An analysis of the appropriateness of management control systems in Iraqi state industry, with special reference to the Iraq cement public company

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AN ANALYSIS OF THE APPROPRIATENESS OF MANAGEMENT CONTROL SYSTEMS IN IRAQI STATE INDUSTRY, WITH SPECIAL REFERENCE TO THE IRAQ CEMENT PUBLIC COMPANY.

by

GEORGE Y. HALABY

A thesis submitted for the degree of Doctor of Philosophy.


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FOREWORD

After the oil industry, the Iraqi Cement Industry is one of the largest industries within the dominant public sector of the Iraqi economy, and its future development is vital to the wellbeing of the country as a whole. Iraqi State Industry as a whole faces management problems caused by rapid growth within a still largely unindustrial society. The aim of this thesis is 1) to specify these problems and 2) to bring the expertise and experience of the modern industrial world to bear upon their solution. However, neither the theory of management control systems developed in the West, nor the Iraqi State industry in general or the Iraq Cement Public Co. in particular, exists in a vacuum, and the transfer of western ideas to the social culture of Iraq is no straightforward and easy matter. To make the intelligent application of these ideas possible it has been necessary to relate the management practices of the State industries and I.C.P.Co. in particular to its present environment and past history, and similarly to relate management experience and ideas briefly to current practice within the nationalized industries in the U.K. and Eastern Europe. It is only upon this broad basis that sensible recommendations can be made for the future development of the Iraqi industry and specifically the I.C.P.Co. and, as may be seen from Chapter VI, these recommendations involve large questions of social education just as much as adjustments within the Company itself.

A work of this kind, involving a survey of the current theory of management control systems, necessitates an extensive account of the opinions and findings of others. Every attempt has been made
to cite the source of ideas culled and used, but the use to which they have been put is, of course, my responsibility. The two field investigations I have done into management practices in the state industries of Iraq as a whole, and the I.C.P.Co. are to provide, the bases for Chapters II and IV. I am, however, personally responsible for the viewpoints I have presented or expressed through the thesis, or for the recommendations summarised in Chapter VI for the integration of developed countries expertise into the fabric of the I.C.P.Co. in particular and thus into the Iraqi government's managerial policy and strategies.
SYNOPSIS

As stated in the Foreword, this study focuses on the problem of finding ways to help in raising the efficiency of Iraqi State Industry in general, and of the Iraq Cement Public Company in particular, by applying appropriate concepts of management control.

In spite of the new tools and systems of management control now available, and despite the general recognition that has now been given to many of the principles of management, nevertheless, very little effort has been made by the top people employed in Iraqi State Industries either to develop a unified concept of management control encompassing both new and traditional approaches, or to formulate an integrated approach to all kinds and levels of control situations and problems. The result has been a somewhat haphazard approach to organising and operating a system of control within state industry as well as in the Iraq Cement Public Company. This situation has led to widespread frustration and dissatisfaction among the managers of these organisations.

This study attempts to provide some guide-lines for solving these problems. It is organised in the following way:

Chapter I is a summary review, which considers the background of Iraqi Industry from the economic and managerial standpoint.

Chapter II contains the results of field research in Iraq, conducted by interviewing several managers in seven different Industrial State Companies. This research revealed that inefficient control systems are utilised by all the companies visited.

Chapter III is an analytical survey of literature concerned with the theory of Management Control Systems, and with management
experience. This enables inferences to be drawn from the difference between what is generally accepted in Management Control, and the practices as tested specifically in the Iraqi Cement Public Company and in Iraqi State Industry in general.

Chapter IV deals with field research in the Iraq Cement Public Company. The examination of the current Management Control Systems and the level of training given in the Company, showed that there was a lack both of good control systems, and of adequately trained personnel.

Chapter V focuses on the comparison between the principles and experience drawn from the survey of literature on Management Control Systems (Chapter III), and the practical working of Management Control Systems as indicated through the empirical research in the Iraq Cement Public Company (Chapter IV) and in Iraqi State Industry in general (Chapters I and II). It was found that the practice at factory level did not generally follow the principles laid down at this level, but the differences between managerial practices in the Iraqi policy and in the State-owned industry of Eastern Europe, are much smaller.

Chapter VI summarises the study and offers my conclusions.

The general recommendation of this study is that the Company should so develop its practices, that it may adapt modern principles of management to suit its own environment, and moreover that it should also create a climate which will stimulate the successful use of the Control System it has adopted.
ACKNOWLEDGMENTS

In the process of research and of writing this thesis, I have received help from numerous people. Mentioning them here is the least I can do to express my appreciation.

I would like to extend my gratitude to my supervisor, Mr. Jeffrey Rackham, for his supervision and support. I am also grateful to: Professor Charles Baker, Director of the Business School for his constructive advice, and to Dr. Mike Reynolds, Director of the Ph.D. programme, and Mr. Peter Manley, Director of the M.Sc. programme for their comments and criticism. My gratitude to Mr. John Machin, Dean-Designate of Faculty of Social Sciences for his vital help in developing both the questions of Exhibit one and the questionnaire of the main study. The staff of Durham University, Computer Unit, especially Miss Judith Rattenbury, also deserve my thanks for their help in processing the data and computations.

Thanks are due to the Iraqi Ministry of Higher Education and Scientific Research for the provision of Scholarship, without which, the author could not do this work.

Over a hundred Iraqi managers in several Iraqi public industrial organisations took the time and trouble to answer my questions, and to fill out the questionnaires, and I would like to express my gratitude to them.

This thesis would not have been completed if it had not been for my understanding wife, Awatef, who managed to prod me to completion, and to our daughters, Dalia, Dina and Hala, who in spite of their troublesome ways, were an incentive for me to work.

George Y. Halaby
26th June, 1978
CHAPTER 1.

INTRODUCTION

The cement industry has now become the second largest industry in Iraq. As a background to my study of it, I will in this chapter, discuss the Government's efforts to develop the economy and promote better management of state industry since nationalisation. The chapter includes a brief description of how the public sector was established, including details of the establishment and growth of the cement industry. There is a discussion of the investment programme, which was assisted by the vast increase in revenues, especially after the nationalisation of the foreign oil Companies. The Government's attitude towards the management of the public sector is discussed, and an examination made of the reasons which persuaded the Government to establish a public sector. A study is made of how the public sector itself sees the role of management Control, and the current educational situation in Iraq.

1. The Background of the Cement Industry

The cement industry in Iraq was established in 1936 when the Iraqi Cement Company was founded with a capital of two hundred thousand Iraqi Dinars (1). However, the Second World War prevented the completion of the building of the plant, so actual production commenced in the middle of October, 1949 (2) with an output of 80 thousand tonnes annually.
The Company undertook to double its output by setting up three other kilns, which were completed in 1952, 1953 and 1955 respectively. The overall output, therefore then reached around 400 thousand tonnes annually.

The growth in output was reflected in an increase in company capital which, by October 1954, amounted to ID,1,250,000 and by August 1955 amounted to ID,1,750,000. By 1962, just prior to nationalisation, output had reached ID,2,625,000. The period between the years 1953 and 1955 saw an important development in the Iraqi Cement industry. Since then it has begun to produce two new types of Portland Cement, sulphate resisting cement, and the low heat cement, in addition to the ordinary one. As a result of the rapid expansion of building activities and the increase in local demand, some businessmen in Mosul city decided to establish the Rafidain Cement Company. Badoosh village was chosen for the site of its factory, which commenced production in 1956 with two kilns, with a production capacity amounting to 200 thousand tonnes annually (3). The success which was achieved by the first Company and the profit realised by the second company, was responsible for attracting private investors to this developing industry. Thus the Purat Cement Company and the United Cement Company were established. The factories commenced production in 1957 and 1959 respectively. The production capacity of each of them is about 200 thousand tonnes annually, making the Iraqi capacity around one million tonnes annually by the late 1950's.

(2)
The Iraqi Government (through the Development Board in 1956) had also founded two other cement factories, to provide for the needs of the Development Board's projects in the northern region, and particularly for the dams and barrages. The first is located in Serchinar, the other in Hammam al-Aleel. The production capacity of each is between 100-200 thousand tonnes annually. The Government played such an important role even in early days, before nationalisation, which took effect on the 14th July 1964, because of:

(a) lack of private capital to invest in such large project, especially in the northern region, where the State needed the cement urgently to build dams and barrages.

(b) Inability of the private sector to secure enough competent managerial personnel to run the project.

(c) The Government's wish not to be dependent upon the private sector to supply the expanded state structural projects.

(d) Desire of the Government to co-ordinate projects.

(e) Political objective of the Government, wanting control over the commanding heights of the economy.

The State cement factory of Serchinar commenced production in 1957, while the production of Hammam al-Aleel cement factory was delayed until the year 1962. Since then the production capacity of Iraq has been estimated at 1.25 million (one and a quarter million) tonnes annually, and the capital invested in this industry has exceeded 12,500,000 (twelve million, five hundred thousand Dinars). (4)
On the 14th July, 1964, the Iraqi Government, according to Law No. 99 of 1964, nationalised all banks, insurance, reinsurance companies, major commercial companies and major industrial companies, including the cement industry, and founded the "State Establishment of Industry", which was to regulate and control the industrial sector.

The Iraqi Government took this measure because it felt that a strong and independent economy needed a sound industrial base, and a national outlook that would ensure industrial growth and serve the interests of the masses. Because of the earlier neglect of industry and the dominance of foreign monopolies in the financial trading sectors of Iraq, domestic private entrepreneurial capabilities had not developed sufficiently to meet the challenges of Iraq's jump into the industrial sphere. As the principle of social justice required the dis-establishment of private monopolies, which would come to dominate the social and political life of the Country, so it was inevitable that the public sector would play a big role.

A few months after the nationalisation took place, and before the end of year 1964, the Furat Cement Company, the Iraq Cement Company and the United Cement Company were merged, forming the Iraq Cement Public Company. The Rafidain Cement Company and Hammam al-Aleel Cement Administration were merged in 1965 to form one company, the Mosual Cement Public Company. It was decided to merge Iraq's cement companies into large units as figure No. 1 shows, for the following reasons:
(a) The geographical closeness in location of the merger companies meant that administrative costs could be reduced.

(b) Each of the merger companies has technical expertise in production, sales, distribution or the purchase of raw materials from local or international markets. This will help in raising the productivity of the merged cement companies, as they complimented each other.

(c) It was also felt that after the merger, the individual companies could become more efficient in fulfilling both their internal and external market obligations, by co-ordinating their efforts to achieve this objective, than if they had remained independent.

<table>
<thead>
<tr>
<th>The Companies before the Merger</th>
<th>The Companies after the Merger</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iraq Cement Company</td>
<td>The Iraq Cement Public Company</td>
</tr>
<tr>
<td>Furat Cement Company</td>
<td></td>
</tr>
<tr>
<td>United Cement Company</td>
<td></td>
</tr>
<tr>
<td>Rafidain Cement Company</td>
<td>The Mosul Cement Public Company</td>
</tr>
<tr>
<td>Hannam al-Aleeel Cement Company</td>
<td></td>
</tr>
<tr>
<td>Serchinar Cement Company</td>
<td>Serchinar Cement Company</td>
</tr>
</tbody>
</table>

Figure No. 1.

The thriving activities of the building construction industry at home and the continuous increase in demand for Iraqi cement abroad led to steady increase in production capacity in the 1960's and 1970's.
As a start, production was doubled at the Furat factory in 1969, reaching 400 thousand tonnes annually. A much larger expansion was also undertaken, including the doubling of the outputs of the Serchinar factory and the Hammam al-Aleel factory, resulting in a total output of up to 200 thousand tonnes annually at each factory. This goal was realised in 1973. Another expansion to the Furat Cement factory was also carried out in the middle of 1974, adding about half a million tonnes to make the total capacity to about 900 thousand tonnes. This was achieved by making it possible for the clinker production stage to take place at the Samawah site, while grinding and filling could be completed at Um Qasr, thus facilitating export operations to the Arab gulf. The expansion policies have also included the establishment of new production units. Cement factories have been founded in the cities of Kufa and Falluja, with a combined output of 200 thousand tonnes annually. The Kufa factory started production in September 1974, while the Falluja factory was operating by the beginning of 1975. Hence the overall volume of cement capacity today amounts to almost 2.7 million tonnes annually, (see figure No. 2).

The Government, through the Planning Council, decided in the middle of 1974, on a number of proposals affecting the Cement industry, which are detailed below. (6)

1. To expand the Falluja Cement factory by adding two kilns of 200,000 tonnes capacity. These were to replace the old No. 2 kiln of the Baghdad factory, whose capacity was 100,000 tonnes.

*An Iraqi port on the Gulf.
This development was to be completed before the end of 1975. The rest of the kilns in the Baghdad factory will probably be demolished in 1980, and the factory will begin to specialise in milling.

2. To expand the Rafidain Cement factory by adding a kiln of 200,000 tonnes annual capacity.

3. To expand the Hamman al-Aleel Cement factory by adding a kiln of 500,000 tonnes annual capacity.

4. To construct the new Kufa Cement project beside the existing plant, with an annual capacity of 2,000,000 tonnes, provided by 4 kilns of 500,000 tonnes annual capacity each. The Government started to construct such over-standard size kilns, as these would lead to a decrease in the costs of kiln productivity. A plan was published showing the development of the projected capacity of the cement industry until 1980.

The Iraqi cement industry was developed at a rapid pace under the plan, with production increasing from 2.7 million tonnes to about 6 million tonnes by the end of 1973 (7).
Development of the Production Capacity of the Cement Industry in Iraq

Figure No. 2 (7)
The average annual consumption of cement in Iraq will be close to that of the industrialised countries, approaching 200 kg. per head of population in 1980 (3). The industry will be able to take its place in supplying the requirements of national development projects. Local demand will be in the region of 3 million tonnes per year from 1980, and in the export field the cement industry will aim to export a further 3 million tonnes by the same date (9).

2. The role of the cement industry in the economy of Iraq.

The Iraqi cement industry is considered one of the largest and most developed processing industries in the country, apart from the petroleum industry. The size of the workforce in the three state cement industries was 3,500 persons by the middle of 1973, and the amount of total sales for the fiscal year 1972-73 was about ID.12 million, while the annual output of this industry was, by 1973, around 2.1 million tonnes. Moreover, cement products are second only to petroleum products in Iraq's industrial exports, and in some years cement exports have amounted to 500 thousand tonnes.

The Iraqi cement industry has had no problem in selling its products since the beginning of its production, both domestically and in export markets. In 1951 Iraq started to export its cement to foreign markets, initially to the Gulf states, with 20 thousand tonnes going to Kuwait. In 1952-54 the cement export stopped, because of the high local demand as a result of construction activities in the country, and in the beginning of 1955 Iraq even had to import 69 thousand tonnes. In 1956 the situation changed, allowing the export of 33 thousand tonnes from surplus production, as a result of beginning products of the Rafidain Cement Company in Mosul, and the completion of the Iraq Cement Company expansion.
The founding of the "Cement Selling Bureau", in accordance with Law No. 41 of 1961, regulating the cement trade, has had its effect on the adjustment of local consumption, and has brought about the merging of all the cement production in a domestic cartel to regulate the distribution of cement in the local market. The Bureau is part of the state organisation for construction industries, and has offices in every public cement company. Exports of Iraqi cement are not controlled by the same regulation as that used in the home market. Control of export is carried out by the State Export Organisation, part of the Ministry of Trade.

The cement industry has, in general, tended to escalate, as a result of increased activities in the building industry and the increase in governmental demand as large developing projects were implemented. There is likewise an expansion in the usage of cement in the various construction industries. For example, in the manufacturing of panels, asbestos, pipes, floor tiles, mosaic, concrete blocks and pipes and other similar products.

Although there has been mostly a rising local demand for cement, there have been considerable fluctuations, in 1957 for instance, output of the cement companies was well in excess of local consumption, which ultimately caused a crisis of production disposal, as a result of keeping the cement factories working at full capacity. This situation culminated during the years 1959 and 1960. In consequence, the private companies and public factories started to co-ordinate their efforts, aiming at expanding the external markets for cement.
Prices were reduced and the low price and high quality of the product meant that it soon started selling well overseas. Cement is, however, a heavy material to transport, which increases costs, but most of the countries which buy Iraqi cement are nearby in the Gulf. This location helps the export operations. The increase in the export quantities continued progressively, until it reached its peak in 1967-68, when more than half a million tonnes of cement were exported. This increase in cement export was not the result of the development of new markets however, but a consequence of increasing demand in the traditional markets of the gulf. Nor were exports given priority over domestic consumption requirements. Consequently, when domestic consumption rose in the late 1960's the export of cement decreased in contrast to the year 1967-68.

About 342 thousand tonnes were exported in 1968-69, and 316 thousand tonnes in 1969-70. Great importance was attached to the increase of the volume of production in the beginning of 1970 in order to meet the increased demands of local and foreign markets. Hence exports increased to 352 thousand tonnes in 1970-71 and to 354 thousand tonnes in 1971-72. The export of clinker and cement (unground cement) increased during the years 1972-73 and 1973-74, when it reached 399 thousand tonnes and 491 thousand tonnes respectively (see figure No. 3).
The major countries to which Iraq exported its cement are, in order of export quantities: Kuwait, the United Arab Emirate, Saudi Arabia, Egypt, Syria, Jordan, Pakistan, Srilanka and Iran. The previous expectation about the internal consumption of local cement, before the last 1974 construction boom, was around 2 million tonnes in 1980, with one million tonnes as the export target for the same year. Thus the previous goal for cement productivity capacities was three million tonnes by the end of the seventies (11).

The actual exported quantities of clinker and cement in thousand tonnes

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantities</td>
<td>316</td>
<td>373</td>
<td>458</td>
<td>395</td>
<td>527</td>
<td>342</td>
<td>316</td>
<td>352</td>
<td>354</td>
<td>399</td>
<td>491</td>
</tr>
<tr>
<td>The Change %</td>
<td>100</td>
<td>120</td>
<td>145</td>
<td>125</td>
<td>167</td>
<td>103</td>
<td>100</td>
<td>111</td>
<td>112</td>
<td>126</td>
<td>155</td>
</tr>
</tbody>
</table>

Figure No. 3 (10).

The old expansion plans have become out-dated in the aftermath of the last 1974 construction boom, and new production targets have now been adopted. The Ministry of Industry and Mines now expects demand for cement to increase as follows:
<table>
<thead>
<tr>
<th>Year</th>
<th>Local demand expectation on different cement (in 1,000 tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>1820</td>
</tr>
<tr>
<td>1976</td>
<td>1957</td>
</tr>
<tr>
<td>1977</td>
<td>2103</td>
</tr>
<tr>
<td>1978</td>
<td>2259</td>
</tr>
<tr>
<td>1979</td>
<td>2427</td>
</tr>
<tr>
<td>1980</td>
<td>2608</td>
</tr>
</tbody>
</table>

Figure No. 4 (12)

The Ministry preferred to add 20% to the above expectation figures as a reserve to cover the expected increase on the crude oil prices. This means the local demand for cement will be around 3 million tonnes in 1980. The same Ministry expects the possibilities of export in the year 1980 to be around 3 million tonnes, as explained in figure No. 5.

<table>
<thead>
<tr>
<th>The Region</th>
<th>Quantity expected export in thousand tonnes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arab Gulf Countries.</td>
<td>2,600</td>
</tr>
<tr>
<td>Africa and Asian Countries.</td>
<td>100</td>
</tr>
<tr>
<td>Europe and Mediterranean Countries</td>
<td>250</td>
</tr>
</tbody>
</table>

Figure No. 5 (13)
According to statistical expectations based on individual consumption trends and the increase of individual income during the period 1964-72, the Ministry of Industry and Mines expects that the local demand for cement in 1985 will be around three million and three quarter tonnes (3,749,000) (14).

Fluctuations in the demand of cement are caused by different factors, the most important are:

(a) political stability in the country
(b) rising general living standards
(c) Governmental investments in the various sectors.

For instance, the highest percentage of Iraqi cement was exported in the period of 1967-63 after the Arab-Israeli war, which had the effect of discouraging the establishment of new Governmental projects and discouraging private people from building houses. This low local consumption of cement enabled the Government to export all surplus production of the local manufacture. In contrast, after 1973-74 Iraq experienced an economic boom, as a result of a sudden increase in the Government revenue from the rising prices of crude oil, and as a result the Government started to build many new projects, which almost eliminated unemployment, while the standard of living of a large proportion of the people started to rise, especially the entrepreneurs and the contractors, who were building for the Government.
Mortgage Bank easy terms helped civil servants to build their houses on the resident land which they got through residential societies at very cheap prices.

Cement pricing is controlled by the cement selling bureau, and as the government regards cement as an essential commodity for the people, pricing takes account of social needs rather than profit. All these factors made the local demands for cement so high that there was no room for export. The factors that encouraged the government to put such a low price on cement are that,

(a) most of the factories work with 3 shifts, and sometimes over-work the plant, i.e. produce more than the quantity stipulated by the manufacturers of the plant.

(b) About 95% of the raw material is available locally.

(c) Recently the government has started to install big-capacity cement kilns in order to decrease the costs.

(d) Along with the above specific factors, cement manufacture is one of the oldest industries in Iraq, the accumulated techniques and experiences gained have made it one of the most intensely productive.

Since 14th July 1964, when all the major industries were nationalised, including the cement companies, their financial activities have come under state control, which is exercised by the Ministry of I. & N.
Every state cement company has its own working capital, and as the investment capital consists of fixed assets with the working capital, this means that every state company finances its industrial activities, either by its own self-produced profit, or by getting loans or grants from the government central budget, if the Ministry of I. & M. believe that there are practical reasons to offer such aid. The investment expenditure of the central government sector in the economic plans in 1974 amounted to ID,40 million (15), allocated as loans granted to government departments and organisations. The investment decisions are taken after defining the available financial resources by the Consultation Council for Industrialisation in the Ministry of I. & M. This council consists of presidents of state qualitative organisations and two deputy ministers, and is chaired by the Minister and it is considered to be the highest managerial authority in the Ministry of I. & M. It has the power to take decisions on all short-term general investment and production for the whole public industrial sector, after considering the reports of the Boards of Directors of the state organisations. These Boards consist of the General Managers of public industrial companies belonging to the organisation concerned, and each is headed by the president of the organisation. Each board draws up its reports according to the views and ideas of the public industrial committee's consultative board (16).
The consultative committee crystalises its reports after combining its views with the views and ideas of the Company's middle management level.

The long-term general policies on financing, production and investment, which embrace the public industrial sector as a whole as well as all other public sectors, are drawn up by the high planning council at the Ministry of Planning. This consists of the Ministers of I. & N., Planning, Finance, Trade and members of the Economic Affairs Bureau in the Revolution Command Council. The high planning council is headed by the vice president of the Revolution Command Council. The major task of this council is preparation of a general detailed economic plan; and annual plans, determination of economic, fiscal, monetary and production policies, determination of method, and selection of the agencies to implement the projects of the plan. For the public industrial sector, the council determines and approves the suggestions prepared by the consultation council for industrialisation. Its suggestions are made in the light of preliminary studies about the project's economic and technical validity. The projects are assessed in the context of the major industrial development plans if the costs exceed one million Dinars.

(17)
The Consultation Council for industrialisation formulates its investment plans, and makes suggestions about financial, production and investment policy. In addition, it sponsors a few general studies which are carried out by experts. From these studies and reports a reasonable picture of the requirements of the state industry can be drawn, on which the consultation council can base its decisions.

The belief that the state sector must neglect profitability when considering its investments, is not sound or practical. It is, of course, only right that there should be social and political objectives, as well as profitability targets in the state sectors, but profitability represents an index of management capability in using the economic resources which are placed at its disposal. In addition, profits in the public companies are considered as a main means to finance new expansions and rising productivity. Reasonable profits do not clash with the nationalisation policy of the State. Basically the public economic projects produce profits to finance new economic investments and ultimately raise national income, and to build a strong material base for Iraq's society.
Even in the Soviet Union reasonable profits have special importance as A. Nove puts it:

"Considerations other than direct profit expectations do influence actions of managers in the west, and profits do affect, to some extent, the behaviour of managers in the U.S.S.R." (17)

A.N. Kosygin elucidated it more frankly:

"Improvement of the forms and methods of planning will make it possible to tackle the problem of strengthening and developing the system of cost accounting in a new way. Lenin stressed that each enterprise must work on the basis of its profitability, i.e. it should completely cover its expenditure from its income, and should make a profit." (18)

Iraq suffers from low productivity in almost all of its state industrial companies, and this is why few of them have produced a profit, as we will notice in the next chapter. The government decided to take measures to raise productivity in all state sectors. It found that one of the major remedies to overcome this serious problem is to ask every president of a state organisation to be responsible and to produce a reasonable profit.

As the Vice President of the Revolution Command Council said to the presidents of all state organisations, when they met in September 1976 to discuss the factors that affect low productivity:

"How can you ask to increase salaries and wages, when most of your organisations suffer from losses. Money incentives depend on profits from production, and profits imply good quality and high quantity." (19)
However, lack of incentives and profits is not the only reason for low productivity, there are other factors like administrative inefficiency, over-ambitious plans, technical and political factors. Lack of profits is probably a consequence rather than a cause. Excessive centralisation, low morale and lack of any sense of participation in constructive work also badly affect the efficiency of the cement industry.
2. How the Public Sector was Established in Iraq.

On the 14th July, 1964 the Iraqi Government, by issuing Law No. 99 of 1964, nationalised all the following companies: Insurance, Reinsurance, Commercial Banks, major Commercial Companies as well as most of the main Industrial Companies. In the same year the Government issued Law No. 98, which established a special organisation called "The Economic Establishment" which took the responsibility for managing the Nationalised Industrial, Commercial and Insurance companies. Also to be attached to the Establishment, according to the law stipulating its foundation, were all the Government industrial boards, which had already existed before the issuing of the nationalisation decisions. Then the Government formed the "State Organisation of Banks" to take responsibility, together with the Central Bank, for managing both the nationalised commercial banks and the Rafidain Bank, (the latter had been founded as a Government bank long before the issuing of the nationalisation decree).

