</td>
<td>Orchard</td>
<td>Tomato</td>
</tr>
<tr>
<td>May</td>
<td>Orchard</td>
<td>Tomato</td>
<td>Barley</td>
<td>Onion</td>
<td>Orchard</td>
<td>Tomato</td>
</tr>
<tr>
<td>Jun.</td>
<td>Orchard</td>
<td>Tomato</td>
<td>Gr. Peppers</td>
<td>Haise</td>
<td>Rice</td>
<td>Cotton</td>
</tr>
<tr>
<td>Jul.</td>
<td>Orchard</td>
<td>Tomato</td>
<td>Gr. Peppers</td>
<td>Haise</td>
<td>Rice</td>
<td>Cotton</td>
</tr>
<tr>
<td>Aug.</td>
<td>Orchard</td>
<td>Tomato</td>
<td>Gr. Peppers</td>
<td>Haise</td>
<td>Rice</td>
<td>Cotton</td>
</tr>
<tr>
<td>Sep.</td>
<td>Orchard</td>
<td>Tomato</td>
<td>Gr. Peppers</td>
<td>Haise</td>
<td>Rice</td>
<td>Cotton</td>
</tr>
<tr>
<td>Oct.</td>
<td>Orchard</td>
<td>Tomato</td>
<td>Gr. Peppers</td>
<td>Haise</td>
<td>Rice</td>
<td>Cotton</td>
</tr>
<tr>
<td></td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
</tr>
</tbody>
</table>
Table VIII.3: Annual Requirements of Agricultural Labour in Easta

<table>
<thead>
<tr>
<th>Month</th>
<th>Total Number of Labourers</th>
<th>Labour Demand Below 7,500</th>
<th>Labour Demand Above 7,500</th>
</tr>
</thead>
<tbody>
<tr>
<td>November</td>
<td>6,134</td>
<td>6,134</td>
<td></td>
</tr>
<tr>
<td>November</td>
<td>5,492</td>
<td>5,492</td>
<td></td>
</tr>
<tr>
<td>December</td>
<td>3,451</td>
<td>3,451</td>
<td></td>
</tr>
<tr>
<td>December</td>
<td>3,116</td>
<td>3,116</td>
<td></td>
</tr>
<tr>
<td>January</td>
<td>16,178</td>
<td>16,178</td>
<td></td>
</tr>
<tr>
<td>January</td>
<td>12,464</td>
<td>12,464</td>
<td></td>
</tr>
<tr>
<td>February</td>
<td>2,610</td>
<td>2,610</td>
<td></td>
</tr>
<tr>
<td>February</td>
<td>458</td>
<td>458</td>
<td></td>
</tr>
<tr>
<td>March</td>
<td>17,045</td>
<td></td>
<td>17,045</td>
</tr>
<tr>
<td>March</td>
<td>5,175</td>
<td>5,175</td>
<td></td>
</tr>
<tr>
<td>April</td>
<td>5,283</td>
<td>5,283</td>
<td></td>
</tr>
<tr>
<td>April</td>
<td>20,000</td>
<td></td>
<td>20,000</td>
</tr>
<tr>
<td>May</td>
<td>24,700</td>
<td></td>
<td>24,700</td>
</tr>
<tr>
<td>May</td>
<td>23,185</td>
<td></td>
<td>23,185</td>
</tr>
<tr>
<td>June</td>
<td>7,333</td>
<td>7,333</td>
<td></td>
</tr>
<tr>
<td>June</td>
<td>2,360</td>
<td>2,360</td>
<td></td>
</tr>
<tr>
<td>July</td>
<td>300</td>
<td>300</td>
<td></td>
</tr>
<tr>
<td>July</td>
<td>735</td>
<td>735</td>
<td></td>
</tr>
<tr>
<td>August</td>
<td>4,979</td>
<td>4,979</td>
<td></td>
</tr>
<tr>
<td>August</td>
<td>4,979</td>
<td></td>
<td>4,979</td>
</tr>
<tr>
<td>September</td>
<td>17,134</td>
<td></td>
<td>17,134</td>
</tr>
<tr>
<td>September</td>
<td>14,444</td>
<td></td>
<td>14,444</td>
</tr>
<tr>
<td>October</td>
<td>13,709</td>
<td></td>
<td>13,709</td>
</tr>
<tr>
<td>October</td>
<td>11,790</td>
<td></td>
<td>11,790</td>
</tr>
</tbody>
</table>
wages of men range between £.E 3 and £.E 5, those of women are fixed at £.E 2.5 and £.E 3, and children's wages vary between £.E 1.5 and £.E 2 daily. This margin of fluctuation depends, partially, on the nature of the operation but, largely, on the supply and demand on the labour market during a certain period of time. (Tab.VIII.1-3)\(^1\)

2. The Seasonal Calendar of the Agricultural Labour Market

The three sectors in Batra follow an intensive diversified rotation cycle with a large variety of crops. (Chapter VI, VII) This means that the labour requirements fluctuate considerably over the year, according to each crop, and that the demand and the supply for wage labourers is unstable.

There are six crops cultivated from December to January, five crops from February to May, and seven crops between May and October. From the seeding date until the harvesting period each crop requires, at different moments, several agricultural operations, which means that there is a high range of agricultural operations undertaken in the same time, and a constant demand for labour on the market. This demand fluctuates in such a way that it cannot absorb the available number of wage labourers during certain period of time, while during a different period it can exceed the number of available wage labourers and create a shortage of labour. (Tab.VIII.2) On the other hand, the average available number of agricultural labourers on the market is of 7,500.\(^2\) By examining the fluctuation of the demand one will notice that over a period of 12 months, there is a high demand for labour during five months and a low demand for seven months. However, the demand does not follow a linear regular course but fluctuates over different months of the year. (Fig.VIII.1) (Tab.VIII.3)
Figure 1. Seasonal Calendar of Agricultural Labour in the Market
Figure VIII.2. Seasonal Demand for Agricultural Labour in the Market, above 7,500 Workers
Figure VIII.3. Seasonal Demand for Agricultural Labour in the Market, below 7,500 Workers
### Table VIII. 4.1: Seasonal Calendar of Labour Requirements for the Annual Agricultural Operations of Fresh Cash Crops on One Section, per Five Hours of Work

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov.</td>
<td></td>
<td>6</td>
<td></td>
<td></td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec.</td>
<td></td>
<td>8</td>
<td></td>
<td></td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan.</td>
<td>10</td>
<td>8</td>
<td>Hoe.</td>
<td>12</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feb.</td>
<td>10</td>
<td></td>
<td>Sed.</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mar.</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td>Mar. 24</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apr.</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>May</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>June</td>
<td></td>
<td>12</td>
<td>Hoe.</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>July</td>
<td></td>
<td>2</td>
<td>Sed.</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aug.</td>
<td></td>
<td>20</td>
<td>Har.</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sep.</td>
<td>10</td>
<td>20</td>
<td>Har.</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct.</td>
<td></td>
<td>20</td>
<td>Har.</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Har.</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>74</td>
<td>44</td>
<td>42</td>
<td>114</td>
<td>107</td>
<td>207</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>612</td>
</tr>
</tbody>
</table>

**Unit of Abbreviations:**
- Har. : Harvesting
- Hoe. : Hoeing
- W. Pot. : Winter Potatoes
- Lab.: Labourers
- Orch.: Orchards
- S. Pot. : Summer Potatoes
- W. Pot. : Winter Potatoes
- Prun.: Pruning
- Cour. : Courgettes
- Sed.: Seeding
- Tom.: Tomatoes
Table VIII. 4.2: Seasonal Calendar of Labour Requirements for the Annual Agricultural Operations of Cereals crops on one Fodder, per Five Hours of Work.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov.</td>
<td>Sed.</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Dec.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Jan.</td>
<td>Har.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Feb.</td>
<td>Har.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Mar.</td>
<td>Har.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Apr.</td>
<td>Har.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>May</td>
<td>Har.</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>June</td>
<td>Har.</td>
<td>8</td>
<td>Sed. 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>July</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Aug.</td>
<td>Har.</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Sep.</td>
<td>Har.</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Oct.</td>
<td>Har.</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>18</td>
<td>12</td>
<td>36</td>
<td>307</td>
<td>30</td>
<td>427</td>
<td></td>
</tr>
</tbody>
</table>

List of Abbreviations:
- Bars.: Barsim
- Har.: Harvesting
- Hce.: Hoeing
- Lab.: Labour
- Sed.: Seeding
- W.Camp.: Wurm Campaign
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov.</td>
<td></td>
<td></td>
<td>Hoe. 1,800</td>
<td>Sed. 1,800</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Har. 3,116</td>
<td></td>
<td></td>
<td></td>
<td>4,916</td>
<td></td>
</tr>
<tr>
<td>Dec.</td>
<td></td>
<td></td>
<td>Har. 3,600</td>
<td></td>
<td>Hoe. 6,275</td>
<td></td>
<td></td>
<td></td>
<td>Har. 3,116</td>
<td></td>
<td></td>
<td></td>
<td>4,916</td>
<td></td>
</tr>
<tr>
<td>Feb.</td>
<td>Har. 2,152</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Har. 3,116</td>
<td></td>
<td></td>
<td></td>
<td>2,152</td>
<td></td>
</tr>
<tr>
<td>Mar.</td>
<td>Hoe. 4,035</td>
<td></td>
<td></td>
<td></td>
<td>Har. 12,552</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16,587</td>
<td></td>
</tr>
<tr>
<td>Apr.</td>
<td>Pru. 4,035</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4,035</td>
<td></td>
</tr>
<tr>
<td>May</td>
<td>Hoe. 2,690</td>
<td></td>
<td>Hoe. 588</td>
<td>Hoe. 588</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2,690</td>
<td></td>
</tr>
<tr>
<td>June</td>
<td></td>
<td>Sed. 98</td>
<td>Sed. 245</td>
<td></td>
<td>Hoe. 1,200</td>
<td></td>
<td></td>
<td></td>
<td>1,200</td>
<td></td>
<td></td>
<td></td>
<td>1,176</td>
<td></td>
</tr>
<tr>
<td>July</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Sed. 300</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>343</td>
<td></td>
</tr>
<tr>
<td>Aug.</td>
<td>Har. 735</td>
<td>Har. 735</td>
<td>Har. 719</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,454</td>
<td></td>
</tr>
<tr>
<td>Sep.</td>
<td>Hoe. 2,690</td>
<td></td>
<td></td>
<td></td>
<td>Har. 719</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,454</td>
<td></td>
</tr>
<tr>
<td>Oct.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Har. 719</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>719</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>19,960</td>
<td>10,800</td>
<td>21,966</td>
<td>4,361</td>
<td>4,426</td>
<td>20,196</td>
<td>81,857</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**List of Abbreviations:**

- Har. : Harvesting
- Hoe. : Hoeling
- Lab. : Labourers
- Pru. : Pruning
- Sed. : Seeding
- Orch. : Orchards
- S. Pot. : Summer Potatoes
- W. Pot. : Winter Potatoes
- Cour. : Courgettes
- Tom. : Tomatoes
- Green Pep. : Green Peppers
### Table VIII. 4.4: Seasonal Calendar of Labour Requirements for the Annual Agricultural Operations, over the Total Surface of Cereals Grown in Egypt; per Five Hours of Work

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov.</td>
<td>Sed. 642</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec.</td>
<td>Sed. 335</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan.</td>
<td>Har. 458</td>
<td>Sed. 576</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,218</td>
</tr>
<tr>
<td>Feb.</td>
<td>Har. 458</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>576</td>
</tr>
<tr>
<td>Mar.</td>
<td>Har. 458</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>335</td>
</tr>
<tr>
<td>Apr.</td>
<td>Har. 458</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,034</td>
</tr>
<tr>
<td>May</td>
<td>Har. 2,010</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>456</td>
</tr>
<tr>
<td>June</td>
<td>Har. 2,010</td>
<td>Sed. 576</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>458</td>
</tr>
<tr>
<td>July</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5,175</td>
</tr>
<tr>
<td>Aug.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,245</td>
</tr>
<tr>
<td>Sep.</td>
<td>Har. 1,200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20,000</td>
</tr>
<tr>
<td>Oct.</td>
<td>Har. 1,200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20,000</td>
</tr>
<tr>
<td>Total</td>
<td>3,852</td>
<td>4,355</td>
<td>4,950</td>
<td>1,728</td>
<td>112,662</td>
<td>14,750</td>
<td>142,117</td>
</tr>
</tbody>
</table>

**List of Abbreviations:**
- Bars.: Barsim
- Har.: Harvesting
- Hoe.: Hoeing
- Lab.: Labour
- Sed.: Seeding
- W.Camp.: Worm Campaign
From November until December the demand for labour declines from 6,134 to 3,116 labourers, because most of the work during this period is limited to the hoeing, the sowing of the winter crops and to the harvesting of tomatoes. (Tab.VIII.3,4.1-4.4) This means that during this period of the year, there are, in the beginning, 1,366 unemployed workers, and later on 4,324 unemployed workers. Starting from January, with the harvesting of winter potatoes, citrus fruit, tamarind, and the sowing of summer potatoes, the demand for labour jumps to reach 16,178 and 12,464 workers. (Tab.VIII.3,4.1-4.4) This is followed by a strong fall to 2,610 workers, in early February, and dropping to 456 workers by the end of the month. (Fig.VIII.1-2) This means that during the month of January the demand is double the available estimated number of workers, which normally increases the price of the wages during this period. (Fig.VIII.2) Yet in February, the demand declines considerably in the beginning leaving 4,890 unemployed workers, and later on 7,050 unemployed labourers. (Fig.VIII.3) The situation changes in March when the demand for labour jumps to 17,045, to cover the requirements of the harvesting of tamarind and the hoeing of orchards, mainly, to meet the requirements of the harvesting of summer potatoes, reaching 12,005 workers, as summer potatoes cover the largest surface of agricultural land in Batra. (Tab.VIII.3,4.1-4.4)

In general, there is a high demand for male wage labourers during the month of March, as the three agricultural operations require the use of tools. Since the demand on the labour market exceeds the number of available workers by 9,546, there is a period of shortage of labour during which many peasants work three times a day. (Fig.VIII.1,3) By the end of the month of March, the demand falls again to 5,175 workers, but recovers slightly in the first two weeks of April rising to 5,280, with resulting underemployment for 2,325 and 2,220 workers. (Tab.VIII.3) (Fig.VIII.1-2) This period corresponds to the preparation of the land for the cultivation of cotton and the pruning of orchards.
At the end of April, the cotton worm campaign begins, requiring 20,000 workers including men, women and children. (Tab.VIII.4.2.1,4.3) The demand on the labour market increases in early May, to reach 24,700, and 23,185 workers by the end of the month, to meet the requirement of the harvesting of wheat. (Tab.VIII.3.4.1,4.4) This period of the year is the season of peak demand for VIII, when labour requirements exceed by three times the available number of workers. (Fig.VIII.1-3) In June, demand declines to 7,333 workers, for the preparation of the fields for the summer crops, namely the ploughing of maize, the seeding of rice, the hoeing of tomatoes, and the seeding of courgettes and green peppers. Decline continues over the rest of June, July, and August, as agricultural operations are confined, in the second two weeks of June, to the seeding of maize and the hoeing of tomatoes which requires only 2,380 workers. In July only 300 workers are required for the seeding of tomatoes and, at the end of July, 735 workers are required for the beginning of the picking of courgettes. (Fig.VIII.1-2) (Tab.VIII.3.4.1,4.3)

This low demand on the market for labourers leaves nearly 7,000 workers unemployed during the month of July. During the month of August the demand is almost constant and does not exceed 4,979 workers for the harvesting of maize, courgettes, and green peppers, and almost 2,521 workers are not employed. However, the months of September and October are considered to be the second peak period on the labour market, as agricultural operations, in September, include the harvesting of rice, cotton, courgettes, and tomatoes, as well as the hoeing of orchards, requiring a total of 17,134 workers. (Fig.VIII.1,3) (Tab.VIII.3.4.1,4.4) In the beginning of October the curve declines to 13,709, as the harvesting of rice, cotton, and tomatoes continues. By the end of the month, the demand falls to 11,790 workers for the picking of cotton only. Finally, over the months of September and October the demand exceeds the average available
number of workers - 7,500 in September, by 6,200 in early October, and by 4,200 in late October. (Fig.VIII.1,3) (Tab.VIII.3,4.1-4.4)

From the above it can be concluded that underemployment of agricultural wage labourers is prevalent during the months of November, December, February, the second two weeks of March, and the first two weeks of April, followed by the months of June, July, and August. On the other hand, the shortage of agricultural labourers prevails in the month of January, the first two weeks of March, the second two weeks of April, May, September and October, as the demand for wage labourers exceeds the average number of available workers. (Fig.VIII.2-3)

The population of Betra, according to the Local Health Unit, numbers 15,697 inhabitants, constituted of 3,140 household units on the assumption that each household includes five members. In fact, it is very difficult to estimate the number of inhabitants involved in agricultural works, whether men, women or children, because of the lack of official figures. Despite this fact, C.A.P.M.A.S advanced an estimated census of the workers involved in agricultural activities in Betra in 1985, which counted 2,156 workers, of which 2,051 were men and 105 were women. (C.P.M.A.S., 1987)

This means that only 14% of the population is involved in agricultural production, an improbable figure and difficult to use for various reasons. First, these figures show that the participation of women in agricultural production does not exceed 0.6% of the entire population, an assumption that cannot be accepted, because women, as it was argued, and as will be discussed in detail, constitute an indispensable cheap labour. Similarly, as will be illustrated in the course of this chapter, women involved in agricultural activities are either working in the context of the household, or with their husbands as wage labourers, or work on their own to support the household in the absence of the husband. Regardless of
the conditions of work, women seldom declare themselves officially as wage labourers. In this way, they avoid problems with the authorities, and they prefer to use their official social status as housewives concerning governmental issues.