The Economic Establishment was abolished by the law concerning "State Establishments", No. 66 of 1965. Its responsibilities were distributed between three organisations - the State Organisation of Industry, the State Organisation of Commerce and the State Organisation of Insurance, which together with the existing State Organisation of Banks, made a total of four organisations.
These four organisations were considered from that date to be the controlling body of the public sector. In all, 27 private industrial companies and 10 State Industrial boards were taken over by the Economic Establishment between 1964-65, and were subsequently attached to the State Organisation of Industry, when Economic Establishment was abolished. (21)

In this manner the construction of the State Organisation of Industry was completed, and the area of the organisation's activities became familiar to the companies attached to it. Although there were several deficiencies in it's activities, such as the pursuit of different types of economic and managerial activities which were not dependent upon qualitative specialisation, the existence of the organisation could help to develop greater efficiency and productivity while making the control system and supervision of the productivity of the industrial companies more effective. A detailed discussion of this will follow in the section after next.
The Organisational Structure of the State Organisation of Industry

The transfer of the property of the industrial companies in the mixed and private sectors to the public sector, and the foundation of the State Organisation of Industry (S.O.I.), has forced the two sectors to establish a soundly based developing industry along the lines set out in the industrial plan. Thus a number of laws and directives were issued dealing with the reorganisation of the public industrial sector and the creation of new organisations. The S.O.I. consists of the following departments:

1. the Department of Administrative Affairs
2. the Department of Technical Affairs, including the following organisations:
   - the Weaving and Spinning Organisation
   - the Construction Products Organisation
   - the Shoe and Leather Organisation
   - the Cigarettes and Related Manufactures Organisation
   - the Organisation for Foodstuffs, Oil and Associated Products and Washing Materials
3. the Department of Control and Direction.

This comprises the directorate of auditing, the directorate of inspection, the directorate of costing and the directorate of marketing.

4. the Department of Industrial Relations.
The responsibilities and aims of S.O.I. have been defined as:

(a) To inspect all Industrial Companies attached to it.

(b) To assist in solving personnel problems in the industrial companies, to assist in estimating their budgets and production plans, to assist as much as possible in purchasing and in the sale of goods in both domestic and foreign markets.

(c) To study annual budgets and the profit and loss accounting of Industrial Companies.

(d) To publish directives for Industrial Companies and to study their problems in order to find the best solution to them.

(e) To make reports on the various activities of all the Companies linked to the Organisation and of all the factories which it controls.

These duties are in addition to those which the Governing body of the Organisation has empowered the Companies to carry out, as laid out in its Constitution.

Certain changes took place in the Organisation and its associated companies, when some industrial companies with similar kinds of production joined together in a single Industrial Company to reduce administrative costs and to co-ordinate the work of the different production units.
This made possible a more efficient use of the expertise and potentialities of the Companies than had previously been possible. There were also a number of advantages from a technological point of view. This merger of Companies with similar fields of operation took place in conformity with the decree of the Board of Directors of the Economic Establishment of 16th May, 1965, as is shown by the following examples:

**The Iraqi Cement Company with the following constituent companies:**
- The Iraqi Cement Company
- The United Cement Company
- The Furat Cement Company

**The Mosul Cement Company, with the following constituent companies:**
- The Rafidain Cement Company (Mosul)
- The Hammam Al-Aleel Cement Company (Mosul)

**The Iraqi Technical Flour Company, with the following constituent companies:**
- The Al-Damarji Flour Company
- The Rafidain Flour and Trading Company
- The Technical Flour Company

**The Iraqi Cigarette Company, with the following constituent companies:**
- The Aboud Cigarette Company
- The National Cigarette Company
- The Rafidain Cigarette Company.
In addition to these mergers, and the economic, technical and managerial changes accompanying them, there were other changes in the managerial structure of S.O.I. It was necessary to assess the advantages of setting up public Industrial Organisations which included companies with different activities, as had been the practice in the period before 17th July, 1968, and the advantages of reorganising the public sector into specialised organisations, with responsibility for the management of a defined sector, or part of a sector of the economy.

The old system was considered necessary to maintain competition, while the new system was based on specialisation to bring about increases in total production, and could direct and control each section and subsection as a single unit, in accordance with the development plan. When the goals of the 1970-74 development plan were elaborated for each section and subsection, it was found necessary to replace most of the old organisations by specialised enterprises. In order to do this the law concerning Public Organisations attached to the Ministry of Industry and Mines (No. 90 of 1970) was published, and this gave directions for the formation of public enterprises on the basis of specialised quantative organisations.

(26)
Evaluation of the Work of S.O.I.

S.O.I. started its functions and familiarised itself with its duties and powers according to its charter, during the period between its original inception and June 1970, when it was divided into specialised organisations, (see page 30 ). Throughout this period it encountered many technical and managerial problems, but nevertheless it managed to establish new statutes for the nationalised Industrial Companies and the Government Industrial Agencies which had existed prior to nationalisation. Furthermore, the Organisation directed its attention to investigating the goals for which it was working and to raising the efficiency and increasing the industrial activities of its associated companies. In order to achieve these ends it took the following steps:

(a) It published an internal system for the whole organisation, defining those posts which carried the responsibility for the collective direction of industrial activities while retaining the profit-making nature of the Organisation. Thus it was possible to achieve major improvements in the quality of production and the precision of specifications.

(b) It created a system for the co-ordination of industrial activities into collectives with unified goals. This creates co-ordination and harmony between different plants producing similar products and also raises the level of production and facilitates the fullest exploitation of the technical potential of any individual plant for the benefit of other similar plants.
(c) It ensured that monthly reports were made on the financial and production situation of all its associated companies.

(d) It made scientific studies aimed at improving the quality and quantity of production, as well as encouraging differentiation of production.

(e) It undertook to export some of its products and to find foreign markets for them.

(f) It lowered the prices of some essential commodities in order to enable members of lower income groups to purchase them.

(g) It tried to inaugurate all round planning to control production processes and the supply of raw materials and to apply new methods of storage for raw materials and finished products. The activities of the Organisation have been divided up in such a way as to facilitate the work of management in its associated companies, and the collection of reports and information on how far objectives are being achieved.

(h) It made scientific studies aimed at trying to eliminate waste in production.

(i) It attempted to raise the standard of living of the working class by increasing wages and instituting social and health services.

(j) It reconsidered certain contracts to discover to what extent they were in Iraq's best interests.
(k) It took measures to free the Government Companies from obsolete routine, and to introduce new methods of work based on commercial principles which would guarantee improved efficiency.

Among the aims of S.O.I. were the presentation of a comprehensive plan with recommendations for the future; planning the sale of goods stored in warehouses and planning to finance investment. To achieve these aims, it was decided to inform consumers about the goods which the Organisation produced, and to try to find export markets.

In spite of the difficulties facing the S.O.I., it managed to achieve many of the goals which it had been set. It also achieved its socialist aims for the benefit of its workers, such as the distribution of profits to workers and the participation of both workers and managers in the meetings of the Boards of Directors of its associated Companies.

In addition, all possible efforts were made to achieve harmonious relations between workers and management. It was felt that if healthy human relations existed within industry, this would certainly have the long term effect of increasing the level of production and increasing the involvement of workers. To insure the creation of such harmonious relations, a special industrial relations department was created, whose function was to supervise the implementation of the Social Security and Labour Law, and to implement proposals to improve relations between workers and management. (23)
In 1970, by the passing of Law No. 29, the S.O.I. was split and reorganised into five specialised qualitative organisations to cope with the expansion of its activities. The new organisations were:

1. The State Organisation of Spinning and Weaving
2. The State Organisation of the Clothing, Leather and Cigarette Industries.
3. The State Organisation of the Chemical and Food-stuffs Industries.
5. The State Organisation of Engineering Industries.

The Iraq Cement Public Company is one of the companies attached to the State Organisation of the construction industries. This organisation encompasses the following companies:

1. The Iraq Cement Public Company
2. The Mosual Cement Public Company
3. The Serchinar Cement Board
5. The Public Real Estate Manufacturing Company.
6. The Public Glass Industries Company. (24)

(30)
The Oil Nationalisation

Another important step in the expansion of the public sector which proved to be a turning point in the economic history of Iraq, was the nationalisation of the oil extraction sector, which had until then been dominated by international monopolistic interests. The operations of the Iraqi Petroleum Company Ltd, were nationalised by Law No. 69 of 1972, and the Iraqi Oil Operations Company was set up to take over control of the nationalised industry. Later the Mosul Petroleum Company was subordinated to the Iraqi Oil Operations Company. (25) In October, 1973, 23.7% of the shares of the Basrah Petroleum Company held by the two American Companies, Standard Oil of New Jersey and Mobil Oil Corporation, were nationalised. In the same month, the holding of the Royal Dutch Oil Company in the shares of the Basrah Petroleum Company, amounting to 14.25% of the total, were also nationalised. Ownership of these shares was transferred to the Iraqi National Oil Company. In December, 1973, the Gulbenkian Foundation's shares in B.O. Co., (5% of the total) were also transferred to the Iraqi National Oil Company. By about the end of 1975, Iraq controlled 85% of its oil petroleum, and owned a tanker-fleet for the transportation and marketing of national oil. On 8th December, 1975, Iraq nationalised the last remaining shares in the Basrah Petroleum Company, which were held by British Petroleum, Shell and the French company C.F.P. (26).

(31)
Iraqi people generally are willing and capable of adopting the new knowhow. Iraqi culture presents no serious obstacle to the implementation of new industrial processes. So the basic problem which now faces Iraq in meeting the requirements for development is the creation of a qualified working force to man the various industrial projects and to undertake different economic activities. The employment of foreign expertise to speed up industrialisation provided no long-term solution to the problem. However, the provision of a well trained native workforce is a practical alternative; indeed the whole industrial structure and new equipment will become obsolete if a highly skilled workforce is not available to implement the new projects.

As development in general and industrialisation in particular required different levels of skill, it is necessary to maintain a balancing between:

1. Demand: this represents what is available from the working force for both present and future projects.

2. Supply: this represents what is available from the working force at present and what could be added through education and training. The workforce required to man current projects, planned projects, and projects under consideration for implementation during the five year plan 1976-1980, would be 50,665 persons. 

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(27)
4. **Iraqi Educational Environment**

Industrialisation requires an educational system functionally related to the skills and professions imperative to its technology. Such an educational system is not primarily concerned with conserving traditional values or perpetuating the classes, it does not adopt a static view of society, and it does not place great emphasis on training in traditional law. The higher educational system of industrial societies stresses the natural sciences, engineering, medicine and managerial training, whether public or private. It must steadily adapt to new disciplines and fields of specialisation. It is only three decades ago that Iraq started to industrialise, and since 1973 when financial revenues became available due to rises in crude oil prices in international markets the Government has allocated the necessary investments to speed up building new industrial projects. Alternative industries to oil had to be developed, as in the long term oil revenues will be exhausted. The establishment of a strong economic base depends upon the existence of flourishing industries, and development of these industries should be helped by the rich agricultural and mineral resources of Iraq. The main problem is to change the mentality of society from an agricultural outlook to one which perceives the needs of a developing industrial economy. The population of Iraq, according to the last general census of 17th October 1977, was around 12½ million.
Iraqi people generally are willing and capable of adopting the new knowhow. Iraqi culture presents no serious obstacle to the implementation of new industrial processes. So the basic problem which now faces Iraq in meeting the requirements for development is the creation of a qualified working force to man the various industrial projects and to undertake different economic activities. The employment of foreign expertise to speed up industrialisation provided no long-term solution to the problem. However, the provision of a well trained native workforce is a practical alternative; indeed the whole industrial structure and new equipment will become obsolete if a highly skilled workforce is not available to implement the new projects.

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2. Supply: this represents what is available from the working force at present and what could be added through education and training. The workforce required to man current projects, planned projects, and projects under consideration for implementation during the five year plan 1976-1980, would be 50,665 persons. (27)
Of this figure, about 30 thousand would need to be skilled and semi-skilled labourers obtainable from:

(1) Industrial Secondary School
(2) Training Centres
(3) Industrial projects

These projects may themselves produce skilled and semi-skilled labour. But this would sometimes be an inefficient method of producing such labour as productivity would be lowered during the period of training. While this problem still exists it is less acute than formerly. Such is the demand for skilled and semi-skilled labour across all professions, whether for the industrial projects under the Ministry of Industry or under other Ministers, that the Industrial Training Committee under the Planning Ministry has decided to establish 21 industrial schools throughout the country, alongside the vocational training centres to be established by various Ministers. The Ministry of Industry has itself decided to establish four other vocational training centres. This Ministry allocated I.D. ½ million to establish 10 training units in 10 industrial companies. In spite of all such preparation, a study by the Ministry of I. & M. indicated that there is still a manpower deficit. It may be said that this is an exaggeration, and that it is easy to find workers for the projects envisaged by the five-year plan, but such workers if unskilled or semi-skilled will hinder the successful development of Industry.
Financial incentives could be one of the means of overcoming this problem, as the raising of wages for the semi-skilled will provide an incentive for unskilled workers to develop specialisations and skills, so that they may then be transferred to the semi-skilled bracket with an attendant rise in productivity. Recently the Iraqi Government has decreed that the minimum wage for unskilled labour in the public sector will be I.D. 1, (28); previously it stood at F.650 (29). Usually a skilled worker in the public sector, who has at least ten years' experience, receives wages over I.D.3.

To prepare the rest of the workforce, such as managers, technicians, engineers etc., is not such a crucial problem. In Iraq there are now six universities which cover most of the natural sciences, engineering and social science subjects. In addition, there is one university and one polytechnic institute specialising in engineering sciences. The current plan is to make university studies and numbers in enrollment meet the requirements of the national development scheme for the country. It seems probable that this plan will lead to the required result before the end of the current five year period (1976-1980) by supplying the country progressively with the necessary graduates; though not all of them are going to be qualified for the jobs they will occupy.
Before the end of 1976 the Iraqi Government had decided to make elementary study compulsory. But this will not be effective until the academic year 1978-79. The illiteracy when this decision was made was about 50%. The scheme hoped to reduce this rate to 10% by the end of this century. An example of the progress made in education may be seen in the increase in student numbers in elementary education from 1,947,182 in 1976-77 to 2,049,090 in 1977-78, an increase of about 5%. Secondary education has shown an increase in students pursuing purely academic studies from 555,184 to 652,398, an increase of about 18%. (30) The 1976-80 national development plan has given consideration to vocational education and university graduates, one of its main provisions for the development of human resources being to increase the number of students accepted in vocational learning to 35% of the total intake in secondary education, while the number of university graduates will be increased during the years of the plan to 25,000 in the applied and pure sciences in 1980, and to 23,000 in the social and educational sciences. (31)
5. The Position of the Public Sector in Economic Life

The Present Economic Structure

The economic structure of Iraq as it exists at present, is largely the result of efforts to develop, which have been intensified during the last few years, but it is still not quite free from the vestiges of the period before nationalisation. Furthermore, only part of the achievements and general improvement in the economic environment can be seen by conventional economic indicators like national income, capital formation, etc. Improvements have been made, but there are still problems to be tackled. An attempt will be made to present as compact a picture as possible.

National Income

Total national income as well as per capita national income has shown a persistent rise over the years. Per capita income more than doubled between 1953 and 1972, with a further large increase in 1973 and 1974, so that in 1974 the per capita income was nearly 6 times that in 1953 (at constant prices, see table No. 1). The main cause of this rise was the nationalisation of the oil sector, and the improvement in oil prices.

The manufacturing industries have increased their share of the national income over the years, but still contribute only a small part of it. Similarly the services sectors and others including construction, transport, trade and finance, Government administration and services, and personal services etc., have increased their share.
A sudden change in the position of the oil industry changed the structure drastically in 1974. The task ahead is obvious — it is to achieve a rate of growth in industry and the other public sectors that will make them the dominant constituents of the national economy.

TABLE No. 1 (32)

National Income and Per Capita Income at Current Prices and Constant Prices (1964)

<table>
<thead>
<tr>
<th>Year</th>
<th>National income at current prices in Mill. ID.</th>
<th>Per Capita income at current prices in I. Dinars</th>
<th>National income at 1964 prices in Mill. ID.</th>
<th>Per Capita income at 1964 prices in I. Dinars</th>
</tr>
</thead>
<tbody>
<tr>
<td>1953</td>
<td>244.0</td>
<td>43.0</td>
<td>290.8</td>
<td>51.2</td>
</tr>
<tr>
<td>1958</td>
<td>374.0</td>
<td>57.3</td>
<td>401.7</td>
<td>61.5</td>
</tr>
<tr>
<td>1963</td>
<td>525.3</td>
<td>69.1</td>
<td>536.5</td>
<td>70.6</td>
</tr>
<tr>
<td>1968</td>
<td>782.9</td>
<td>87.8</td>
<td>749.2</td>
<td>84.0</td>
</tr>
<tr>
<td>1972</td>
<td>1217.8</td>
<td>120.2</td>
<td>1159.8</td>
<td>114.4</td>
</tr>
<tr>
<td>1974</td>
<td>3367.0</td>
<td>312.8</td>
<td>3176.4</td>
<td>295.1</td>
</tr>
</tbody>
</table>

Note: Figures for 1974 are preliminary and subject to revision.
The Investment Programme for April - December 1975

The first programme of investment after the revolution of 14th July, 1958 and the emergence of a planning Ministry, covered the years 1959 to 1970. It included the formulation of four development plans which gave a higher priority to Industry, increasing the allocation of investment to the industrial sector to 26.5% (33) while the agricultural sector's allocation dropped to 22% of the total allocation of I.D. 1521 m.

The second phase after 14th July, 1958 covered the years 1970 - 1974 and witnessed the first development plan formulated as a result of the 17th July, 1968 revolution. The objectives of the plan were defined and were much more comprehensive. The overriding goal of the plan (1970-71)-(1974-75) was to achieve a national income growth rate of 7.1%, which would outstrip the population growth rate and make it possible to double the national income within ten years. (34)

The plan included five investment programmes, each covering a fiscal year, as all the plans and the programmes were on a fiscal year basis (April 1st to March 31st) parallel to the State Budget. This practice was, however, discontinued following the Revolution Command Council's resolution of 7th February, 1974, which decreed the formulation of all Iraqi budgets and plans (including national development plans and, consequently, investment programmes) on a calendar-year basis (January 1st - December 31st). As the R.C.C.'s resolution would come into effect starting from January 1st, 1976, the last nine months of the current year, 1975, have been considered as an extension of the 1970-1974 five-year plan.

* Fiscal years.
An investment programme has, therefore, been formulated to complement that for the preceding five years. As this is the latest information available on this subject, and as this programme could be taken as an indication of later trends in investment programmes, I will tackle it in some detail.

Reverting to the mentioned programme, we find that it is neither limited in scope (number of projects) nor less ambitious than any of the previous ones. The aggregate amount appropriated for expenditure on its projects is I.D. 1,076 m. for a nine month period (April to December, 1975), or I.D. 1,436 m. calculated on a twelve month basis. Table 2 below shows the programme's allocations divided into sectors.

\[ \text{TABLE 2} \]

Main Outlays of the Current Investment Programme by Sector (April to December 1975) (In Millions of Iraqi Dinars)

<table>
<thead>
<tr>
<th>Sector</th>
<th>Nine month Allocations</th>
<th>Adjusted on 12 month basis</th>
<th>Per Cent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural</td>
<td>207.5</td>
<td>276.7</td>
<td>19.3</td>
</tr>
<tr>
<td>Industrial</td>
<td>448.0</td>
<td>597.3</td>
<td>41.6</td>
</tr>
<tr>
<td>Transport and Communications</td>
<td>166.0</td>
<td>221.3</td>
<td>15.4</td>
</tr>
<tr>
<td>Building &amp; Services</td>
<td>138.0</td>
<td>250.7</td>
<td>17.5</td>
</tr>
<tr>
<td>Others</td>
<td>66.5</td>
<td>88.7</td>
<td>6.2</td>
</tr>
<tr>
<td>Total</td>
<td>1076.0</td>
<td>1434.7</td>
<td>100.0</td>
</tr>
</tbody>
</table>

On comparison of the total allocations of the current programme as adjusted on a 12 month basis with those of each of the five preceding programmes (Table No. 3), it is found that the aggregate amount allocated is almost double that of the first four programmes added together, and approximately three times the total of the actual disbursements made.
The adjusted twelve month figure is 20% up on 1974-75.

A new method has been adopted in channelling the expected oil revenues to the state budget and investment programme. The adoption of such a method, for the first time in modern Iraqi history, is an indication of the great significance attached by the State to national development plans: instead of dividing the oil revenues between the budget and the programme on a 50% basis, as was customary prior to the fiscal year 1974-75, a fixed amount of I.D.500 m. has been allocated to the state budget, leaving the balance to development funds. Thus no ceiling is imposed on development investment.

This new method has made a clear impact on the programme, in so much as autogenous revenues are no longer the decisive factor in its formulation, but rather the assimilatory capacity of the country as a whole and the ability of its infrastructures to bear the stress. Hence the allocations of the current programme, although the largest in the country's history, have not covered all sectorial requirements due to the limitations of the country's assimilatory capacity and the necessity of ensuring equilibrium in development at a time when new projects with immensely large allocations have been introduced into the programme. Some of these projects aim at the elimination of bottlenecks in the Transport and Communications and the Building and Construction Sectors, while others, in the Industrial and Agricultural sectors have been introduced with a view to implementing the long-range plan aimed at restructuring the economy on an equipoised base by developing the non oil-sector.

(41)
### TABLE 3


*(IN THOUSANDS OF IRAQI DINARS)*

<table>
<thead>
<tr>
<th></th>
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<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Disburse.</td>
<td>Efficiency</td>
<td>Disburse.</td>
<td>Efficiency</td>
</tr>
<tr>
<td>Agriculture</td>
<td>28,000</td>
<td>14,058</td>
<td>60,000</td>
<td>49,310</td>
</tr>
<tr>
<td>Industrial</td>
<td>28,000</td>
<td>21,145</td>
<td>50,000</td>
<td>35,917</td>
</tr>
<tr>
<td>Transport &amp; Communications</td>
<td>15,268</td>
<td>7,406</td>
<td>28,000</td>
<td>16,964</td>
</tr>
<tr>
<td>Building &amp; Services</td>
<td>13,000</td>
<td>9,894</td>
<td>28,000</td>
<td>17,605</td>
</tr>
<tr>
<td>Other</td>
<td>32,262</td>
<td>25,549</td>
<td>36,000</td>
<td>33,987</td>
</tr>
<tr>
<td></td>
<td>116,530</td>
<td>78,052</td>
<td>202,000</td>
<td>153,782</td>
</tr>
</tbody>
</table>

**TABLE 3 (Contd.)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Sector</td>
<td>Appropns.</td>
<td>Expend.</td>
</tr>
<tr>
<td></td>
<td>before</td>
<td>up to 1974</td>
</tr>
<tr>
<td></td>
<td>after</td>
<td>Efficiency</td>
</tr>
<tr>
<td></td>
<td>Amendt.</td>
<td>%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>70,000</td>
<td>29,267</td>
</tr>
<tr>
<td>Industrial</td>
<td>60,000</td>
<td>22,212</td>
</tr>
<tr>
<td>Transport &amp; Communications</td>
<td>29,000</td>
<td>19,864</td>
</tr>
<tr>
<td>Building &amp; Services</td>
<td>35,000</td>
<td>16,717</td>
</tr>
<tr>
<td>Other</td>
<td>40,460</td>
<td>100,000</td>
</tr>
<tr>
<td></td>
<td>242,500</td>
<td>128,329</td>
</tr>
</tbody>
</table>
A Comparison of the Possibilities of the Public and Private Sectors

The Public Sector

Planning for projects in the public sector is carried out in the following way:

Each Ministry lays down priorities for the various projects. Its suggestions are made in the light of preliminary studies of their economic and technical validity. The projects are assessed in the context of the major industrial development plans whose costs exceed one million dinars. The Planning Council must then agree on the selection of a suitable advisory bureau to be charged with a study of the economic validity of the undertaking and the soundness of its conception. The Federation of Industries is responsible for making such project studies in the private and mixed sectors. Furthermore, each ministry undertakes to complete the projects of the previous plan when putting forward its projects for the current plan. In assessing these projects, the Ministry of Planning may call upon the assistance of a number of specialised agencies, such as the National Centre of Consultancy and Management Development, the Establishment for Design and Industrial Construction, the Central Statistical Organisation, and experts attached to the United Nations, to provide technical details and engineering specifications in the framework of the recommendations provided by the preliminary studies.
During the years 1968-73, the planning process was developed to include the existing industries and the agricultural sector. At the same time (following the revolution of 17th July, 1968) the reorganisation of the industrial sector was inaugurated, and in order to overcome the difficulties of management in production allocation and integration, specialised organisations were created to replace the (S.O.I.) - see page 30 above. The immediate aim of this reorganisation was to achieve specialisation and decentralisation of management, or more specifically, to achieve centralisation of planning rather than centralisation of execution, with important concessions made towards the public sector to enable it to perform its role in the development of Industry to the greatest possible degree of efficiency. (37)

The next table (No. 4) shows the span of public industrial sector development; the figures indicate how important it is for Iraq to be ready from now on to create sufficient specialist bodies of all kinds. The Ministry of Industry turned its attention to the problems of production, and measures were taken to increase the efficiency of the implementation of plans in the following ways:

(a) Reduction in institutionalisation and administrative costs.

(b) Continuation of the development of the number of technical staff.

(c) Increased commitment to training and experimentation centres.

(d) Keeping closely to the annual plan implementation programme.

(e) Paying particular attention to process of work and production.

(44)
(f) Making attempts to improve the co-ordination among production workers.

(g) Reliance on modern methods of storing raw materials and manufactured products.

In order to understand and overcome the problems of production the Directorate of Planning and Research was created within the Ministry of Industry and Mines to conduct research into projects concerned with National Development planning. The work of this Directorate is undertaken within a fixed timetable and budget.

Table No. 4

<table>
<thead>
<tr>
<th>Details</th>
<th>The Basic Year: 1967-68</th>
<th>1971-72</th>
<th>% of diff.</th>
<th>1972-73</th>
<th>% of diff.</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital invested</td>
<td>43,000,000</td>
<td>-</td>
<td>-</td>
<td>157,591,524</td>
<td>4.0</td>
<td>No information avail. for 1971/72</td>
</tr>
<tr>
<td>Value of actual production</td>
<td>54,950,000</td>
<td>96,012,060</td>
<td>1.74</td>
<td>127,412,604</td>
<td>2.31</td>
<td>Information summarised for ease of comprehension</td>
</tr>
<tr>
<td>Value of actual sales</td>
<td>51,215,000</td>
<td>105,477,852</td>
<td>2.00</td>
<td>134,042,213</td>
<td>2.75</td>
<td>-</td>
</tr>
<tr>
<td>Manpower</td>
<td>20,608</td>
<td>35,729</td>
<td>1.73</td>
<td>41,878</td>
<td>2.03</td>
<td>Including employees &amp; officials</td>
</tr>
<tr>
<td>Wages paid</td>
<td>6,252,910</td>
<td>12,231,511</td>
<td>1.95</td>
<td>14,187,151</td>
<td>2.26</td>
<td>-</td>
</tr>
<tr>
<td>Net Profits</td>
<td>No Precise inform.</td>
<td>10,190,714</td>
<td>-</td>
<td>15,812,294</td>
<td>0.50</td>
<td>In comparison with 1971/72</td>
</tr>
</tbody>
</table>

(45)
Total allocations to the Economic plan for 1970-1974 were fixed in the supplement to the plan law (first supplement No. 187 of 1971). The amount was fixed at a maximum of 1559 million dinars, an increase of 415-6 million dinars on the original allocation, which represents an increase of 7.1% of the gross national income. In the meantime, the gross national income increased from I.D. 785.5 million in 1969 to I.D. 1,107 in 1971, and average per capita income from I.D. 96.7 to I.D. 112.6 (41) over the same period. The financial and industrial capacity of the public sector increased during the period of the 1970-1974 Development Plan in proportion to the Plan's implementation. The success of the plan was largely due to the nationalisation of the oil-fields, which took place in June, 1972, and also to the possibility of using the large deposits of sulphar in the national interest, which facilitated appropriate measures to support the public sector, as well as co-operation between the public, and the mixed sector in furthering development projects.

The Private Sector

The Iraqi experience shows that the local capitalist sector had failed to activate widespread economic development, particularly the development of heavy industry, and the consequent building up of the national economy. "The country is in need of rapid development and the participation of the whole population in the process, including the participation of the private sector in the industrial programme, and especially in the consumer and complementary light industries.
It is, therefore, very important that the state should encourage this sector, and provide all necessary facilities and guarantee for its success". (42)

In order to ensure the participation of the private sector, the Government set aside an allocation of I.D. 50 million in the National Development plan for the period 1970-1974. This was to be spent on the construction of a number of industrial projects in different parts of the country. The National Economic plan enabled the private sector to participate in a total of 820 industrial projects. Specialised state institutions provided free economic and technical assistance for the majority of the projects. Among them were projects for food processing plants (215), spinning and weaving companies (185), metal works (132), tanneries, shoe factories and rubber and plastic factories (60), and projects for the manufacture of constructional materials, glass and insulators (54). (43)

As the President of Iraq declared on 5th July, 1970 -

In order to reach this goal - the development of industry in the private sector - the Government has undertaken a number of steps such as spreading the geographical distribution of the new private sector. Amongst these steps are the easing of restrictions on opening businesses and the increase of the incentives given in the Law of Industrial Development. Recommendations have also been made to the financial offices to facilitate the distribution of grants to industrialists. Authority to grant import licences for raw materials need in the industrial sector has been given to the State Organisation for Industrial Development, which is part of the Ministry of Industry. (44)
In order to encourage industrialists to continue their work, the Government has amended the Law, which structures a number of companies and organisations (Law No. 103 of 1964). The amendment provides that each limited liability company with paid up capital of I.D. 70,000 or more should take the form of a Joint Stock Company in such a way that the limitation of liability rises to I.D. 100,000. At the same time, the limit on individual share-holding has been raised from I.D. 10,000 to 20% of the capital of the Joint Stock Company. These changes have encouraged industrialists to make use of their capital in industry. Many industrial projects have been undertaken. It must be stressed here, that the response of the industrialists in investing their capital was entirely due to their confidence in the seriousness of the Government's intention to give assistance to the private industrial sector. Sixty private industrial projects were inaugurated between 1st November 1970 and 25th February, 1971 with a total increase in capital of I.D. 1,400,000. In 1973 410 establishing licences were granted to industrialists to begin new projects, involving nearly I.D. 19 million.

Before concluding this section, a brief discussion of the reasons for the administrative division into public and private industrial sectors would seem to be desirable. Certain factors seem to justify the division, e.g.:

1. Co-ordination and harmony between the two sectors are vital to the success and execution of all economic planning.
This can not be achieved unless preparatory directives and legislation are issued defining the field of activity of each sector. These are essential because natural resources, manpower and finance are limited and fixed within a definite period, and if the distribution of these resources is not properly regulated, this will have a negative effect on economic development as a whole and lead to confusion.

2. The need to achieve various economic, administrative and social objectives for the public good.

3. The division of the economy into two sectors widens the possibility of each one playing its part in the changes required within the scope of a general clear framework.

4. The widening of the scope of the public sector enables it to control key industries related to the development of the industrial or agricultural sectors, such as the production of chemical fertilisers.

5. The need to avoid the concentration of capital in the hands of private capitalists, which would result from their investment in major high profit projects.

Before ending this section, it is necessary to stress the importance of the Iraqi Industrial Bank, which is part of the Ministry of Industry and Mines, in assisting industrial development, especially in the private and mixed sectors.
The Industrial Bank has played an effective role in the industrialisation of the country in the past few years, both by the extent of its financial participation and by the number of industrial projects which is supported before the nationalisation of 1964. The Bank participated in the work of 17 industrial companies, and the value of its shares amounted to almost I.D. 2 million or 20% of paid capital. (47)

After issuing the Nationalisation Laws, the Bank's shares were transferred to the S.O.I. and subsequently divided between a number of industrial companies known as mixed industrial companies. There are now 10 of these companies and the Bank has a holding of I.D. 500,000 of their paid capital, representing a proportion ranging between 20% and 51% of the capital of each company. The companies involved are the Iraqi Bicycle Company, the light Industrial Company, the National Chemical Company (which produces sponges and artificial leather), and the General Battery Company, the National Beer Company, the Kadhamiya Date Company, the Karbala Date Company, the Kut Manufacturing Company, the Amara Manufacturing Company, the Hillal Company, and the Northern Timber Company.

The Industrial Bank is involved in a number of other Industrial projects, of which the most important are the vehicles assembly project, a factory for the manufacture of tomato extract and another for the production of wood fibre pulp.
The Bank has also taken a number of initiatives in order to improve and facilitate investment processes and motivate the investors, for example: raising the percentage of credits from 50% for any particular project to 60%. It was also decided to fix as high a credit limit as possible for private business, and it was in consequence raised from I.D. 50,000 to I.D. 70,000.

It should be noted that the demand for loans increased because of the general increase in opportunities which the Bank's activities provided. The total capital loaned out by the bank has reached I.D. 4,750,000.\(^{(48)}\)
6. **Reasons for Nationalisation of Iraqi Industries including the Cement Industry**

It will be clear from what has already been said that industrial development in Iraq began with public and private companies existing side by side. The move towards the nationalisation of the Cement industry as well as other industries naturally had the effect of increasing public ownership. Nationalisation of major Industries was the result of the development of various fundamental factors. One of these is that developing societies like Iraq are passing through a period of economic, political and social change, and of rapid technological development, although Iraq has not prepared itself to absorb fully these technological changes. The writer believes that at this point in its history, Iraq has come to the realisation that there is a huge gap between itself and the developed world, in spite of the country having very considerable natural resources. The intervention of the state in public economic life can accomplish essential objectives, such as the acceleration of the development processes and of economic integration, particularly in the industrial sphere. The state is also in a position to determine the availability and supply of personnel in order to accelerate the development process, and it supplies the investment capital which this process requires. The state is also responsible for setting up factories to fulfil the strategic goals of the economy, while also taking account of political, social and economic factors in the geographical distribution of these factories, in some cases without regard to the profit motive and economic validity.
Professor A.H. Hanson, Professor of Public Administration in the Faculty of Social Sciences at the University of Leeds, says,

These countries known as underdeveloped countries (like Iraq) have decided to increase their economic activities and to develop them by depending mainly on the public organisations for economic, social and political reasons.  

He also states that:

These factors are ideological from one point of view and practical from another.

Other factors which governments have to take into account in order to establish and develop their public sectors are:

1. The general scarcity of private enterprise, and its lack of will to develop institutions with strategic aims.

2. The desire to create economic institutions exercising greater control than that which the private sector could exercise, such as electricity, transport and heavy industries.

3. The desire to establish production models on a scale which the private sector in developing countries cannot afford.

4. Many private enterprises have failed in their aims or have not wanted to develop the required quality or quantity of products.
7. Management Control Systems in Iraq's Public Sector

It was stated in the political report adopted by the 8th regional congress of the Arab Ba'ath Socialist party (Iraq) in January, 1974: (50)

The problem of developing has been and will long continue to be a very important and basic question... It is vital to provide all material, technical and human resources to achieve swift and balanced development in every sphere of life in our society... the central task in our present situation and in the years to come is to lay down a development strategy in order to bring about socialist change, to make the development of the socialist sector in agriculture, industry, trade and services our first priority.

During the writer's visits to the management of various public industrial companies in Iraq, he made enquiries about the effect of Governmental intervention on management control systems. An outline summary of the answers follows. The government, represented by the Ministry of Industry and Mines, made a great effort to improve the M.C.S., which were acting as a serious impediment to the new experiment. The Ministry created a principal department in each qualitative state organisation, and in all public companies belonging to it, including cement companies. These departments were called either "Productivity and Organisation Department" or "Organisation and Methods Department", as the situation demanded. They are directly linked to the Minister, the President of the state organisation, or to the General Manager of the public company.
Such departments have the following duties:

1. To collect information and run special surveys of managerial organisations within the organisation. To study and analyse aims and fields of competence, and suggest ways of improvements.

2. To study work methods within the Unit (Organisation or company) and to suggest simple solutions to problems. To identify obstacles caused by bottle necks, procrastination, and unjustified interference.

3. To study the organisation structure of the unit, the various posts and their areas of responsibility. To define their hierarchical levels and their staffing relations.

4. To study the progress of work and to make suggestions which will increase production and proper exploitation of all available resources and potentialities.

5. To set up and develop systems of management information to assist the units in planning and controlling.

6. To develop accounting systems and cost controlling mechanisms for accurate costing in order to serve the different management levels in planning and control.

7. To publish "procedural guides" to explain to members of the organisational unit (51), members of the public and other organisational units, how to follow the principal instructions. (52)

Decree No. 333 concerns the role of the National Centre of Consultancy and Management Development, and lays down how it should participate in the setting up and supervision of M.C.S. in the State Sector.
The National Centre for Consultancy and Management
Development must exercise sufficient authority to ensure
the efficient working of the productivity and organisation
departments or Organisation and Methods Departments.

The following are the most important responsibilities of the
Centre, as laid out in the Decree:

1. The selection of specialised personnel to work in
the departments, particularly from the staff of the
unit itself. The responsibility for decisions on
transfers of personnel from other organisations, and
for new appointments which must be in accordance with
the conditions laid down by the Centre and be agreed
upon by the President of the Organisation, which is
actually making the appointment. Employees can only
be transferred to other work with the agreement of
the Centre.

2. To set up a training programme for personnel of
the Organisation, and for the personnel in the
productivity and the Organisation and Methods
departments, both within and outside the Centre
and both in Iraq and abroad.

3. To put forward guidelines for work within the
departments and their relations with the higher
management within the organisational unit. This
is one of the objectives of the plan.

As Assistant Director General of one of the industrial companies
in Baghdad told me, any Decree of the Revolutionary Command Council,
affecting industry and industrial development, has the force of
law.
The following are some of the main duties of the Centre:

(a) A reconsideration of financial and accounting practices, in order to facilitate quick decisions, while ensuring the rights and duties of both the state and the citizens.

(b) The inauguration and development of scientific management information systems to help organisation units in their planning and control.

Section 4 of Decree 333 makes the following provisions:

(a) The technical activities of the "productivity and organisation departments" or the "Organisation and Methods departments" are to be under the supervision of the Centre.

(b) The work plan of the above-mentioned departments should be submitted to the Minister responsible or the Senior Officer of the organisational unit for discussion, following which orders should be given for the plan's execution.

(c) If there is a disagreement between the centre and the organisational unit, the case should be submitted to the Senior Officer for discussion at the highest level. If there is disagreement between the Centre and a particular Ministry, the differing viewpoints should be brought before the Planning Council, whose decision will be final and binding.

(57)
Usually the Management Control System is a comprehensive system, in the sense that it embraces large aspects of the Company's operation. It needs to be a comprehensive system because an important management function is to assure that all parts of the operation are in balance with one another, and therefore, information about each of the parts is needed. With some exceptions, Management Control Systems are built on a financial structure, that is resources and outputs are expressed in monetary units. Money is the only common denominator by which the heterogeneous elements of outputs and resources (for instance, hours of labour, type of labour, quality and quantity of material, amount and kind of products produced) can be combined and compared.

As Professor R. Anthony said:

Although the financial structure is usually the central focus, non monetary measures, such as time, number of persons, and reject and spoilage rates are also important parts of the system. (53)

The Ministry of Industry and Mines convened a special committee to set up a unified accounting system, which was in fact started in co-operation with experts from Egypt and Syria. It was found desirable to apply the system first to all companies associated with the State Organisation of Weaving and Spinning Industries, since one of the Iraqi experts with practical experience of the application of the system is Director of Planning and Financial Control in this Organisation. The system was inaugurated on 1st April, 1972, and after its success was apparent from the half yearly reports of the weaving and spinning companies, the Ministry of Industry and Mines on 19th October, 1972, ordered the application of the system to all companies associated with the organisation from 1st April, 1973.

(58)
To clarify how the system works we refer to the work of Sahib al-Mustaufi, the Iraqi expert who participated in its implementation:

The unified accounting system is a collection of measures which facilitates the recording of accounts at company level, as well as the levels of the qualitative industries, or the industrial sector as a whole, or at the national level in the widest possible sense. It makes possible the drawing up of final accounts and budget plans from a framework based on recognised accountancy procedures. (54)

From this it will be seen that the unified accounting system consists of financial, management and cost accounting. The unified accounting system aims at a number of goals on all management levels. These aims differ in kind and in detail according to the management needs of the projects. It can be said that the unified accounting system aims at preparing accounting statements which satisfy the requirements of the various levels of the organisations in Iraqi society and facilitate planning, execution, and controlling. The system has shown great efficiency in the development of financial and management accounting in so far as it fulfils the requirements of the economic structure of the society and the wishes of the planners and businessmen. It has also helped businessmen to meet a large proportion of their set targets by providing them with practical information based on accurate figures.

The unified accounting system is considered as basis for the reform of financial practice in the production units, and as a way of discovering sometimes in advance, the defects which might affect the success of the overall plan.

(59)
It is possible to implement the system in various different kinds of projects, whether they are profit seeking or aim at specific services. This applies to projects in the private and public sectors, whether in production of service companies. It is a system which assists development, and is in harmony with all activities independent of their nature and effectiveness. It leads to the unification of all accounting methods, records, balance sheets, and final accounts - thus it leads towards unified usage. (55)

The book by the Minister of Industry and Mines, Industrial Management and the Requirements of Economic Development, gives examples of government intervention in Management, producing changes and reforms in the public sector in Iraq. The Minister says:

Industrial Management has direct influence on all other aspects of production in productive enterprises. The basic factors of industrial management which must be incorporated into any fundamental change in order to implement management changes and reforms are:

1. A reconsideration of the legislation and laws with which industrial management works.

2. A reconsideration of the organisational structure to accommodate new aims and new management methods.

3. A reconsideration of the essential qualifications for posts in industrial management in order to supply people who understand the new methods and approaches. This goal is connected with the new political reality which is closely associated with the interests of the working people, as well as being linked to the just relations in industry, which the political system is endeavouring to establish.

4. The availability of the financial capability, which is necessary for the achievement of the desired change. (56)
This chapter shows how Iraq implemented the nationalisation policy in industry and services, nationalisation being concentrated in the industrial field. The nationalisation procedure started on 14th July, 1964. Chapter One is divided into seven parts.

The first part describes the background of the cement industry in Iraq, explaining why the Government played an important role in the cement industry before nationalisation, why the public sector is necessary in Iraq, and why the merger of the cement industry was desirable. It then gives some detail about the expansion of the cement industry.

The second part deals with the role of the cement industry in the economy of Iraq, concentrating on the fluctuations in demand for cement in Iraq and abroad. It then deals with the chain of authority from the high planning council to the middle level of management in the public companies, and lastly describes the attitude to profitability on the part of the nationalised companies in Iraq.

The third part shows how the public sector was established in Iraq. Firstly, the working of the public sector in Iraq is explained in detail and this explanation is followed by an account of the structure of the State Organisation of Industry. There then follows a critical account of the functions of this organisation, and of how the oil nationalisation programme was implemented.

The fourth part concentrates on Iraqi education.
The fifth part explains the position of the public sector in economic life, emphasising national income. The investment programmes are discussed, then a comparison is made between the possible roles of the public and private sectors, and an account is given of the priorities of the Iraqi government in their endeavour to develop effective productivity in Iraqi industry. The private sector is then dealt with and its influence on industry as a whole is discussed, as well as the procedures adopted by the Government to encourage this sector.

After this there is a brief discussion of the reasons for the division into public and private industrial sectors. We conclude this part by stressing the importance of the Iraqi Industrial Bank in assisting industrial developments, especially in the private and mixed sectors.

The sixth part is about the reasons for the nationalisation of Iraqi industries, including the cement industry. In this part the reasons that persuaded the Government to concentrate on the public sector are analysed.

The seventh and last part of this chapter concerns the attitude of the Government towards management, and how it sees Management Control Systems.

The investigations in this chapter attempt to provide a background to Iraqi industry from an economic and managerial standpoint.
Next chapter is a field research carried out in Iraq, with seven different selected industrial companies. The aim of the research is to present an accurate picture of the current managerial situation, and the standard of the management control systems followed in Iraqi state industry as a whole.
REFERENCES


2. The Silver Jubilee of the Cement Industry in Iraq, issued by the State Organisation for the construction industries, Baghdad, 1974, thereafter referred to as The Silver Jubilee of the Cement Industry in Iraq.

3. Ibid.

4. Ibid.

5. Ibid.

6. Dr. A. Sharif, 'The Iraq Cement Industry and its Future Development', _al-Sinai Magazine_, No. 4, 1974, issued by Iraqi Federation of Industries, Baghdad, p. 120, thereafter referred to as 'The Iraq Cement Industry and its Future Development'.

7. Ibid.

8. Ibid.

9. Ibid.

10. The Silver Jubilee of the Cement Industry in Iraq, p. 29

11. 'The Iraq Cement Industry and its Future Development', p. 4


16. Consultative Committees in the public industrial companies represent the Boards of Directors, and consist of the managers of divisions, the General Manager, his two assistants, and two representatives, one representing the workers, the other representing the Managers.


23. Ibid, pp. 390-403


25. Dr. J. Hashim, Development Planning Iraq - Historical Perspective and new directions, six lectures, April, 1975, Baghdad p. 22


29. One Iraqi Dinar (I.D.) equals One thousand (F.) Fils


32. Dr. J. Hashim, Evolution of Economic Development in Iraq 1950-1970, op cit., p. 27

34. Ibid, p. 15
35. Ibid, p. 18
36. Ibid, p. 23
37. H.A. Rashid, 'Towards a new understanding of managerial leadership' Alam-al-Sina'a Magazine, No. 16, 1974 Baghdad, p. 28
40. Ibid, p. 30
41. Ibid, p. 30
43. 'Economic Development in Iraq after 17th July, 1968, Economic Affairs Department, al-Thawra Newspaper Baghdad, August, 1972
44. From the speech of the President of the Republic, 5th July, 1970.
48. Ibid, pp. 107-109
51. Organisational unit in this research means Ministers, public enterprises, state industries, state companies and any official or semi-official body.
52. Some of the clauses in R.G.C. Decree No. 222 of 24th May, 1972

55. Ibid, p. 41

CHAPTER II
CURRENT MANAGEMENT CONTROL SYSTEMS IN A COMPREHENSIVE SELECTION OF IRAQI INDUSTRIAL COMPANIES

Overall Organisational Structure of Ministry of Industry and Mines

Before defining the objectives, systems, organisational structure and other aspects of the Management Control Systems of the State Industrial Companies that I chose during my first visit to Iraq in May and June, 1975, it will be useful to describe the modern organisational structure of the Ministry of Industry and Mines in Iraq. This is the Ministry specifically responsible for the implementation of objectives and the designation of management control systems for the public industrial sector, and for encouraging the expansion of the private and mixed sectors. The aim of this Chapter is to discover the general management control Systems that are currently being applied in Iraqi State Industry.

If we take a good look at the organisational structure of the Ministry, (please see Chart No. 1), we see that it comprises:

A.1 Five State Qualitative Organisations; concerned with the supervising and control of 42 public industrial companies and having a single centre in Alexandria for the professional training of industrial engineers. The activities of the State Organisation of Technical Industries are secret, because they are restricted to military concerns.

A.2 The State Organisation of Design and Industrial Construction;
Its chief responsibilities comprise the following: (1)

i. To prepare detailed preliminary, technical studies
for commissioned projects. To submit proposals with the related reports and statistics. To amass, where possible, adequate information, from the industrial projects in Iraq and from relevant industries abroad.

ii. To prepare preliminary surveys and tenders including technical specifications, general stipulations, quantitative charts. To study applications, submit proposals and to prepare contracts in their final form for major industrial and electricity projects.

iii. To supervise the implementation of the projects and ensure that the projects in progress are completed on schedule.

iv. To plan and follow up the execution of the projects and to co-ordinate the operations between the various branches of the organisation and outside agencies. To participate in choosing the land required for the project and to investigate the transactions of acquisition and occupancy. To take the necessary measures to hand the project over to the beneficiary agencies, and to ensure that the commitments of the contract are met.

A.3 The Specialised Institute for Engineering Industries; This Institute was established according to Article 28 of the year 1972 to carry out the following operations ; (2)

i. To launch essential and practical scientific studies and research.
ii. To implement the studies and designs. To prepare the conditions and specifications in specialist fields and to prepare plans for their implementation.

iii. To launch research intermediate between long-term research and the practical development research, with the aim of advancing the industries in which the Institute specialises.

iv. To work towards solving technological problems in the industrial field, and to deal with defects that may appear in the products either during production or when in use.

v. To make all the analyses and estimates in the fields of physics, mechanics and chemistry, that are necessary for the factories connected with these industries.

vi. To introduce improvements and innovations in equipment and raw materials to raise the quantity and quality of production.

All the above-mentioned State Organisations, together with the Specialised Institute for Engineering Industries are under the supervision of a Deputy Minister, who is responsible for them.

The other side of the Organisational Structure is supervised by another Deputy Minister, who is responsible for planning and development. He is in charge of the following offices:

A.4 The Iraqi Federation of Industries(3) Its objectives may be summarised as follows:

It is the only professional establishment which organises effective industrial projects in Iraq in all sectors, public, mixed
and private. It represents the national industries and industrial interests to the public authorities and all other committees. It works for the advancement and protection of Industry and has the authority to draw up and administer its general policies within the public political and economic framework of the nation. Half of its Administrative Committee represents the public sector and the other half represents the private and mixed sectors. A public secretariat is to be established for the Federation in order to implement the public policies of the Administrative Committee and to carry out the duties assigned to it by the first Article of the Association, No. 52 of the year 1956, and subsequently by the present amendment of the last Article, No. 13 of the year 1962. The third paragraph of that amendment contains the following definition of responsibilities:

1. To amass, classify and publish information and statistics which concern industry.

2. To study the conditions of the country's industry and to review the methods used for the advancement of industry.

3. To review the laws dealing with industrial affairs, taxes and the tax conditions imposed on industry and manufacturers, and to amass a list of industrial problems whose solution requires government help dependent on industrial support.

4. To study and review industrial relations, and the economic and technical agreements between Iraq and other countries.
v. To submit proposals connected with the laying down of technical specifications for Iraqi industrial products.

vi. To judge and settle differences occurring between entrepreneurs, and to form a Judicial Committee for this purpose.

vii. To define the concept of legal practice and legal contractual terms in industrial affairs.

viii. To certify the dating of papers presented and the photocopies of the papers registered with them.

ix. To set up exhibitions and industrial fairs, or to participate in such within the limits set down by the relevant laws.

x. To issue certificates validating the Iraqi origin of products from Iraqi factories, and to approve all documents that will help in exporting these products.

xi. To issue certificates establishing the financial competency of a member at the request of governmental departments and agencies.

The most important contributions of the Federation of industries to the private and mixed sectors are the following:

- It prepares economic and technical viability studies for industrial entrepreneurs and others hoping for profit.

- It presents ready-made programmes of industrial projects assigned to the private and mixed sector in the national development plan, for the benefit of industrialists with initiative. It also offers advice and proposals as soon as these are required. This task is undertaken by the
permanent Technical Consultants Committee of the Federation of Industries.

A.5 **The State Organisation of Mining**: This second office will be the responsibility of the Deputy Minister, who deals with planning and follow-up. This office was established recently (in March, 1975) and because of its connection with the Ministry of Industry, it was known as the Ministry of Industry and Mines (I., & M.).

The majority of this organisation's activities used belonged to the Ministry of Petroleum, but because of the connection of this organisation with the nature and objectives of the Ministry of Industry and Mines, it was recently joined to it. The organisational structure of this establishment comprises the following:

i. **The State Directorate for Geological Surveys and Mining Investigation.**

ii. **The State Directorate for projects** - The activities of this office will entail the launching of necessary economic, administrative and technical studies for every project connected with mining both now and in the future.

iii. **The State Directorate for Sulphur in Mishraq** - this company is responsible for the activities of mining, purifying and selling sulphur both in Iraq and abroad.

A.6 **The State Organisation of Industrial Development**, comprises:

a) **The Industrial Bank.** We have already mentioned in some detail its activities and its influence on the national economy in Chapter 1, pp. 49 - 51.
b) The Directorate of Organisation and State Welfare.

c) The Directorate of Research and State Industrial Control.

The above-mentioned establishment was brought into being according to Article 134 of the year 1973 to implement the following objectives:

i. To incorporate an industrial growth plan for the private and mixed sectors into the policies and objectives of the national growth plan at the national level, or alternatively to use the latter as a programme at the provincial level.

ii. To form share-holding companies and to encourage investment by offering bank facilities.

iii. To present openings and opportunities for investment in industry, and to give facilities for investors and savers, encouraging them to invest, whether they be Iraqi or from other Arab countries.

iv. To improve established industrial projects by extensions or modifications, and to stipulate conditions to be fulfilled and methods to be followed in giving credit, and financing industrial projects.

v. To launch viable technical and economic studies to give rise to new projects, or to extend existing projects, or to develop production, by the use of specialised offices in the organisation or in the co-operative, together with technical offices present in the country or in the mixed and private sectors either in Iraq or abroad.

iv. To provide industrial projects with technical and administrative aid, guidance and information on an outright
fee basis, or on commission, or free of charge, and to issue import licences for industrial projects both in the mixed and private sectors.

vii. To check the quality of industrial products and their conformity with the specifications. To provide guidance and direction in order to improve the quality of these products.

A.7 The State Electricity Organisation, which comprises:

a) The State Directorate for Electric power Generation.

b) The State Directorate for Minor Projects and Electricity in Rural Areas.

c) The State Directorate for Major Electric Projects.

The objectives of this State Organisation include the increase and development of the uninterrupted supply of electric power in most parts of the country to aid economic and industrial progress.

A.8 The Directorate of Planning and Follow-up, which comprises the following sub-directorates:

a) The Planning Directorate

b) The following "

c) The Contracts "

d) The Industrial Relations Directorate.