Second, the same census estimates that the number of men working in agricultural activities does not exceed 13.4%, a figure that can hardly match the reality or even be close to the effective number, since the local agricultural cooperative of Betra counts 1,160 holders in Betra, and there are nearly 2,845 holders of agricultural land in the territory of Betra cultivated three times a year. Thus, on the basis of the official figures, a fieldman would be cultivated by 0.3 person, which is impossible to conceive for practical reasons over this surface of land. However, it seems that the official figures advanced were partly based on the number of the holders registered in the local agricultural cooperative, rather than on the real number of the inhabitants working in agricultural activities. On the other hand, most of the agricultural labourers do not declare themselves to the authorities as being agricultural wage labourers in order to avoid administrative problems or constraints.

Under these conditions, it can be assumed that out of a family of five persons, half of them can be involved on seasonal basis in agricultural activities. This means that, out of a population of 15,697 inhabitants, nearly 7,500 inhabitants are involved in agricultural operations. Thus, on these assumptions the seasonal calendar was elaborated, rather than using improbable official figures which do not correspond to any real or practical conception of agricultural works within a specific region and over a period of time.
Within the annual labour requirements of the agricultural sector, underemployment predominates for more than half of the year. The demand for wage labourers is mainly seasonal with long intervals of low demand at fixed low wages. Therefore, many peasants working as wage labourers find themselves unable to cope with the high costs of living, especially during the low season of demand in the agricultural sector.

During the fieldwork study, most of the peasants working as wage labourers argued that they get involved in non-agricultural works requiring unskilled labour during the period of underemployment. However, there are limited opportunities for unskilled wage labourers in other sectors, such as the construction sector, where the demand has declined given the limited scale of its expansion. (Chapter II) Similarly, most of the workers interviewed had had more than one experience of work in Arab oil countries, especially in Iraq. Concerning women, most of them are either working to support the household in the absence of the husband who is working abroad, or after the death of the husband.

In other words, wage labourers often counterbalance the low demand for agricultural works by working in other sectors requiring unskilled labour for higher wages. They also find means by which they can be hired for longer periods of time in agricultural works in exchange for a lower wage. As for women and children, who have less mobility and lower access to job opportunities compared to men, they sometimes, get involved in the weekly market of Bata where they sell whatever they can produce at home, such as chickens and eggs, to support the
A number of systems are adopted on the agricultural wage labour market by the
owner or the holders who buy the work of the labourers, to ensure the daily
pressure of workers whenever they are required. Similarly, the labourers find
ways and means of being hired or having access to the market for work during the
low season of demand, to ensure an income for the household. This income may
be in cash, or it may be in kind, depending on the arrangement. In this context,
the following part will examine the various means by which the relationships
between the workers, men and women, and those who hire them are established
under the seasonal calendar of agricultural operations.

3.1. The Contractor of Agricultural Wage Labour and the
Organization of Work

Hilmi is a contractor of agricultural labour in Batra who has been practicing this
occupation for more than 20 years. In the early 1950's he was a tenant on 16
quiries, located in sector C, owned by the Fakiri family. Beginning in the late
1950's, the Fakiri family hired him to recruit wage labourers for agricultural
operations on the farm, and for the supervision of the work, in exchange for a
daily wage equivalent to the workers' wage. During this period, there was a large
number of wage labourers available on the market which exceeded the demand, as
there was a limited demand for workers in non-agricultural sectors, and the
migration to Arab oil countries had not begun. According to Hilmi, during this
period, he used to pay men a daily wage of £ E 0.10, and woman £ E 0.05.

After a certain period of time, Hilmi became the contractor of wage labourers of
the Fakiri farm, and was paid 10% on each wage paid to the hired labourers. This
system continued, and Hilmi's profits increased with the increase of the wages. However, when a government company for the export of citrus fruit bought the crop of the farm, the company had to hire the wage labourers, as it assumed by contract the picking of the crop. The company found that the wages in Batra were higher than those in the village of Badavih, located on the other bank of the Nile opposite Batra and, thus, it attempted to hire the needed workers from there. But when the workers in Batra came to know about this arrangement, and when the workers from Badavih started crossing the Nile towards the village, a fight took place between the two parties. Hostility already existed between the two villages, following the death of a young boy from Batra in their village during a dispute over of football match! Moreover, the peasants of Batra claimed that their neighbours came to take over the job opportunities available in their village, while they had priority over the strangers to be hired in their own village, given the limited possibilities of work.

Under such conditions, the company was obliged to hire its labourers from Batra for higher wages. Hilmi was the one responsible for the recruitment of the workers, but because he had no official papers proving that he was working as a contractor of agricultural labour, a way of avoiding taxation and problems with the labour office, the company had to find another alternative to counter an illegal situation in its administrative system. One of the employees was registered officially as the recruiter of workers, while Hilmi was the real organizer and the contractor.

The agricultural requirements of the company are different from the work undertaken by the field merchants, who sell the crop on the local market. In the case of the company, most of the crop is exported and, therefore, certain specifications concerning the shape of the fruit are required on international markets. This means that the picking of the fruit has to be done with scissors and
not by hand, in order to meet the specifications. On the other hand, the export of oranges is done according to shipping conditions, and to the demand on the international market.

Thus, during the period of harvesting, the work can be intensive on certain days, and slower on others. Under these conditions, the quantity of the fruit to be picked becomes an important daily issue among the workers. With the exception of tangerines, all the crop is exported, including grapefruit. Within the variety of the picked fruit, Hilmi deals on different terms with the company, according to the price of the picking of the fruit, and the destination of the crop. Concerning the export fruit, he is paid per quantity picked daily, regardless the number of labourers hired. The fixed price of one ton of the 'Ashumani oranges, naval oranges, and grapefruit is of £E 12. However, each fruit has a different size, grapefruit is the largest, followed by naval oranges, and the smallest is the 'Ashumani. This means that one ton of each crop requires a different number of workers for the same price. Concerning tangerines, Hilmi charges the company 10% on the wage of each labourer hired for the picking of the fruit, because it is sold by retail merchants and peddlers on the local market; there are, therefore, no specifications to be met for the shape of the fruit, and there are no conditions on the date of delivery.

Concerning the harvesting of the exported fruit, Hilmi receives the order of the needed quantity for the next day at the end of each day, and in his turn informs the workers. The following morning, each worker receives a pair of scissors. Baskets are distributed in the fields, and Hilmi registers the number of workers hired for the day. He, then fixes the ceiling of the quantity of fruit picked per worker, according to which he pays the daily wage. Above the fixed ceiling of the quantity to be picked, the workers are paid an extra wage proportional to the quantity. The picking of the oranges is done by women and men equally, a man
and two women form a team together. The men usually cut the oranges from the
trees, and one woman collects them from the ground and piles them into the
baskets, while the other transport them to the trunk. But, in the absence of men,
women replace them in the cutting. In other words, within this division of labour,
women undertake all types of agricultural works for half the men's wages, while
men undertake only the cutting of the fruit from the trees.

Hilmi, estimated that the picking of one ton daily, would require a team of
workers working from 7 a.m to 4 p.m., i.e. eight hours of work. However,
because a day's work, under these conditions, is longer than an average day of
work in Batea, which starts at 8 a.m. and goes to 12 a.m., i.e. four hours, the wages
are fixed at a higher price. Thus, the daily wage of a woman reaches £.E 3, and a
man's daily wage reaches £.E 5, for the picking of one ton of fruit. If a team
picks half a ton over the fixed ceiling, they are paid an additional half day's wage.
This means that, for the picking of one ton Hilmi pays £.E 6 for the two women
and £.E 5 for the man, for a total of £.E 11 for the labour work, and he makes a
net income of £.E 1 on each ton. Therefore, it is more profitable for him to hire
more women than men.

In general, the picking of the oranges in the Fakhrri farm takes two months on
intervals. It usually starts in early December, because the company picks the
oranges before they are totally mature in order to store them during the shipping
period and allow them to sell the merchandise on foreign markets. This means
that the harvesting of the fruit is undertaken, partly, during a period of low
demand for wage labourers on the market. Hilmi hires an average of six men and
12 women daily, to pick an average of nine tons, for which he receives £.E 108
from the company, and from which £.E 99 are distributed to the workers and £.E
9 constitute his average daily net income. Although it appears that Hilmi pays the
workers a higher wage than the average wage fixed on the market, in reality he
pays them a lower wage.

The date of the period of harvesting is extended over a period of a low demand on the labour market, not extending 3,500 workers, and during which the wages average £E 1 for men, and £E 2.5 for women, for four hours of work. Starting from January, the wages increase to £E 5 for men and £E 3 for women for the same working hours. This means that a worker can work twice a day from 8 to 12 a.m., and from 2 p.m. to 6 p.m. Thus, a man can earn £E 10 and a woman £E 6 daily for eight hours of work. While during this period, Hilmi hires a man for £E 5, and a woman for £E 3, for eight hours representing two days of work on the market for a wage equivalent to one day of work.

According to Hilmi, a team of one man and two women, or three women can pick a maximum of one ton and a half, in exchange for one and a half day's wage. This means that Hilmi reduces the inputs of labour by one quarter of a day of each worker, which constitutes part of his income. Moreover, the period of high demand in January does not affect his work as the demand is mainly for men, because the harvesting of potatoes is essentially done with a hoe. Thus, he hires women instead of men who undertake the same work for a cheaper wage.

Hilmi argues that in exchange for the low wages he pays, he offers the workers regular job opportunities over longer periods of time. However, in his turn, he makes the best from this type of agreement. In other words, because of the intensive work required by the company which can be undertaken by men and women equally, and because the agreement is based on the quantity delivered and not per day's work, Hilmi can find ways to reduce the share of the workers in the fixed price of the picking. Yet, this can only be done when the size of the fruit is large enough to fill the size of one ton with a small number of labourers. But when the size of the fruit is small and requires a larger number of workers to pick
one ton, Hilmi's income is reduced and the share of the labourers' wages becomes higher in the final price of the ton.

In fact, during the picking of the 'Ashmuni oranges, Hilmi lost over 23 days of work, £E 85, because it is a small fruit compared to grapefruit and naval oranges, which requires a large number of workers to pick one ton. During a day of work, the team could not even reach a ton, representing 50 baskets, which Hilmi fixed in exchange for a daily wage. Thus, for the same price, £E 12, offered by the company for the picking of one ton, Hilmi had to pay his workers the same wage for a smaller quantity, only 30 baskets, and he claims that the work done by each worker could not even cover the daily wage. However, the loss on the 'Ashmuni oranges was covered by the income made on the grapefruit, because it is a very large fruit, and each team was able to pick two tons daily.

Asked whether he faced difficulties over the years in recruiting wage labourers, and whether he faces an annual shortage of labour during certain seasons, Hilmi responded that, in the 1980's, there was no shortage of labourers on the market in Beira, because many workers had returned permanently from the Arab oil countries. In fact, work conditions were no longer advantageous in the receiving countries, given the high competition of Asian workers, given the difficulty of converting the remittances into foreign currency in Iraq, where most of the workers go, and because of the war in Lebanon. But mostly, because many Arab oil countries made cuts in their budgets after the drop in the prices of oil.

However, a number of workers travel abroad for short periods of time, mainly in summer, as students are on holiday, and work opportunities in Beira are low in the months of July and August. He added that women represent an important element and alternative on the labour market because they are cheaper than men and undertake most of the agricultural works requiring a large number of workers.
which reduces by half the inputs of labour. Moreover, he relied on women for several years, during the 1970's, when men migrated extensively to Arab oil countries.

From the worker's position, on the other hand, Hilmi represents a reliable alternative for access to work, because he provides on quasi-regular terms job opportunities throughout the year, either for agricultural operations on the farm, or for other maintenance work needed on the property, such as cleaning the canals, the arrangement of a road, the destruction of a building, etc. Thus, by monopolizing the works of the farm, he recruits the workers who collaborate with him according to his terms, in exchange for providing work over long periods of time. For example, the wages for ordinary agricultural work on the farm are fixed at £.E 4 for a man, and £.E 2.5 for a woman, starting from 7 to 11 a.m. Hilmi charges the landowners 10% on each worker he hires. These wages do not follow the fluctuation of the labour market, but the working hours allow the labourers to seek jobs elsewhere during the same day for a full wage. On the other hand, Hilmi pays the wages to the workers every Wednesday of the week, which means that he controls them during the week, and can put more pressure on them for work. The choice of the pay day was made by the workers, because it allows men and women to save their wages until the market day on Thursday. Similarly, on Thursdays, Hilmi offers them a lunch meal, tobacco, and cigarettes on his account as part of the agreement.

According to Hilmi, the recruitment of men for agricultural work has become easier lately, as those who used to work in the construction sector can no longer find jobs because of the decline in the activity of this sector. Many present stopped building houses in bricks, as they have already spent their remittances made abroad, and it has become difficult and expensive to find new contracts or job opportunities in Arab countries.
The above account focused on one aspect of the labour market in Beira. In this system, the contractor of labourers acts as a middle man between the workers and those who pay the wages. Through the monopoly over the recruitment of workers hired for the farm, Hilmi is able to control the labourers and make an income from the commission charged on the wages of the workers. Thus, over the years, Hilmi was able to impose himself on the market and to a certain extent expand the scale of his work. However, from the worker's position the situation and the relations underlying the labour market are different.

4. The Livelihood Strategies

Most of the agricultural labourers, women and men, are agricultural labourers working for the survival of their households. Their income depends totally on the seasonal calendar of the agricultural operations in Beira. The following part will, thus, examine, how the workers organise themselves under these conditions of employment in order to maintain their reproduction.

3.2. The Position of Men on the Labour Market

3.2.1. Hamid

Hamid is a night guard, appointed in the 'Umida's armed force in Beira. A few years ago, he became in charged of the night guard on one of the large properties in Beira. Hamid is on duty at night and during the day he works as a wage labourer on the property whenever work is available, or works for any owner or
tenant who needs a worker on his land. He is the father of six children, the oldest child is ten years old and works at a carpenter's workshop. The others are very young and do not go to school.

Hamid is an agricultural labour who relies on his L.E. 45 monthly salary from the government. Unlike many other workers, Hamid could not work in the Arab countries because of the restrictions of his regular job in the government. Thus, in order to increase his income to meet his household needs, Hamid undertakes any available job. For example, if there is a cattle station on the property, he is hired as a groom during the cycle of six months, in exchange for a daily wage of L.E. 4. During this period, Hamid returns to his family once a week on Fridays, and on Mondays he reports to the 'Umud's office.

According to Hamid, in 1985, he worked for only 98 days, in addition to his night guard shifts. Hamid's annual schedule shows that he worked in January for two days, in the cleaning of canals for L.E. 4. In February, he worked for 15 days in the picking of winter potatoes and in the seeding of summer potatoes for L.E. 5 daily, during the season of high demand on wage labourers. In March, he worked in another village located 20 km north of Betra, where a field merchant of fruit hired workers from Betra for the hoeing and the pruning of orchard trees. For 20 days they were transported, every morning by trucks to the fields and brought back at 2 p.m., for L.E. 4 daily. In April, he worked for six days in the removal of banana trees for L.E. 5, as he was using a hoe. In May, he worked six days for L.E. 4 with a relative who was ploughing his plot for the cultivation of maize. Although the wage was low compared to the price fixed for hoeing, he accepted the job because he had no other offers during that month. In June, he worked for six days in hoeing tomatoes, and in July he worked for seven days in maize, for L.E. 4 daily.
Table IX.5.1. Hemid

<table>
<thead>
<tr>
<th>Month</th>
<th>Nature of Work</th>
<th>Working Days</th>
<th>Daily Wage</th>
<th>Total Wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>Cleaning of the canals</td>
<td>2</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>February</td>
<td>Potato cultivation</td>
<td>15</td>
<td>5</td>
<td>75</td>
</tr>
<tr>
<td>March</td>
<td>Hoeing and pruning oranges</td>
<td>20</td>
<td>4</td>
<td>80</td>
</tr>
<tr>
<td>April</td>
<td>Removal of bananas</td>
<td>6</td>
<td>5</td>
<td>30</td>
</tr>
<tr>
<td>May</td>
<td>Ploughing of maize</td>
<td>6</td>
<td>4</td>
<td>24</td>
</tr>
<tr>
<td>June</td>
<td>Hoeing of tomatoes</td>
<td>6</td>
<td>4</td>
<td>24</td>
</tr>
<tr>
<td>July</td>
<td>Maize</td>
<td>7</td>
<td>4</td>
<td>28</td>
</tr>
<tr>
<td>August</td>
<td>Harvesting of maize</td>
<td>10</td>
<td>3.5</td>
<td>35</td>
</tr>
<tr>
<td>September</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>October</td>
<td>Harvesting of cotton</td>
<td>6</td>
<td>4</td>
<td>24</td>
</tr>
<tr>
<td>November</td>
<td>Loading manure</td>
<td>5</td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td>December</td>
<td>Hoisting of orchards</td>
<td>15</td>
<td>4</td>
<td>60</td>
</tr>
</tbody>
</table>

**Total** 98 408
In August, he worked ten days for £.E 3.5 daily, because there was no demand for agricultural work, in addition to the fact that students were on summer holiday and seeking summer jobs. During the month of September, Hamid had to report to the police station for training and was unable to work. In October, he worked for six days in the harvesting of cotton with his neighbour. In November, he worked for five days loading mangos for £.E 4, and in December he worked 15 days in the orchards for £.E 4 daily.

Thus, over 98 working days per year, Hamid made £.E 408, an average of £.E 34 per month, which is the equivalent of eight days and a half of work monthly. This means that Hamid made a monthly income of £.E 79.5 from the government salary and from working as a wage labourer. However, the government monthly salary is paid on regular terms, whereas his income from the daily work is irregular, and varies between £.E 8 a month, the lowest wage made in January, and £.E 30 made in March (Tab. VIII.5.1)

From this income Hamid supports a family of six young children, a mother, and a wife. The wife works on irregular terms for her brother who owns 12 qirats cultivated by free cash crops, for which she is paid in kind. If she participates in the harvesting of potatoes or maize, she is given a large bag of potatoes or of maize. Hamid’s wife works only for her brother, because she is in charge of the household work, under the supervision of her mother in law, who holds the accounts of the family. The women are not involved in commerce, because there is no space in the house for animals, nor do they possess land to sell the product or raise a cow.