A.9 The Ministry Office:

The objectives of this office are to facilitate routine activities, the flow of commissions and propositions from the State Organisations and companies to the top levels of the Ministry of Industry and Mines and vice versa.

(75)
The importance of this department in the industrial progress of Iraq will be shown in an outline of its most important objectives and duties:

i. To study, discover what industrial projects are needed in administration and technical fields, and to define their future requirements of trained personnel.

ii. To combine with the Ministry of Industry and Mines in administering industrial professional training centres, to supervise the practical and theoretical training programmes, to follow up all activities connected with these centres, to supply them with machines, equipment, tools and raw materials, to facilitate the smooth running of the training, and to incorporate any new industrial techniques which may be developed during the training programme.

iii. To ensure that the projects planned by the new Training Centres accord with the needs of industry, to construct and establish these centres, and supply them with specialists, technicians and trainers.

iv. To establish specific qualifications for the professions in the industrial sector, and lay down specifications and practical and theoretical training schedules for the training centres belonging to the Ministry of Industry and Mines. To translate the textbooks for the different subjects taught in training centres.
v. To launch a general study of industrial companies, to select those companies capable of providing practical training in different professions for the Training Centres and to provide an incentive for the students selected from these companies to receive their practical training in the Centres. To draw up a time table for every student showing the time spent on every skill specialised in. To prepare a file for each trainee, and records for different training schemes, e.g. apprenticeship, the fast training scheme and the scheme to raise professional efficiency.

vi. Taking the proper measures in co-operation with the specialised bodies, to put an end to illiteracy in industrial projects. This problem is considered one of the greatest barriers to effective production.

vii. To issue monthly or two-monthly reports on the efficiency of man-power in the organisations which belong to the Ministry of Industry and Minerals.

A.11 The Consultation Council for Industrialisation. This is the highest authority in all matters of planning and of the implementation of general policies throughout the public industrial sector.

A.12 Special Bureaux. These are secretarial offices, one for the Minister and one for each Deputy Minister.
B. Examples of Public Companies from all Qualitative Organisations; their Current Objectives, Systems and Structure.

During my first research visit to Iraq, I collected information, and I conducted field research with seven public industrial companies, one company from each qualitative state organisation, except for the State Organisation of Chemical Industries, from which I researched three industrial companies. The companies researched are these:

a) Two out of the three companies (the Public Company of the Fertilizer Industry in Basrah and the Public Company of the Paper Industry in Basrah) are located at what is almost the farthest point from the Board of Directors of the State Organisation for Chemical Industries, whose headquarters are in Baghdad city. This Organisation supervises seven industrial public companies, among them the two companies mentioned above.

b) These two Companies represent the kind of Industry that the Ministry of Industry and Mines has already taken measures to encourage and expand, for it is interested in expanding the petrochemical industries, whose raw materials exist in Iraq in abundance and at low cost. (7)

In addition to the two mentioned, the following companies were also selected:

1. The Public Bata Company in Baghdad, one of the companies belonging to the State Organisation for Chemical Industries.
2. The Public Company for Mechanical Industries in Alexandria. One of the companies belonging to the State Organisation of Engineering Industries.

3. The Public Vegetable Oil Company. One of the companies belonging to the State Organisation of Food Industries.

4. The Iraqi Public Spinning and Weaving Company. One of the companies belonging to the State Organisation of Spinning and Weaving Industries.

5. Iraq Cement Public Company. One of the companies belonging to the State Organisation for Construction Industries.

I compiled a checklist of 30 questions (see Exhibit 1). All 30 questions were not asked of each respondent, but only those that were relevant in a particular case. Respondents were selected so as to give a fairly wide response to the questions. They included, for example, departmental managers of: Organisation & Productivity, Accounting, Administration, and Maintenance. If the respondents' responses needed clarification, further questions were asked. The respondents were not shown the questions on the checklist. The replies were recorded in note form by the researcher, and his personal observations were then added as follows:

B.1. The Public Company of the Fertiliser Industry in Basrah

- The objectives of this Company as stated by the Administration Division Manager and his assistant are as follows:

A note on the Company itself

Established on the 16th September, 1969, in Basrah County. Nominal Capital (I.D. 12 million). On the 1st April, 1974, attached to the State Organisation of Chemical Industries. Its major products and capacity are as follows:
a) To produce fertilizers for local use and for export.

b) To help in reducing unemployment.

c) To do its best to reduce costs and increase production, in order to compete with foreign produce in the international market.

d) To participate in creating an industrial atmosphere in the southern part of Iraq.

e) To participate in developing the area around the Company both socially and economically. (The Company is located about 20 miles away from Basrah City).

f) To train unskilled and semi-skilled workers, in order to reach a reasonable level of productivity.

g) To make a profit if conditions of production and marketing permit it, and if the national interest requires it.

---

<table>
<thead>
<tr>
<th>Product</th>
<th>Unit</th>
<th>Productivity Capacity (Yearly) with three shifts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Urea fertiliser</td>
<td>Tonne</td>
<td>46,000</td>
</tr>
<tr>
<td>2 Ammonium Sulphate</td>
<td>Tonne</td>
<td>120,000</td>
</tr>
<tr>
<td>fertilizer</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Expansion

On the 22nd April, 1972, Ministry of I. & M. decided to expand the existing factory in order to raise Urea production. The Contract was awarded to the Japanese Mitsubishi Company. This Company took the responsibility for initiating the whole project on the 11th September, 1973, at a cost of (I.D. 33 million) and set a date for completion by the end of 1976.
As the Cost Accountant mentioned, the Company has not made a profit since its establishment on 27th June, 1971. He ascribed this to the need to sell the product in the local market at prices equal to the production cost at most times, since the Company's product is distributed by purchasing bodies and also governmental offices. The product is mostly Ammonium sulphate, Urea, Ammonium gas, H2 SO4 and Liquid Ammonium to public industrial companies, or to peasant societies, which are also under government supervision.

The second reason, which is beyond the Government's control, is the low price of such products in the international market.

The technical reasons behind not making a profit, as mentioned by one of the Company's Engineers, are:

a) Frequent stoppages, which happen to the factory machines as a result of technical faults when the machines were installed, and frequent power cuts.

b) Shortage of efficient Iraqi technical staff to maintain the factory machines and increase productivity.
o) Unsuitability of the machine design for Iraqi weather. (The area where the Company is situated is considered one of the most humid and hot places in Iraq).

d) Even under perfect conditions, production in the Company never exceeds 75% of the designed capacity.

- Among the other points, mentioned by the Cost Accountant, as sufficient reasons for not making a profit, is one which creates dissatisfaction among the manpower in the Company. This is the prolonged and complicated procedure, which must be gone through before taking the most important decisions.

This situation results in a negative attitude, when the decision is at last made, and it frequently results in the loss of profitable deals on the international market. Other points mentioned by this officer are the distance at which the people responsible for production planning, marketing and expenditure operate. (Those people are members of the Board of Directors of the State Organisation of Chemical Industries, and their offices are located in Baghdad City, which is about 360 miles from the Company site). Very rarely does any one of them come personally to visit the Company and try seriously to investigate and live through the problems of the factory and its workers, before the central Board enforces its general plans for such things as production.

A third factor noted is the urgent need to increase the authority of the Consultative Committee of the Company. This Committee is much more familiar than any other body with the needs and problems of the Company. If, however, it is to
take speedy and effective action, it must have sufficient authority.

- The long term general objectives, which embrace the public industrial sector as a whole, are drawn up by the High Planning Council at the Ministry of Planning. This consists of the Ministers of I. & M., Planning, Finance and Trade and members of the Economic Affairs Bureau in the Revolution Command Council, together with members of the Consultation Council for Industrialisation. (10) The High Planning Council is headed by the Vice President of the Revolution Command Council. The short-term general objectives for one or a few state industrial companies are planned by members of the Consultation Council for industrialisation.

- Some changes occur in regard to the general short-term objectives, mostly once a year.

- The organisational structure of this particular company defines the authority and responsibilities of the high and middle management levels, in order to control and supervise the functions of the divisions, departments and section, and then defines the possibility of co-operation and co-ordination among these offices (See Chart No. 2).

- Members of the Consultative Committee are chiefly responsible for the success of the organisational structure.

- The Company prepares two kinds of accounts - Forecast (Budgeting) and general Final Accounts (see Table No. 5).

- The Finance Manager would not give me a copy of the final general balance sheet, as he said this information was considered secret, according to instructions from State Organisations to all public
companies. I did obtain the figures of the Final Balance Sheets of the companies. I visited from the annual report issued by the Ministry of Industry and Mines for the year 1973/74, after I had received written legal permission from the Deputy Minister.

- The Company does not use any computing machine to calculate the financial process. Actually no part of public industrial sector uses a computer system in its activities.

- There is a manual to help managers draw up the budget.(11)

- The process which is followed when the managers prepare their forecast budgets, is that each division prepares detailed information about its needs, and its estimated expenses during the next fiscal year. This financial information is collated in the accounting division and after co-ordination, presented to the Consultative Committee. This Committee studies the information, amends when necessary, and presents it to the State Organisation that supervises the Company, i.e. to the Planning and Financial Office, which then studies the budgets from all financial aspects. After that, the Planning and Financial Office presents the Forecast budget to the Board of Directors of the Organisation for discussion and approval, and then presents it to the Ministry of Industry and Mines for final approval. To take the instance of the Maintenance Department, which is part of the Technical Affairs Division. Since the Head of this Department is also a member of the Estimated Budget Preparatory Committee, he uses all the information available to him about the needs, and forecasts
of the Maintenance Department, and he personally classifies his Department budget. This budget, combined with those of all other departments is subject to the Technical Affairs Division. The same procedure is carried out in all the other divisions.

- Usually the required reports about control processes for instance cost accounting, statistics and a profit and loss sheet, are presented each month to the Manager of Technical Affairs (see Tables Nos. 6, 7).

- The Company does not use Standard Costing as a means of controlling Engineering Costs. Estimates, as the Cost Accountant mentioned, fulfil this objective. He also said that no other controls are exercised by accounting division. The reason is that most of the Technicians in the factory do not accept any kind of control or interference from cost accounting officers. For instance, when one of the Technicians in the Maintenance Department asks to purchase any material from the local or foreign market, he never consults the Cost Accounting Department about the prices or quality of the materials needed.

- Reports are presented daily or weekly from the Technical Supervisors to their Department Heads and then to the Cost Accounting Department.

- There is a manual, which might be considered a management plan, listing the objectives of each department (See Job description, No. 1.).

**Personal Observations:**

1. Some of the officers I met answered the questions, in a limited and specific way. Some of them tried
not to answer clearly, especially when they saw that their answers were being put in writing. They were afraid that if their answers were critical they might be held responsible for what they had said.

2. Some respondents, due to lack of experience and specialisation, did not understand the meaning of some of the questions, although I explained them in simple language.

3. I found that there is a tendency towards carelessness, a lack of real interest in serious work requiring initiative. Most of the officers and employees are conscious of working in an area far away from the cities, which gives them an excuse, since they are in an isolated position, to be dissatisfied with the lack of a modern social life. A good percentage of them hope later to be able to transfer to another Company near one of the cities like Mosul or Basrah or Baghdad.

4. All the public industrial sectors have broadly identical objectives and control systems. These are planned by a member of the Consultation Council for Industrialisation. But these objectives and the general systems, can be elastic, and there is the possibility of varying them to certain extent, according to the needs of each Company.
This ability to manoeuvre depends on:

a) The capability, strength of personality and the extent of the political involvement of the General Manager.

b) The experience, efficiency and enthusiasm of the managers in the high and middle levels.

c) The location, type and quantity of product, and the date when the Company was established. All these elements can play a part in crystalising the control systems that fit each Company within the general plan and policies drawn up by the Consultation Council.

5. As Iraq is developing in almost all spheres of economic activities, after the sudden drastic increase of oil revenue, the change in the size, and the organisation's structure and their titles have to match with these developing activities.

B.2 The Public Company of the Paper Industry in Basrah

During my visit to the Company I met officers from the Technical Division, Controlling Department, Financial Organisation and Productivity and Administration Divisions.

A Note on the Company itself

Established on 17th September, 1970, in the country outside Basrah city. Its capital is I.D. 21,000,000.
Their answers to the questions which related to their particular fields on the checklist in Exhibit I were as follows:

- The objectives of the Company are clear and may be summarised as follows:
  
a) To supply the Iraqi market with products previously available only as imports.

b) To exploit national resources previously ignored, in this case the material from the processing of sugar cane.

c) The Company has now undertaken laboratory research to investigate the usefulness of other cheaply available, cellulose material, i.e. palm leaves, cotton fuzz, etc.

d) To provide further employment in the country and to create an industrial atmosphere in the area surrounding the site, which is located 30 miles from Basrah City.

Further, to familiarise the neighbouring swamp inhabitants with the workings of modern industry.

e) To exploit nearby energy sources, e.g. natural gas.

f) To make use of the by-products of other industries, for example, pulp from the sugar industry, hydrochloric acid.

<table>
<thead>
<tr>
<th>Products and Capacity of the Company</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product</strong></td>
</tr>
<tr>
<td>Paper (various types)</td>
</tr>
<tr>
<td>Cartons</td>
</tr>
</tbody>
</table>

Expansion (13)

A Contract was made for the expansion programme with the Saltzer Co. of Switzerland on 14th March, 1974, on the basis of a prepared plan and at a cost of I.D. 38,250,000. Completion has been set to take place, after a limit of 34 months on 14th January, 1977. The project will depend on terms of productivity on the raw material provided by sugar cane available in Southern Iraq. The expansion includes the construction of a unit to process "brevity dough" with an annual capacity of 30,000 tonnes.
acid from the textile industry, lime from Mosul Sugar Factory and H2 SO4 from the fertilizer factory.

g) To try to make a reasonable profit for the benefit of the whole national economy.

- Theoretically an overall plan was to be produced by every qualitative (parent) Organisation for each of the companies it administers. In reality the plan for the achieving of the objectives has evolved internally. Suggestions and recommendations are first made by members of middle management, i.e. supervisors and department heads. These ideas are forwarded to divisional heads at the meeting of the Consultative Committee of the Company, when they are consolidated into a plan, which also takes into account the objectives drawn up by the Ministry of Industry and Mines.

These objectives are then forwarded to the Board of Directors of the State Organisation which supervises the Company. After any emendations which the Board may find necessary, it is then sent to the Consultation Council for Industrialisation, which the Minister heads, for final study and approval.

- Details of the organisational structure were not available because the Company was in the process of expansion, but the structure current at the time of my visit can be seen in Chart 3.

- The organisational structure is fixed, except when affected by expansion or changes in the high managerial level. Such changes usually occur at intervals of between one and five years.

- The objective of the organisational structure is to establish another unit with an annual capacity of 36,000 tonnes will produce dough from the brevity unit. A paper manufacturing machine producing 17,000 tonnes of white paper annually and a second machine with a capacity of 8,000 tonnes of paper will also be constructed, as well as a machine producing 4,000 tonnes of sanitary paper a year.
hierarchical authority and responsibility - to limit the relationship between the divisions themselves and between the divisions and the other levels of the Company.

- It is the responsibility of the General Manager and Divisional Managers (the Consultative Committee) to monitor the success or failure of the organisational structure.

- The Company prepares budgets like any other state industrial concern. These are of two kinds. The first, called a Forecast Budget, contains information about the Company's intended financial activities in the coming fiscal year. The second, known as the general final balance sheet is a summary of the previous year's financial activities (see Table No. 8).

- As the Finance Manager mentioned, the Company has not made a profit since its establishment, but it has working capital which enables it to continue production. This situation is ascribed by the Manager to the inability of the Company to reach designed production capacity in the early stages of its life. The Company does not make a profit, because:

  a) Technical and managerial staff lack experience and mistakes occur whilst experience is being gained.

  b) Most of the Company's efficiency depends on imported raw materials, and this dependence puts the Company at the mercy of international price changes.

  c) The boring routine creates an atmosphere in which correct decisions are not always made at the right time.
d) Limited authority has been delegated to the Company's Consultative Committee.

e) The company is hampered by a problem common among industrial concerns, especially those situated like this one, in rural areas, and that is the problem of dependence on local manpower. This particular area is considered to be one of the most backward of rural areas - it is an area of swamp - and the problem is one of attempting to change simple farmers into disciplined factory workers, a process which takes considerable time, money and effort.

- The Forecast Budget is sometimes inaccurate by up to 40%.
- The final and forecast accounts are drawn up solely with the help of manual accounting machines. However, information is available from the unified accounting system which assists managerial staff in drawing up their budgets.
- The final balance sheet is drawn up by the officers of the Financial Division and then discussed by the Consultative Committee.
- The Maintenance Department suggests its planning budget and the Financial Division puts it in an acceptable form for accounting.
- The ideas and suggestions of foremen, supervisors, heads of departments are sent in the form of reports to the Divisional Managers of the relevant fields. After finalisation by the Divisional Manager, they are forwarded to the Financial Division, who analyse this information on a specially designed form. This information concerns the problems and achievements of production.
and development, and suggestions or ideas for solving existing problems. These reports are then studied at the weekly meetings of the Consultative Committee. For the Maintenance Department there are daily and monthly reports and usually the heads of the Technical Department meet with the Technical Division Manager.

- The Company does not use standard cost accounting procedures in order to control engineering costs because no specialists in this field are available.

- The Division responsible for drawing up productive specifications is the Organisation and Productive Division, but until now the job has not been done by this division because it was only set up four months ago. Further, there are no work study staff.

- The system of controlling engineering costs is by a special form, filled in by workshop supervisors, which provides the following information:

  a) The cost of the raw material used. The workshop supervisors fill in the designation of the raw material, the store number from which it is drawn, and the standard unit and quantity used.

  b) The number of man-hours necessary to complete the job.

  c) The machine hours on each individual machine.

  This form is in quadruplicate, and after completion of the job the manufactured product is sent to the outward stores. The costing information recorded on the form and the internal working document, and the information concerning raw material used in production, is recorded on a stock control document. Any surplus is recorded in the general ledger and returned to the stores.
Three copies of this document are sent to the Stores Accounts Office, where the raw materials are priced in the Originating Department. The three copies are then sent to the Costing Department, where the wages costs, depreciation, and other expenses are added, from the figures calculated in advance on the planning budget.

The Cost Department calculates the total cost and sends the top copy to the Financial Division for the purpose of journal entry. The second copy is returned to the Stores Accounts Office, where the stores receipt for manufactured material is appended, and the material priced and entered on stock cards. The third copy remains in the Costing Department for analysis and use in non-internal functions. The total working cost is calculated by the Costing Department from the total factory expenses, and the results are related to other divisions, according to their interest in that factory. This is a brief résumé of the information on the method of calculating engineering costs given to me by the Financial Manager.

As regards non-accounting control, the Organisation and Productivity Manager explained that each division has a particular responsibility. For instance the responsibility of the Purchasing Division is to decide on reasonable prices for raw material, and to ensure that such material meets specifications. In the event of its being sub-standard, alternatives must be found. The Marketing Division co-operates with the Production Manager to amend and develop production, and to create new markets for the developed product.
Control over non-accounting aspects of direct work cost are exercised by these means:

a) Daily and monthly reports obtained by Senior Management from Department Heads and Technical Supervisors in order to establish what problems and deviations might occur during work shifts.

b) Quality control is exercised by gauges fixed to the machinery and by prepared charts and forms.

- The system for providing management with information to assist in the planning of costs is as follows:

  For maintenance, development, and Quality Control, none exists, but a serious study is being undertaken by the National Centre for Consultation and Management Development in order to evolve a practical method.

- There is a manual, which could be considered to be a plan for management, which delimits the job description of various divisions and departments.

- The planning (Forecasting) budget is considered to be an outline for senior and middle management in the fulfilment of their objectives.

- The Supervisors are not responsible for the costing of their departments.

- The easiest costs to control are those of modern machinery, i.e. computers. These are not yet in use.

- The most difficult costs to control are those incurred by the increasing percentage of unskilled and lazy workers and agitators.

- Information which is not to hand, but which would be of great benefit to management, is the real cost of all production activities and their accurate timing.

(94)
There is no export since production does not satisfy internal demand - local markets are a function not of demand, but of the production capacity of the machinery.

**Personal Observations:**

I have made an exploratory visit to observe the Company working. This visit started from the raw material stores and progressed through the production process to the finishing department. I can summarise what I have seen, and the answers given to my questions by the Manager of the Organisation and Productivity Division:

1. The full design capacity of the machinery is not exploited, even though enough time has elapsed since establishment to allow this to take place.
2. I believe that the production flow line is not correctly organised, though the nature of this product requires consecutive assembly.
3. The percentage of waste and spoilage during production is unacceptable.
4. Study of the last forecast budget reveals:
   a) That it makes super-human demands for its execution, and
   b) No Commercial Market Study is considered, and there is only a superficial study of profitability. I consider this to be a result of the inability to undertake cost control. The prices are not competitive with those of foreign companies.
The reason, as the Manager explained, is not only that management control systems in developed countries are more efficient and effective, but also that the opportunity exists abroad for mass production and industrial integration. In addition there exists a greater industrial awareness.

5. There are weaknesses in the system of following-up the production processes necessary to achieve the Company's objectives. I consider the reason for this to be the lack of specialised technicians and managers. Those technicians and managers who do exist were found to lack enthusiasm for the execution of their responsibilities. They realise that they will not be called seriously to account because of the difficulty in replacing them.

6. There is a lack of real knowledge of the state of the international market in respect of the source and availability of spare parts, competitive prices and alternative spares. I found that some spares had been bought in large quantities indicating a lack of scheduling study. The result of this is frozen capital which might otherwise be available for other uses, and a shortage of other spares leading to slowing down and stoppages on some machines.

7. There are clear problems in regard to delimiting authority, some officers occupying a favourable position because of a relationship with someone in state authority. Those officers exercise authority in areas for which they accept no equal
responsibility. This situation gives rise to some sensitivity in the relations among the personnel.

8. The Company suffers from a problem of wage rates. This is because it is situated near the Iraqi National Oil Company, which is able, due to its greater wealth, to offer greater financial incentives to those workers who have experience in industrial work. This doubles the problem of finding trained technical workers for the paper industry.

B.3 The Public Bata Company in Baghdad

I visited the Company and met the Administration Manager, the Sales Manager, and the Senior Cost Accountant. After presenting the questions, the following answers were received in the order in which they appear on the checklist, although the answers were not as open and detailed as those given by the previous Company.

---

A Note on the Company

It was established in 1936 as a small branch of a foreign Company in Iraq. It expanded gradually up to 1952 when it became a limited Company with Iraqi and foreign capital. The factory was built to manufacture shoes from leather, rubber and plastic. The Company was nationalised in 1964 and attached to the People's Shoe Manufacturing Administration in Kufa. Other Companies were attached to it in 1970 when Organisation Statute No. 90 came into being, viz one of the ex-Ministry of Defence factories at al Furat, and the Sponge rubber factory. The capital is now ID.1,885,575.

Products and Capacity

<table>
<thead>
<tr>
<th>Product</th>
<th>Unit</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leather Shoes</td>
<td>pair</td>
<td>2,168,000 (1 shift)</td>
</tr>
<tr>
<td>Rubber Shoes</td>
<td>pair</td>
<td>1,258,000 (3 shift)</td>
</tr>
<tr>
<td>Plastic Shoes</td>
<td>pair</td>
<td>580,000 (3 shift)</td>
</tr>
<tr>
<td>Sponge Rubber</td>
<td>Tonne</td>
<td>4,000 (1 shift)</td>
</tr>
</tbody>
</table>

(97)
The objectives of the Bata Company may be summarised as follows:

a) Since there is an increasing demand for shoes, and the Government does not encourage imports, maximum possible use of the machines is one of the Company's objectives.

b) Profit is not considered to be an objective, but is in fact achieved from exports.

c) Satisfying a certain percentage of home demand is an objective.

The objectives are drawn up by the Consultative Committee of the Company. They are pursued together with the general objectives set by the State Organisation of Chemical Industries.

The objectives of the Company change according to the general plan of the Ministry of Industry and Mines, which is linked to the National plan, renewed every five years.

The organisational structure is not in printed form.

The organisational structure does not change unless there are major personnel changes or expansion takes place. These sorts of changes usually take place every few years. For example, let us take the Kufa branch of the Bata Company (previously the State People's Shoe Company in Kufa); this branch was established in 1959, was independent managerially and belonged to the State Establishment for Industry (now abolished.) When the Ministry of Industry and Mines took over this factory in 1970, which is 90 miles from Baghdad City, it was attached to the headquarters.
Company in Baghdad. Its association with the Headquarters Company includes planning and management control. It is also controlled for the purpose of distribution by the Company executive (the executive of the Public Bata Company in Baghdad) who also exercises responsibility for limitation of the market, quality and quantity of production, and details of financial activities. The Assistant General Manager in Kufa, for instance, who carries out the duties of General Manager in that factory, receives instructions and authority from the General Manager of the Bata Company in Baghdad, as do most of the individual departments.

In short, authority is centralised.

- There are about 100 outlets for the Company's product throughout Iraq. The people who carry out the job of marketing are commission agents who receive a percentage of the profits - between 3% and 6% of the sale price according to the location of the outlets and who are independent of the Company.

- At the moment there are no foreign officers in this Company.

- The organisational structure is designed to produce co-operation and co-ordination between the departments on each level and between the different levels, and helps to define authority and responsibility.

- The Company like the whole of the State Industrial Sector, prepares two kinds of accounts, planning (forecasting budgets and Final Statements - see Table 9).

- Every divisional manager is responsible for the preparation of his divisional accounts. These are collected and sent to the Financial Division in order to be put into final shape, and after discussion with the Finance Manager the accounts are presented to
the Consultative Committee. They then go on to the Board of Directors of the Organisation and finally to the Ministry for approval.

- There is a manual to help the managers to draw up their budget. This Company does not employ a Standard Costing System, but the historical one of forecasting. The reason for this is the lack of efficient accounts staff.

- The Leather Costing Card shows information about the price of each pair of shoes, and the approximate quantities of leather which should be used (see Table 10). The Costing Department prepares documents specially for each model which exists in production, and the specifications for all kinds of material used in the shoes. The information on these documents is used by the officers of the Production Department, who draw materials from the Stores Supervisor.

- The Company has a forward production plan for four weeks ahead. After this short term plan has been accepted by the specialists, the Costing Department prepares all the models in the factory sections for each week, and then the raw material supply documents are prepared by the Cost Department and sent to the Production Department, so that the Cost Department controls the quantity and specifications of each model weekly.

- There are no non-accounting control procedures.

- Each supervisor in the Production Department is responsible for having enough materials for a limited period of production. The supervisor is considered responsible for the production of a fixed
quantity of the finished product previously specified, and it is
his duty to reduce unnecessary waste.
- The actual cost method is the easiest for controlling. The most
difficult, according to the Senior Accountant is standard costing,
and he ascribes this difficulty to the lack of competent accounting
officers.
- The previous officer adds that information not now available,
which would be of use to management, could be provided by
specialised costing personnel, able to prepare a standard system
which might give a clear and precise picture of the costing procedure.
This would help top management to make the right decisions.
- Export activities are controlled by different accounting methods,
for instance, in the calculating of export costs, internal taxes
must be disregarded in drawing up a selling price. The commission
of the distribution agencies is similarly omitted, while some of
the managerial expenses which relate to the Export Department,
a part of the Sales Division, are added.

Personal Observation

1. The following observations were made during my visit to Bata
   in Baghdad and from the information received from the Senior
   Accountant after asking the final question.

a) This Company makes a reasonable profit, perhaps partly because
   the management control system remains to a certain extent
   affected by the system in operation when the Company was under
   partial foreign ownership.

b) Many of the managerial staff have been employed here for several
   years and have accumulated experience and ability.
c) The successful marketing operation which existed prior to nationalisation is still workable, because the Marketing Division conduct field studies to discover real public taste. This Division asks the Production Department to develop products according to the changing taste of customers of both sexes and most ages.

d) Mechanisation has helped towards mass production, which enables the unit cost to be reduced and the percentage of waste to be cut. The Company have also saved time and money by creating skillful workers. These factors contribute to products of high quality and reasonable price, which encourages the import by foreign countries of the shoes produced by this Company. For instance, "the 1974 figure to the U.S.R. was 15,000 pairs, and this is the lowest export figure in recent years" (15)

2. The problems suffered by this Company are the lack of a profound and factual study of the work specifications for each job, and the difficulty of ensuring the appointment of staff with appropriate qualifications, interest and an efficient approach which will enable them to carry out their appointed task without any pressures other than those of the job in hand. The Company is nonetheless ideally situated in this respect in the centre of Baghdad City, where there is a wide choice of suitably qualified personnel.

3. Some of the Company's employees were not qualified to accept the responsibility of their jobs, and so they tried in various ways to conceal the fact that they were working in a lazy and
dishonest way. They found a variety of excuses for absenting themselves from their duties. I believe that the reasons are those stated in the previous observations, No. 2.

4. The Company takes care to ensure adequate stock levels for a period of not less than six months ahead. This period is considered reasonable, especially since some of the materials are imported from distant countries, and the sources are affected by political and economic factors, international price fluctuation and the availability of alternative materials. As for the finished goods in the Company's warehouses, these were few and sometimes almost non-existent. This is because the distribution channels in the home market are effective because of the financial incentive, and foreign demand is high because of the high quality and reasonable price of the Company's shoes and the satisfactory results obtained in the tests they are subjected to.

5. This Company is the only one which operated a piece work system of paying wages. (This system was started a few years before nationalisation). This method, however, had a detrimental effect on quality, especially in the last two years of its operation, and so a new method of assessment was prepared by the Production Department. The production operations were divided according to the skill required for their operation and designated 1 - 6 in an ascending order of difficulty. For each level there is a set wage. This
system has been in operation since 1st October, 1975.

B.4 Public Company for Mechanical Industries in Alexandria

During my visit to this Company, situated some 50 miles from Baghdad, I met the General Manager and the Commercial Manager. However, the time they had available to answer the questions was limited and I found that they were reticent about supplying information not already available in printed form. The information gained from these answers, the printed forms and my own observation follows, but first I wish to give a concise picture of this heavy industry.

a) Organisational Structure and Main Offices of the Company

According to Statute No. 90 (1970), the jobs of planning, following-up and co-ordinating, the issuing of credit on the basis of the forecast and final account, the preparation of financial statements and the supervision of the affairs of officers and employees, are all the responsibility of the State Organisation for the Engineering Industry. While every public company carries out the general plan by preparing the production requirements and manufacturing its products in order to fulfil its forecast budget, this Company is in addition involved in following the market processes and obtaining the money.

Summary of the Company

When, in 1959, the Soviet-Iraq Technical and Economic Agreement was signed, it was decided to set up an agricultural machinery project. This project was given a high development priority. At the beginning of 1968 the State Engineering Industry was established within the State Establishment for Industry and 1970 saw the establishment of the State Organisation of Engineering Industries, which took over responsibility for the creation of heavy industry in Iraq.
from sales. (This specialisation among the qualitative organisations and the public industries which are administered by them could apply to all qualitative organisations.) As there is a huge expansion in motor car production, a special directorate has been created to control it.

The directorate is attached directly to the State Organisation of Engineering Industries, besides its legal attachment to the company. The offices which exist in the organisational structure (see Chart 4) are attached directly to the general manager, who supervises the execution of the company's industrial policy and co-ordinates the jobs of different offices. There is a special bureau for checking and follow-up to assist the general manager in the execution of his duties.

b) Nature of Work in the Company's Factories

Here I am going to present in some detail the gist of the major functions of the company's factories drawn from the available literature. In order to give an idea of the nature of the work in these factories it is necessary to follow the various processes carried out from market research to after-sales service and development, which could be called the production cycle. This includes four major steps, the first of which is production designation. This includes checks on quality, specification and demand. The second step is production itself, including preparing production requirements.

This company became one of the main companies in the organisation and was later named the public Mechanical Industries Company in Alexandria and was given the task of constructing agricultural machines and ancillary components.

(105)
production processes and quality control. The third step is marketing, which encompasses preparation for selling, advertising and sales procedures and services. The final step is production development, including improving quality and redesigning according to the state of the market. In the first stage, a contribution is made to the investigation by the Commercial Office (Marketing), who ascertain the type of product and size of demand, while the Research and Development Office makes a study of required production and arrives at the major specification. The third step is helped by the technical, planning, quality control and commercial offices. The Technical Office decides on designs and the technology, which in turn determines the raw materials required, and the Commercial Office (Purchasing) works to ensure the availability of these materials. Meanwhile spare parts are manufactured in the spares Department, which belongs to the Technical Office. After preparing product requirements, the Production Divisions and its assembly lines produce and prepare the commodity for despatch. At the end of each production process there is a quality control process to ensure that the product conforms to specification. During this process, when necessary, manpower training takes place, as skill is a major requirement. This is the responsibility of the Administration Office. To execute the third stage the Commercial Office have to advertise and contract with agencies to sell the final product, or to arrange direct sales and take care of after-sales service either directly or through agencies, and to collect information about the suitability of the product for its intended job.
In addition they co-operate with the Financial and Economic Office for cost study and to establish a competitive price. The fourth stage is the concern of the Research and Development Office, which tries to improve the product, or redesign a product suitable for the job according to the recommendations of the Commercial Office or the observations of the users. After completion of research and development, the samples are presented to the Technical Office (Design Department), for completion of the production cycle.

In addition there are other important jobs, which are not directly related to the production cycle, but are nevertheless of major importance in facilitating the production procedures. The most important of these are maintenance, transport, public services, stores and construction. A brief picture will now be given of the nature of the work in some of the major departments related to our studies in the Company's factories, i.e. to the Management Control System followed by this Company.

1. **Planning**

The major objective of planning is to ensure the most efficient means of production by the intelligent use of machines and individual processes. This could be achieved through issuing detailed schedules and preparing production sequences, also through following up the execution of each stage and analysing and assessing the results in order to amend the schedule for the next period. Planning comprises these major departments. Firstly - the Scheduling Department. This initiates the schedules, resulting from the documents, forms and technological procedures.
Secondly - the Despatch Department. This sends out information on the use of raw materials, spare parts, job orders, and controlling, besides following up the jobs and making amendments where necessary.

Thirdly - the Following Department. No doubt each department has to have its own follow-up procedures, but the central Following Department is still very important for unifying the facts and preventing clashes of procedure as a result of various changes. This following-up has two main functions:

1. To produce awareness of actual activity as compared with that planned, and to explain the reasons for any divergence.

2. To suggest modification procedures to eliminate this divergence. The Planning Department has a direct link with technology, productivity and marketing in the sense that it determines raw material, production, the shift production level and job standardisation.

2. Quality Control

The major objective of quality control is to ensure the high quality of raw materials, products, spares and measuring equipment, besides drawing up analyses which include design procedures. Accordingly, the Division contains these major departments:

Firstly - the Investigation Department. This oversees assembled and non-assembled goods. The investigation must be carried out according to the technical requirements laid down by the designs, and this Department has investigation sections which take care
of all the production departments, spares and assembly.
Secondly - the precise measuring laboratories. Their function is to check equipment spares, etc., used in measurement, and to be sure of their suitability for the job.
Thirdly - the Mining laboratories. These are concerned with the quality of raw material and other materials used during the technicological processes, including mechanical, mining, chemical and heat processes and stoving, painting and oiling. There is also a special laboratory for spectral and X-ray analysis, and quality control has direct links with design, technology, production and planning.

3. Costing

Classic costing procedures cannot be considered as a means of calculating costs for the mechanical industries. In this case the definition I give extends to and includes control of planning execution, showing divergence and bringing it to the attention of the Company services, besides controlling stock levels and wages distribution. The factories of the Mechanical Industries Company have several production workshops and follow different technological methods for the production of different items. This situation calls for a number of costing centres within the framework of central costing, which means that calculation of forward cost depends on the technological contribution. For the purpose of establishing the cost of any product this equation may be used:

where \( C = \text{cost} \); \( Cd = \text{direct cost} \); \( Ci = \text{indirect cost} \)

\[
C = Cd + Ci
\]
The direct cost comprises:

- Raw material (Mining)
- Secondary & completion materials (tyres, glass and plastic)
- Depreciation (casting, fixing and production machinery)
- Power (electricity, steam and pressed air)

The elements of indirect cost are:

- Industrial Services
- Marketing and administration services
- Fixed costs: (buildings etc.)

Calculation of these items must take into consideration the forecast for individual workshops. The cost of raw material and secondary materials can be calculated by Technology Department. (See Table 11.) The Company considers that building depreciation will reach zero in 20 years, and machinery in 10 years.

In order to execute these functions the following sections exist in the Cost Department.

1. Forecast Cost Section
2. Actual Cost Section
3. Loading, distribution and Stores Expenditure Section
4. Store Control Section
5. Claims Section

The Cost Department has a close liaison with the Technology, Planning and Marketing Departments for the purpose of forecasting costs and assessing prices.

The following answers are the whole of the information received in reply to the questions on the checklist, and the answers
were given in a legal letter signed by the General Manager, the Engineer Latif al-Alwan.

- Yes the Company has objectives.
- The objectives were initiated by the Consultative Committee together with the Board of Directors.
- The objectives have not changed since establishment.
- The Company has a clear organisational structure.
- The organisational structure has not changed since its establishment by the Industrial Development Centre for Arabic Countries in 1971.
- The Budget is prepared by the High Committee and Subsidiary Committees and the Office of Financial Affairs.
- Each division of the Company prepares its Budget in co-operation with each department and its officers.
- Budget follow-up takes place once a month by report.
- The Company uses standard costing and standards are set for current work by the Technical Department, and for the further work by the Work Study Team.
- Control for deviation of raw material is established by Material Control in the Planning Office and directed during working hours by the Production Division. The result is sent to the Costing Department on special forms.
- Each supervisor is responsible for the execution of the plan, but not for cost control.
- The planning Budget is divided into months and seasons and it must be followed precisely as a monthly and seasonal programme for production and sales.
Each division specialises in certain functions, for which all information is fully available to the division.

There is no large export activity now because of home demand.

Personal Observations

My personal observations of this Company through my visit, and from information supplied to me in printed form, are as follows:

1. The following table is compiled from Company products and shows present production growth compared with the previous year, (see Table No. 12).

2. There is a tendency for both Iraqi and foreign personnel to leave their jobs. This tendency was marked in 1973-74 and increased in 1974-75. Incidentally, this Company alone among the Companies I visited employs foreign experts and technicians, most of whom are Russians and Czechoslovaks. In order to assess the reasons for this it is necessary to point out these facts.

   a) The difficulty which the employees encounter in transferring to the area where the Company is situated, despite the guarantee by the Company of transport for most employees.

   b) Most the employees live near the Company, in an isolated rural area. The Company has prepared a housing area and public facilities in order to encourage employees to live nearby, but although the number of houses consistently increases, it can not keep pace with demand, especially since the designation has been increased, because of the family and social ties of employees, most of whose families live in cities.
Table No. 12.

From the beginning of the year to end of March 1974

<table>
<thead>
<tr>
<th>Products</th>
<th>Unit</th>
<th>Actual Quant.</th>
<th>Actual Price</th>
<th>Planning Quant.</th>
<th>Planning Price</th>
<th>Actual %</th>
<th>Quant.</th>
<th>Price</th>
<th>Same period of last year.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agric. Equip.</td>
<td>number</td>
<td>2,184</td>
<td>211,682</td>
<td>4,120</td>
<td>598,970</td>
<td>35</td>
<td>734</td>
<td>203,299</td>
<td>104</td>
</tr>
<tr>
<td>Bodies</td>
<td>&quot;</td>
<td>585</td>
<td>103,223</td>
<td>1,100</td>
<td>251,120</td>
<td>61</td>
<td>294</td>
<td>68,015</td>
<td>225</td>
</tr>
<tr>
<td>Wooden goods</td>
<td>&quot;</td>
<td>diff.</td>
<td>151,936</td>
<td>diff.</td>
<td>14,600</td>
<td>104</td>
<td>diff.</td>
<td>93,122</td>
<td>126</td>
</tr>
<tr>
<td>Castings</td>
<td>Tonnes</td>
<td>4,033</td>
<td>571,422</td>
<td>5,250</td>
<td>790,900</td>
<td>72</td>
<td>2,712</td>
<td>314,649</td>
<td>182</td>
</tr>
<tr>
<td>Non-standard tools</td>
<td>&quot;</td>
<td>355,174</td>
<td>89,405</td>
<td>860</td>
<td>212,500</td>
<td>42</td>
<td>diff.</td>
<td>55,248</td>
<td>162</td>
</tr>
<tr>
<td>Manual tools</td>
<td>number</td>
<td>69,695</td>
<td>41,346</td>
<td>60,000</td>
<td>170,000</td>
<td>15</td>
<td>21,490</td>
<td>5,329</td>
<td>820</td>
</tr>
<tr>
<td>Springs</td>
<td>Tonnes</td>
<td>1,424</td>
<td>249,255</td>
<td>2,100</td>
<td>393,000</td>
<td>63</td>
<td>178,185</td>
<td>50,605</td>
<td>493</td>
</tr>
<tr>
<td>Other Manufac.</td>
<td>&quot;</td>
<td>197,583</td>
<td>68,916</td>
<td>716</td>
<td>126,260</td>
<td>55</td>
<td>diff.</td>
<td>15,467</td>
<td>453</td>
</tr>
<tr>
<td>Tractors</td>
<td>number</td>
<td>1,735</td>
<td>245,750</td>
<td>1,750</td>
<td>2492,500</td>
<td>98</td>
<td>710</td>
<td>984,100</td>
<td>250</td>
</tr>
<tr>
<td>Capital Manufacturers</td>
<td>amount</td>
<td>diff.</td>
<td>335,959</td>
<td>diff.</td>
<td>584,750</td>
<td>57</td>
<td>diff.</td>
<td>535,988</td>
<td>62</td>
</tr>
<tr>
<td>Total</td>
<td>Diff.</td>
<td>4330,594</td>
<td>Diff. 5866,600</td>
<td>74</td>
<td>Diff. 2325,822</td>
<td>185</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Result of the Product Report for March 1974 (22)
c) The difficult nature of work in some divisions - notably the Casting Department.

d) Employees of this Company do not receive wages comparable with the employees of other State Companies, if account is taken of the unpleasant nature of the work and the different circumstances from those which obtain in other Iraqi companies. Furthermore, it is an isolated area. I believe that these problems are common to most companies located at a distance from county centres, but a serious practical study is being made to overcome these problems in the near future.

3. The inevitable result of industrialisation in any newly developed country is development and technological difficulties. This means obstacles in the early stages, accompanied by deviations which make it hard to succeed. These problems and the consequent wastage are not easy to control. All this is in addition to the Government policy of making products available at the lowest possible prices to consumers who are members of agricultural societies or to other workers whose livelihoods are considered to depend on this Company's products. This point is given increased importance by the fact that agriculture is also planned and controlled by the Government. In addition, the prices of most of the raw materials and semi-manufactured products essential to final production have increased. In spite of all these negative factors, the Company was able measurably to decrease losses and to compensate for losses which might occur with revenue from reserves (see table No. §3).
The following table (A) explains this (23).

| Table No. 13 |  
| --- | --- | --- |
| **Profit & Loss** | **1971-72** | **1972-73** | **1973-74** |
| Profit |  |  |  |
| Loss | 1093365 | 891376 | 716806 |

The Company was able to find the financial resources to fulfil its projects and execute its productivity plan by preparing and realising the necessary cash liquidity.

The following table (B) shows the different Sources (24).

<table>
<thead>
<tr>
<th>Sources</th>
<th>1971-72</th>
<th>1972-73</th>
<th>1973-74</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased banking fac.</td>
<td>1000,000</td>
<td>2000,000</td>
<td>4000,000</td>
</tr>
<tr>
<td>Loans</td>
<td>750,000</td>
<td>1500,000</td>
<td>2876,923</td>
</tr>
<tr>
<td>Credit payments (unpaid)</td>
<td>4049,219</td>
<td>5289,800</td>
<td>1862,626</td>
</tr>
<tr>
<td>Capital Support</td>
<td>1362,000</td>
<td>1460,975</td>
<td>1688,975</td>
</tr>
</tbody>
</table>

4. Among the urgent problems which make difficult the working of the budget is the availability of raw material. The only solution to this problem is a stock reserve for a period of not less than two years. This does not imply that there is an actual probability that the Company will not obtain the raw material either because of the inability of the supplier to provide the material for unforeseen reasons, or because of non-fulfilment of his obligations for commercial or other reasons. The likelihood of such a case is in fact low, but if it did occur, it would lead to stoppage and failure to reach the production target. If the Company is unable to
obtain any material that it needs, the result is either no production, or a material different from specifications. This means additional effort and high costs. The following measures are suggested by the Manager of the Commercial Office to avoid such an occurrence: that the office have authority to obtain the relevant raw material when necessary, up to a total of I.D. 10,000 for each credit opening instead of the I.D. 1,500 limit now in force; that this be accomplished without the need to invite tenders, but with the approval of the Consultative Committee. It is suggested that this procedure be worked for both internal and external purchasing. The final point is that the solution of technical problems is basically dependent on two factors; the existence of technical cadres and experience in the exercise of technology.

B.5 The Public Vegetable Oil Company in Baghdad

As there is a tendency in the Ministry of Industry and Mines towards the amalgamation of companies with identical and complementary products, I have asked the Industrial Relations

Summary of the Company (25)

The Company is the result of the amalgamation of the vegetable oil extraction Company, established in 1940, with the Cotton Seed products Company established in 1953. It was amalgamated with the Rafidan Detergent Company in 1967 and with the Industrial Printing Company in 1969. The nominal capital is I.D. 3,367,612.

The Company's Products & Capacity (26)

<table>
<thead>
<tr>
<th>Products</th>
<th>Capacity in Tonnes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Margarine</td>
<td>90,000</td>
</tr>
<tr>
<td>2. Liquid vegetable oils</td>
<td>9,000</td>
</tr>
<tr>
<td>3. Toilet soaps</td>
<td>11,000</td>
</tr>
<tr>
<td>4. Washing soaps</td>
<td>11,700</td>
</tr>
<tr>
<td>5. Detergent powders</td>
<td>20,800</td>
</tr>
<tr>
<td>6. Cosmetics</td>
<td>714</td>
</tr>
</tbody>
</table>

(116)
Manager why this is so, and why each Company does not work in a free competitive market. His answer was as follows:

The first two Companies were nationalised on 14th July, 1964, and the other two concerns had been under state ownership since their establishment, the sales and distribution policy and price limitation being issued by the Legal Office, which is part of the State Organisation of the Food Industry. Since each of the four Companies has technical expertise, in production, sales, distribution or the purchase of raw materials in international markets, we can clearly use this to mutual advantage. It was also felt that after amalgamation the individual Companies could become more efficient in fulfilling both their internal and external market obligations than if they had remained independent. It would also be possible, after amalgamation, for a Company to reduce its staff and to direct advertising expenditure to the foreign market which it could then supply.

He added that the co-ordination of activities will serve the consumer through the development of the products of the amalgamated Company.

When meeting the Managers of the Organisation and Productivity, and Personnel Divisions, and the Cost Accountant, I found that some of their answers showed a tendency to hesitate and displayed evidence of a lack of experience. Indeed the answers were not very different from those given by other Companies. The most important information, given by the Manager of the Organisation and Productivity Division, was as follows:
Essentially the Company objectives originated from the Consultative Committee in co-operation with middle management. For instance, when sales objectives have to be drawn up, they are formulated in a general way by the Assistant to the General Manager of Commercial Affairs in co-operation with the Marketing Division and the Head of the Sales Department. These objectives are presented to the Technical Manager (Assistant General Manager for Technical Affairs). The production objectives are established with the co-operation of the production departments. Then the plan is forwarded to the State Organisation for study and to the Consultation Council for Industrialisation for approval.

The information used in preparing sales plans is in this form:

a) The previous year’s sales.

b) The production capacity of the Company.

c) Received statistical information from the Central Statistical Bureau, which is a subsidiary of the Ministry of Planning, about the interest in the Company products and purchasing power of the Iraqi Consumers.

d) This information is analysed by specialists to help the preparation of a plan.

There are several methods of submitting a plan, which are used depending on the objectives of the Company.

a) The Historical Method (Time Series).

b) The average sales figures for previous years.

c) The traditional method of adding 10% to last year’s sales figures.

The method followed in this Company is the historical method.

Almost 90% of the raw materials for various processes is imported, especially crude palm oil and soya oil, which mainly come from
Malaysia and other South East Asian countries.

- This company used to accumulate profits of between I.D. 1½ - 2 million until the year 1972/73 (See Table 14). The fiscal year 1974/75 saw a loss by the Company of I.D. half a million, the reason being a sudden increase in raw material prices on the world market. Since one of the major objectives of the Company is to maintain reasonable prices for the Iraqi consumer, some of its prices have not been raised since 1964. The loss suffered by the Company was subsidised by the Treasury Office of the Ministry of Finance.

- There is no complete information system except that used for stock control. The Divisional Managers, therefore, depend, when taking decisions, upon routine information acquired by keeping in touch with the Departmental Heads and the rest of middle management, and by using personal efforts and skill. In other words, the information system is not based on scientific study.

- The Organisation and Productivity Division working with specialists from the National Centre for Consultancy and Management Development, has prepared a system to exploit the machines in all the Company factories (see Table 15). This table shows the conclusion of the monthly reports on how the machines in the Company's factories should be exploited.

- There are no job descriptions for the administrative posts, but there is information on job evaluation for the workers.

- There is a Following Committee whose purpose is to follow up the execution of managerial decisions.

- The Company's problems, as outlined by the Organisation and Productivity Divisional Manager are as follows:
1. The Selection of senior managerial staff from competent people with the required level of efficiency. Or to put it another way, getting the right man for the right job.

2. The State Organisation has to allow for planners in the Company to initiate a planning scheme which also incorporates the suggestions of workers and foremen. This means that planners at different levels have to be in practical touch with the real problems of the workers.

3. Utilising modern systems for increasing production before considering expansion.

4. The need to realise that a flexible attitude towards changes of ideas is necessary among senior management.

5. Serious consideration of technical and managerial training at all levels.

6. Material Incentives might be advantageous, but before they are established, a real figure (standard) for productivity must be arrived at.

7. The essential need to provide modern managerial aids, such as comprehensive job descriptions.
B.6  **The Iraqi Public Spinning and Weaving Company in Baghdad**

I was able to obtain information after meeting the Acting General Manager of the Administration Affairs Office in the headquarters of the State Organisation of Spinning and Weaving. I also met the Cost Accountant and the Head of the Maintenance Department, whose answers to the questions in Exhibit 1 were as follows:

- Before nationalisation one of the essential objectives of the Company was profit making, but now its chief concern is to fulfil the Country's demand for its products at reasonable prices.
- The purpose of any profit made is to finance expansion.
- The Company has no prepared Organisational Structure.

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**Summary of the Company**

The Company was established on 18th January, 1945 as a limited Company with a capital of I.D. 150,000, then increased to I.D. 1,200,000 in 1959. The Company was nationalised in 1964 and attached to the Medical Cotton Company in 1968 with a capital of I.D. 212,796. During the last few years a great many expansion and development projects have been undertaken, the most important being the expansion of the Company factory and the installation of the majority of spinning and weaving machines, as well as the replacement of the old machines by new ones. The capital of this Company was I.D. 1,657,504 on 31st March, 1974.

**Company Production and Capacity**

a)  **Spinning and Weaving Factory:**

1. Different garments  - 19,000,000 metres (2 shifts)
2. Cotton spinning  - 4,177 tonnes (3 shifts)

b)  **Medical Cotton Factory**

<table>
<thead>
<tr>
<th>Product</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  Medical cotton</td>
<td>120 tonnes</td>
</tr>
<tr>
<td>2  &quot; bandages</td>
<td>250,000 dozen</td>
</tr>
<tr>
<td>3  &quot; muslin</td>
<td>3,500,000 meters</td>
</tr>
<tr>
<td>4  white and boric lint</td>
<td>30 tonnes</td>
</tr>
<tr>
<td>5  paper tissues</td>
<td>4,000 boxes</td>
</tr>
</tbody>
</table>
The Consultative Committee is responsible for the carrying out of the Company's objectives and it is this Committee which implements the planning in a practical way.

There is no information on the limitation of official duties.

Each Divisional Manager is responsible for the preparation of his own forecast budget, using the unified accounting system.

The actual accounting and preparation of the final balance sheet is done by the Accounting Division (see Table 16).

Maintenance Forms which act as control documents for cost fixing are used in the Maintenance Department, for all Company repairs (see Table 17).

This last form is sent from all the factory departments which are requesting repairs and renewals to the Maintenance Department. It is usually sent daily, and Table 18 shows the calculation of repair and renewal costs carried out in the Maintenance Workshop. This sheet is sent from Maintenance to the Accounts Department (Costing) after repairs and renewals have been carried out. A copy is sent to the Technical Office Manager, the Organisation and Productivity Manager and to the Cost Accountant. The result of the Account Department's study is presented to the Consultative Committee for emendation and approval.

The Company does not use standard costing but actual costing.

Non-accounting control is still not integrated.

The Company does not export, since all its products are consumed by the home market.

The Company's problems are summarised as follows by the Acting General Manager.
1. Lack of co-ordination between divisions and between divisions and departments.

2. No information system exists, preparing such a system is part of the duties of the Organisation and Productivity Division, but the inefficiency of this Department makes it impractical to ask them to perform such a task.