Every Wednesday, Hamid gives his mother £.E 15 or £.E 20 for the daily expenses of the household. Rice, flour, and maize are the most important elements for the diet of the members of the household, and are bought annually on a separate
budget. Hamid buys, every month, three kilo of rice for £.E 13 each, which he pays on a monthly installment, and often he is indebted to the merchant at the end of the month. Maize, flour, and grains are bought annually after the harvesting of the crop when the price is low, and stored on the roof of the house. According to Hamid, most of the household needs for daily consumption are paid by installment and he is always indebted to the merchants and pays them whenever cash is available.

Despite the lack of money, Hamid managed to construct a small house on 80 metres square in red bricks, on a piece of land which his father bought in the late 1950's. The house is built on one floor and is constituted of four rooms. The costs of construction reached £.E 4,000, which he gradually raised from different sources. He received £.E 1,000 inheritance from his father; he sold the gold bracelets of his wife which he offered her as a dowry for their marriage, in addition to a few pieces of furniture, for a total of £.E 200.

With the capital, he bought a small cow which he gave to his neighbour for fattening. The cow was sold six months later, with a income of £.E 750, from which the neighbour took a share of £.E 375, in exchange for the work and Hamid took the rest. Over a period of one year, Hamid was able to raise £.E 1,500, with which he started the construction of his new house. The house was build in stages, over four years. In the beginning, he made the foundation and two rooms, a year later he added a room, and in the third year he built the bathroom and the fourth room. The fourth year, he painted half of the house and continued the ceiling. According to Hamid, it would have been impossible to construct the house if the suppliers of the material and the workers were not cooperative in terms of payment. Up to the present time, he is still indebted to the contractor for £.E 200, and to the merchant of red bricks for £.E 150, which he pays on whenever he receives cash.
3.2.2. Muhammad

Unlike Hamid, Muhammad earns his living from the daily wage in agricultural work only. He is the father of three children, a boy of 11 years studying at the al-`Azhar Religious Institute, and two small girls, one six years old studying in the same institute as her brother, and the smallest is three years old. According to Muhammad, the only reason his children continue to go to school is that they receive a scholarship for their high grades. Muhammad lives in his father's house in the centre of the village, where he and his family occupy two rooms. His father and his sister occupy a third room; his two cousins each occupy a room; and the sixth room is the kitchen. All the members of this large family are working as agricultural wage labourers.

Muhammad never worked in one of the Arab oil countries, because he could not afford the financial costs of traveling, and his health condition would not allow him to endure the hard living conditions. Muhammad works mainly with Hikmi, the contractor of wage labourers, who pays him an average wage of £E 4 daily, with the exception of the work done for the export company. During the month of January, he worked for Hikmi in the digging of a well for the installation of a new water pump, and was hired for 30 days. In February, he worked for two weeks in the construction of the foundations of the well where he was hired to carry the cement. In March, he worked in the hoising of citrus fruit for 15 days, in April he worked for 12 days, and in May for six days in the hoising of the banana fields. During the month of June, he worked for 15 days hoising tomatoes, and in July he worked for 20 days spreading manure. In August, he did not work because there was a low demand for agricultural labour. In October and in November, his health condition did not allow him to undertake the heavy work of cotton and rice, as it was the season. However, in December, he worked for ten days picking
oranges. According to Muhammad, job opportunities in Balra have decreased lately because many migrants returned permanently from abroad. As a result, the number of available workers has increased, while the seasonal demand in agricultural operations has not. (Tab.VIII.5.2)

Thus, over 12 months Muhammad worked only 130 days, i.e five months. During this period of work, Muhammad earned nearly £ E 530, which was the only income for his family over the year. Because there are five different families living in the same house due to heritage reasons, Muhammad's father, sister and his family share the costs of living, while his cousin's households live on a separate budget. However, certain household operations are shared among the five families, such as the baking of bread, undertaken every two weeks by the housewives collectively.

His wife is responsible for the daily expenses of the family, while he is responsible for the educational expenses of the children. Every Thursday, he gives his wife £ E 10 to purchase her needs from the market of the village. She buys her flour, grains and rice by the week, because Muhammad's family cannot store anything given the limited space of the house and the lack of cash to buy large quantities of food stuffs. Similarly, his wife buys her needs from merchants to whom she pays part of the bill in the beginning of the week, and the rest during the week. (Tab.VIII.5.2)
<table>
<thead>
<tr>
<th>Month</th>
<th>Nature of Work</th>
<th>Working Days</th>
<th>Daily Wage</th>
<th>Total Wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>The digging of a well</td>
<td>30</td>
<td>4</td>
<td>120</td>
</tr>
<tr>
<td>February</td>
<td>The foundations of a water pump</td>
<td>15</td>
<td>4</td>
<td>60</td>
</tr>
<tr>
<td>March</td>
<td>Pruning and pruning oranges</td>
<td>15</td>
<td>4</td>
<td>60</td>
</tr>
<tr>
<td>April</td>
<td>Pruning of bananas</td>
<td>12</td>
<td>4</td>
<td>48</td>
</tr>
<tr>
<td>May</td>
<td>Pruning of bananas</td>
<td>6</td>
<td>4</td>
<td>24</td>
</tr>
<tr>
<td>June</td>
<td>Pruning of tomatoes</td>
<td>15</td>
<td>4</td>
<td>60</td>
</tr>
<tr>
<td>July</td>
<td>Spreading manure</td>
<td>20</td>
<td>4</td>
<td>80</td>
</tr>
<tr>
<td>August</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>September</td>
<td>Harvesting of rice</td>
<td>7</td>
<td>4</td>
<td>28</td>
</tr>
<tr>
<td>October</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>November</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>December</td>
<td>Picking of oranges</td>
<td>10</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>130</td>
<td></td>
<td>530</td>
</tr>
</tbody>
</table>
3.2.3. Gamal

Gamal is 25 years old and is the father of two babies. Gamal, his father and his brothers are wage labourers working in agriculture. When Gamal served in the army he learned driving and was granted a driving license. Thus, after his release from the military service, he became a truck driver in the evenings, and an agricultural labourer in the mornings. According to Gamal, although the daily wage of a truck driver is higher than the wage in agriculture, it is very difficult to compete with the drivers, because it is a closed circle in which the competition is very high when the driver is not an owner of a truck.

From 1985 to 1987, he worked in Iraq as a wage labourer in the construction sector, and he used to transfer to his family part of his income. But when the currency exchange conditions in Iraq became restricted, he returned to Egypt as working abroad was no longer profitable. When he came back he started working again in agriculture as a wage labourer.

In January and February of that year, he worked in the picking of oranges with Hili, for the export company. In March, he worked 15 days in the hosing of the orchards, and for five days as a truck driver from Mansura to Beira for £E 5 daily. In April, he worked for five days in agriculture and for ten days on a truck. In May, he worked for 20 days on the plots of small peasants and, in June, he worked for 15 days hosing tomatoes, and for a week as a driver. In July, he worked for ten days spreading manure. In August, September, and October, Gamal did not work. He could not find work in August, but in September and for 20 days in October he was physically sick due to a treatment for bilharziosis, a very strong medication under which a patient cannot work. After his recovery, he worked for ten days in October as a truck driver, in November he worked for ten
days in the seeding of potatoes, and for ten days, in December, picking oranges. (Tab.VIII.5.3) Over the year, Gamaal worked for 130 days in agriculture, almost five months from which he made a total of L.E 575. On the other hand, he worked during the same year for 37 days as a truck driver, from which he made L.E 185. This means that his average monthly income was of L.E 64. (Tab.VIII.5.3) With such a low income, it would have been impossible for Gamaal to support his family.

However, the fact that Gamaal shares the same house with his father and his brothers’ families reduces the costs of living. Gamaal has six married brothers with whom he shares the same house. Before he left to Iraq, his father, a wage labourer, sold his old house in the centre of the village for L.E 6,000, and bought a plot of 130 metres square for L.E 900, on which he built a house of two floors with the rest of the money. Each floor of the house is constituted of four bedrooms and a bathroom, and each family occupies one room. Gamaal’s father is responsible for the daily expenses of this large household, and each son gives him L.E 10 weekly. Part of this sum is given to the eldest wife who is responsible for buying the necessary needs for the household consumption from the market and the rest is used for other expenses. According to Gamaal, the fact that the six families share the household expenses reduces the burden on each one. Thus, if he cannot find work during a period of time, one or two of his brothers manage to get hired, this means that during the year they are ensured a minimum regular income which is distributed among 25 persons. On the other hand, the fact that the daily costs are shared by a large number of people reduces the share of each in the costs of living, which, in its turn, help them to survive on low wages, and in the face of high costs of living.
<table>
<thead>
<tr>
<th>Month</th>
<th>Nature of Work</th>
<th>Working Days</th>
<th>Daily Wage</th>
<th>Total</th>
<th>Daily Wage</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>Picking of oranges</td>
<td>25</td>
<td>5</td>
<td>125</td>
<td></td>
<td></td>
</tr>
<tr>
<td>February</td>
<td>Picking of oranges</td>
<td>20</td>
<td>5</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>March</td>
<td>Hoeing, pruning oranges</td>
<td>15</td>
<td>4</td>
<td>60</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>April</td>
<td>Spraying chemicals</td>
<td>5</td>
<td>4</td>
<td>20</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>May</td>
<td>Hoeing</td>
<td>20</td>
<td>4</td>
<td>80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>June</td>
<td>Hoeing</td>
<td>15</td>
<td>4</td>
<td>60</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>July</td>
<td>Spreading manure</td>
<td>10</td>
<td>4</td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>August</td>
<td></td>
<td></td>
<td></td>
<td>5</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td>September</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>October</td>
<td></td>
<td></td>
<td></td>
<td>10</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>November</td>
<td>Seeding of potatoes</td>
<td>10</td>
<td>4</td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>December</td>
<td>Picking oranges</td>
<td>10</td>
<td>5</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>130</td>
<td>37</td>
<td>185</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3.3. The Position of Women on the Market

Like men, women are involved in agricultural work on seasonal terms in order to support the family. It was very difficult to trace the seasonal calendar of the women's agricultural work over the year, because they could not remember their working days in each month. Therefore, the following part will not focus on the annual seasonal calendar, but on the organisation of the household under the working conditions, on the basis of the irregular income.

Most of these women are responsible for both the financial aspect of the family and the organisation of the household work. Therefore, their position and their role in the society is more demanding and more difficult than that of men, as they assume more than one role. In most cases, women work either to help the husband, or to support on their own the family in the absence of the husband. In both cases the role of woman becomes socially and economically more demanding than man's.

3.3.1. Widad

Widad was married to an agricultural wage labourer who died a month after his return from Iraq, where he spent a year and a half working in agriculture. During his stay abroad, he used to transfer £5,000 annually to his wife in order to meet the expenses of three sons and a daughter. On his return, he had saved £10,000, from which £5,000 were spent on his medical treatment, and on his funeral. A year later, the marriage of Widad's daughter to a carpenter took place, and the rest of her husband's savings were spent on the costs of the marriage, comprising the ceremony, the trousseau, and the furniture of the house.
According to the norm in Betra, if the bride is educated the groom assumes two thirds of the costs of the marriage, on the assumption that the parents of the bride spent money on her education; but if she did not go to school, both families share equally in the costs of marriage, which was the case with Widad's daughter. However, Widad counted on her oldest son who was also working in Iraq to provide a financial support to the family, which would have prevented her from working, but her son never returned from Iraq, and was reported dead under unknown conditions.

Widad then had to find a way to support her two sons. She worked as a wage labourer picking oranges, in the removal of the wood from the pruning of the orchard trees, and in cotton, rice, and maize. According to her, the income from agricultural work is low, therefore, her two sons had to leave school at the age of ten to work for a carpenter and for a plumber. For five years the children receive a daily wage varying between £.E. 0.50 and £.E. 1 daily, because they are still learning the skill, but later they will be paid higher wages. Widad, believes that learning specialised skills will offer her children a wider range of work opportunities in Betra, or in the city. At the present time, the daily wage of the sons is sufficient to meet their daily expenses, and her irregular daily wages are spent on the household consumption, and on social obligations.

In addition to her daily wage, Widad receives £.E. 12 monthly from a life insurance policy her husband took out before he migrated. The insurance money represents a regular income, which covers half the amount of rice consumed monthly, as for the rest of the price of rice she pays it on installments to the merchant. On the market day, her main purchases include lentils, beans and, if there is enough money, she buys fruit. She adds that, because her children are small and are working all day outside the house, the consumption of sugar, tea, and
oil is reduced. Widad takes twice a month in a public baking oven opposite her house, and all the household work is done by her including the provision of water from a public tap, since she does not have water in her house. On the other hand, she is not involved in the marketing of any commodity, because of the small space of the house. But her daughter and her son in law give her, on an irregular basis, small amounts of money to help support her family. This money covers basically the costs of cloth and the costs of medical treatment.

3.3.2. Fathiyya

Like Widad, Fathiyya was married to an agricultural wage labourer who died under unknown circumstances in the south of Lebanon, where he was working on a farm. Fathiyya is the mother of four girls, of which two are married to wage labourers and the two others are living with her and work in agriculture. Fathiyya and her daughters, work basically with Hilmi, whenever there is work. She argues that the demand for women on the labour market is mostly concentrated in summer, as men travel abroad. Thus, they undertake any type of agricultural operation required during this period, in order to earn their living.

Fathiyya’s conditions are better than Widad’s, because she has two daughters who earn their living, and share with her the household work. Moreover, because she has enough space in her house, Fathiyya raises chickens in winter, which she sells on the market to cover the cost of living during the period of unemployment. Before, she started raising chickens, Fathiyya bought a sewing machine to work as a dressmaker in the evenings, but her project failed due to sight problems. Despite her efforts to raise money on regular terms, Fathiyya explains, that most of time she is indebted to the merchants of the village.

The majority of the households in Baira pay for their daily purchases on
installments, as a few can afford to pay cash on delivery. This system is very frequent in the village, and it is based essentially on social relations, as most of the inhabitants of Betra know each other and can trace between them a relation of kinship. On these bases, the merchants or the lenders are in most cases sure to get their dues, or else commerce cannot take place in Betra on such a scale.

From the above case studies, many issues can be raised concerning the labourers’ conditions. Although these case studies were chosen in an arbitrary way, they are representative of the agricultural labour conditions in Betra. The overwhelming majority of the labourers work on seasonal terms, they have no legal status through which they can protect their rights, nor do they benefit from medical or social security. Similarly, they do not receive a government pension or allowance during the periods of unemployment. All these factors have enabled the contractor of wage labourers, like Hikmi, or those who hire the wage labourers’ directly, to impose their own terms of work agreements, regardless of the workers conditions or the working conditions. Many male wage labourers worked, for a period of time, in Arab oil countries, and managed to save a considerable amount of money in comparison to what they would have made by working in the village. These remittances were in most cases spent on consumer goods or on the improvement of their housing conditions. However, with the decline of the possibility of migration due to the economic crisis, many peasants returned permanently to Betra. Many of them suffered from serious health problems, as working and living conditions abroad had not been favourable.

Fathiyya’s husband and Widad’s son and husband died under unknown conditions abroad, or died after their return from abroad, and do not represent an exception. Many others like them, young and middle aged men died or came back with a handicap as a result of the working conditions. Other young men left their families and their wives and disappeared, hoping to find better conditions of work.
These stories are constantly told in the village, and each family has been, in one way or another, affected by the migration of their men.

However, most of the wage labourers who migrated returned to their initial work on seasonal terms, with the same people under the same conditions, but for higher wages given the increase in prices. Those who managed to learn a skill during their migration period, or during their military service, found it difficult to compete on the market for this type of work, as it is monopolised by a small group who own the means for it. According to Gamal, those who worked in Arab countries and were originally working as truck drivers, returned and bought a taxi or a small truck in partnership with friends working in the same field, whereas an agricultural wage labourer who has a driving license and worked in Arab countries in agricultural works cannot save the needed capital to buy a truck. Therefore, under such conditions the priorities of the wage labourers were, in most cases, the restoration or the construction of the house made in red bricks, as an investment for their families.

In other words, the competition in non-agricultural activities requires capital, connections, and know how. These conditions are difficult to meet by a wage labourer in order to diversify his economic activity. However, if the know how exists, as in the case of Gamal, certainly he has more chances of finding a daily job than any agricultural labourer who does not have a skill, but it remains a daily seasonal job. According to Gamal, it is very difficult to learn a new skill unless it has been taught in the military service were the institution covers the costs of learning. Therefore, many wage labourers cannot find the means to diversify their incomes and, thus, they are totally dependent on the agricultural labour market, in which the contractor of labourers monopolise the areas where work is available on a more regular basis.
As a result of the working conditions on the labour market, many wage labourers, removed their children from schools, as they consume without being able to support themselves, in which case education becomes a luxury. Furthermore, the future of educated children is no longer conceived, in the village, as the finest achievement in life, as it used to be in the 1950's. This has been the result of the low salaries offered to government employees, and of the difficulty of being appointed permanently in government positions. Children are removed from school at the average age of ten years, to be hired in a workshop to learn a skill.

The agricultural wage labourers adopt strategies to cope with the low wages they earn annually. According to Gamal and Muhammad, one of the means which allows them to survive under the working conditions is the large number of their families. Sharing the daily expenses with their families reduces their costs of living, as much household work is undertaken collectively and, thus, their basic needs are met at a lower cost. Similarly, the fact that there are several sharing the household responsibilities means that the burden is also shared. Thus, each member of the large household is available in cases of emergency. Similarly, the sharing of living by a large number of the members of the family, gives them a higher chance to find work opportunities over the year, as there are several to seek a daily job. During the peak seasons of agricultural labour demand, the members of the family can work in different plots in one day, and can raise more than one daily wage, but these are short seasons. Others prefer to work for a contractor of wage labour who provides them with longer working days, in exchange of lower wages. In either case, they do not exceed an average of five months of work per year.