3. Lack of correct co-operation among divisions and departments because of a tendency for some strong individuals to impose their influence on other members of the Company. This would mean that an information system even if it did exist, would become inefficient or would prove impossible to apply in practice.

- The above-mentioned Manager ascribed these, and other problems which affect the efficiency and effectiveness of the Company's productivity to "personnel factors". The availability of an efficient Cadre, in the sense of a body of educated and experimentally minded people who have a real interest in serious work would be invaluable in overcoming problems and in achieving the Company's objectives. He believes that the appointment of productive cadres is dependent on the Administration Offices in the State Organisations, which are responsible for appointing suitable personnel. The inefficiency of the personnel officers, or their personal prejudice and lack of fairness in treating employees, will inevitably create an atmosphere of dissatisfaction and jealousy, and a sense of under-privilege among workers. This situation will reflect on the control system and finally on productivity and efficiency. The dependence of the system of appointments
on personal bias and favour has also lead to a lack of trust between top management and the working force on all levels. This means that every instruction from top management will be questioned and not always accepted. This situation is one which would impede efficiency in any working environment and thus impair industrial success.

B. 7 Iraq Cement Public Company

My visit to this Company was not the last on the schedule, but I have recorded it last in order to co-ordinate the sequence of information in this study of the objectives, control systems and organisational structures of the seven industrial companies. Since this Company will be the subject of concentrated analysis in later chapters, concentration will now centre on information received from the questions (Exhibit 1). Information about its establishment has already been given in Chapter 1.

The following answers were received from the Assistant General Manager for Administration Affairs, the Accounts Divisional Manager and the Controlling Engineer.

- The Company has clear objectives; the most important is to increase and develop production in order to satisfy the home demand for different cement products, and secondly to satisfy international demand for Iraqi Cement.
- The Company has not made a profit for two years because the prices of the products have remained the same since nationalisation.
- As this Company is part of the public sector the profit motive is considered as secondary to the need to supply the market at a reasonable price.

(124)
The Consultation Council for Industrialisation in the Ministry of Industry and Mines, which consists of Presidents of State Organisations and two Deputy Ministers and is chaired by the Minister, is considered to be the highest managerial authority. It has the power to determine short-term general objectives for the whole public industrial sector, after considering the reports of the Board's of Directors of the State Organisations. These Boards consist of the General Managers of public industrial companies belonging to the Organisation concerned, and each is headed by the President of the Organisation. Each board draws up its reports according to the views and ideas of the Public Industrial Committee's Consultative Board. This Committee represents the senior managerial level in the Company and consists of the General Manager, his two assistants and Divisional Managers, and representatives, one for the workers, another for the managers. The Consultative Committee crystalises its reports after combining its views with the views and ideas of the Company's middle management levels.

- The Company's objectives do not usually change rapidly - perhaps once a year.

- The reviewing of the Organisational Structure whenever there are changes in divisions and departments of the Company resulting from the current expansion (see Chart No. 5).

- The Organisational Structure exists to co-ordinate the work of the different managerial levels and the departments on each level. It also exists to limit and define the responsibility and authority of each position.

- In the Organisational Structure responsibility for success rests with the Consultative Committee.
- The Company prepares two kinds of account statements, a forecast (planning) at the beginning of each calendar year (1st January - 31st December), and a final general balance sheet at the end of each fiscal year (1st April - 31st March; see Table 19).

- Accounts are prepared by calculating machines, as in other industrial Companies; computers are not employed yet.

- The planning budget is prepared by a committee which exists for this purpose and comprises the Accounts Manager, the Cost Accountant, Chief Accounting Auditor, Production Manager and a stores official, and sometimes assistance is given by one of the factory managers. This committee takes into account the production schedule, sales, major machine stoppages, capital expenditure and raw material requirements.

- The general final balance sheet is prepared by the accounts division.

- Every Divisional Manager is responsible for the preparation of his own forecast in co-operation with his departments and sections, there being no departmental accountant.

- Table 20 shows one of the control forms, which is sent to the general manager daily. Table 21 shows one of the forms for raw material quality control. This illustrates the activities during each hour of the day's work and is sent daily to the Factory Manager with a copy to the Cost Department in the Accounts Division.

- The Company does not use standard cost procedures, but forecast accounting for comparison with actual cost.

- In order to control engineering costs, there is a special form
for giving the energy consumption of each machine and its raw material consumption and this is filled in weekly by the Controlling Engineer, with a copy to the Technical Manager and General Manager. The Laboratory Department exercises quality control in line with International Standard Specifications, which are mainly taken from British Cement Specifications. This department presents its report daily to the Production Manager. In the event of a product batch not meeting the specifications, the Production Manager is asked to combine this batch with another satisfactory batch, so that the result will be satisfactory.

- There is no manual which sets out the objectives of each division.

- There is no manual explaining to the foremen and supervisors how to achieve their objectives.

- Foremen and supervisors are not responsible for the costs of their sections.

It is noteworthy that there are few cost department employees and their experience is limited since the department is less than three years old.

- There is no written system to help supervisors, Department Heads or Division Heads to find out what is required of them. The daily work sequence together with specialised and general information, is sent occasionally from the organisational headquarters. This information, together with the general social development of the country will define what is expected of each officer.
Answers to General Questions

- The easiest costing to control is actual costing or the comparison of the actual cost with the forecast.
- Costing is most difficult costing to control when purchase prices vary, especially when the accounts department attempts to standardise them.
- Much information is available in magazines and publications issued by the Ministry of Industry and Mines or the State Organisation. There are seminars, meetings of managers to exchange expertise, and in several cases information has been exchanged between all factory managers engaged in producing similar items, since these are under the supervision of one State Organisation.
- Up to 1971 exports exceeded home consumption, but now the opposite is true, despite an increase in production. The reason for this is that home demand has increased faster than production.
- Exports are not controlled by the same information system as that used in the home market. Control is carried out by the State Export Organisation, part of the Ministry of Trade.

The Final Question

These are, in conclusion, the problems which are suffered by the Company, and which are considered obstacles to affectiveness and efficiency.

1. There is a lack of capable technical and managerial staff on all levels.
2. Raw materials frequently fall short of the standards required.
3. The need to keep machines working to meet home demand, often means that the maintenance department is unable to carry out routine maintenance work at the correct times, so that delays take place when overhaul becomes necessary.

4. Sometimes suppliers of raw materials, particularly of limestone, fail to fulfil obligations in terms of both quantity and quality.

5. Shortage of financial incentives for workers leads to a decrease in enthusiasm for hard work.
SUMMARY OF CHAPTER II

This Chapter is the result of field research carried out in Iraq. The research was carried out by interviews using a checklist of questions. The responses to the questions disclosed information concerning the current objectives of the Company, management structures, budgets, control reports, cost control, information systems, and how problems concerning the efficiency of the organisation were investigated. This information was obtained from all of the seven companies visited.

In order to give an accurate picture of Iraqi industry as a whole, the researcher selected seven different industrial companies, which are representative of all the five state qualitative organisations of industry in Iraq.

In the first part of this Chapter, I reviewed the structure and functions of the Ministry of Industry and Mines in Iraq, which is specifically responsible for the implementation of objectives and the designation of Management Control Systems in the public industrial sector.

In the second part I described how I collected information from the field research on seven state industrial companies. One of the purposes of this field research was to gain further information on which to base more detailed questions in the later questionnaire (as shown in Chapter four).

Respondents were selected so as to give a fairly wide range of answers to the questions. The following procedure was followed in order to conduct this part of the study.

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Firstly, I compiled a brief account of each industrial company, including information on its capital, location, products, productive capacity, and whether it had decided to expand its existing factories.

Secondly, after preliminary analysis, the information I obtained from my field research showed serious low productivity and an accumulation of losses in almost all the companies studied. This was related to the lack of skilled manpower in the technical and managerial sides of the business, inefficiency in cost controlling and in the information system and the use of generally inefficient systems of control.

Thirdly, the writer expressed his personal observations and analysed the problems that presented obstacles to effective management in each company visited.

The aim of this Chapter was to present an accurate picture of the current managerial situation and the standard of the Management Control Systems followed in Iraqi state industry as a whole.
The next chapter will contain two parts, the first part is to present an analytical survey of literature which is based on management control systems theory and practice. The material of this part is drawn from literature written by British or American authors. Part two will explain the managerial processes of the U.K. nationalised industries, and shows ideas and experience of management in state-owned enterprises in Eastern European countries.
REFERENCES

1. M.A. al-Difai, Study of the actual and probable labour force required by the Organisations of the Ministry of Industry and Mines and the Mixed Sector, Baghdad, 1974, p.17

2. Ibid., p. 125


4. Ibid, p.3.

5. M.A. al-Difai, op. cit., p. 113


7. The Times Newspaper, London, mentioned on 18th February, 1974: The most important industrial projects in Iraq are in the oil and gas sectors; $1,500 m. of the $2,000 m. credit advanced to Iraq by Japan is going to help to finance a liquefied petroleum gas plant at Rumaila, a petrochemical plant at Basrah, and an export refinery at Zubair. (All these locations are in Basrah province).


9. Ibid., Section 2, p. 59

10. This Council consists of: Presidents of the State Organisations and two Deputy Ministers. The Council is headed by the Minister of I. & M.

11. The unified accounting system for the productive organisations, whose usefulness as a manual for helping managers to prepare their budget was mentioned in the last section of Chapter 1.


13. Ibid., section 2, p. 61

14. Ibid., section 1, p. 98.

15. Sales Division Manager in the Company


(133)

18. The writer.

19. See Organisation Structure for the Ministry of I. & M.


21. Ibid.


23. Ibid.

24. Ibid.


26. Ibid., p. 33.

27. Ibid., p. 61

28. Ibid., p. 62.
CHAPTER III

MANAGEMENT CONTROL SYSTEMS IN GENERAL

The main purpose of the first part of this Chapter is to present an analytical survey of the literature, based on accepted views of management control, cost control and training. In the second part, the survey is extended to present some ideas from British Nationalized industries and also to draw on Eastern European experience, which has some relevance to the managerial situation in Iraq. This will enable inferences in Management Control theory and the practices established by the two field researches carried out in Iraq in the manner described in the second and fourth Chapters. One of these investigations concerned the Iraq Cement Public Company, and its results will be analysed in Chapter four, while the other, dealing with selected Iraqi public industrial companies, was discussed in Chapter two. The results of these investigations and the differences between accepted theory and actual practice should point the way in which the Iraq Cement Public Company, in particular, and Iraqi State Industries in general, ought to develop. This conclusion will be formulated in Chapter five.

The material in part one of this Chapter is drawn from literature written by British or American authors. The ideas represent the practices of western developed countries regarding Management Control Systems. Part two considers ideas and practices of Management in Nationalized industries in the U.K. and in State-owned enterprises in Eastern European Countries.
PART ONE: The Experience of Western Developed Countries with Management Control:

1.A What are Management Control Systems?

If we accept the simplified definition of management as getting things done through people, of control as the monitoring of plans to achieve objectives, and of a system as the procedure used to achieve end results, then the term "Management Control System" is necessarily defined as: The procedure for monitoring plans to achieve objectives through people. This means that such systems cannot simply spring into being, but must be designed to meet the needs of individual organisations. Many writers connect control with planning, i.e. there can be no control without at least the recognition of the need for a plan to achieve objectives, although the opposite is not true. Management control therefore depends on the simple principle of producing a plan, monitoring performance against the plan, and then making decisions and taking action. This is a continuous process carried out in each centre of responsibility, and provides data for improving future plans. R. Ackoff says:

It was incorrectly assumed by many that planning necessarily implies a strong centralised government or management and it has only recently been understood that planning, like problem solving, can serve any political or organisational philosophy. It can increase the effectiveness of either a decentralised democracy or a centralised autocracy. (2)

The question is, do the control systems at the various units and sub-units of the organisation meet the needs of the overall plan? R. Anthony (3) postulates that the Management Control System operates within the given conditions determined by strategic planning, and that the management control process is intended to make possible the achievement of planned objectives as effectively and effic-
ently as possible within this framework. According to his definition, Management Control System is:

The process by which managers assure that resources are obtained and used effectively and efficiently in the accomplishment of the Organisation's objectives.

Anthony believes that Control Systems must, therefore, be derived from the needs of the total organisation and are intended to influence managers to actions which are both in their own and the Organisation's best interests. He differentiates between Management Control System and Operational Control on the grounds that Management Control System is "people" orientated, has lower scientific standards to compare performance, is subjective, being determined by the judgment and feeling of human beings, and is appropriate to the whole of any unit, whereas operational control is "Rational" objective, is subsumed by Management Control Systems because it is formulated in the Management Control process, and is appropriate to individual tasks. He includes the topics of information handling and financial accounting, which he feels do not form part of the main framework, but nevertheless have relevance. Anthony compares the control process to the nervous system in living organisms and compares management control to the cerebral cortex, finally suggesting that his analysis "should be related to systems theory or cybernetics....

Many academics in natural and applied sciences have written on general systems theory. No doubt their findings are academically sound and scientifically rigorous, but whether they can be applied in a social organisation is open to serious doubt. Von Bertalanffy (4) admits that general systems theory has "obvious limitations, different approaches and legitimate criticisms."

(137)
Boulding, whilst accepting the validity of Von Bertalanffy's approach, nevertheless prefers a second approach, which is, "The management of theoretical systems and constructs in a hierarchy of complexity leading to a 'system of systems'." He claims that this is more systematic than Von Bertalanffy's approach, but does not replace it. He outlines nine levels of systems from "frameworks" (The anatomy of the Universe) to cells, plants, the human level and finally the social organisation. He admits that beyond the fourth level we have not the rudiments of theoretical systems, in the face of living systems we are helpless, and science does itself a disservice by its unwillingness "To admit the very low level of its success in systemisation".

Russel Ackoff, in trying to clarify a solution for management systems, admits that a capable system must perform four functions:

1. Identifying problems
2. Making the best decisions
3. Controlling the decisions made, and
4. Providing the information required to perform each of the first three functions.

B. Towards a Definition: Some Features of Management Control

Since the early works of Fayol, Taylor, Follet and Weber, writers have been analysing the manager's job and there seems to be broad agreement about the functions despite the countless definitions. For instance, E. Brech says,

The true nature of control in business is frequently misunderstood. He blames this partly on the ambiguity
of the word, and partly on the difficulty of getting a comprehensive picture of the way control operates. Some believe the word "control" to be frequently associated with restrictions or restraint, but he considers that control in management has a positive meaning.

Brech defines Management Control as:

Guiding and regulating the activities of a business or any of its parts by means of management judgment, decision and action for the purpose of attaining agreed objectives.

P. Drucker in his book Management: Tasks, Responsibilities, Practices, described some features on Management Control. He distinguished between the two words "control" and "controls". In his opinion, the two words have totally distinct meanings in the context of social institutions. He said:

The synonyms for controls are measurement and information... The synonym for control is direction, controls pertain to means, control to an end. Controls deal with facts, that is with events of the past. Control deals with expectations, that is with the future. Controls are analytical, concerned with what was and is. Control is normative and concerned with what is expected to be.

Drucker emphasised that Management Control draws upon many areas of management science, which in turn is able to use an increasing number of new tools and practices as a result of the computer revolution, as well as the longer established skills of accounting and finance. These new tools include systems theory, PERT/CPM, operations research, decision theory, simulation, information systems, Cybernetics, electronic data processing and behavioural science. He asked what these improved techniques mean for control. It seems that there is a need to beware of too many controls and too little control.

T. Jerome's definition of Management Control is that it is, Some sort of systematic effort to compare current performance to a predetermined plan or objective, presumably to take any remedial action required.
A studied comparison of Anthony's definition with that of Jerome shows that they agree in many respects. Mockler (10) shows a comprehensive understanding of management control as defined by Jerome and Anthony, when he describes it as,

A systematic effort by business management to compare performance to predetermined standards, plans or objectives in order to determine whether performance is in line with these standards, and presumably in order to take any remedial action required to see that human and other corporate resources are being used in the most effective and efficient way possible in achieving corporate objectives.

2.A Analysis of Managerial Behaviour in an Open System

Recent attempts to apply aspects of general systems theory to the study of organisations have provided a useful context for the analysis of managerial behaviour. This is not the place for a complete review and analysis of "systems theory", but certain characteristics of open systems have useful implications in regard to managerial behaviour in organisations.

Numerous authors have elucidated the general characteristics of open systems (Katz and Kahn, 1966; Litterer, 1969). The following list of dimensions has been liberally adapted from Litterer (1969, pp. 3 - 6): (11)

1. A system is comprised of interrelated subjects, attitudes and events. This interrelatedness has clear implications for organisational members in general and for organisational leaders in particular. Since "a change in any one (objects, attitudes or events) means some adjustment or change in the others",

See Anthony's definition on page 137.
survival of an individual or group within a system is dependent on a certain minimal sensitivity to the activities in other parts of the organisation.

2. The whole (a complete cycle of events) is greater than the sum of its individual parts. Wholeness implies that effective behaviour within an organisation may require some understanding of how the whole system, as opposed to its components, responds and reacts to internal and external stimuli. The direct implication of this wholeness is that even complete understanding of a single subsystem will not necessarily contribute to the understanding of how the interrelated parts of the larger system impinge on one another and on the system as a whole.

3. A system seeks an equilibrium around a goal or a set of goals. As Buckley (12) pointed out, system equilibrium is dynamic rather than static. Goals and sets of goals change in time, and the system responds to changes by establishing a new equilibrium. As Litterer argues, the apparent stability of systems is a characteristic of the whole rather than of its parts.

4. A system is essentially self-regulating, individual properties or elements can be changed to move towards equilibrium. The internal components of a system are constantly in a state of flux as a result of the dynamic equilibrium and of their own interdependence. This suggests that adjustment, control, and learning are
crucial processes within an organisation, and that organisation members are routinely affected by the movement within the system.

5. Systems receive inputs from other systems and produce outputs needed by other systems. In other words, systems are dependent on one another. Not only are the components of larger systems interrelated, but systems are interrelated with other systems as well. This suggests that the boundaries between systems are often unclear and that members of one system will, to varying degrees, have to respond to the activities and events transpiring in adjacent systems.

6. The output of a system differs from the inputs. The cycle of events produces a transformation. The transformation process approximates to the more traditional definition of the work flow in an organisation.

7. The systems are nested within systems, creating a hierarchy. This kind of hierarchy should not be confused with formal organisational hierarchies, which rigidly define authority and function. Subsystems are nested within larger systems, and they may be isolated for convenience in analysis, but in reality the open system consists of interdependent components.

8. Open systems receive inputs of information and energy from the environment, and they have a tendency to run down. Negative entropy can be accumulated, however. The more differentiated the elements of a system and the more systematically they are arranged, the greater
is the negative entropy. There are two very important aspects to this characteristic: firstly, increasing information decreases entropy (as does the importation of energy), hence the tendency of systems in general to seek to gather reserves of information, and secondly, increased differentiation and integration.

9. An initial state can yield several possible final states, and the same final state may be preceded by several possible initial states (equifinality). Equifinality suggests a certain amount of flexibility in terms of causality. That is, uncertainty will flourish in an open system unless, as Kats and Kahn (1966) suggest, regulatory mechanisms are generated for the purposes of control.

10. Systems typically become more differentiated and complex over a period of time. Simply put, specialised units appear, over a period of time, to take care of different problems that the system faces.

If the organisation is viewed as an open system possessing these ten characteristics, the vital nature of information about the system becomes apparent. A system must somehow translate variety into order. So it engages in an encoding process and develops rules for reducing variety to a usable commodity. For individuals within the system, however, norms and values, and hence rules and institutional structure in general, do not specify concrete behaviours; they are more or less general rules or guides,

(143)
and do not contain enough 'information' to specify the detailed operation of the system or to 'map' more than a small part of the 'variety' of the environment or the internal system. (13)

In a formal organisation the "manager" is a "head" or designated leader. (14) By virtue of his role as a formal control point in an open system he must deal constantly with information of various types and in some way come to grips with his organisation as a system. Visualising the manager as a member of an open system is not new. The Caveat attached to many research efforts based on the leader-group dimension is that leadership must be viewed in the context of the system. Unfortunately, this is seldom done, probably because of the difficulty of measuring the properties of a system. Nonetheless, theoretical statements about the systemic nature of the manager's job are prevalent, and A.K. Rice in his book, The Enterprise and its Environment, provides some stimulating explanations. The job of a manager is analogous to a "control centre" in the cybernetic model (15) (see figure 3, p. 145). Each manager attempts to maintain the performance of his own subsystem by taking actions and assessing the effects of those actions in relation to his goal parameters. A crucial component of such assessment is "Information gathering on output effects." As A. K. Rice (16) put it,

The primary task of leadership is to manage the relations between an enterprise and its environment so as to permit 'optimal performance of the primary task of the enterprise. For an enterprise the environment consists of its total political, social and economic surrounding, for a part of an enterprise the environment includes the other parts and the whole.

Secondly, because the organisation is a set of interdependent parts, the maintenance of the activity of a subsystem is dependent
upon the behaviour of other subsystems (and indeed other systems). "A manager rarely controls all the resources needed to do whatever has been assigned to him, especially as regards other subsystems. It is therefore logical that most formal leaders must maintain many relationships throughout their system and its environment. As Sayles pointed out, these relationships are not "optional, extra, or necessary as good human relations, they are an integral part of the administrative task." Thirdly, as Buckley, indicated, norms and institutional structures in general are inadequate to specify concrete behaviours within a system. A manager (Leader) in a system must, then, specify much of his activity for himself. Sayles put this succinctly:

The individual manager does not have a clearly bounded job with neatly defined authorities and responsibilities. Rather he is placed in the middle of a system of relationships, out of which he must fashion an organisation that will accomplish his objectives.

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Figure 3
The general cybernetic model of the Error-regulating feedback system (20)
**B. The Formal Leader (Manager) as a Monitor of Information in Organisations.**

It is a basic assumption that information is a crucial component in an organisational system and that information gathering is an essential part of the manager's job. Buckley \(^{(21)}\) (1967), in his discussion of systems theory, said,

whereas the relations among components of mechanical systems are a function primarily of special and temporal considerations and the transmission of energy from one component to another, the interrelations characterising higher levels (of organised complexity) comes to depend more and more on the transmission of information - a principle fundamental to modern complex system analysis.

Katz and Kahn \(^{(22)}\) argued that leaders (managers) at various levels in the organisational hierarchy engage in different leadership processes which require different cognitive and effective abilities and skills, specifically top echelon managers deal with the organisation of structure (change, creation and elimination of structure) and utilise a "system perspective", managers at intermediate levels engage in the interpolation of structure (supplementing and piecing out of structure) and utilise a "sub-system perspective", and managers at lower levels engage in administration of structure (use of existing structure) and utilise technical knowledge and their understanding of systems of rules.

Allen and Gerstberger \(^{(23)}\) have shown that, for engineers, the perceived accessibility of information channels is related to their utilisation. Technical quality was related to acceptance of the information. The implication is that the longer a manager has been involved with the system, the more likely it is that new information channels have become accessible, and that some channels have been eliminated because of low quality.
They admitted that:

The fundamental paradox facing a formal leader over time is the establishment of causal networks without closing himself off from new kinds of information. Resolution of this paradox by the individual manager may be the clue to effective performance.

Katz and Kahn argued that multiple communication channels and check procedures provide the manager with a mechanism, with which to avoid corrupting or being corrupted by his own information service. Many theorists have tried to analyse the effects of uncertainty on organisation, e.g. Lawrence and Lorsch, 1967, Thompson, 1967, Perrow, 1970. Uncertainty in the environment affects organisations through the organisational members who respond to it, usually the managerial personnel first. The cognitive approach to leadership would suggest that a manager could experience uncertainty, in any or all of the spheres of the leadership process, he may be uncertain about what to monitor, he may not know what effects changes in his environment will have, or he may not know what actions he should take in response to changes (or he may not be able to take the actions he feels are necessary). One might see the effects of environmental uncertainty in shorter cycle lengths for information monitored in the environment and increased cognitive differentiation in regard to the uncertain information. This in turn might cause measurable organisational increase in sub-unit differentiation and
more formal attempts at subunit integration (Lawrence and Lorsch, 1967). It might also be reflected in less structuring of the formal organisation in order to permit more experimentation in action. The size of sub-units, may have important consequences for leadership. To the extent that increased size also increases the difficulty of accurate causal mapping and the amount of information about the group that the manager must monitor, it may reduce the ability of the manager to deal with the larger system adequately. If the task is routine, size may have no serious consequences, but for complex tasks the impact of increased cognitive work on the part of the manager may be dramatic. The quality of relations between the manager and his group, may also have detrimental effects on managerial effectiveness. If poor relations force the manager to depend on bureaucratic sources of information and to rely on documents, or to attend to information about the group at the expense of other kinds of information, then the manager cannot cope effectively with the management system in which his group is embedded.

C. Designing the Overall System

From the discussion in the previous sections it is apparent that the information and behavioural subsystems are mutually dependent. This dependence arises from the feedback relationship existing between them. Any changes in one will have repercussions on the other, and vice versa. The critical factor, from the point of view of the overall system, is the nature of the feedback relationship between the two subsystems, that is, whether it is complementary or conflicting. A complementary relationship enhances the chances for the increased effectiveness of the system, while a conflicting
relationship will cause bottlenecks within the system.

There is nothing new in the idea that the increased efficiency of the system is dependent upon how well its parts are integrated. Systems theorists have long maintained that the effectiveness of the whole depends upon how well the parts of the whole perform together, that is, the system as a whole performs best when its component parts are in a compatible and harmonious relationship to each other.

Although the idea of the internal consistency of parts is not new to general systems theory, its application to organisational systems has been steadily increasing in recent years. Writers on organisation theory are today taking into consideration a number of factors and their relationships in predicting organisational effectiveness. This system's view of organisational effectiveness is called the "Contingency approach". It is embodied in the writings of people such as Joan Woodward, Lawrence and Lorsch, R. Boyce and D. Newman. (24)

Each of these writers has pointed out the importance of considering factors such as technology, environment, and task structure, and their interaction with other organisational factors, in predicting organisational effectiveness. The need for consistency or compatibility in the variance control system means designing the system so that the information and behavioural subsystems are in a harmonious relationship. Changes in one of the subsystems without requisite changes in the other may not lead to the desired results. For example, no matter how sophisticated the information system, it will not be effective if introduced in a non-responsive behavioural climate. Likert, for
example has pointed out the need for internally consistent control systems as follows:

Experiments in organisation must involve internally consistent changes. Every aspect of a managerial system is related to every other part and interacts with it. The results obtained by altering a single variable or procedure while keeping all others the same usually will lead to quite different results from those obtained when that variable is changed along with simultaneous and compatible changes in all other aspects of the management system. The true influence of altering one aspect of a system cannot be determined by varying it and it alone.