Women are subject to comparable working conditions as men. However, unlike men, they assume various roles, among which is the role of housewives responsible for the household, and the role of workers on the labour market. Thus, they
combine household work, together with agricultural work, and often with commercial activities, such as the marketing of the household products. All these factors have put women in a position where they are subject to more social pressure and financial obligations than men. In the absence of men they work on the labour market to support the household, and have to find other sources of income to meet their basic needs. Although they have less possibility of mobility than men, since they only move in the surroundings of the village, they tend to find different means for raising money through trade and commerce on a small scale from the house. Moreover, as they frequently go to the marketplace to purchase their needs, and as they undertake collectively several household works, such as baking, and washing the laundry and the dishes in the public tubs, they have social relations with other women during this time, and establish contacts in these gathering places, where men do not go. Similarly, they sometimes organise activities which can help them to increase their income, such as collectively raising chickens, rabbits or pigeons in a house owned by one of them, where the space is available.

Thus, each woman participates, with a share in the small capital, in the costs of raising the poultry. At the end of the cycle, they sell the product to others or on the market day, and share the net income. Many women are working as retail merchants in grains, rice, and vegetables from their houses. They are also present at these gathering places and they get to establish social relations together. Through these contacts many wage labourers, who cannot afford to pay for their purchases on delivery, find an arrangement with the merchant to pay the price on installment, or whenever the money is available.

All these means are adopted to reduce the cash spent, and reduce the amount paid each time, as the income from agricultural works is low and irregular. These strategies based on social relations, or mutual exchange and on non-monetary
relations, ensure both the economic survival of the household but also a moral and a social support for women assuming the reproduction of the household or her own. Men, children and women, each participate in these strategies for the survival of the household, according to a sexual division of labour. The possibility of economic diversification for agricultural wage labourers is lower than any other category in the village, because of the lack of cash to undertake commercial activities, and skills are difficult to learn with the lack of money.

All these factors have rendered the agricultural wage labourers the least privileged category in the village. Unlike the other social categories in Baira, they cannot have access to government facilities, nor do they have access to loans or financial aids. They must therefore depend totally on the demand for agricultural labourers in the market, and are left to be under the total control of the contractor of wage labourers. He makes his profits on the wages paid without offering any social insurance or protection. Therefore, they rely extensively on non-commodity relations, since their external relations and economic diversification are very limited compared to the other socio-economic categories.
1- The calculations of tables VIII.1-5.3 are based on the observations and on the information gathered in the course of the fieldwork in Betra. Similarly, they are calculated according to the figures presented in chapters VI and VII. However, these calculations remain subject to a certain margin of error given the complexity of the agricultural operations in general, the specificity of the labour requirements of each crop, and the conditions under which production is undertaken.

2- This figure is based on the total number of the population, 15,000 inhabitants, from which it is estimated that half of the population is actively involved in agriculture.
CHAPTER IX

The Marketing of Crops and the Socio-Political Structure in Batra

This chapter will examine the market relations in Batra, through the process of the circulation of the crops. It is at the level of the circulation of the crop that profits are realized from agricultural production, and accumulation takes place. Likewise, it is at this level that losses are encountered, if the crop is not sold under favourable conditions. Therefore, this chapter will attempt to show how market relations affect the level of agricultural production, and how these relations in their different forms play an important role in the social structure of the village.

The first part of this chapter will examine the marketing conditions of cotton, under the state monopoly. This will be followed by the study of the marketing network of free cash crops, covering the regional markets, the urban markets, and the international markets. However, the focus will only be on the marketing network in which the merchants of Batra are directly integrated. The marketing of the potato seeds will be traced in order to show how the level of production is conditioned by the market. The market in the field will illustrate the relationship between the small peasant-producers and the merchants. The weekly market of Batra which is the channel through which small peasant households have direct access to the market, will be presented. The weekly regional market will be
traced, as it reflects the relationship between the potters and the various categories of merchants. Finally, the marketing process in the markets of the city will highlight the role played by the wholesaler in the network. In their variety, the market relations, as will be shown, under a high monetary circulation take also the form of non-monetary relations which are essential for the different categories of merchants. Thus, they are necessary for the reproduction of the small merchants, and for their strategies of survival. Similarly, non-monetary relations are means adopted by the large merchants to increase their profits and consolidate their positions.

With these market relations in view, the second part of this chapter will examine some aspects of the social stratification of the village, through specific case studies derived from the previous chapters. This part will present the first families who had access to the markets, and latter on, to political power, before the 1950's. It will examine, for example, how the Husnani family through its market relations had access to the position of 'Ulama (the mayor of the village), and how succeeded in maintaining its authority over this post until the present time. Similarly, it will show how the Hammam family was able to impose itself among the important families, through its family alliance with the Husnani's, and how they were able to expand their market activities. The coalition of antagonistic merchant families, under specific political conditions will be examined, through the Yusif and the Yasin families. This will be followed by the presentation of the merchant families who emerged during the agrarian reform laws in the 1950's. The case study of Hag Latif Nigma will illustrate the extent to which the control and the dominance of the market determines the capacity of this family to accumulate and extend its power in the village. Finally, the case study of Hag Lutfi Hataba, the richest merchant in Beira, will show the process by which he accumulated his wealth, and transferred it to agro-industrial projects.
I. The Marketing of Compulsory Crops

As mentioned previously, the government has total control over the local marketing network of cotton, and the producer is compelled to deliver the entire production to the government. (Chapter VII)

Muhammad, an owner of 12 qirat in sector A cultivated cotton every three years, says that after the harvesting in September and October he, as most peasants, stores the cotton in a cool place for five or six days to conserve a high rate of humidity which increases the weight of the crop. He adds that the yield of the first harvest is heavier than the second, as the second is more exposed to the sun. The vaporisation results in a decrease in the weight and of the final price. The crop is transported to the local branch of the Marketing Cooperative, where it is is graded and weighed by two experts from the cooperative al-Farqaz and al-'Abhami, in the presence of one member of the village assembly, who represents the interests of the peasants. According to Muhammad, the grading procedures of cotton are of great importance, since they determine the final price per unit of weight. If the peasant objects to the appraisal of his crop, the operation is repeated in order to make sure that he receives an fair grading. However, Muhammad's cotton, as all peasants' crops, is graded one fourth grade lower than its real grade to allow the trade companies to cover part of the ginning costs.

After the crop is weighed and its price calculated according to its grade, Muhammad receives half of the price in cash on delivery, to cover his immediate expenses. The rest of the sum is paid a month later after the deduction of the bank's loans and interests, and the cooperative commissions for providing the grading and weighing services. A copy of a check delivered to Muhammad in
December 1965 indicates that the crop weighed 4 hectares, that its price was fixed at an average of £E 90 per hectare for a total of £E 360. During that year, Muhammad took out a loan from the local Bank for inputs and fertilizers for production, which amounted to £E 500. The loan and the interest rate were subtracted from the price of his cotton, and Muhammad was left with a debt of £E 140. It should be noted that the total price of the crop, £E. 360, did not cover the inputs of production which amounted to £E 483.59. This means that Muhammad had a deficit of £E 123.59, in addition to the bank's debt amounting to £E. 140. Thus, during the following season, Muhammad had to repay the rest of the debt and the interest to the Bank, as well as cover his loss from the low price of the crop. (Chapter VII)

The above example shows that the amount of subsidies allocated to the peasants cultivating cotton is regained by the government over the low, fixed buying price, and by the commissions charged by the bank and the cooperative for their services. As argued previously, the agricultural operations of cotton are intensive over a long period of time. The inputs of production, and the expenditures for labour are not covered by the government’s fixed buying prices. Therefore, unpaid labour is essential for the small peasant producer in order to counterbalance the low income made from the cultivation of cotton. (Chapter VII)

1.1. The Marketing Network of Cotton

Once the cotton crop is collected from the fields, the Marketing Cooperative for cotton delivers it to the government-controlled cotton ginners, and the ginned cotton is distributed to the national and the international markets. At this level of the marketing network a number of government institutions are involved in the process of cotton circulation. According to an employee in the Port Said Export
Company, responsible for the department of public relations, the national market covers both public and private spinning companies, to which the distribution of the quota of cotton is determined according to the size of the factory. The price of cotton destined to the public sector factories is subsidised by the government, while the share of the private sector is sold according to the fluctuation of prices on the world market. Finally, he adds that the public and private textile factories receive an annual quota from the spinning factories, which often does not cover the demand of the market. Thus, the private sector, in particular, imports the rest of its requirements. (Port Said Export Company, 1982)

The employees of the company added that Egyptian cotton exports are handled by government trade companies. In January of every year, a committee representing the six Egyptian public trade companies fixes a range of prices for the different categories of cotton, according to the current rate on the international cotton exchange. Several agreements are signed with Socialist countries according to contracts, while other agreements are concluded with Western countries on the basis of price fluctuations on the market. Egypt's cotton exports are classified on the international market according to grades attributed to the variety of fibers. To counterbalance the drop of prices on the world market, Egyptian companies concentrate their exports to Socialist countries, as the cotton is sold according to prices fixed in advance, thus avoiding the fluctuations of the world market prices. (Chapter VII)

1.1.1. The crisis of cotton exports, 1983-85

In the 1983-84 season, Egyptian trade companies signed contracts for exporting 5,710,000 banters of cotton to the world market, which they could not cover. This was due to the fact that the 1983-84 yield was estimated to reach 7,883,000 banters, from which 5,295,000 banters were destined to the local market, and only
3,390,000 hektars were left for export. Thus, the companies faced a large deficit, and could only cover half of the export agreements. (Hana, 1984:32-33)

Similarly, national production of cotton in the season of 1984-85 was estimated to be 8,500,000 hektars. Local consumption reached 6,320,000 hektars, and the rest was supposed to cover the exports. However, the total demand on both international and national markets reached 9,600,000 hektars, causing a deficit over 1,000,000 hektars, which was taken from the share of the national market. (Al-Ahram Ihtissadi, 1984) Under these circumstances, the government decided on the 11th of March 1984 to increase the price of all cotton grades for producers by £E 7 per hektar, meanwhile increasing the area cultivated by cotton. (Akbar El-Yom, 1984) These measures illustrate the extent to which the fluctuations of the world market affect state policies. Without questioning the adopted pricing policy, however, the government claimed that the deficit in national production was the result of the peasants' refusal to cultivate cotton. Under such pricing policy, the peasant-producers often cannot cover the inputs of production, and the income does not cover the unpaid work of the members of the household. (Chapter VII)

2. The Marketing of Free Cash Crops

Free cash crops are an important source of income for the peasants in Beira; as their cultivation responds to free market prices, and their marketing through local, private channels, follows a different course than that of the compulsory crops. Therefore, the examination of the marketing network of free cash crops will highlight the gap that exists between the marketing of compulsory crops and free cash crops. This difference between compulsory marketing and the marketing of a free cash crop appears, both in direct and indirect relation to the world market.
prices. Similarly, this discussion will bring to the fore the various relationships between the producers and the merchants, and between the various merchants within the hierarchy of the merchants.

2.1. The Marketing of Summer Potato Seeds

The marketing of free cash crops includes not only the crop, but also the marketing of seeds, or other necessary inputs for the process of production. Illustrative of this is the cultivation of summer potatoes in which a number of market factors, before and after production, determine the final price for the consumer.

Before focusing on this aspect of marketing, it is important to note that summer potatoes are cultivated in winter and the crop is sold in summer. The seeds are imported from international markets and the crop is exported. Winter potatoes are cultivated in the beginning of the winter and the crop is sold in winter, hence the names attributed to each variety. The marketing of summer potatoes covers a large variety of markets, including various types of merchants, and reflects the close relationship between the local and the international markets.

Within the structure of the cooperatives in Egypt, there are a number of specialised agricultural cooperatives in charge of the organisation of the marketing, and in a few cases the storage, of onions, garlic, sugar cane, potatoes, rice, vegetables, fruits, flowers, cotton and linen. The specialised cooperatives operate under the supervision of the government, and are managed by a board of directors elected from the members of the cooperatives. They benefit from a semi-autonomous status as compared to other cooperatives, such as the Multipurpose Agricultural Cooperative. Every potato producer is entitled to be a member of the Specialised Cooperative of Potato Producers. (Chapter II-III) The
Specialised Cooperative of Potato Producers was created in the early 1930's with the expansion of the cultivation of potatoes in Egypt. It was initiated by the large potato producers in order to prevent the monopoly of merchants over the imported seeds. Gradually, the activities of the cooperative expanded to cover the importation of seeds, and the storage and the marketing of the crop. With the restructuring of the cooperative system in Egypt in the 1950's, the cooperative became the only supplier of imported select seeds. Thus, this organisation plays an important role on the level of production and on the level of marketing, through the control of the marketing of seeds. (Sirki:7-14)

On the level of production, the Specialised Cooperative of Potato Producers imports the seeds, controls their prices on the local markets, according to world market prices, and distributes them to the producers through the Bank of the Village. The quantity and the quality of the seeds are usually insufficient to cover the cultivated area. Only 600 kg are distributed per feddan. Therefore, the peasants purchase their needed quantity from the black market at higher prices.

According to Mahmud, who annually cultivates summer potatoes on four girata, the cooperative usually delivers a mixture of varieties of seeds to the peasants, so agricultural operations become difficult since each variety requires different types of attention during the period of vegetation. Mahmud adds that this affects the marketing of the crop, because the price of potatoes on the field is fixed according to the variety. Because of this situation, the black market is an important source for the distribution of select seeds, which are in high demand, as it is a profitable source of cash for the seller. In fact, Mahmud was able to make a net profit of £E 225 from the marketing of the seeds, which exceeded the income made from the marketing of the crop. (Chapter VI) Mahmud adds that as a result of the shortage of summer potato seeds, many peasants apply for the cultivation of summer potatoes, receive the seeds, and sell them on the black market to make a profit
from the difference between the buying and the selling prices. The difference between the two prices can reach as much as £E 100 per ton. Thus, over a season of three months, a peasant following this system cultivates the land with zaidan, from which he makes a profit, with the minimum requirements of agricultural operations, and adds to that the profit made from selling of potato seeds.

2.2. The Regional Marketing Network of Free Cash Crops

The marketing of free cash crops is highly complex and difficult to trace, given the numerous forms of dealings that take place in the different marketing channels. Summer potatoes, which cover a large proportion of the territory, are the major winter crop sold on the free market in Batra. Most of the peasants count on their production for income in winter, and many merchants are involved in their marketing network, comprising the village market, the regional markets, and the city markets. It should be pointed out that 40% of the national production of summer potatoes is exported to international markets. However, the following part will only focus on the local markets, as the examination of the process of marketing on the international markets is beyond the scope of the present study.

In the process of circulation, the marketing of summer potatoes follows a number of stages. From the producers to the consumer, the potatoes pass through eight marketing channels, constituted, mainly, of private enterprises. (Fig.IX.1) According to Hag Latif Nigma, one of the largest field merchants of fruit and vegetables in Batra, the marketing of summer potatoes starts in March after harvesting, and the crop is either sold directly or stored by the peasant-producers or the field merchants until the price increases on the market. Hag Latif Nigma suggests that storage is a very important means for increasing the prices on the market, or for holding them for export purposes. In either case, potatoes are stored on the field by the field merchants or the peasants, or in large refrigerators
Figure IX. 1. The Marketing Network of Summer Potatoes

- A: Marketing on the field level.
- B: Marketing on the wholesaler level.
- C: Marketing on the retail level.
owned by private enterprises, or by the Specialised Cooperative for the Potato Producers. Cold storage of the merchandise increases the profit considerably as the merchants can sell at their convenience according to the fluctuations of market prices. The Specialised Cooperative for the Potato Producers rents storage space to the field merchants, an activity that increases the income of the cooperative.

On the other hand, Hay Latif Nigma aids that field storage, whereby the crop is stored for a maximum of three weeks under straw and chemicals, is a common practice adopted by the peasants and the merchants. This operation is rather cheap, and allows the peasants and the merchants a limited margin of time to sell the crop at a high price. After storage, the potatoes are transferred to different levels of marketing, through various merchants. During this course, marketing agreements differ and change constantly depending upon the destination of the merchandise and prices.

2.2.1. The weekly Thursday market in Batra

The Batra market is a small local market from which products are sold to the inhabitants of the village, or dispersed to the city. Despite the large varieties of crops produced in Batra, the high level of monetary circulation, and the variety of imported goods sold in the village, a limited variety of agricultural products are seen on the market. The merchants selling in the street market of Batra are from the village, and it is only on Thursdays that the market is open to peasants, to merchants from other villages and to every one who wants to sell directly to the consumer. (Chapter III)

It is interesting to examine the case of al-Shirbini, a peasant growing summer potatoes on 12 qirats of land. After a bad season of potato cultivation, he had to sell the crop directly on the market to pay back his debts, and hopefully by-pass
the profit made by the merchants. Leila, his wife, was the one in charge of selling
the crop on Thursday's market. She adds, that during that year the prices were
higher than expected, regardless of the quality of the crop, because the supply was
lower than the demand. al-Shirbini and Leila were able to sell the crop rapidly
under favourable conditions, because they had a limited quantity of potatoes. For
many peasants, then, the weekly market is the appropriate channel through which
they can have access to cash, without having recourse to a merchant or a middle
man. In most cases, and according to the division of labour in the household, the
wife is the one who undertakes the marketing of the household products.

Hilmi, the contractor for wage labour, also cultivates summer potatoes on a plot of
ten qirats under tenancy. (Chapter VII) In addition to his job, Hilmi is involved in
the marketing of summer potatoes on a small scale through his connections in the
tree sectors of Batra. There are many forms of arrangements established
between Hilmi and the peasants, depending on the quantity of the merchandise, and
on the marketing conditions. Usually, Hilmi buys the crop from the peasants, and
in turn sells it on the market. However, when Hilmi lacks the needed capital to
buy the crop from the peasants, he becomes the middle man between the peasant-
producers and the field merchants. He collects the crop from the peasants, sells it
on the market and the profit is distributed to the peasants proportionally according
to their share of the product, after deducting the costs of transportation and
storage, and Hilmi's commission of 15% on the value of the merchandise sold.

Hilmi sells the crop to field merchants, or directly on the local market of Batra
through his wife and daughters. Hilmi's profit is made on the difference in market
prices, during the period of storage, on the use of land for storage, and through
the participation of unpaid work from the members of the household. The
circulation of the merchandise, in this case, is done over a short period of time,
not exceeding three weeks, due to the limited possibilities of storage under straw.
As result of his connections in the village through his main job, (contractor for wage labour), through the use of the land under tenancy, and through the female members of the household, Hilmi is able to increase his income over a short period of time by playing the role of a middle man. The merchants, the middle man, and the peasants are integrated in the weekly market of the village, without facing strong competition, as in the daily market, or in the regional markets. Therefore, the participation of women in commerce is important for the household incorporation in the marketing network, as men usually are not willing to lay out their produce on the floor in the weekly market, or enter into endless bargaining with the consumers, unless they are merchants on a full time basis.

The margin of profit made by paddlers in the weekly market is higher than the one made in the regional markets, because the paddlers, like Hilmi’s wife and Leila, do not pay the costs of transportation for a long distance, since the merchandise is bought and sold in Batra. (Chapter III) Similarly, at the end of the day if they did not sell all their produce, they take it back home, where they can sell it directly to the consumers during the week. In fact, they often adopt this system because their neighbours, their friends, and their relatives know that they stock the remainder of the merchandise at home. Finally, the weekly market of the village is an essential way for increasing and extending social relations between the buyer and the seller.

2.2.2. The weekly Friday market in Shirkia

The weekly regional markets in the surrounding areas of Batra are important channels for the field merchants. Similar to the local market of Batra, the weekly regional markets have specific functions, and serve a specific type of consumer.

After the harvesting of summer potatoes, Hag Latif Nigma buys the crop directly from the peasants, or through a middle man like Hilmi. If Hag Latif Nigma
purchases the crop directly from the peasants, he buys it from fields located in the
same basins, in order to reduce the costs of transportation, whereas the middle
man, Hilmi, collects the crop from small holdings located in various basins. Hag
Latif Nigma's commercial activities extend over the Delta, Alexandria, Damietta
and Cairo. Because of the large-scale nature of his commerce, and because he is
himself a landowner, and an owner of a cattle station, he often uses a middle man
like Hilmi to collect the vegetables from the peasants. He either undertakes the
commerce of summer potatoes directly on his account, or sends them to the
markets on behalf of the peasants in exchange for a percentage of the quantity sold.
A small plot of his ownership is reserved for the storage of summer potatoes. So,
in exchange for storing the crop for the peasants on his land, he charges a sum of
money, which changes every year according to the market prices of potatoes, and
varies according to the quantity and the time of storage. Given the small scale of
Hag Latif Nigma's commerce in potatoes, he sells it on the weekly regional market
in the surroundings of Batra, as it is the cheapest channel for marketing.

2.3. The Role of Peddlers in the Marketing Network

The peddlers are a permanent, available and direct channel for marketing in
markets where the government's control is limited, and where the consumer
accepts the lowest qualities of merchandise. This channel contributes in the
liquidation of the remainder of the merchandise at the end of the season, under
favourable conditions. Moreover, given the social and the economic position of
the peddlers in the hierarchy of merchants, field merchants, like Hag Latif Nigma,
acquire control over the terms of agreement, as compared to the larger markets
where competition, monopoly, and rivalries between the merchants reduce the
power of the field merchant. From the point of view of the peddlers, who are the
least privileged social and economic category, the field merchant is an important
economic and social support in the village. Similarly, the field merchant's protection is extended to the weekly regional market, where he is their guarantee in their dealings with other merchants, and their protector in matters concerning official authorities.

After the harvesting of potatoes, Hag Latif Nigma concludes the buying agreements in the field with the seller. In the beginning of the season, the price is fixed according to the market prices, and determined by the variety, and the quality of the merchandise. In his turn, Hag Latif Nigma stores the crop until the fluctuation of the prices permits a convenient margin of profit. The price of potatoes complies to the rule of the supply and demand, as they are sold in the free market. Hag Latif Nigma sells the product in the regional, and the urban markets as well as supplying export companies. Given the large transactions in the urban markets, the drop in their prices has a direct repercussion on the local and the regional markets and it would, consequently, affect the selling price of the field merchant to the wholesalers. In order to avoid the consequences of the instability of prices on the national markets, Hag Latif Nigma sells part of the crop directly to the paddlers in Batra. In fact, this system allows him to appropriate the margin of profit charged by the wholesalers, selling the merchandise to the paddlers for a higher prices, and increasing his net profit. (Fig.IX.1) (Tab.IX.1-2)

The weekly Friday market of Shirbin is one of the largest markets in the surroundings of Batra. Shirbin is a big town located eight km north east of Batra, on the main road that joins Mansura and Damietta. The market quarter in Shirbin serving the centre, and the surrounding villages, covers a large area, and each street is reserved for a specific type of merchandise. The fruit and vegetable market extends over two streets. Each paddler has a specific place on the pavement of the street, and on both sides of the street the retail merchants have their shops. The group of paddlers is a closed circle, where the merchants know
Table IX.1: Breakdown of the Price of One Ton of Summer Potatoes from the Field to the Weekly Regional Market.

<table>
<thead>
<tr>
<th>Stages of Marketing</th>
<th>Price</th>
<th>Hargin</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costs of Production</td>
<td>110.00</td>
<td>35%</td>
<td></td>
</tr>
<tr>
<td>Selling Price of the Producers</td>
<td>200.00</td>
<td>90.00</td>
<td>29%</td>
</tr>
<tr>
<td>Selling Price of the Field Merchants</td>
<td>260.00</td>
<td>80.00</td>
<td>26%</td>
</tr>
<tr>
<td>Selling Price of the Peddler Merchants</td>
<td>310.00</td>
<td>30.00</td>
<td>10%</td>
</tr>
</tbody>
</table>

Table IX.2: Breakdown of the Price of One Ton of Summer Potatoes from the Field to the City Market.

<table>
<thead>
<tr>
<th>Stages of Marketing</th>
<th>Price</th>
<th>Hargin</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costs of Production</td>
<td>110.00</td>
<td>27%</td>
<td></td>
</tr>
<tr>
<td>Selling Price of the Producers</td>
<td>200.00</td>
<td>90.00</td>
<td>22%</td>
</tr>
<tr>
<td>Selling Price of the Field Merchants</td>
<td>260.00</td>
<td>80.00</td>
<td>15%</td>
</tr>
<tr>
<td>Selling Price of the Whole-saler Merchants</td>
<td>320.00</td>
<td>60.00</td>
<td>15%</td>
</tr>
<tr>
<td>Selling Price of the Retail Merchants</td>
<td>410.00</td>
<td>90.00</td>
<td>22%</td>
</tr>
</tbody>
</table>
each other, as they meet every day in a different weekly market. Despite the fact that the peddlers are constantly mobile, a number of rules and regulations are respected among them, and certain regulations concerning the appropriation of space on the market are established.

Thus, in these large regional markets, there is a monopoly over the space of the market by the merchants who have been in the market for a long time, and who acquired the space either by inheritance, or by buying the right of using the space from another merchant. However, if the space is on a new extension of the market street, it is acquired by the first to occupy it. On the other hand, the retail merchants or the wholesalers who have a shop opposite the space occupied by the peddler charge the peddler a monthly rent varying between £.E 5 and £.E 8, in exchange for occupying this space once a week. In some cases, two or three peddlers share the rent of the space in front of a shop, given the limited space in the market street. The rent can be paid in cash or in kind, depending on the oral agreement between the owner of the shop and the peddler. Alongside the retail merchants' shops, the wholesalers own shops and storage places, from which they disperse their merchandise to larger markets. The wholesalers play an important role in determining the daily prices of the merchandise, within the range of fluctuations. They release a quantity of the stored merchandise on the regional market every day, through the retail merchants or the peddlers. But most of their transactions are on a very large scale. The wholesalers have almost total control of the market street: they control the means of transportation, of weighing, and are the first to be informed on the latest market prices.

Most of the peddlers deal with the wholesalers in the market, either by buying part of the merchandise, or by storing the remainder of their merchandise during the week to save the costs of transportation, or just to be informed on the daily prices of the merchandise. They, also, seek them for services, or for support, as the
paddlers are not officially registered, and do not have a commercial license. Since
the paddlers do not benefit from any legal status, and are not affiliated to a union
or any form of official organisation, they are not protected against other
merchants or against the authorities. Therefore, each paddler is usually under the
protection of a field merchant or wholesaler, in return of certain services they
require for this type of social protection.

In addition to the various categories of merchants, there are number of market
tasks undertaken by other individuals. For example, in every market street there
are people who rent umbrellas to the paddlers, as they cannot stand all day long in
the sun. Each one of them covers a specific area of the market. Children who can
read and write are of great use in the market, as most paddlers are illiterate. The
children write the prices fixed by the paddler on a piece of paper, and change them
during the day whenever the price changes. Each child serves a group of paddlers
in exchange for £.E 0.03 paid for each time they write the price. The division of
labour, and of the space in the weekly regional market is highly respected in the
market, as each participant in the market street is an indispensable element for the
others, starting from the children, to the wholesalers who directly or indirectly
control every operation or transaction taking place in the market. The paddlers,
the children, the owners of the umbrellas, and the man who load and transport the
merchandise meet every day in a different market and, thus, they know each other,
and depend on each other for doing their job.

2.3.1. Luza and Zaynabum

Luza and Zaynabum are two women from Batra who work as paddlers in the
seven markets held every day of the week from Mansura to Shirbin. Luza and
Zaynabum are married to the same man, and between them have 10 children. The
husband does not work on a regular basis. Seldom does he help his wives in their
commerce, and is known in the village to live on their income. Thus, with an 
unemployed husband, and with ten children to support, the mothers had to find a 
way to earn their living, and to support a household composed of 13 members. 
For a very long time, they have been dealing with Hag Latif Nigma, from whom 
they buy their merchandises on a regular basis. Given their relationship with Hag 
Latif Nigma, and since they lack cash, he seldom charges the price of the 
merchandise in advance. However, the terms of agreement change depending upon 
the merchandise bought. For example, they buy the remainders of the citrus fruit 
which is not sold to wholesalers, per basket of 20 kg, and provide transportation 
and the baskets. As for vegetables, Hag Latif Nigma gives them a plot of land at 
the end of the season, and they harvest the crop, pack the produce in baskets, and 
transport it to the markets. Luza and Zaynahum do not hire wage labour for these 
operations; they undertake the necessary work themselves with one of the eldest 
daughter helping them. Luza and Zaynahum’s relationship with a field merchant 
like Hag Latif Nigma is advantageous because of its flexibility. It allows them to 
store the merchandise on the land whenever they need to, and to pay per 
installment the buying price of the merchandise.

In the process of marketing, Luza and Zaynahum’s net profit varies constantly 
according to the fluctuation of prices. However, they try to minimise their cash 
expenditures, by relying on unpaid labour, or by exchanging services in the 
market. By examining the circulation of merchandise over a day in the market, 
several aspects concerning the relationship between the various parties involved in 
the process of marketing can be traced. Luza and Zaynahum start their working 
day at 4 a.m. by picking the vegetables in the field, and placing them in baskets. 
They usually pick a small quantity which they estimate they will be able to sell 
during the day at the market. If it is a large quantity they are assisted by two of 
their children. On one specific day, they picked 100 kg of courgettes which they 
divided in four baskets. The buying price of courgettes on the field from Hag
Latif Nigara was fixed at L.E 0.30 per kg for the entire season, so long as they took charge of the picking. They also picked 400 kg of oranges, for L.E 0.50 per kg, which they divided into 20 baskets. After collecting the produce, they hired a taxi for L.E 7 to cover the ten km distance to the marketplace. They always hire the same taxi driver and, therefore, pay him once a week for the seven trips. Helavithum, Luza’s youngest daughter, accompanies them daily to the market. (Tab.IX.3) The Shibrin market starts at 6 a.m., after the morning prayers. At their arrival, around 5.30 a.m., the women settle in their place where they sort the merchandise, arrange it, and rent two umbrellas for L.E 0.50 a day. They often purchase small quantities of potatoes, or any other type of vegetables from the wholesalers in the market, to diversify their produce. After making their inquiries on the latest prices of vegetables, they negotiate the price with the wholesaler.

On this specific day, they bought 200 kg of summer potatoes which they divided between four bags, and for which they paid an average of L.E 0.28 per kg. The price of the merchandise was paid to the wholesaler at the end of the market day. They bought three different types of potatoes, each of a different quality, for different prices, which they would mix when selling them to the consumer in the market, to increase the prices. In fact, the consumer does not differentiate between the varieties of potatoes, as his choice is based on the shape of the vegetable. One of the common tricks adopted by the retailers, and the paddlers in the market is to sell the bad quality merchandise along with the good quality, for a high price, in order to make a higher profit.

By using this trick the paddlers can sell the remainder of the wholesaler’s merchandise, which is not accepted in the expensive markets. Thus, the criteria of grading the product, and consequently its price differs from one level of marketing to the other, and these criteria change depending on the destination of
### Table IX.3: Net Income of Luna and Zaynab during a Day Spent in the Weekly Market of Shubin, in L.F.

<table>
<thead>
<tr>
<th>Buying Price of the Merchandise</th>
<th>Number</th>
<th>Price</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oranges</td>
<td>kg</td>
<td>400</td>
<td>0.50</td>
</tr>
<tr>
<td>Courgettes</td>
<td>kg</td>
<td>100</td>
<td>0.30</td>
</tr>
<tr>
<td>Potatoes</td>
<td>kg</td>
<td>200</td>
<td>0.20</td>
</tr>
<tr>
<td><strong>Total Price of the Merchandise</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Expenses of Marketing:

<table>
<thead>
<tr>
<th>Expense</th>
<th>Unit</th>
<th>Price</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labour for loading</td>
<td>day</td>
<td>1</td>
<td>3.00</td>
</tr>
<tr>
<td>Rent of umbrella</td>
<td>day</td>
<td>2</td>
<td>0.25</td>
</tr>
<tr>
<td>Transportation within the market</td>
<td>bag</td>
<td>4</td>
<td>0.05</td>
</tr>
<tr>
<td>Taxi for transport</td>
<td>trip</td>
<td>1</td>
<td>7.00</td>
</tr>
<tr>
<td>Rent of the space in the market</td>
<td>day</td>
<td>1</td>
<td>1.50</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Total Price and Expenses

- **Total Income**: 298.20
- **Share**: 95%

#### Selling Price of the Merchandise:

<table>
<thead>
<tr>
<th>Merchandise</th>
<th>Unit</th>
<th>Price</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oranges</td>
<td>kg</td>
<td>400</td>
<td>0.54</td>
</tr>
<tr>
<td>Courgettes</td>
<td>kg</td>
<td>100</td>
<td>0.34</td>
</tr>
<tr>
<td>Potatoes</td>
<td>kg</td>
<td>200</td>
<td>0.32</td>
</tr>
<tr>
<td><strong>Total Income</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Net Income

- **Amount**: 15.80
- **Share**: 5%
Table IX.4: The Daily Fluctuation of Prices of Vegetables and Fruit in Shibin Market, in L.E per kg

<table>
<thead>
<tr>
<th>Merchandise</th>
<th>Opening Prices</th>
<th>Highest Prices</th>
<th>Closing Prices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potatoes</td>
<td>0.29</td>
<td>0.31-0.33</td>
<td>0.20</td>
</tr>
<tr>
<td>Oranges</td>
<td>0.53</td>
<td>0.54-0.56</td>
<td>0.51</td>
</tr>
<tr>
<td>Courgettes</td>
<td>0.33</td>
<td>0.35-0.39</td>
<td>0.34</td>
</tr>
</tbody>
</table>
the merchandise in the market. Urban markets in residential quarters, weekly or regular markets in the city and in the villages, all have different types of consumers, different requirements, and different prices within the range of the supply and the demand, in a specific period of time.

After purchasing their additional merchandise and settling down in their place in the market, Luza and Zaynahum fix their starting selling price according to the current rates. (Tab.IX.4) On Fridays, the peak period of demand is between 8 a.m. and 1 p.m., during which the prices reach their highest levels. Friday is the official weekly holiday, in which most of the inhabitants of Sharbin do their weekly shopping, before and after the Friday prayer in the mosque. Thus, the prices on the market jump before and after the noon prayers. At this particular time the peddlers sell the lowest grades of the merchandise for the highest prices. In fact, they display the produce to the client in such a way, and turn it in their hands so rapidly that the buyer does not notice the defect in the quality, especially since the market is very crowded and there is no way to negotiate the price or the quality of the merchandise. By 1 p.m. the prices start to drop as the demand decreases, and the merchants want to sell their merchandise before the market closes. Thus, in order to attract consumers, they display the best quality of the merchandise for a lower price than that charged during the peak time of demand. By the end of the market day, the prices drop considerably, as most of the merchants would rather sell the merchandise, even at less than pay the price of storage to keep their goods until the following week when they come back to the same market. (Tab.IX.4)

After the market closes, Luza and Zaynahum start paying for their purchases from the wholesalers in the market, while their daughter Halevittum pays the children who wrote the prices during the day, the rent of the umbrellas, and collects the baskets. Back in Batra, they pay Hag Latif Nigem, and make their arrangements
for the following day. It is not before 9 p.m. that Luza, Zayrahman and
Halavitham join their family at home.

This account illustrates the process by which the peddlers deal with the field
merchant, the wholesalers, and with the consumers during the different parts of
the day. According to the figures advanced by Luza and Zayrahman, the net profit
made during that day reached £F 15.50 for both of them and their daughter
Halavitham. However, it is important to note that these figures correspond to the
effective circulation of cash during the day.

Thus, they do not calculate their own wages for certain operations they undertake
by themselves, such as for picking and packing the produce in the field, which
when calculated would amount to £F 3. Most important is the fact that the
majority of the peddlers seen in the weekly markets were women and children who
accompany their mothers. Thus, as the value of the woman’s wage on the labour
market is half that of men’s wages, it reduces the inputs of labour in the process of
marketing. In fact, other women like Luza and Zayrahman sell homemade
products. Although it is an occupation that implies high mobility and long
working days under hard conditions, the work of women in commerce is fully
accepted in the villages. In their turn, men participate occasionally in the peddler-
merchant circle, but mostly they are involved in the market as retail merchants,
wholesalers or field merchants. They also do most of the heavy work, such as
transporting the merchandise to the market in exchange for a wage paid per
quantity transported.