As Boyce pointed out, there are a number of distinct stages involved in developing a fully integrated control system, viz:

1. Design of the control system.
2. Analysis of the "capabilities" of the enterprise.
4. Preparation of the overall financial plan.
5. Establishment of dynamic control.

Although the importance of the first stage has already been discussed, it is worthwhile to place it in its logical sequence, which is as follows:

(a) Establish the information and control needs.
(b) Identify the key factors.
(c) Study the control system in relation to the Company's organisational structure, and vice versa.
(d) Design the overall reporting system.
(e) Evaluate the preliminary design.
(f) Design individual control reports.
(g) Design data collection procedures.
(h) Install, de-bug and operate.
As P. Drucker(27) put it, to give the manager control, controls must satisfy seven specifications. They must be:
- economical,
- meaningful,
- appropriate,
- congruent,
- timely,
- simple, and
- operational.

He added: (28)

In designing controls for an organisation one has to understand and analyse the actual control of the business, its people's decisions. Otherwise one designs a system of controls which does not lead to control. One has to realise that even the most powerful 'instrument board', complete with computers, operations research, and simulation, is secondary to the invisible, qualitative control of any human organisation, its systems of rewards and punishments, of values and taboos.

So any successful manager must learn to depend upon his own judgment in setting objectives and goals, upon his ability to request the most needed feedback or control information, upon his ability to interpret and utilise this up-to-date information for sound decisions. Without proper control information, all the planning and vigorous direction of an intelligent executive will be ineffective.

3.A. Management Accounting Techniques

The ever increasing demands of economic and technological achievements place a heavy burden on the men who manage today's business enterprises and on the management accounting systems upon which they depend. The latter have had to develop from the simplistic techniques of 20 years ago into a far more profound
indicated the logical objectives of management accounting, when he saw that its two major functions should be:

1. That Management Accounting should be related to fiduciary responsibility, which is concerned with "keeping track of things", and answering such questions as, "Did we get what we paid for?", and "Do we still have it?". He added, that costing techniques which are primarily designed to provide cost and inventory data for financial statement purposes might also be included under the heading of fiduciary accounting.

2. That Management Accounting should furnish information which is useful as a basis for decision-making at all levels of the organisation. This function provides managers with the data required for planning, co-ordinating, and controlling activities. But it also includes the operation of a system which assists in motivating individuals to make and implement those decisions that will lead to the accomplishment of the organisation's goals.

He concluded that Management Accounting plays an important role in influencing behaviour at all the various stages of the management process, including:

(a) The setting of goals,
(b) Informing individuals what they must do to contribute to the accomplishment of these goals,

(152)
(c) Motivating desirable performance,
(d) Evaluating performance, and
(e) Suggesting when corrective actions must be taken.

Recent trends by business towards decentralisation and profit centres have accentuated the need for better and more timely information as a basis for management decisions. Since traditional accounting techniques have always satisfied this management requirement, the role of accounting, during the last few years has begun to change. R. Campbell\(^{(30)}\) made the following observation about the changing role of accounting:

In the last decade we have seen a decided change in the role of accounting. At one time accounting was primarily a technique for measuring income and financial condition, while this objective has not become any less broadened in recent years to include other objectives. The scientific management movement in industry has placed emphasis upon factual accounting information as a basis for management decisions. This is sometimes referred to as management accounting.

In an article written approximately 10 years after Campbell's observation, R.L. Brummet\(^{(31)}\) contends that the role of management accounting is related to management objectives. He says:

The conventional role of Management Accounting is one of assisting in the articulation of Management objectives, and then of providing feedback of performance information to assist in monitoring progress toward such objectives.

B. Responsibility Centres

While the profit centre concept is used primarily for profit making organisations in private industry, it is only one of a number of responsibility centres. According to R. Anthony\(^{(32)}\)
A responsibility centre is simply an organisation unit headed by a responsible person. The centre is responsible for performing some function, which is its output, and for using resources, or inputs, as efficiently as possible in performing this function.

Anthony further states that there are three types of responsibility centres:

1. Expense Centres
2. Profit Centres, and
3. Investment Centres, which can be defined as follows:

**Expense Centres**

If the control system measures the expenses incurred by an organisation unit, but does not measure the monetary value of its output, the unit is an expense centre.

**Profit Centres**

If the performance of a responsibility centre is measured in terms of both the revenue it earns and the cost it incurs, it is called a profit centre.

**Investment Centres**

Centres where the supervisor is responsible not only for profit but also for the assets he uses.

In identifying expense centres, Anthony puts forward the argument that managerial cost control techniques can be as effective in Governmental operations as they are in private industry.

J.L. Brown and L.R. Howard distinguish between two methods of cost accounting:

1. The calculation of the cost of a product after it has been completed; this can be referred to as historical costing.
2. The detailed estimation of the cost of a product before it is manufactured, so that expenditure can be controlled during production; on completion, the actual result can be compared with the estimate, and variances ascertained and investigated. This method can be referred to as pre-determined or standard costing.

C. Standard Costing and Budgetary Control

Before arriving at a definition, Brown and Howard argued that when historical cost figures are analysed carefully they may be useful in remedying past results, but mistakes and inefficiencies are not discovered until after the damage is done. They considered that information of this type is an aid to management, but is not as valuable as it might be for the following reasons:

1. The data are not presented to management until some considerable time has elapsed, so that management is unable to take the necessary corrective action at the proper time.

2. No suitable yard stick is provided by which management can measure actual performance. (34)

Standard costing is one of the most recently developed refinements of cost accounting and has been widely adopted because it is so effective in providing the information needed for control. It may be defined basically as:

A technique of cost accounting which compares the 'standard cost' of each product or service with the actual cost, to determine the efficiency of the operation, so that any remedial action may be taken immediately. (35)
The 'standard cost' is "a predetermined cost which determines what each product or service should cost under given circumstances."

'Variance' is "the difference between a budgeted or standard amount and the actual amount during a given period."

As Brown and Howard said – standard costing involves:

1. Setting standards.
2. Ascertaining actual results.
3. Comparing standards and actual costs to determine the variances.
4. Investigating the variances and taking any appropriate action.

The writers concluded that although budgetary control and standard costing are similar systems by virtue of their forward looking nature, a major difference between the two is that while budgetary control is concerned with comparison of estimated and actual results in a department, company, or larger unit, standard costing is concerned with comparison of the estimated and actual results of manufacturing a product or providing a service. Nevertheless both systems are clearly valuable to management cost control procedures.

A budget is usually defined in accounting literature as a "financial plan for the future". Some writers in the field describe the following principal steps in what is referred to as the "budgetary control" process. (36)

1. Preparation of a plan consistent with the goals of the business.
2. Review, discussion, and adjustment of the plan as needed to facilitate its accomplishment.
3. Communication of sub-sections of the plan to responsibility centres within the organisation.

4. Comparison of actual performance with planned results.

5. Analysis and explanation of variances from the plan.

6. Corrective action where significant unfavourable variances occur between planned and actual performance.

Budgeting is a method of translating the goals of an organisation into operational terms, disseminating these goals to the appropriate decision-makers, and facilitating, co-ordinating, and controlling the actions of the various sub-units within the organisation. We have noted in the previous sections, that control includes the measurement, evaluation and correction, where necessary, of the contributions of organisation participants. Budgeting contributes to control by providing objectives against which performance results can be measured. For example, the performance of a department head can be evaluated in terms of his ability to achieve certain desired results as specified by the budget and within the cost constraints imposed by the budget.

J. Machin, (37) described the functions of a budget, as,

a necessary management control system in an organisation of any size but it is not sufficient. In any department where every input and every output cannot be satisfactorily quantified and shown in a common time span (and that is, in fact, every department of any organisation), it is less wholly relevant. In any department where the majority of inputs and outputs cannot be satisfactorily costed or valued, a budgetary control system may well induce dysfunctional decision making by the manager in charge of the department if used for the wrong purpose.

Dew and Gee (38) suggested six conditions for effective budgeting control, as follows:

(157)
1. In so far as the managers are expected to act on the information provided, management, authority and responsibility must be clear.

2. As the system depends on predetermined standards and budgets, and the periodical measurement of performance for comparison with such standards, the managers must have accepted the standards as being reasonable and attainable.

3. Budgetary control information must be understood by the managers, and, hopefully, understood as it was meant to be by the individuals who produced it.

4. As some training or education in the use and value of budgetary control systems is required, whether gained on formal courses or simply by experience, this training must be adequate.

5. As the budgeting control information flow will be affected by the suitability of the management accounting organisation, this organisation must be appropriate.

6. Managers must understand the purposes of the budgetary system in order to take appropriate action on the basis of the information provided.

D. Responsibility Reporting

The trends towards decentralisation, responsibility centres, etc., created the need for new accounting measurement systems to identify the expenses and revenues of various organisational units within the firm. Anthony adroitly distinguishes between tradition-
In product cost accounting, costs are accumulated in terms of products or programs. In responsibility accounting, costs are accumulated in terms of management responsibility. (39)

R. Campbell describes responsibility reporting as a method for providing information for management control. He writes:

One concept that has received a great deal of attention is responsibility reporting. The objective here is to identify results with the executive responsible for producing them. Responsibility involves performance measurement, in which actual results are compared with pre-determined standards. This can be accomplished by introducing account classifications that parallel the Company's organisation plan in order that reports may be prepared to show, in financial terms, the results of the operations for which each individual is responsible. (40)

J. Stallman also describes responsibility accounting as a means of providing information for management control, when he states:

Industrial accountants generally perceive the control of operations of their firm to be a significant part of their accounting systems procedures and reports which together are variously known as 'responsibility accounting' - 'performance reporting' - 'budgetary control' and so forth. (41)

In their book entitled Management Control Systems, Anthony, Dearden, and Vancil contend that management accounting techniques can and should be utilised in Government operations.

Non-profit making organisations can use many of the control practices described in this book, although they so far have been slow to do so. They can adopt the concept of the responsibility centre. They have many opportunities to create 'profit centres' that sell products or services to other units within the organisation. They can use flexible budgets (although many of them do not need to do so because of the relative certainty of their volume estimates.) They can use standard-cost, and can segregate efficiency variances.
from the variances attributable to price, volume, or mix. They can set selling prices by estimating full costs including, in some circumstances, the cost of capital. Above all, they can introduce the spur of competition among similar units within the organisation and between an internal unit such as, a maintenance department, and its counterpart in the private sector (42).

From the top management and middle management point of view, it is essential that results be expressed in financial terms and related to the overall plans of the Company. It becomes the responsibility of the accounting section, therefore, to convert the accumulating daily information into financial terms in so far as these are valuable for guiding management decisions. Although most financial reports are on a weekly basis, decisions must depend upon the immediate needs of the situation.

4.A Organisation

Organisational ability has always been a feature of mankind and has been responsible for many of man's achievements. The magnificent constructions of the ancient world, the pyramids and the hanging gardens of Babylon, for instance, clearly required the organisation of large bodies of men. Great armies like those of Nebuchadnazzar, Alexander the Great, and Julius Caesar were also superbly organised, and further evidence of man's organisational ability is offered by the Churches, the military and political states. With the passage of time this accumulated experience was held on record to guide those who came after.
During the Industrial Revolution, management organisation was planned in an increasingly systematic way. Writers on scientific management, such as Taylor, Gant, Gilbraith and their successors, assembled the information into a usable body of knowledge, which today has widespread application. This body of knowledge, created both from personal experience and individual theories, enables the organisational problems arising from both economic and non-economic objectives to be solved with increasing success.

The survival and prosperity of a commercial unit have come to depend on increasingly complex factors, no longer remaining simply the problems of an owner, or manager adjusting to the demands of a market. Modern management, although largely separate from ownership, has nevertheless to take the owners' interests into account as well as market fluctuations, competitors, technology, labour unions and international politics, when making its decisions. Clearly only a sophisticated planning organisation makes it possible to deal with this multitude of factors.

The importance of organisational planning increases with the size of the company as the head of an operational unit becomes further removed from his headquarters, i.e. as his control over the policies which affect him is reduced. Similarly, headquarters staff responsible for policies and procedures are increasingly less aware of the feel of the situation. Increasing size has also meant the introduction of the staff specialist, possibly with long chains of command behind him, and the divergence between his advisory position to the line and the need to get his ideas accepted and
carried out, puts him in a dilemma. Finally, more systematic organisational structuring is required to make a success of increasing executive participation at all levels through the delegation of decision-making.

B. What is an Organisation?

C. Barnard defined organisation simply as:

A comprehensive system of co-operative human activities. \((43)\)

E. Dale's definition of organisation planning is:

The process of defining and grouping the activities of the enterprise so that they may be most logically assigned and effectively executed. It is concerned with the establishment of relationships among the units so as to further the objectives of the enterprise. \((44)\)

Koontz and O'Donnell (1959) in their book, Principles of Management, considered Organisation to be the establishment of authority relationships, with provisions for structural co-ordination both vertically and horizontally, between positions to which have been assigned specialised tasks required for the achievement of enterprise objectives.

It is thus the structural relationship which binds an enterprise together, and is the framework within which individual effort is co-ordinated. If we examine the above definitions we find five points that are common to all organisations:

1. An organisation always includes persons.

2. These persons are involved with one another in some way - that is they interact.

3. These interactions can always be ordered or described by some sort of structure.

4. Each person in the organisation has personal objectives, some of which are the reasons for his actions. He expects
that participation in the organisation will help to achieve his objectives.

5. These interactions can also help individuals to achieve compatible joint objectives, perhaps different from but related to their personal objectives. (45)

The nature of the structure and the particular processes of interaction will vary from one organisation to another. However, persons interact for objectives in every organisation, and this interaction can always be described by some type of structure. Where formal organisations are concerned, structure is likely to be recognised as a primary feature, but in the case of informal organisations the structure is likely to be less important. No doubt the working elements determine the quality of interactions. Members interacting make an organisation, but the working elements make it effective or ineffective. Or as Hicks so neatly observed:

The working elements of an organisation consist of its human resources, its members' abilities and their personal influence; its non-human resources, free and economic goods, and the conceptual resources of a particular group of its members - the managers. The degree to which all members of an organisation employ their abilities and influence in the effective utilisation of resources depends upon how well the managers of the organisation understand and perform their job. (46)

Writers like M. Barnes, A. Fogg, C. Stephens and L. Titman (47) argued that a great deal of attention had been given to the subject of objectives without relating it specifically to organisation structure, and stressed the importance of defining the objectives on their own merits first. Obviously the defined objectives will affect the organisation structure, but the process should not be allowed to be reciprocal, i.e. objectives must not be defined simply because an existing organisation structure will facilitate the achievement of these objectives, rather than other objectives which may make a greater contribution to success. Nevertheless, a time will clearly
come when the investment in a particular structure is such that no change should be made until a sufficient return has been received from it. The primary objectives of a business organisation are survival, growth and profit. To achieve these, a company must define its secondary objectives, especially in the areas of marketing, innovation and efficiency. Since an organisation is an open system, a company needs to secure a continuing supply of human and material resources by its operations. They concluded that the objectives of a company would affect its organisation structure by highlighting the various areas of activity and decision-making. These would provide the skeleton of the structure.

D. Newman(48) emphasised that the general way in which people behave and relate to one another, the style of management and leadership, the attitude to problems and inadequacies, are all elements of the general organisation style that have a direct relationship to the particular form of organisation structure and to the way in which that form is communicated to the people who operate within it. He said:

The life, the action in an organisation comes from the people in it, acting individually and in groups. The organisation's structure should give a framework, a degree of consistency, to this action. At the same time, this structure is itself affected by those people who work in the organisation.

C. Modern Organisation Theory

The results of research into traditional theories have highlighted their limitations without producing a more viable and equally simple alternative. For this reason the old framework
must still be used as a point of departure, although supplemented by creditable research and new concepts which may throw new light on organisation behaviour. A major trend in modern thinking about organisation is the joint treatment of groups of managerial functions.

Studies tend to be descriptive rather than prescriptive, so that human organisations are treated as systems of interdependent human relationships directed towards common goals. Advances have been made, however, despite the lack of a unified approach, and some of the more important new concepts will be discussed below.

D. Authority, Influence, Power and Bureaucracy

Probably one of the most important and controversial contributions made by modern theorists involves the concept of authority. The theory of Bernard and Simon (49) which proposes that a communication carries authority only if accepted by the receiver, upset traditional assumptions about the flow of authority from the high point of a hierarchical structure. The controversy that has followed may not have shed new light on the subject, but it has resulted in two distinct schools of thought. One way of reconciling the two theories is to consider that a right to act, although delegated from above, to be effective, must be matched by a willingness and capacity to act on the part of those below. Another view has been put forward by Mary Parker Follet (1941), who sees authority as belonging to and staying with a job.

J. Miner (1973) argued about influence concept as:

Behaviour on the part of one individual which alters the behaviour, attitudes, feelings, and so on, of another. One person may influence another by virtue of control over sanctions, by persuasion, by playing upon attitudes held
toward him, by exercising control over significant aspects of the other person's environment, or as a consequence of an exchange agreement which provides for influence as one part of the bargain. Influence may be attempted by whatever means and, in some instances still fail of success. (50)

An organisation can be described by determining the flow of influence in the decision-making process. Organisational behaviour may also be observed by examining an organisation's power centres. These are not invariably centres of authority, since power is personal and not institutionalised; this implies that control is by reward and penalty. In a book called, Company Organisation: Theory and Practice (1970), a group of writers states that,

One of the greatest sources of power in the business world is the "entrepreneur", and much of the psychological strength of the entrepreneur lies in the fact that the satisfaction of his individual needs, e.g. for power, security, etc., and the objectives of the organisation are very closely linked indeed. They go on to say, that

the healthiest organisation with greatest potential for growth and the greatest success in human terms will be the organisation which can integrate its own objectives with the needs of the people and groups in it. (51)

This concept is applicable to organisational units of any size. Those in positions of authority should realise that in order to remain in powerful positions, they must understand and apply this concept.

A. Tannenbaum (1968) related control to other factors in organisational effectiveness. His findings illustrate that
the overall amount of influence in the organisation correlated substantially with performance and satisfaction.

Moreover, the application of this relationship has been extended to include highly skilled persons performing a variety of complex tasks. He maintained that the degree of control by an officer over his subordinates was positively related to the control they exercised over him. He claimed, that the total control, performance and satisfaction were all relatively high in the case of an office manager whose leadership was perceived as resting largely upon his skill and expertise (expert power) and upon the attractiveness of his personal qualities, (referent power). Conversely, a less effective office manager tended to rely more heavily on the use of rewards and sanctions, as well as the formal authority of his position.

Max Weber (53) in his historical study of social behaviour, noticed three areas of influence on organisational behaviour:

1. The traditional taboos of society
2. Personal leadership of great men (which he called charisma, and
3. The concept of bureaucracy.

The characteristics of the third area of influence have been the subject of study by social scientists and offer a model for a formal theory of organisation. Webster's New World Dictionary (1958), defined bureaucracy as, "The administration of Government through departments and subdivisions managed by sets of officials following an inflexible routine."

M. Crozier elucidated the term bureaucracy by saying that,
Planned co-operative action is possible only if one can rely on a great deal of regularity of behaviour on the part of all the participants. In other words, any organisation must obtain from its members a variable but always substantial amount of conformity. Members will conform partly voluntarily, partly because of coercion. Whatever the proportions, the achievement of the necessary conformity will be the central problem of an organisation's government. (54)

E. Identification, Loyalty, Responsibility and Accountability

The concept of identification, whereby an individual participates in an organisation by accepting its goals as his own, is useful to our understanding of organisation, since it admits the importance of self-involvement in organisational activities. Identification of this sort removes the problem of continual reappraisal of value judgments when decisions are made.

In the same way, loyalty to an organisation strengthens the relationship between individuals and groups, and by allowing predictability of reaction, assists in the co-ordination of decisions. Problems may, however, arise when loyalties are divided, say, between a department of a company and the company itself, when the goals of the two units do not seem to coincide.

Responsibility, the obligation or duty of a person to act, has always been an important feature of organisation. C. Barnard (1938), described it broadly as the power of a personal code of morals to control the conduct of an individual. The behaviour of an organisation is affected by the individual moral code of those active within it.

A theory of accountability, in addition to that of responsibility, has been developed by some writers, notably Koontz and O'Donnel (1959), who view it as the pre-requisite for the proper
discharge of duties by the subordinate. M. Barnes (1970) and his associates describe it as the obligation to produce results in terms of objectives achieved, often associated with profit centres.

F. The Functioning System of an Organisation

Dalton suggested that six essential elements were necessary to fulfil the requirements of a business organisation's functioning system. The first requirement is the production of goods or services. The second is a sales effort to ensure that those goods and services reach the individuals for whom they are designed, and also to regenerate demand when necessary. Thirdly, a design and development effort is required to ensure that the products meet consumer demands and are adapted to any changes in those demands. In order to bind these three elements together, a fourth element is necessary, a system of administration and control which relies on effective communication and decision-making. The two final elements, a system of rewards and punishments, and a company philosophy, are important because of their effect on the individuals within the organisation. The rewards, e.g. status, money, etc., must ideally be highly valued by the members of the organisation, so that they can be used in a way which will encourage activities for the continued health and growth of the company, whilst discouraging activities which hamper the attainment of the company's objectives.

A company philosophy is necessary to generate appropriate attitudes in the individual members and to reinforce the motivation given by other means, e.g. by rewards and punishment. The ultimate
aim is to develop a philosophy which will generate in all members of the organisation a loyalty to the purposes of that organisation. If any of these six elements are completely absent, then the system will have difficulty in maintaining itself. In addition to survival the characteristic of growth is present in an organisation, just as it is in any other system. Growth is seen not simply in terms of increasing size but also in terms of increasing ability to cope with the circumstances of its environment, e.g. markets, suppliers, Government instructions, etc. Where this growth potential is not realised in an organisation, it will become inflexible and deteriorate, unless changes are made to revitalise it. An example of this would be a one-product company whose product demand changes.

Decline is not only seen in the product, it is reflected in the organisation as well. Burns and Stalker (56) have given an example of a company which failed to take advantage of new technology because their old system was not flexible enough to assimilate it. An organisation must be open to new ideas and be capable of integrating them even when they conflict with existing policy and philosophy, and for this reason flexibility is essential.

G. Management by Objectives

Good management must be developed in such a way that its objectives appeal to the individual members of the organisation as meaningful. A useful approach, suggested by P. Drucker (57) is management by objectives, in which objectives are supplied in "every area where performance and results directly and vitally affect the survival and prosperity of the business." (56) In management by objectives, an executive must concentrate the
attention of each person in the organisation achieving definite and measurable results that are felt by each individual to have a clear meaning for himself. Each part of an organisation can contribute towards the company's objectives if it sees its own specific goals clearly, and can determine, through measurement, how well it is doing. The selection of the proper factors for measurement is important, because it is the factor that is measured which usually receives attention.

The overall objectives of a firm are generally established by top management, but it is desirable for each subordinate manager to have a say in setting his own objectives. If each manager is to understand the relationship between his own organisational objectives and the broader objectives of the company, he will need to participate in the goal-setting process. If he is involved in establishing his own objectives, he will feel that these objectives are the right ones and he will work towards them more readily. In this way, each part of the organisation will strive in a joint effort towards the recognised organisational objectives. Drucker continues, that objectives may be set as ideals or idealistic expectations. Whether the objectives are idealistic or realistic, they should be stated in terms of definite results. The statement "reduce costs", sounds fine, but it is vague and lacks precision. Even if a conscientious manager sincerely strives towards this vague objective, he will never know whether he has reached it. The statement "produce at costs 10 per cent less than last year" is better because it states the specific results that are desired.
H. The Organisation and its Environment

The relevant environment can be conceptualised in these three different layers:

A. The organisational environment can be conceived as the environment existing within the closed systems that marks the boundaries of the organisation. This layer of the environment is largely under the purview of the managers or decision-makers. Size, technology, organisational climate, and the human and capital resources of the firm are some of the important variables located in this environmental layer.(59)

B. The task environment. This has been defined by Dill as, "That part of the total environment of management, which is potentially relevant to goal settings and goal attainment".(60)

C. Lastly, one can conceive the third layer of environment, which is the societal environment, as the macro-environment (economic, political, social, cultural, legal) in a given nation.

5.A Concept of Training

G. Odiorne, admits that:

Training involves a programme designed to change the behaviour of employees. A well-designed training programme cannot be constructed in isolation from the organisation in which the change in behaviour is necessary. The assessment of training needs must begin with the determination of the difference between the desired conditions and the current conditions within a particular organisation. The factors causing this difference must then be identified and the training centred on those factors that it can change.(61)

The first principle of training is to begin by producing a process of "unfreezing".(62) Before training can effectively change behaviour, the trainee must feel a need to accept the training and to change his behaviour. In practice this means that the

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old habits and practices must be brought into question by focusing on situations that are not satisfactorily met by existing behaviour patterns.\(^{(63)}\)

There are four forms of action training that appear to be applicable to training in managerial skills: discussion, cases, problems and role-playing. One caution is necessary on the use of these methods. The trainee cannot be expected to make a proper response during action training, unless the response is in his repertoire. This means that some method of preparatory training, such as assigned readings or lectures, is necessary in order to provide an intellectual basis and establish an initial level of skill, which the action training will then improve. The discussion method of action training is particularly appropriate for managerial skill. The use of discussion allows a considerable degree of feedback to the instructor, so that he can assess how the training programme should be spaced out and how effective the training is.\(^{(64)}\)

As a method of practice, the use of a structured rather than an unstructured discussion can also be used in combination with one of the other forms of action training—case studies, problems, and role-playing. This combination is normally an effective way of allowing the trainee to participate actively, while retaining the possibility of immediate feedback in response to his performance.

One other method that might be effective in this kind of training is a derivation of the "syndicate" system.\(^{(65)}\) Under
this system a 'syndicat', or group of trainees, usually numbering ten or less, is assigned a general task. This group makes a comprehensive study of documents and meets with various experts. Finally the group gives a full report and has this report criticised by all of the trainees.

There are a number of other factors that will influence the exact methods used in managerial training. They include the physical facilities and budget available for the training effort, the geographical location of the training programme, the reaction of the trainee to the methods used, and the interests and skills of the instructors involved.\(^{(66)}\) It seems obvious that an effective programme of training will use a combination of methods, assigned readings, lectures, discussion, case studies, problems, and role-playing to reinforce one another when necessary.

One aspect of the mechanics of training deserves mentioning. There appears to be an advantage in having trainees from as homogeneous an environment as possible in each separate training session. This is because the more closely the training effort is tied to the work environment, the more the behaviour change carries over into the work situation. If a relatively homogeneous group is trained together, then the cases, problems and role-playing can be selectively drawn from situations that approximate more closely to the actual working conditions of the trainee. This could help both the speed at which he assimilates the material and the extent to which he realises its applicability to his personal work

(174)
situation.

The report by the management training and development committee, giving recommendations on managerial training programmes, states that:

The Committee wishes to emphasise certain general considerations. These are: (67)

- The significance for effective management development of the "climate" within the firm.