This picture shows the extent to which women are incorporated in the markets,
and depend upon unpaid work provided by the available members of the
household. The reliance on unpaid labour certainly reduces the inputs of labour
work in the marketing process. However, from the fieldwork it has been noticed
that the incorporation of women in the marketing network is confined to this level. In other words, they are incorporated in the less privileged category of merchants where they can only earn the income necessary for the reproduction of their households.

Luza, Zayrahm and Hala'vitum say that their average income from a day spent at the market varies between £E. 12 and £E. 17 for the three of them. This means that each one of them receives an average income of £E. 5 for 15 hours of work. This income is approximately equal to the wage of nearly two days of work for women on the agricultural labour market, where wages reach £E 2.50 for five hours of work per day. However, Luza, Zayrahm and Hala'vitum work for an average of 15 hours daily, which would correspond to three days of work on the agricultural wage labour market. (Chapter VIII) (Tab. VIII.4) As they seldom face working days without an income, their income is more regular than the income of the agricultural wage labour, though its amount depends on the agricultural season, and on the daily and the seasonal fluctuation of prices.

2.4. The Market of Damietta

The Damietta market is one of the largest markets in the north east of the Delta for the marketing of vegetables and fruit. It is located in the north of the city of Damietta, covering a large quarter, and it is surrounded by the workshops of carpenters and handicrafts. The market is enclosed between four large walls, with one entrance and one exit. At the entrance of the market, there is a main office, affiliated with the Ministry of Provisions, which controls the quality and the prices of the merchandises. The wholesalers' shops and storage facilities are located alongside the four walls. Marketing activities start at 4 a.m. and last until 12 a.m., during which all sorts of negotiations, sales, auctions, and bargains take place.

The field merchant sells the merchandises, vegetables or fruit, to the wholesalers
merchants in the markets of Damietta. According to Hag Latif Nigma, the field merchant usually deals with the same group of wholesalers according to their specialisation. The wholesaler buys the merchandises at prices fixed on the basis of the category, of quality, and market prices. The wholesaler himself transports the merchandises from the field to the shop in the market centre. In Damietta, the merchandises is sold to the retailer either by kilograms, by lots of 50 kg, or by baskets of 25 kg, or in other forms of deals depending on the supply and the demand, over a period of time. However, if the supply exceeds the demand the merchandises is sold in open auctions. In other cases, the wholesaler acts as a broker on the market, concluding agreements directly between the producer and the retailer, or between other wholesalers in different markets in exchange for a percentage on sales. This takes place only when there is a large quantity of merchandises. These are, generally, the forms of trade in the city market, yet there is a great degree of flexibility in the terms of the deals which are adapted to market conditions. The city market is the centre of the distribution of the merchandises, which is controlled to a certain extent by the wholesalers since they have access to storage facilities and refrigerators.

Hag Mitvali is one of the largest wholesalers of fruit and vegetables in the Damietta market. He says that to the price of each ton of potatoes, for example, bought in the field from Hag Latif Nigma, he adds at least 15% in order to cover the costs of marketing and his net income. Hag Mitvali notes that one of the common forms of marketing adopted, for example in Rud al-Farag Market in Cairo and in the market of Damietta, are sales by commission. In this type of deal, Hag Mitvali acts as a broker and usually deals directly with the producer without the intermediary of the field merchant. In exchange for displaying and storing the merchandises in his shop in the market, Hag Mitvali charges the producer a commission varying between 15% and 17% of the value of the sold merchandises.
Fruit and vegetable auctions are among the various forms of selling on the market. They take place under certain conditions, specifically during the high season when the price of the merchandise drops on the market, such as in the case of strawberries in April and May of 1984. According to Hag Mitvati, although strawberries have not been part of the Egyptian diet, many producers turned to their cultivation, as considerable incomes were made the previous season from their exports. As a result of the high supply over a period of time, the international markets could not absorb the entire production, and the local markets were flooded with strawberries in the beginning of the season. Thus, Hag Mitvati, as most wholesalers, was left with the merchandise piled in the market in summer, and selling the merchandise in auctions was the only solution to liquidate strawberries before they were destroyed by the heat. He adds that in Damietta the price of one kilogram of strawberries fell gradually from £.E. 3.50 to £.E. 1.50, and the merchants found themselves facing great losses. However, he tried to cover the loss by increasing the prices of other merchandise with high demand, such as cucumbers whose prices jumped from £.E. 0.20 to £.E 1.20 per kg. This phenomenon raised debates in the media, concerning the state’s agricultural and pricing policies.

Under the constant, unpredictable fluctuations of prices, and within the flexibility of marketing deals, the merchants find ways and means to maximise profit under the most advantageous conditions. Unlike the village and weekly markets, the city market deals with greater bulks, and the merchandise is priced according to its category.

2.5. The Breakdown of Prices in the Regional and City Markets

In general each participant’s share in the profit made during the course of marketing is related to the number of intermediaries involved in the network. By
breaking down the final price of the product, it can be seen that the inputs of production constitute the highest share. This is followed by the share of the present or the producer, the field merchant, and the share of the peddler. (Tab. IX. 1)

In the city market, such as the one in Demietta, the inputs of production contribute most in the total price. The share of both the producer and the retail merchant are equal as are those of the field merchant and the wholesaler. (Tab. IX. 2) However, by comparing tables IX. 1 and IX. 2, it is evident that the fluctuation of prices does not take place on the level of the producers, as it takes place on the level of the various merchants. Therefore, the merchant can maximize his profit by increasing the difference between the buying price and the selling price. Whereas, the present-producer can only increase the income by reducing the cash expenditures in the agricultural operations. But the minimization of cash expenditures cannot exceed a certain limit. These figures, however, are based on approximate calculations in order to illustrate, grosso modo, the share of each merchant in the income made from marketing. (Tab. IX. 1-2)

It is clear, from the above, that the inputs of production determine the prices of potatoes on the market; and as argued previously, the inputs of production of summer potatoes are, in their turn, conditioned by the market prices of inputs. The impact of the different levels of marketing on the organization of production becomes, thus, evident, since the process of marketing is the sphere in which profit can be made, and where accumulation can take place.

The comparison between the two channels of marketing shows that in the weekly regional market as in the city market, the share of the inputs of production in the initial selling price is an important factor in conditioning the final price. More specifically, the inputs of production in the case of summer potatoes are
determined by the share of the price of the imported seeds in the expenditure of production. In fact, the share of the price of seeds represents 34% of the inputs of production and, therefore, the fluctuations of their price on the international and the national markets directly affects the inputs of production. (Chapter VI)

Fluctuations in the inputs of production in turn, partially, determine the area of a particular crop's production from one season to the other. In other words, if the price of inputs for peasants increases, the area of cultivation may decrease, and consequently the supply is reduced which increases the final price for the consumer. As a result of the rise in price, the following season there is a reverse reaction on the part of the producers, who cultivate the crop on the assumption that the market prices will match the ones of the previous year. Thus, the offer exceeds the demand on the market, and the prices of the producers and the merchants consequently drop. Therefore, there is a close relationship between the various levels of agricultural production and marketing, which determine the share of profit of each participant in these two levels. Similarly, each participant's share in the process of production and of marketing is determined by his capacity to minimise the cash expenditures, while maintaining his position in the marketing network.

On the level of the field, the paddlers, for example, rely on the unpaid work of the members of the household, as they rely and depend on their social relations with merchants in the market. Luza and Zaynahum's loyalty to Hag Latif Nigama, for example, is not only the result of his flexibility in the terms of marketing, but also of the social protection and financial support he provides them in the village, and in the market. Since they are not owners of shops and do not have capital which would allow them to expand their commercial activities, the paddlers are dependent on the field merchant and are subject to, and conditioned by, his terms of agreement.
Similarly, Hay Latif Niguma, as a field merchant, has certain social obligations towards Luza and Zaynabun. For example, Luza was arrested a few years ago after selling csoutries without putting the prices on the merchandises, and had to pay a fine of £.E. 350 or spend three months in jail. Hay Latif Niguma paid the fine, and Luza was released. His intervention was a means to insure the continuation of a marketing channel, as well as a way to maintain their loyalty to him. Hay Latif Niguma's social and financial support to the paddlers is an implicit social agreement, and if he had not intervened, they would have sought the help of another field merchant, and transferred their commerce to him. Such a step would also have affected the relationship between Hay Latif Niguma and the other paddlers with whom he deals. Therefore, he supports them in cases of financial, health, and social problems, in exchange for controlling the terms of agreement in marketing.

Non-monetary relations are also practiced between the paddlers in the market, as a means of economic support. According to Luza and Zaynabun, in addition to the monetary circulation during market day, relations of exchange between the paddlers are essential for the circulation of their merchandises, since they lack cash or reserve it for the important expenditures, such as the buying of a merchandise from wholesalers. For example, they often pay the rent of the space to the retailer in hand, or share the space with another paddler to reduce the expenditure of cash. Exchanges of different qualities of goods are important for the diversification of sales. Thus, paddlers might purchase 300 kg of summer potatoes from a wholesaler, and exchange part of it with a paddler who bought a large quantity of green beans. By doing this both paddlers will have a larger variety of produce.

Thus, a number of relations are implied in the process of marketing, and between the level of marketing of crops and the level of the organisation of agricultural production. All the various constituent participants in both levels, production and
marketing, are interrelated, and highly dependent on each other. The extent to which one of the categories exercises control over the marketing of the crops, or over the conditions of production, determines the capacity of this group to accumulate profit, and to extend its power in the social structure of the village. As shown in this part, the marketing network of crops, starting from the small peasant producer to the various categories of merchants, is the sphere in which profit can be realized, or losses can be suffered. It is by maintaining their position in the market that a specific merchant group is able to control the market. Through the control of the market the same group of merchants can extend its social and political power in the village, through the use of governmental channels, or through the social and political relations established by the members of the society. It is important, then, in the context of the analysis presented in the previous chapters, and prior to concluding this thesis, to indicate some aspects of the class structure and social stratification within the village of Bata. Thus, the following section will be an attempt to present the different means by which a specific group of merchant in the village acquired and maintains its dominant position in the social structure of the village.

3. The Intensification of Merchant's Power in Bata

It has been argued in the chapter on the forms of access to land that the size of ownership is not the criterion determining the class position of the peasants or the producers in Bata. (Chapter V) In fact, it has been shown that historically, the important figures and the authorities in the village are not the largest landowners, but they are extensively involved in the marketing network or in the production of free cash crops which they market.

From the description of the village of Bata, and from the examination of the
historical development of the forms of access to land in the village, one can argue that two important periods marked the social structure of Betra. The first period was in the 1930's, when the large absentee landowners were directly affected by the world economic crisis. The second period, the 1960's, represented a turning point on the national scene when, once again, the large landowners were the target of the agrarian reform laws launched under Nasir (Chapter III, V). It is, therefore, during these two periods that the social structure of the village witnessed the rise of a specific group, and the decline of another group. Within this framework, the following section will focus on the development of the group of merchants in Betra, through the means they adopt to consolidate their economic and social position, to increase their political and social power, and to control the market.

3.1. The Emergence of Merchants from Betra Prior to the 1960's

In the middle of the 1930's, with the economic crisis of the large absentee landowners who were compelled to sell their agricultural land, a few peasant families were able to acquire agricultural land, and consequently expand their market activities. The 'Ummiya, the post of mayor, was held by the members of these families (Chapter III) (Chapter V).

Most of these peasant families initially worked as wage labourers on the large properties of the absentee landowners. Over the years they became involved in a variety of economic activities on the property, such as the marketing of crops and livestock rearing. Thus, through their integration in the marketing network, these families were able to raise cash for buying agricultural land when the opportunity occurred. However, the purchase of agricultural land by peasants was on a very small scale, not exceeding four or five feddans per family. Given the conditions of
the market during this period, the peasants cultivated cotton, grains and winter vegetables, which they then sold on the market. This was the beginning of the emergence of influential social groups in the village. It was from these groups that the Umnia and Shitah al-Balad, and other government positions were recruited for many years.

Peasant ownership of agricultural land was a family enterprise. The entire extended family contributed to the buying price of the land, and participated in the agricultural operations. At the end of the season the income was distributed to each member. However, the ownership of the land remained in the name of the head of the family. Therefore, as government positions in the village were based on the family’s ownership, the members regarded these positions as a family inheritance. (Chapter III)

With the marketing of the agricultural production, many peasants entered in the market by leasing the land from the absentee landowners, and profitably subleasing the same plot to landless peasants who were hired as wage labourers on the property. It should be pointed out that leases of agricultural land took place in sectors A and B where cotton, vegetables and grains were cultivated. This was due to the advantageous marketing conditions of these crops. However, the areas cultivated by permanent crops in sector C were managed directly by the owners, as the marketing of these crops was not yet established in the village, and because at that time these crops were not considered as profitable as cotton. (Chapter V)

This form of marketing in agricultural land was a means of having access to ready products which could be sold directly in the market by the peasant who rented the land. Thus, the peasant who rents the land from the owner received rent from the direct peasant producer, bought the crop from the peasant producer, and resold it on the market. The entire profit was made over the difference in the buying price,
and the selling price of the merchandise, or the difference between the rents. (Chapter V)

3.1.1. The Husani family: Hay Humi

Hay Humi's family, the Husani, was among the first families to buy agricultural land during this time. According to Hay Humi cash was very difficult to raise, and the family had to borrow part of the needed capital from the absentee landowners. Although all the members of the extended family contributed to the capital, the land was registered in the name of the head of the family. Through the income made from the marketing of the crop, the Husani expanded the property, and progressively became totally involved in the marketing of crops. It was from this family that the 'Umida, the mayor of Beira, was elected, as one of the conditions for election to the post of 'Umida was a minimum size of ownership fixed at ten fanams. With the increasing number of peasants owning land, conflicts and rivalries grew between the peasant families in Beira on questions related to access to land, and water, and to political positions in the village. (Chapter V)

These conflicts were exacerbated by the political instability on the national scene, as this period witnessed a permanent succession of antagonistic political parties in the government, with which each of the competing families was affiliated. Therefore, on the village level, the loyalty of the different families to the political parties had a direct repercussion on the post of 'Umida. Before 1952, the main conflict in the village was between the Gergis family and the Husani family. The Gergis family was a powerful family, and heavily involved in the marketing of cotton. It was not until 1950 that the Husani family took over the post of 'Umida from the Gergis family. This was partly the result of the decline of the Gergis family, whose members started to migrate to the cities, and whose ownership was progressively being sold. During their political conflicts over the post of 'Umida
with the Sigris family until 1950, or with the Zaghlul family another influential family in Btra, later on, the Humani family was allied to the Hammam family, one of the large families in Btra. Both families constituted a strong front, and the post of the 'Umudiyya remained with the Humani family until a few years ago, when one of its members refused to succeed his father and transferred the position to a member of the Hammam family, their allies. (Chapter III)

Hag Humani represents the third generation of the Humani family since it acquired the post of 'Umida. Although Hag Humani does not occupy an official position, he is regarded as an authority in the village. In fact, it has been established in the village and among all groups that the position of 'Umida is held by the Humani family, or transferred to their allies with their consent. However, legally the 'Umida should be elected democratically by the villagers. Despite the transfer of the 'Umudiyya from the Humani to the Hammam family, the actual power remained with the Humani. The Humani is a stronger and a richer family than the Hammam family. Therefore, their alliance is mutually advantageous, as the first family has control over the second, and the second is elevated because of the support of the first family, the Humani.

According to Hag Humani, it was not before the late 1940's that the commercial activities of the family in agricultural production started to grow. The expansion of their commercial activities together with their agricultural production was initiated by the presence of the eldest son, Hag Humani, who took charge of his father's affairs and supervised his younger brothers. Hag Humani understood that agricultural production cannot be separated from the marketing of crops, and that profit was essentially made in the marketing process. Thus, he geared agricultural production directly to market conditions. The cultivation followed a rotation cycle which allowed the shift from one crop to the other depending on market prices. Moreover, the fact that he directly undertook both the production and the
marketing of the crops allowed him to make a higher margin of profit. This profit was also enhanced as the result of the participation of a large number of family members who were working with him. Until the early 1950’s, Hag Husni was involved in the production and the marketing of cotton and grains, and was starting to cultivate tomatoes. So when the state intervened directly, in the production and the marketing of crops in the 1950’s, he was able to shift to the cultivation of potatoes and tomatoes, as both are free cash crops cultivated in both sectors A and B where his ownership is located. At the same time, as a field merchant he, gradually, started to store his merchandises in refrigerators so that it could be sold on the market when the price was high.

Hag Husni was not only able to survive the intervention of the state in the agricultural production and marketing, but he was able to expand his production and his marketing through seasonal rents. (Chapter V) Hag Husni rents agricultural land on seasonal terms for the cultivation of tomatoes and potatoes, a system he started to adopt when a compulsory rotation cycle was imposed by the government, as he found that he could not cultivate free cash crops every year on his land. He took recourse to this system in order to maintain the size of his marketing. Given the large number of members of his family involved in both production and marketing, he was able to rent large plots located in different parts of Batra, and in different villages. He annually rents between 30 and 70 feddans in different areas. His choice of the plots is based on the value of the rent for the cultivation of tomatoes, and on the conditions of the land. He says that he never rents good quality land because of its high rental value. Instead, he prefers to rent lower quality land for a lower rent, and treat it with chemicals and fertilisers on the short term to increase the yield. (Chapter V) (Chapter VII)

After the death of his father, the ‘Umda of the village, in the 1980’s, Hag Husni was to inherit his father’s position, but he refused to, choosing instead to manage
3.1.3. THE BEHAVIOR OF FAMILIES

The behavior of families is a key aspect of the economic and social context. The interaction of the family's behavior on the market, and the economic and social context, forms the basis of the family's reputation, position, and the family's influence on the market. The family's behavior on the market, and the family's reputation, position, and influence on the market, are determined by the family's behavior, which is affected by the family's behavior in the market. The family's behavior in the market is determined by its economic and social context.

3.1.4. THE BEHAVIOR OF INDIVIDUALS

The behavior of individuals is influenced by their economic and social context. The individual's behavior on the market, and the individual's economic and social context, forms the basis of the individual's reputation, position, and the individual's influence on the market. The individual's behavior on the market, and the individual's reputation, position, and influence on the market, are determined by the individual's behavior, which is affected by the individual's behavior in the market. The individual's behavior in the market is determined by its economic and social context.
two labour families among those who were brought from other villages, gradually gained the confidence of the owner, and became the labour supervisors on the property. The Yusif family is originally from the village of Kasabia, and the Yasin family moved from Dikane’s village. Both families settled in Beira, where they were hired by Hag Khalil for the installation of a water pump on his property. After the death of Hag Khalil, and in the absence of the owners, these two families held important positions among the peasants of the ‘Jish, and offered to rent the land from the absent landowners on the basis of a three year contract. Starting from that time, they expanded their activities in the region, and became the largest families in the sector competing with each other for the marketing of crops. (Chapter III)

Although the property was cultivated on a sharecropping basis, the owners rented the land to these two families, who managed the agricultural operations, sold the crop, paid an annual rent to the owners, and gave the sharecroppers their share from the crop. The lease of the property took place in auctions, every three years. However, the property remained in the hands of these two families and the competition was always between them in a way that no third party was allowed to enter their domain. (Chapter V)

After the promulgation of the agrarian reform law in the middle of the 1950’s, and the abolition of agricultural land subleases, the owners had to supervise and control the work on their property directly. This period coincided with the government monopoly over the marketing of cotton, which of course tremendously affected the cotton merchants. By that time, these two families accumulated great wealth from their previous commercial activities, and reoriented their commerce to the marketing of grains and vegetables. A considerable part of Hag Khalil’s property was bought by the Yasin and the Yusif families, and the rest was sold to peasants who were sharecroppers on the land.
The Yasim family bought part of the property extended in sector B, and built a large house in the area for their family. Thus a new Ilaha was created, bearing the name of the family, as it owns the largest part of the area. At the present time, these two families are the heads of Ilaha al-Hag Khalil, claiming the separation of the Ilaha from Betra, and its establishment as an independent village, their claims being strengthened by their membership in the ruling political party. (Chapter III)

From the late 1970's up until the present time, they have based the arguments of their claims on the fact that the access to land are predominantly in the form of sharecropping and tenancy, which are different from the prevailing forms of access to land in sectors B and C. They also claimed that because of their historical background they benefit the least from the services offered by the government to Betra. It is said that the inhabitants of Ilaha al-Hag Khalil were migrants from the neighbourhoods of Betra, who escaped from the tyranny of a powerful 'Umda, hoping to find better means for survival. Playing on the idea of minorities during the electoral campaign of 1984 for the People's Assembly, a representative of the National Democratic party from Ilaha al-Hag Khalil promised the leaders of the Ilaha, members of the Yasim and the Yusif families, and members of the board of directors of the agricultural cooperative, to promote the creation of Ilaha al-Hag Khalil as a separate, independent village with its own institutions. In exchange for this favour, they were to vote for him in the elections against the candidate of the Labour Party- the opposition party - who was from Betra. The two representatives of the Ilaha al-Hag Khalil in the cooperative of Betra launched a large campaign against the candidate of the Labour Party supporting the candidate of the ruling party. (Chapter III)

This situation provoked serious conflicts and accusations from both parties. The representatives of the Ilaha argued that the citizens of Betra, namely a few families in power, personally benefited from the funds given by the government for public
services. Similarly, they noted that by the time the peasants of the 'Isah were informed that the quota of inputs had arrived at the bank, the peasants from Bastra would have already taken more than their share. Finally, they argued that because they were not living in the centre of the village they were the last to be informed of what was happening, and the last to receive their share of services. Furthermore, because of their origin as wage labour, they felt that they were resent by the people of Bastra, and that they, as a minority, suffered from social discrimination.

These claims were met by strong opposition from the heads of Bastra, in particular by Hag Husni, who denounced their claims in the name of personal interests. The party representing Bastra formed an opposition front with the members of the cooperative of the neighbouring village, Kafr al-Nataha, who also claimed that the partition of the territory of Bastra would affect the frontiers of the two villages. However, the representatives of Bastra on the board of directors of the cooperative together with the 'Umada of Bastra could not oppose the candidate of the ruling party, and support the candidate of the Labour Party. Instead, their role was to orient the opinion of the voters of Bastra against the opposition party, meanwhile gaining the support of the government against the claims of the 'Isah, al-Hag Khalil which were initially supported by the candidate of the National Democratic Party.

From the above examples it is clear that the four mentioned families were able to purchase agricultural land during periods of crisis, when they were already involved in the marketing of crops. Their access to agricultural land in the form of ownership, lease, or seasonal rent was for the purpose of marketing. In a number of cases, the ownership of agricultural land was not an objective per se; it was a means through which they could have access to the marketing network. However, it was only through their integration in the marketing network, through
the expansion of their activities, that they were able to make profits and accumulate wealth. This accumulation allowed them to exercise power in the village and to enter into political conflicts, which in reality reflected their personal interests. They relied, in many cases, on family alliances, and on coalitions between two antagonistic parties when their economic interests and relations of power were jeopardized. As these families have been on the scene since the late 1940's until the present time, they have been able to impose themselves and their families on the social structure of the village, even though they are no longer the richest families in the village.

During the 1950's the impact of the state's direct intervention in the agricultural sector, through its direct control over agricultural production and its monopoly over the marketing of cotton, and through its control over the marketing of grains, affected the marketing network, just as it affected the producers. As well the agrarian reform laws led a large wave of selling of agricultural land. All these factors led to the emergence of a new class of rural-based merchants, initially landless peasants, who took the opportunity, through their integration in the marketing network, to expand their commercial trade and their landholdings.

3.2. The Emergence of a New Merchant Group by the End of the 1950's

This phase of the development of the agricultural sector led most producers and merchants to shift their production and commerce to free market crops. This shift was supported by the state's open-door economic policy.

3.2.1. Hag Latif Nigma

Hag Latif Nigma was among the purchasers of agricultural land in sector C. He is
the son of Nigma, the gardener of bananas on the Fakhri property, who expanded his activities to cover the marketing of fruit. The purchase of agricultural land in sector C, cultivated by vegetables, was a means of acquiring one of the best bits of agricultural land in the territory, and a way of expanding his lucrative business. Through the purchase of land in this area, Hag Latif Nigma ensured his regular presence on the Fakhri property, the largest field from which he buys his merchandises. Therefore, the buying of agricultural land in this sector was an indirect means of gaining access to the property of the Fakhri located on the borders of his land, and a means of producing fine cash crops.

It is to be noted that, indirectly, the location of his land near the property of the Fakhri was an important factor in his commercial affairs, allowing him to maintain his relations with the owners through, for example, irrigation or other aspects of agricultural production that bind together the interests of the landowners in the same basin. Likewise, being in the neighbourhood of the property allows him to be informed of what is happening on the property concerning the production, selling, or marketing of the crop. Although this factor may seem unimportant, it must be considered given the high competition between the small number of field merchants who monopolise the fruit market, and control the small number of large properties cultivated by orchards.

In the late 1950’s, Hag Latif Nigma bought nearly ten feddans cultivated by vegetables from the Fakhri. The ownership was bought from the capital he raised from the marketing of bananas from the Fakhri property, and like the rest of the purchasers, he was given payment terms. Hag Latif Nigma is the head of a large family including four brothers who work on permanent terms with him. Together they were able to expand their activities through the marketing of agricultural crops.
Starting from the 1970's, Hag Latif Nigma annually bought the entire production of the Fahiri property and, thus, over the years he monopolized the marketing of their crop. Given the large size of the property, and its high production, Hag Latif Nigma could not afford to pay for the total price of the merchandises on his own. Through his connections with the small peasants in Beira, from whom he buys the crop, he collected enough cash to buy the crop. At the end of the season, each person contributing in the capital received a proportional share of the profit. Through marketing and commerce, Hag Latif Nigma expanded his holdings which at the present time amount to 30 fields located in sectors C and E, and cultivated by free cash crops. Furthermore, in the early eighties, he started investing in the food security projects promoted by the Bank of the Village. On two fields of agricultural land located in sector B, he constructed a cattle station for meat and dairy products, in addition to a large poultry station. These projects were financed through loans provided by the Bank of the Village on the guarantee of his ownership.

Now Hag Latif Nigma is one of the largest field merchants in the village, on whom many small peasants' and paddlers' households depend for their survival. Through his connections in the village institutions, through the job opportunities he offers to many landless peasants, through the marketing possibilities he offers to paddlers from the remainder of his merchandises, and through the marketing channels he offers to small peasants involved in free cash crops, Hag Latif Nigma has acquired an important position in the village. Many peasants' families are devoted to him and his family, in exchange for his financial and social support.

Hag Latif Nigma's social status and his financial position in Beira were gained after he started marketing the crops of the Fahiri property. After 15 years of monopolizing the marketing of the crop produced on the farm, Hag Latif Nigma began to interfere in the management of the farm. He started to gather the
permanent workers around him, to gain their support and they became his informers. Similarly, he started neglecting the work he was supposed to do, and store his merchandise on the farm. Thus, the agricultural operations following the harvesting were delayed, which affected the state of the farm. He was able to gather around him most small peasants who have access to irrigation from the Faktiri farm. He gained power on the farm through his relations with the permanent workers on the farm, with the contractor of wage labourers, and with the small peasants whose interests were related to the farm. In return, he offered his financial support, his social protection in the village, and his presence in cases of emergencies. Seldom did he return from a trip to Damietta without offering a gift to the families of the permanent workers. On every occasion he distributed money, cloth and other goods. Such gestures were constantly made, and were highly appreciated by the permanent workers. Gradually, the owners felt that their authority over the management of the farm was threatened, and that they had to put an end to Hag Latif Nigma's monopoly over the marketing of the crop. It was a means of expressing their presence, their right over the management of their land, and that Hag Latif Nigma was finally simply a merchant who could be replaced by another. Until now, this property remains the largest consolidated farm from which he buys his merchandise. However, certain events made the owners determined to change their merchant.

The Faktiri signed an annual contract for selling the crop for a year to the al-Nile Company, a government company for the export of citrus fruit. The deal was concluded in Cairo, and by the time Hag Latif Nigma was informed, the contract was signed. In fact, the Faktiri accepted a lower selling price offered by the company, rather than the one offered by Hag Latif Nigma and other merchants who knew about the breakdown of relations between Hag Latif Nigma and the Faktiri family. The following year, Hag Latif Nigma offered even a higher price than the market, his idea being to regain his position on the farm, but the owners
refused and sold the crop to the company. The third year, the same story took
place, and Hag Latif Nigma started to feel the effect of this loss on his commercial
activities. It was difficult for him to replace the advantages of the location, of size,
and the quality of the crop. Not only did the company buy the crop of this farm,
but they also bought the crop of another farm in a village located north of Batra,
from which Hag Latif Nigma used to buy his merchandise.

The same year, several accidents of sabotage took place on the Fakhrri property:
the pipes of pesticides machines were broken, furniture from the house was
thrown into the Nile, and anonymous, threatening letters were sent to the
permanent workers on the farm. Investigations did not turn up the perpetrator,
but the opinions of the workers on the farm, and those who are indirectly
concerned were divided. One party accused Hag Latif Nigma, as their loyalty is to
his rival Hag Luhi, on the basis that he is the only one sufficiently motivated and
capable of such actions. While the other party, who depend on Hag Latif Nigma in
many aspects for their survival, or for the prosperity of their trade, defended him
strongly, praising his merits and his good intentions.

3.2.2. Hag Luhi Hataha

Currently Hag Luhi Hataha and his family are considered to be the richest family
in Batra, and Hag Latif Nigma’s prime competitor on the market. Originally, they
were peasant owners of small plots of agricultural land, and during the agrarian
reform laws three brothers together bought from Fakhrri 12 faddans cultivated
with orchards, in sector C. The purchase of the land cultivated by permanent
crops introduced them directly to the markets, as they directly undertook the
marketing of their crops in the cities. Although Hag Luhi and his brothers are
partners, the first brother is the head of the family and the manager of their
financial affairs. Their commerce expanded as peasants and large landowners in
Batra and in other governorates oriented their production to orchards. Consequently their ownership increased, reaching 75 feeders located in the three sectors of Batra.

In the 1980's, Hag Lutfi and his relatives turned to investments in food security projects. In the centre of the village, they built a large egg factory with a capacity of 15 million eggs annually. Given the size of the project, which was constructed by an Italian company, part of the loan was provided by the Bank of the Village in Batra amounting to £ E 1,110,000 and representing 30% of the total loans provided by the Bank in Batra in 1982. (Chapter III) The rest of the capital was provided from other banks in the cities with the participation of other members of the family working in Cairo.

Thus, with the size of his financial affairs, his marketing and his ownership together with his connections in the cities, Hag Lutfi became an influential figure in the village. Given the potential of his affairs, he became the first rival of Hag Latif Nigma on the market in Batra, as Hag Latif Nigma cannot compete with him on his own. On several occasions, they have confronted one another in open auctions selling the crop on the fields, and Hag Latif Nigma had to collaborate with other field merchants whom he brought from other governorates in order to compete with Hag Lutfi's prices. Hag Lutfi Hataba is not, though, a figure often seen in the village streets or on social occasions, unlike Hag Latif Nigma who maintains his public and social relations in the village.

From the above discussion, it can be seen that the influential families in Batra have acquired control over political and social institutions in the village through their control over the market. The families that emerged before the 1950's were in the beginning small peasants who got involved in the marketing network through their positions as wage labourers or tenants on the absentee landowners’ farms. In the
course of their economic and social development on the village scene, they enabled other families to rise, as family alliances were required to maintain their power, gain their authority, and compete on the market. Likewise, the coalition between antagonistic families at times when the interests of both parties on the market, and on the village scene, are threatened become a necessity in order to dominate the market and the political scene. This is clear in the case of Jibril al-Has Khalil. If the Yusif and the Yasin families succeed in gaining their claims of independence, they will be able to control one of the largest agglomerations of inhabitants in Belfa, without having to compete with larger merchant or influential families in Belfa.

On the other hand, the families that emerged during the 1950's, by taking the advantage of the political and the economic conditions on the national scene, were able to expand their commercial activities and become over the last two decades among the richest families in Belfa. Although they are not considered as influential as those who emerged before them, they are gaining ground. Therefore, at this stage it is important for them to maintain the position of their families, to expand their activities, and to gain the support of the largest number of people in different social groups.

One of the salient features of the village community is the kinship relation. The majority of the inhabitants, regardless of their social status or their financial conditions, always identify themselves as being related to the most important families, and the village becomes like a large family, in which every one is related to one another. This aspect explains the nature of social institutions established in the village, which in their turn, reinforce the economic activities of a specific group. Similarly, the government institutions in the village play an important role in consolidating the power of the important families, and their economic interests. This is clearly seen in the role assumed by the agricultural cooperative as a
representative of the state policy through the most powerful elements in the village community. The Local Agricultural Cooperative insures the stability of the system and the loyalty of the community to the regime. Similarly, the Bank of the Village cannot operate unless it promotes the financial interests of the richest categories in Baira, in order to realize profits through the interests on the loans provided. Therefore, the government institutions cannot operate on the village level unless they are supported by the influential families in the village to achieve their economic and political objectives, in particular to maintain a certain balance in the village community, and a certain equilibrium between the government and the rural community. (Chapter III)

Finally, the influential families who control the markets cannot operate or maintain their positions in the village without allowing the least privileged social groups, such as the paddlers, and the wage labourers, to reproduce themselves and survive. By providing them with the means of survival, and possibilities for reproducing their households, they gain their support and their loyalty. Similarly, by allowing the middle merchants and the small peasant producers a certain margin of profit not exceeding a specific ceiling, in order not to compete with them, these families can dominate the markets and the social structure of the village. It is, therefore, on the level of marketing and of market relations that the economic and social differentiation of the society takes place. The process of differentiation is realised through monetary and non-monetary relations in a society where merchant capital prevails.
Notes

1- Given the complex way in which cotton is marketed on the national and the international levels, given the number of public institutions involved in the process of marketing, the information presented in this part is basically gathered from the Port Said Export Company for cotton, in Alexandria. In fact, it is beyond the scope of this study to examine in detail the marketing network of cotton, and the role of the various cotton institutions in Egypt.

2- The information gathered on the marketing of crops in the market of Shirbin was collected during a day spent in the Friday market with Luza, Zayrahum, and Halavitbun. The price of the merchandise advanced corresponds to that day spent in the market, during which the prices changed according to specific conditions. Therefore, the relevance of such an account lies in its illustrative aspects of the relationship between the various categories of merchants, and the means adopted by the paddlers to make the highest profit under the prevailing conditions.
Conclusion

This thesis has tried to argue that the process of social differentiation in the village of Batra is taking place under the dominance of merchant capital, through monitory and non-monitory relations. Furthermore, the foregoing discussion has shown that market relations are the sphere in which the small merchants and the big merchants are able to reproduce themselves, and for a few to accumulate wealth. The control of the marketing network has allowed certain families in the village to emerge as influential figures, and to replace the families who lost their control over the market. The thesis has also shown that the government institutions, through the increasing process of externalisation, in their turn, support the families in power, consolidate their economic positions through state policies, and allow them to acquire legal status, through the Agricultural Cooperative and the Bank of the Village.

On the other hand, the various categories of small merchants are able to reproduce their household unit through market relations, and under the supervision of the large field merchants who control the marketing network. The small merchants are essential for the accumulation of wealth by the large field merchants, since they represent cheap and available channels of marketing. The small merchants are also essential for the social status of the large merchants, as they constitute one of the supportive groups in the village. Non-commodity relations, thus, are as necessary as commodity relations, for maintaining the economic and the political position of certain influential families, and for the survival of the least privileged of the village. These non-monitory relations take a number of forms, such as
family alliances, exchange of services, unremunerated work, and social or financial support, which they undertake within the local structures of the village. Commodity relations are mostly adopted at the level of the external relations of the household unit, more specifically in the diversification of the economic activities.

Likewise, under a highly commodified system, non-monetary relations are adopted at the level of the market of wage labour, from which the labour force for agricultural production in Bafor, is drawn. It has been shown that agricultural operations do not absorb the available number of agricultural labour year-round. More specifically, it has been argued that the demand for wage labour is concentrated over a specific period of time, during which a shortage of labour, in fact, takes place, while during the rest of the year, underemployment prevails given the seasonal nature of agricultural operations. Thus, in the absence of mechanisation in Bafor, and under these conditions, the role of the contractor of wage labour becomes important in providing maximum working periods for the agricultural workers. By monopolising certain areas of work, the contractor benefits from the terms of agreements. He hires labour under specific terms, according to which he offers them low wages, as he relies on the cheapest labour on the market, peasant women. It is, thus, from the difference of the value of the work extracted from the workers, and the low wages he offers them, that the contractor makes his profit. In other words, it is through commodity relations, and through his extensive external relations with private enterprises, government companies, and absentee landowners, that the contractor of wage labour is able to make profit. Thus, for the contractor, who is at the same time a small peasant merchant, the diversification of his economic activities is an important factor for the expansion of his enterprise.

On the other hand, wage labour who have no resources but their wages, have recourse to a number of relations to compensate for the periods of
underemployment, and to reproduce their household in the face of the low wages which cannot meet the increasing costs of living. Among the forms of survival strategies which are adopted is the minimisation of cash expenditures through the unpaid work of the members of the household. Similarly, the contribution of women, and the participation of children in the reproduction of the household is indispensable. Given the limited resources available in the household unit, which limits access to the market, cooperation between the members of the family and between other households is vital.

The sexual division of labour adopted is a means of survival under harsh economic conditions. It has been shown that women undertake a wider variety of work on the labour market than men, in addition to the organisation of the household economy. Women’s possibilities in the weekly markets, whenever they can sell a product, are higher than those of men, who are involved in different economic activities. The sexual division of labour among labour is not rigid; it is adapted to meet the socio-economic conditions, and it changes and varies accordingly. Similarly, the forms of non-monetary relations are dynamic, adapting themselves to meet the different socio-economic conditions of the household unit, as well as the conditions in the labour market. Thus, the combination of non-commodity and commodity relations by the wage labourers, and the occasional diversification of their economic activities, contributes only to their survival and their reproduction.

It has been argued, in the course of this study, that the organisation of agricultural production is not isolated from market relations. In many respects, the forms of production are determined by marketing since it is at this level that the small peasant producer realises the profit. Under state agricultural policies, which are marked by the distinction between the free cash crop pricing system and the compulsory crop pricing system, the peasants adapt their forms of organisation depending upon the available members of the household unit. The peasants find
ways of reducing cash expenditures, while intensifying and diversifying their agricultural production.

Thus, depending on the above mentioned conditions, the small peasant producers organise their production, which in most cases is destined for the market and for the household consumption. The various forms of organisation discussed in the thesis illustrate the specific nature of the process of agricultural production, and the different forms of commodity and non-commodity relations adopted by the small peasant producer in order to ensure the reproduction of the household unit. Likewise, the study of the organisation of agricultural production illustrates the extent to which the peasants have recourse to a number of strategies in order to exploit to the maximum the size of the holding, given government policies. The regional ecological diversity of the territory, as shown, is another factor conditioning the extent to which the peasant producer can intensify or diversify agricultural production. Therefore, the diversification of agricultural production, under the specific ecological conditions, and the state agricultural policy, have generated differences between the peasant producers. In this context, a number of commodity and non-commodity relations of production underlie the process of production. The use of unpaid labour from the members of the household is a common form of organisation. The peasants often cooperate on agricultural operations in order to reduce cash expenditures. Coordinated with these non-commodity relations, monetary ones are also necessary for the production and reproduction processes of the various socio-economic categories, yet with differing significances for each category.

As suggested in the main argument of the thesis, the forms of access to land and water are determinant factors in the organisation of agricultural production. It is has been shown that there are a number of forms of access to land which reflect both the ecological specificity of the territory, and the strategies adopted by the
present to organise their economic and social reproduction. The forms of access to land are based, on an oral agreement as in the case of seasonal rent and sharecropping, or are officially registered on the basis of a written contract. The forms of access to land reflect the diversity of the relations, both monetary and non-monetary relations that exist among the peasants. The relations underlying the forms of access to land are always adopted according to the organisation of production on the level of the household unit, and state policy. Thus, the forms of access to land are dynamic, and change according to local and national conditions. For example the prevalence of a specific form of access to land, such as sharecropping, in one part of the village of Batra, reflects the historical development of this part, where the market forces determined the type of the cultivated crop, cotton, and where investments were made by large landowners. Therefore, the dynamic of change of the the forms of access to land cannot be traced, and analysed on the basis of aggregate data, and statistics and, it is, thus, misleading to base an argument on such limited information.

Likewise, the forms of access to water for irrigation are vital factors in the process of production. The irrigation system is one of the means by which the state can exercise control over agricultural production. Therefore, within the ecological specificity of Batra, a number of forms of access to water have been illustrated. These forms are usually organised in cooperation with the peasants on the local level, and under the government irrigation structure. Thus, peasants irrigating in the same basin synchronise their turns of irrigation from the water pump, according to their location in relation to the source of the water. The different forms of access to water adopted by the peasants depend largely on the location of the land in relation to the source of water, and on the type of machines used for irrigation, or on the means by which the water is raised to the level of the land. In many cases, the machine was adapted to the local conditions of the area irrigated, in order to meet the various requirements of agricultural production
throughout the year. Therefore, the interaction between the government policies and the local structures in the village, at the level of access to water and land, is one of the important aspects in helping to ensure a certain balance in production, and a means of making use of the local structures for the implementation of state policies. However, within the diversified forms of commodity and non-commodity relations implied in the various strategies adopted between the producers, the differentiated socio-economic structure of the various socio-economic categories is reflected.

The examination of the various levels of production and marketing shows that the two levels are interrelated and cannot be treated in isolation. They constitute an entity, and each component was examined in detail in relation to the other components. As shown also, agricultural production and marketing operate under a state agricultural policy implemented by the Bank of the Village and the local Agricultural Cooperative. Each of these institutions plays a specific role by which state economic policies are translated to the level of the village. The Bank of the Village, as shown, promotes and assists the landowners in agricultural production, but basically in investments projects with high short term remuneration. Thus, the landless peasants and the small peasants who cultivate compulsory crops, derive the least benefit from the Bank’s services, while the large landowners and the big merchants who have the needed capital are the ones who benefit the most from the banking system.

Parallel to the Bank of the Village, the local Agricultural Cooperative plays an important political role in the village, despite its neutralised appearance, and its inefficiency in providing assistance to the peasants. The cooperative movement is no longer assuming the role for which it was created in the 1960’s, which was to protect the interests of the peasants and to coordinate their efforts in matters concerning agricultural production and marketing of the crops within a specific
political orientation. Instead, the local Agricultural Cooperative maintains the
tility of the powerful elements in the community. As shown, the local
Agricultural Cooperative ensures the stability of the system, and the loyalty of the
society to the regime, rather than expressing and protecting the interests of the
peasants.

It was shown how the village structure of Batra developed to meet the emerging
social and economic relations. The ecological diversity of Batra's environment has
been adapted, during different historical phases of Egypt's development, to meet
the new socio-economic needs of the various social groups of the village.
Similarly, the local social structure was reorganised, restructured, and changed in
response to the wider economic and political system. The development of
ownership, for example, and the emergence of new forms of relations, such as in
the case of the 'kheja' system, illustrates the dynamics of the rural society, and its
differentiated structure within the village, under a given historical development.

The differentiated structure of the community takes various forms under different
socio-economic conditions. In the 1970's, and more specifically during Ishtah, the
process of social differentiation was reflected in the features of the village, where
the division of the urban centre, into poor and rich quarters, as shown, became one
of the salient characteristics of the village. Marketing activities expanded to cover
all sorts of commodities, in addition to crops, and remain the main occupation of
the inhabitants, around which social relations revolve.

As shown and discussed in the present work, the authority of the village is in the
hands of a few merchant families that are not necessarily the large landowners, and
are not by definition directly involved in a governmental institution, but
nonetheless control the marketing network. These families have acquired a
legitimacy based on a social consensus in the village, that has been consolidated and
maintained by kinship relations, as well as being supported by the government
institutions. Yet, the above does not mean that the social relations in the village are stagnant. Change and transformation on the national scene have been reflected on the local political relations, and a few families have emerged on the village stage, while others are in the process of disappearing. As argued, the merchant families that are gaining ground in the village, on the basis of market relations, are themselves part of the dominant class on the national level.

It has been argued in this thesis that, historically, merchant capital is the dominant form of the Egyptian economy. It is not surprising, therefore, that in Batra it is also the prevalent form which enables a certain class of the society to acquire political power in the village. Similarly, as has been stressed repeatedly, the historical dominance of merchant capital in the Egyptian economy does not imply that the society is static. On the contrary, its dynamics lies in the capacity of the less privileged social groups to survive, and the capacity of the privileged groups to accumulate wealth.

In the context of the analytical framework adopted in this thesis, a detailed examination of the process by which the small peasant households adapt their strategies for survival in a socio-economic setting was required, given the limited number of studies concerned with such questions. In fact, to my knowledge there are presently only two studies which have such an orientation, that of Georg Stauth, 1983, and Kathy Glavanis, 1984. Therefore, it would have been difficult to undertake a similar detailed examination of the class structure and political power in Batra, as it would have required additional fieldwork, and the present study would have taken large dimensions. Thus, the present study requires a second stage of analysis, which would examine in detail the political and the social structure of the village, in order to analyse the class relations of a rural society within the wider economic and political context. It is hoped that these questions will constitute the subject of future research.
References

Abdel Fadil, Mahmoud

'Abdil Fadil, Mahmoud (Abdel Fadil, Mahmoud

Abdel-Khalik, Gouda

Abdel-Malek, Anouar

'Abdil Tawah, Mu'awya

'Abul Hassan, 'Abul Hassan 'Abdil Rahman
1982 'al-Bunut al-'Agabiyyah wa Daurihah', (The Foreign Banks and their Role), in al-Insilah al-Guzur... wal HasaT... wal Mustiqbal (Al-
Abouzaid, Hassan

'Amin, Gamal

'Amir, Ibrahim

'Aql, Badr

Aulas, Marie Christine

1980 'La proqvoimante modernisation', Le Monde Diplomatique, March.


1982b 'L'Egypte à la recherche d'une cohérence idéologique', Le Monde Diplomatique, December.

Aydin, Zulkuf

Ayrout, Henri
1958 The Egyptian Peasant, Boston, Beacon Press. (First published in French, 1938).
Bear, Gabriel

Bailey, Robert
1981 'USAID to Egypt's Farmers Misses the Mark', Mideast, 12-13.

Bata, Paul and Claudine Rulleau
1962 La vision pessahienca, Paris, Simbad.

al-Bashir, Shabban
1979 Masaru al-Talhut al-'Injimi li-Marzuz Talkha, (Project of Regional Planning in Talkha Centre) Cairo, al-'Azhar University, Faculty of Engineering, Department of Planning, B.Sc. Graduation Project.

Bezancon, Jacques
1957 L'homme et le nil, Paris, Gallimard.

Burns, Eliaor

Cox, Graham, Philip Love and Michael Winter

Croucherley, A. E.

Debb, Marius

Eisa, Mohamed Adri-Salehe
1984 'Un modèle de croissance économique non-industriel', Le Monde Diplomatique, May.

El-Ghony, Rizk M.
1968 'Economic and Institutional Organization of Egyptian Agriculture',
in Egypt since the Revolution, ed. by P. J. Vetickis, London, George Allen and Unwin L.T.D.


El Far, Zaki 1921 al-Qutu (Cotton), Mansura, Matha'at al-Nil.


1984b Non-Capitalist Relations and the Small Peasant Household in Rural Egypt, University of Hull, Unpublished Ph.D. Thesis.
Glevanis, Pandelis
1983 "The Peripheral State and Economy in the International Division of Labour. The Salaf Era in Historical Perspective", in The Arab World and the International Division of Labour, Kuwait, Kuwait University Press: 181-204.

Glevanis, Kathy and Pandelis Glevanis

Glevanis, Kathy and Pandelis Glevanis

Glevanis, Kathy and Pandelis Glevanis (eds)

Goodman, David and Michael Redclift

Hamdan, Gamal

1984 Min Kharitat al-Zira'a al-Misriyyah (From the Map of the Egyptian Agriculture), Cairo, Dar al-Shuruq.

Hana, Yusif
1984 'Quta Misr bayna 'I'tibarat Ziyadat al-Talab al-'Alami... wa Nafs al-Misrah al-Munzari'ah' (The Egyptian Cotton between the Considerations of the Increase in the International Demand... and the Decrease in the Cultivated Surface), Al-Ahram Iktisadi, (864): 32-33.

Hansen, Bent, and Samir Radwan
Himini, Nassim Henry
1983  Mari Grgis, Village de Haute Egypte, Cairo, Institut Français d'Archéologie Orientale.

Hopkins, Nicolas S.
1983  Agrarian Transformation in Egypt, Cairo, The American University in Cairo Press. (First published in the USA).

Husin, 'Adil

Ikr Ram, Khalid

al-‘Irani, Muhammad

Issavi, Charles

‘Iz al-‘Arabi, Rustu\d

Kurayyin, Karima
1982  ‘Tava‘ al-Dabhi wa| Da‘m’ (Distribution of Income and Subsidies), in Gouda Abdil Khaliq, ed., al- Infatih al-Guzur... wa|-Hasad... wa|-Mustaqbal, (The Open Door Policy. The Roots... and the Harvest... and the Future), Cairo, al-Markaz al-‘Arabi Ilil-Babth wa|-Nashr: 319-54.

Lawrence, E.Y.
1956  Egypt and the West: Salient Facts Behind the Suez Crisis, New York, American Institute of International Information.
Long, Norman


Long, Norman


Long, Norman and Jan Douwe van der Ploeg

Long, Norman and Jan Douwe van der Ploeg

Mar'i, Sayyid
1970 al-Zirz'ah al-Misriyyah (The Egyptian Agriculture), Cairo, Ministry of Agriculture.

Ménessa, Leila and Pierre Lasserrière
1974 La Sanaa. Techniques et vocabulaire de la roue à eau égyptienne, Cairo, Institut Français d'Archéologie Orientale du Caire.

Mingione, Enzo
1985 "Social Reproduction of the Surplus Labour Force: the Case of Southern Italy", in Beyond Employment, Household, Gender and
Mirel, Pierre

Mitvali, Muhamed

Monaco, Elizabeth

Mubarak, 'Ali

Mutbhar, Ali

Mursi, Muhammed
1936 al-Milkiyyah al-'Anqariyyah fi Misl va Tataturiba al-Tarikhi min 'Abd al-Farizah bata al-'An, (The Historical Development of Landed Property from the Period of the Pharaohs to the Present Time), Cairo, Nuri Press.

O'Brien, Patrick

Owen, Roger

Pléple, Olivier and Gilles Richard
1983 L'agriculture dans la zone rizicole du Delta du Nil (Egypte), Cairo, C.E.D.U.S.T.
van der Ploeg, Jan Douve

Radwan, Samir


Ra'uf Abbas, Hamid

Redclift, Nannake

Redclift, Nannake and Enzo Mingione

Rizl, Hassen

Richards, Alan

Rivlin, Helen
1958 The Agricultural Policy of Muhammad 'Ali in Egypt, Cambridge, Harvard University Press. (Translated into Arabic by 'Abdel Rahim Mustafa and Mustafa al-Husini under the title of 'al-'Iqtisad wa l-'Idarah fi Misr fi Mustahal al-Qarn al-Tas'ashar', Cairo, Dar al-
Rothstein, Theodore

Sa'd al-Din, ‘Ibrahim and Others
1985 Daw’ al-‘Agroiya’ va Daw’ al-Furara’ (Subsidising the Rich and Subsidising the Poor), Cairo, al-‘Abati Journal.

Seab, Gabriel

de Sainte Marie, Christine


1989 'Techniques d'apport d'eau et pratiques paysannes en Egypte', Études Rurales, special volume, forthcoming September.


Saddon, David

Sirkli, Muhammad ‘Ali’ al-Din
n.d ‘Integ al-Batatis (The Production of Potatoes), Cairo, al-Gam'iiyyah al-Ta'awuniyyah li-Mundigi al-Batatis.

Smith, Joan Immanuel Wallerstein and Hans-Dieter Evers
Smith, Georg

Stork, Jon

Van der Gaast, Peter

Wali, Yusif

Waterbury, John

Wood, Charles

Zeinoul, Malak

al-Zayati, No'man

Reports and Statistics

al-'Abali
1980  Wednesday, 16th of November.

Al-Ahram Iktisadi
1984a  'al-'Urūz al-Miṣr biyya Da'īm al-Mustabīlīk... wa Da'īm al-'Iqtisād al-Qawma (The Egyptian Rice between the Subsidy of the Consumer... and the Subsidy of the National Economy), 9th of April: 28-29.

1984b  'Quta Mīr Bayyān 'l-Thabrat Ziyadat al-Tālāh wa Ṭālāh al-'Ālaami wa Nāsq al-Miṣḥaḥ al-Munzārī'ah, (The Egyptian Cotton between the Increase in the International Demand and the Decrease in the Cultivated Area), 16th April.

Akher El Yem
1984  12th. of March

Central Agency for Public Mobilisation and Statistics. (C.A.P.M.A.S.)
1987  Bayyān 'an 'Adīd al-Sūrat al-Mīsāb al-Nūr' wa 'Amlīn bi'l-Ārsīṭāb al-Muḥṭātīfah li-Qaṣīdat Bātra, Marʿākz Tālībāt, Muḥṣāribat al-Danāḥīyya (Data on the Number of the Population, According to the Type and the Workers in the Different Activities, in the Village of Bātra, Tālībāt Centre, Danāḥīyya Governorate), Cairo.

New Left Review

Port Said Company for Cotton Export

Principle Bank for Development and Agricultural Credit

World Water
1989  'A Case for Drip Systems. The Nubariya Scheme in the Middle East is being Used as a Model for Drip Irrigation', World Water, May.