- The need for the senior executives to give the lead.

- The fact that all managers have a responsibility for training; and

- The need to give scope for the individual manager's own efforts, to develop himself.
PART TWO: Nationalized Industries in the U.K. and Eastern European Experience with Management

1. Nationalized Industries in the U.K.

A report of the Labour Party on industrial democracy, published in June 1967, concentrated on the urgency of an extension of workers' participation in workshop and industrial affairs, and on the nature of the needs that such an extension must set to meet. The report concluded by stating that:

A continuing strand in British Socialist thought has been the argument that no system of public ownership and administration can be regarded as, even approximately satisfactory, unless it offers those engaged in it an effective voice in the control of policy and administration. We have sought to define a way in which positive participation by workers and their trade unions could develop in a way beneficial to the whole community, so that the public sector could, garner the benefits of such a development whilst avoiding its dangers.

The report discusses the contribution to industrial efficiency that can come from an extension of workers participation, backed, of course, by improved union servicing and industrial training, and by provision of relevant information by management. Amongst many possible aspects of this improvement in efficiency, the report mentioned:

The direct contribution from workers representatives and individual workers to improvements in work routines, layouts, processes and products. . . . The alternatives to participation, in the shape of misunderstanding, resistance, low morale and suspicion, are all too prevalent.

In the Lindsay Memorial Lectures given at the University of Keele in 1964, it was pointed out that the pragmatic approach was not overlooked by the main liberal writers, all of them being prepared to accept as proper to the state, those functions that passed the
following tests:

1. Where a given expenditure would bring an even
larger economic return to the community, but would
not be undertaken by any private individual.

2. Where a given expenditure, although not necessarily
yielding an economic return in the narrow sense, could
nevertheless be shown to be "really important to the
general interest."

3. Where the individual in striving, in apparently rational
fashion, for some benefit or the avoidance of some harm,
would normally be led to take action which would
frustrate his own purpose.

4. Where it could be shown that the state, for one reason
or another, would be able to produce goods or services
more cheaply than private enterprises.(70)

Graham Reid and Kevin Allen, when discussing the nationalized
industries in Britain, admitted that most of the nationalized
industries were not taken into public ownership primarily for economic
reasons, though there has often been an attempt to include an
economic rationale in the decision to nationalize a particular
industry. Because they are publicly owned, the nationalized indu-
stries are accountable to parliament and are subject to political
influence and control. The nationalized industries in Britain in-
clude the electricity industry, the gas industry, the coal industry,
the railways, the nationalized road haulage industry and the air-
lines, and although the re-nationalization of steel in 1968/69
and the proposed nationalization of the docks in 1970/71 were
designed ostensibly to rationalize the industries and to make
them more efficient. The authors, nevertheless, put this open
question:

Whether this aim, to make the nationalized industries more
efficient, could not have been fulfilled by a different
method of control rather than by outright public ownership.(71)

Alec Nove argues that there is no point in nationalizing
industries, such as the chemical or sugar giants, unless powerful
special reasons for doing so exist. He asserts:

It is, of course, possible to urge nationalized enterprises to operate in a competitive environment. Competition can be between nationalized industries (for example, coal, gas and electricity in Great Britain), or between nationalized firms and private firms in the same industry (such as Renault and Simca car plants in France). Under these conditions, nationalized management does have a powerful impetus towards efficiency. (72)

The French premier in an interview with Time Magazine declared his views on nationalization in France:

If our nationalized industries perform well, it is because they are managed in a spirit that respects their autonomy and because those in the industrial sector, like Renault, are subject to competition from private enterprises. (73)

Arthur Knight regards the whole Whitehall machine as having no hope of influencing and no capacity to understand the management of business, but he emphasizes that:

Firms survive and make profits generally by making things which the public will buy at costs which reflect the value in alternative uses of the resources which are employed. Earning adequate profits to sustain business in fields in which the U.K. has a comparative advantage is in the social interest, as is investing in new technology which will ultimately benefit consumers. Thus the chief reasons why governments in the U.K. usually have policies towards industry is in order to hold the ring. (74)

Arthur Knight stresses two further points:

First, government has to make its assessment of which industries should be helped to survive, where the doctrine of comparative advantage appears to be relevant. Second, government has to deal with possible divergences between public and private interest. (75)

Basic facts about the nationalized industries in the U.K. are taken from "Nationalized Industries" 1970. (76)

In the U.K. the nationalized industries, although similar to private enterprise in their basic aim, differ in other respects, as they are very much larger than the average privately owned company and often have a considerable degree of monopoly power.
Also, the political background against which they operate cannot be ignored.

The nationalized industries occupy a key position in the economy not only in themselves, but also because of the profound effect they can have on the efficient operation of the rest of the economy. There were strong political pressures for the maintenance at relatively low prices of services which were unprofitable but thought to be "socially desirable". This was particularly the case with railways, coal and airlines. The control and appraisal of capital investment was inadequate. Some of the industries were capable of absorbing enormous amounts of capital, most of it raised by Government loans rather than through the capital market. The U.K. Government has formulated a series of rules or guidelines within which the nationalized industries ought to operate in order to achieve an efficient use of resources. These guidelines are a partial substitute for the market constraints which affect a firm operating in a competitive environment. They are quite specific about the type of pricing policy that the industries should use, the minimum rate of return which new investment projects should show and the method of evaluating such projects, and the overall rate of return on net assets which the whole operation of an industry should achieve.
2. **Eastern European Experience with Management:** Exploring how Eastern European Countries tackle their managerial problems.

Starting with one of the experts on this field from Czechoslovakia, Ota Sik in his book, "The Third Way" (1976), commenting on J.K. Galbraith's book, "The New Industrial State", notes that Galbraith is one of the few recent non-Marxist theorists to lend support, in a sense, to official Marxism's rejection of the market.

Sik took a closer look at Galbraith's attitude, when he said:

> He is primarily concerned with demonstrating that, with the so-called "technostructure" now controlling production, the market and the goal of profit maximization are no longer of first importance for the giant corporation in the west. The corporation plan, he argues, has taken over; the market is accommodated to the plan, and goals of planning have little in common with profit-seeking by the technostructure.

Sik continues:

> From his highly complicated and, to my mind, unconvincing line of argument we can extract two main staves. First, the market is subordinated to the planned goals set by the firm. Second, the behaviour of the corporation is adapted to the motive of the technostructures.(77)

Regarding profit optimization, Sik stated that:

> First, it is necessary to distinguish between profit as the concentrated manifestation of economic effect and the manner in which this profit is appropriated.(78)

In another place he argues:

> In the real-world economy, profit, while an objectively necessary money form of surplus value, also serves as an indicator of the social effectiveness of industrial performance, the extent to which it approaches the optimum.(79)

His ideas on marketing and planning in the Eastern bloc countries are summarised in the following statement: (180)
In recent decades, however, especially in the light of postwar events in the "socialist" countries, there has been a move among specialists on the subject towards a realization that, in the long term, neither the market alone nor planning without the market can ensure that growth will be effective, above all, in tune with the public interest. (80)

His personal experience on the same subject is that:

The actual experience and the analyses made of the planned economies in several socialist countries over the recent decades have demonstrated that enormous losses have been caused by suppression of the market mechanism, including its prices and market-related earning, and by abolishing competition and consumer choice. In Poland, Czechoslovakia, Hungary, especially, and to some extent in the U.S.S.R., there have been periods when the irrationality, the contradictions and the wastefulness of command planning have been frankly admitted in hard-hitting debates. (81)

In his article "Economic planning and Management in Czechoslovakia", Ota Sik admitted that the existing system of central planning and management had failed to lead to intensive development and greater efficiency. It became obvious that the existing system of management could not ensure the needed radical and lasting upswing. He said:

There are times, in particular the transition from capitalist of socialist economy, when some degree of strict centralized management is necessary. Centralization helped us to accelerate the social and structural reconstruction of the economy and to ensure progress along socialist lines at a time when the class composition of the managerial personnel was undergoing a radical change, and it facilitated rapid equalization of the economic levels in the various parts of the country. But as socialist economic development gradually got into its stride, the rigid centralized planning and management became the main impediments to greater efficiency. (82)

Sik admitted that recent developments in economic thought in Czechoslovakia and the other socialist countries had made it easier to draw the correct conclusions from a critical analysis that aimed at getting to the root of the negative phenomena evident
in these countries. Thus it was clear, not only that the existing system of planned management had proved unable to overcome the contradictions between production trends, but also that the very system of central management itself, through greater and greater reliance on purely administrative methods, was deepening the discrepancies between the structure of production and the structure of requirements. He stated that:

The one-sided drive for more output, for quantitative targets, was inevitably accompanied by a lack of incentive to technical and technological advance, to use modern materials and turn out better and more up-to-date goods. That is to say, that now obsolete methods of management have unavoidably resulted in neglect of the qualitative aspects of economic progress in the widest sense of the term. One-sided and insufficiently realistic plans and the material interests of the enterprises and their personnel have retarded technological progress, perfection of use values and rationalization of production. (83)

On the fixing of prices in Czechoslovakia Sik said:

The fact is that the proceeds from sales should correspond to the actual created and realized value. In short, prices should harmonize with the socially necessary expenses of production. (84)

As he noted the new system underscores the role of prices, which should help to channel production along lines expedient for the whole of society.

The centralized model of planning devised in the U.S.S.R. was adopted in other Eastern bloc countries, in the period when all of them, regardless of size, traditions, or resource endowment, copied all things soviet. In all these countries this model is now being questioned and, in varying degrees, changed. For instance, improving the forms and methods of planning will make it possible to tackle the problem of strengthening and developing the system of
cost accounting in a new way. A. Kosygin, asked what would have to be done in order to strengthen and develop cost accounting in the new conditions. He said:

Firstly, condition must be created under which the enterprises will be able to solve their problems of improving production independently, and that they will be interested in utilizing to the utmost the fixed assets assigned to them for increasing output and the amount of profit they received. It is therefore, necessary to leave to the enterprises more of the profits which they derive. Secondly, it is necessary to strengthen the cost-accounting system in inter-enterprise relations and to guarantee that enterprises adhere strictly to consignment deliveries as stated in concluded contracts, and to increase their material responsibility for discharging their obligations. Thirdly, on the basis of the cost-accounting system, it is necessary to provide material incentives for the entire collective and every shop and section of the enterprise to make them interested in fulfilling not only their own individual assignments but also in improving the over-all results of the enterprise. In doing this, incentives must be organized so that enterprises will be interested in working out and fulfilling higher planned assignments, and in the better utilization of internal resources. (85)

In the same report Kosygin explained that under the existing system capital investments are almost exclusively allocated according to the central plan, and in the main are devoted to the construction of new enterprises. In many cases operating enterprises do not have the necessary means at their disposal and thus cannot replace obsolete equipment quickly enough. The result is a tendency to retard the growth of labour productivity, to retard improvement in the quality of the goods and to emphasize cost-accounting in production. He therefore proposed the following economic and management reforms:

It is proposed that at every enterprise there should be established a production development fund which would be formed from its profits. Such funds will also be supplemented by part of the depreciation fund which is intended for the complete replacement of fixed assets. At present this part of the depreciation fund is used wholly for

(183)
centralized financing of capital construction, and enterprises cannot use these means at their own discretion.\(^{(86)}\)

The report tackled money incentives in the U.S.S.R., emphasising that in 1965 new methods of planning and economic stimulation had been introduced in a number of enterprises in the garment, footwear and textile industries:

Recently a new system of bonus payments to managers, engineers, technicians and office workers was introduced at enterprises in a number of industrial branches, aimed at raising the workers' interest in the growth of production and quality of the goods. The first results which we have at our disposal already confirm the correctness of the road chosen.\(^{(87)}\)

The presidium of the Council of Ministers of the U.S.S.R. in the beginning of the 1960's started to delegate more authority to some of the enterprise managers. They were granted considerable powers to use any profit above the planned level, as well as savings in the wages funds, for the material stimulation of their workers, for improvement of socio-cultural conditions and for the development of their own production base:

The presidium of the Council of Ministers of the U.S.S.R. recently examined the first results of their work and heard the reports of the directors of two of the Moscow road-transport organisations. Already the first results of their work have shown that the introduction of the new system of planning and material stimulation yields a considerable effect.\(^{(88)}\)

Regarding the calculations of prices in the U.S.S.R., the report stated:

At present, when wholesale prices are determined for industrial goods, it is becoming absolutely necessary to substantiate scientifically the calculated level of profitability in the branches of industry. Normally functioning enterprises must obtain their profit from the realization of their produce at wholesale prices; in this way they must derive an opportunity to set up stimulation funds and to dispose of the necessary means for expanding their activities, for paying for their assets

\(^{(184)}\)
and for making other transfers to the state budget. Price must also play a major role in tackling the problems connected with the raising of the quality of goods, and improving the length of service and durability of goods. Thus when prices are determined for new improved model, they must reflect the additional expenditures made by manufacturers and the benefit which the customers will get from using better quality goods. (89)

David Granick, in his book 'The Red Executive' (1960) points out that in any advanced industrial society, regardless of its social system or traditions, much the same sorts of problems are involved in operating the complex industrial structure. The solutions to these problems, as Granick admitted may, of course, be different. But the differences are limited by the fact that some basic problems must be tackled. His book discussed both the similarities and differences between the American and Russian approaches. He found that in many fundamental respects, British management is much like American, and there are other respects in which British management has much in common with, both American and Russian. For example:

In all three countries, there has been increasing concern with decentralization of management, and various experiments have been undertaken in trying to achieve it. Functional departments such as research and cost accounting have grown in importance. There has been the problem of the reduction of the role of the foreman to the extent that functional specialists have become more important in management. (90)

He found that had even greater importance as a pre-requisite for middle and top management in the U.S.S.R. than it did in the United States. Another area of similarity is the regard in which the industrial manager is held by society in general.

He is kingpin in both of the two giant economies described in this book, while he holds a much more modest role of esteem in Britain. (91)
He concluded that in both countries (the U.S.A. and U.S.S.R.), it would be very difficult indeed to carry on normal business activities strictly within the law. As a result, the top manager is a "risk taker" in both these societies. In Britain, on the other hand, the business man seems to find law breaking much less necessary and less socially acceptable.

About the centralization of authority in the U.S.A. and U.S.S.R. the author said:

The modern American corporation had outgrown the organisational form of one-man authority. "Decentralization" became the slogan of the day, by the 1950's, it was firmly imbedded in the folkways of management .... The soviet approach to administration is sloganized in the concept of centralized planning combined with decentralized operational decisions. (92)

Soviet theory has always called for decentralization of operational decisions to a local level:

But the term "decentralization" has never had the meaning in soviet parlance which is given to it in American business: that middle managers should have quite explicitly, reserved to themselves the right to meddle directly in the detailed affairs of even the smallest organisations. (93)

Granick added:

In actual fact, plant directors have possessed great authority. But in theory, they have not; and so they have constantly struggled to legitimize their power. (94)

The year 1957 saw a new type of industrial reorganisation in the U.S.S.R. At the end of March, Khrushchev published his "Theses" advocating the abolition of industrial ministries. Accordingly the Industrial Reorganisation Law ended the former system of grouping industry by product and technological process into national ministries. Instead, one hundred or so regional councils were
formed to administer all types of industry and construction within their respective regions.

Administration had shifted from organisation by type of product to organisation by geographic region. (95)

What made this reorganisation appear so drastic is that virtually all of the industry administrations had previously been centred in Moscow, while the new regional administrations were, in the nature of things, to disperse to the four winds.

The indoctrination problem is one key reason for the low mobility of American managers between companies. Moving from plant to plant, subdivision to subdivision, but always remaining within the company, the upward-bound executive gains breadth without losing his touch for the individual peculiarities of his corporation's personality. In the Soviet Union, the Communist Party plays this indoctrination role.

Rare is the executive of stature who is not a party member. For a non-party executive has not been subjected to the full strength of the traditions of the soviet administrative "personality" and so in a real sense is not fully trained for his job. Those few executives who are "non-party Bolsheviks" as the term goes, are presumably men with other vital qualifications who are judged to have also imbibed enough of the party personality to make them acceptable. (96)

One aspect of the communication problem in the U.S.S.R., is the need to bring lower- and middle-management personnel into the process of planning and decision-making. As Granick argued, the value of such participation has been well recognized both in American and in Russian industry. It has been viewed as improving the quality of final decisions and, of at least equal importance, as giving these executives a great psychological stake in the fulfilment
As an epilogue to the subject of the organization man in Russian Industry, D. Granick concluded:

The Russian manager is a man with power, but he is no independent decision-maker. He is an organisation man, filling a slot in an industrial bureaucracy which has lines reaching to the very heights of Soviet power. His production goals, his cost, and even his industrial research objectives are set for him. Moreover, he must establish and maintain successful contact with the members of other powerful bureaucracies — and in particular with that of the Communist Party. But if the manager's goals are established for him, their achievement is his personal responsibility. Often, the drive to meet quotas will force him into illegal activities; this cannot be helped. It is a basic part of his task to determine what is necessary in order to "succeed"; in this sense, the Red Executive is very much an independent businessman. The Soviet Manager is orientated to production. Volume of output is the acid test of his work. Marketing is no problem; finance is a trivial concern. But the purchasing department is the rock on which the factory organisation stands, for supply shortage heads to production shortages.(97)

The September (1965) Plenum introduced the following major reforms(98):

1. The management of industry was reorganised on a sectional rather than a regional basis. Whereas under the 1957 reorganisation industry was managed by regional economic councils, under the 1965 reform it is managed by industrial ministers, one for each industry.

2. Greater independence was granted to the enterprises. The number of indices in enterprise plans fixed from above by the central planners was drastically reduced. Now an enterprise will have prescribed from above only nine indices. Sales, the quantities of the basic items in the product mix, the wages fund, the total of profits, the rate of profit, payments to and grants from the state budget, centralized investment, the introduction of new technology, and the plan for material-technical supply. The importance of the profitability index was to be greatly increased; Kosygin remarked in his speech to the Plenum that the volume of profit was largely responsible for determining the size of the contribution made by each enterprise to the net income of the country, and thus to the extension of production and the improvement of the welfare of the people. Prior to the September Plenum, profits and the rate of profit were not basic indicators, and there were many planned-loss enterprises.
The basic idea was that in order to eliminate the flagrant disregard for the requirements of consumers when enterprises were interested only in fulfilling the plan prescribed from above, directions from above would be greatly reduced, and enterprises would direct their efforts to the satisfaction of consumer demand, guided by profitability. It was hoped to create a situation in which what was advantageous for society would be advantageous for individual enterprises. Whereas producers formerly produced bulky iron bedsteads in order to fulfill plans in tons, now it was hoped that in order to make profits they would produce modern beds which consumers would prefer. Under the new system much greater emphasis than before is placed on financial levers and an economic approach, and much less emphasis than before on natural indices and an engineering approach. The two chief indices for judging the work of industrial enterprises under the new system are sales and profit.

3. Enterprises are to pay the state interest on fixed capital employed.

4. In the sphere of material-technical supply Kosygin stated that it was intended to develop wider connections between capital goods, enterprises and consumer goods enterprises. It is essential gradually to make the transition to wholesale trade in separate types of materials and equipment.

Ellman made several comments on the 1965 reform, of which the following three seem critical:

1. A major feature of the reform was increased emphasis placed on the incentive funds of enterprises.

2. The reforms so far adopted have been far too limited to eliminate the problems of the old system.
3. It is widely believed that the present generation of enterprise management does not have the training and experience necessary to operate a system in which enterprises have more autonomy than formerly, and that management education on the American pattern is a necessary complement to a system that increases the autonomy of enterprise management. The taking of socially rational decisions by enterprise management is a matter not only of education but also of motivation.

Ellman believes that the major social problem of the U.S.S.R. is,

The irresponsibility of the administrative apparatus, leading both to an unwillingness at all levels to take responsibility for decisions, and to an arrogant treatment of the population by all officials from petty clerks upwards. (99)

Increasing attention has been given to management as the central force and the critical factor. In India and in many Latin American Countries, in the newly independent countries of Africa, in the Middle East, and in Southern Asia, management associations were formed, management schools came into being, and management began to become a major focus of governmental as well as of business concern. Eventually the management boom reached the Communist world. One Communist country after another in Europe, starting with heretical Yugoslavia and then Poland and Hungary and ultimately even the Soviet Union and Czechoslovakia set up management schools and management institutes, began to translate western, especially American and British, management books, and began to teach management as the solution to economic stagnation.

What we have learned since the management boom of three decades ago? P. Drucker answers:

The first thing is that management, that is, the organ of leadership, direction, and decision in our social institutions and especially in business enterprise, is a generic function which faces the same basic tasks in every country and, essentially, in every society. It has to think through the institution's mission, has to set its objectives, and has to organise resources for the results the institution has to contribute. (100)
Management in the Soviet bloc, especially after the developments of the sixties, can largely be explained in terms of the dynamics of management and their impact on Communist ideology and organisation. In the Eastern bloc countries management was to a large extent the rallying cry of those who opposed impositions from an alien source.

The Communist reformers, first in Yugoslavia, then in Hungary, and finally, in Czechoslovakia, demanded autonomy... In part of course, their motives were economic. But in equal measure, they looked to management as a force to reform government society. (101)

T. Gambling, in his study of the application of accounting in the U.S.S.R., found that:

The prices of most major commodities in the U.S.S.R. are fixed by law, and are supposed to reflect the socially necessary costs of production, i.e. standard labour costs. (102)

Gambling argued that one of the major reasons for the introduction of the Economic Reforms in the U.S.S.R. and other Socialist Countries, is that centrally-directed and detailed physical planning can no longer provide for the satisfaction of the 'ideal whims' of an affluent society:

Once accounting in these countries ceases to be used as a control system, in support of a detailed physical plan, the enterprises start to use their accounts in much the same way as their capitalist counterparts. (103)
SUMMARY OF CHAPTER III

This chapter has been divided into two parts. The first part contains an analytical survey of literature and is based on Management Control Systems theory and practice. The material of this part is drawn from literature written by British or American authors. Their ideas represent the concepts and practices of Western developed countries with regard to Management Control Systems. This part has been divided into five major sections:

Section one explains what Management Control Systems are, it attempts a definition, and describes some features of management control.

Section two consists of an analysis of management behaviour in an open system, the role of the formal leader (manager) as a monitor of information in organisations, and in the designing of the overall system.

Section three concerns management accounting techniques, responsibility centres, standard costing and budgetary control, and also responsibility reporting.

Section four explains what an organisation is, modern organisation theory, authority, influence, power and bureaucracy. It goes on to describe the meaning of identifications, loyalties, responsibility and accountability. Some features of the functioning of a system of organisation, and management by objectives, are then explained.

Section five concentrates on the concept of training. From the information compiled in the first part of this chapter, it may be concluded that Management Control situations are diverse in
nature. They may call for the designing of a new control system or the developing of new standards, the analysing and measuring of deviations between actual performance and the standards, the developing of a qualitative basis for determining where to invest limited capital resources, the taking of corrective action, or simply the examination of a situation to determine exactly what the control problem is.

Part two has been divided into two major sections:

Section one explains the managerial processes of the U.K. nationalized industries. It is observed that competition between nationalized industries in the U.K. could produce a powerful impetus towards efficiency in their management.

Section two considers ideas, experience and practices of management in state-owned enterprises in Eastern European countries.

The Soviet centralized model, which is adapted by other Eastern European countries, is based on central assessment of need and on 'directive' planning, in which this assessment is translated into action by a system of instructions via the economic-political hierarchy. Criteria for management are predominantly related to the fulfilment of the directive plans. However, during the last two decades, Eastern European reformers, have been trying to change the central plans relating to major investments, and have moved towards a flexible centralization and money incentives, rather than 'directive' methods to attain desired goals.
REFERENCES


18. Ibid., p. 59.

19. Ibid., p. 27.


28. Ibid., p. 505.


34. Ibid., p. 145.

35. Ibid., p. 145.


46. Ibid., p. 24.


49. C. Barnard, The Functions of the Executive, op. cit.


58. Ibid., p. 59.


63. Ibid, p. 38.


69. Ibid, p. 23.


75. Ibid, p. 197.


79. Ibid, p. 177.


82. Ota Sik, Economic Planning and Management in Czechoslovakia - Orbis - Prague, 1965, p. 5.

83. Ibid, p. 9.


86. Ibid, p. 325.

87. Ibid, p. 331.

88. Ibid, p. 332.

89. Ibid, p. 333.

92. Ibid, p. 142.
93. Ibid, p. 156.
94. Ibid, p. 159.
95. Ibid, p. 163.
96. Ibid, p. 172.
CHAPTER IV

THE CURRENT MANAGEMENT CONTROL SYSTEMS USED IN THE IRAQ CEMENT PUBLIC COMPANY

Before analysing the current Management Control System, Cost control and training programme, a general account of the company is needed:

1.A. A Note on the Company

The Iraqi Cement Public Company which forms the subject of our study, and has been mentioned, in some detail, in chapters one and two. The Company was established in 1936 in Baghdad city. Production started in 1950 with one kiln and with an annual production of 75,000 tonnes. The capital of this company in 1974 amounted to I.D. 7,707,694, and on the 14th July, 1964 the company was nationalised. (1) This is one of the associate companies of the State Organisation of Construction Industries, which in turn, are attached to the Ministry of Industry and Mines, in accordance with the decree of this Ministry concerning the setting up of specialised enterprises published in 1970.

(200)
Production Capacity

The Company runs and manages four cement factories with a total annual production of 1,090,000 tonnes, distributed as follows:

1. The Baghdad Cement Factory. This factory has four kilns with a total annual production capacity of about 450,000 tonnes.

2. The Falluja Cement Factory. The annual capacity of this factory is 200,000 tonnes. This is all produced by its one kiln. Production started before the end of 1975.

3. Seddat al-Hindiya Cement Factory. The annual production capacity of this factory is 240,000 tonnes, produced by two kilns.

4. Kufa Cement Factory. Production in this factory started in 1974 with an annual capacity of 200,000 tonnes. The factory has one kiln.(2)

The Company has a factory at Baghdad for making cement filling sacks with an annual production capacity of 27 million sacks.

Types and Specifications of the Output

The Company produces the following kinds of cement:
1. Ordinary portland cement. This kind of cement is produced according to the following specifications:
   (a) Iraqi specifications No. 5, 1967.
   (b) British specifications B.S. No. 12, 1958.
   (c) American specifications No. ASTM C 150 - 62, Type 1.

2. Salt-resistant cement. This kind of cement is very soft and produced according to the following specifications:
   (a) Iraqi specifications No. 6, 1968
   (b) British specifications, B.S. 4027, 1966.
   (c) American specifications, ASTM C150 - 62, Type 5.

3. Moderate Salt-resistant cement. This kind of cement is used when little resistance to salt is required, and it is produced according to American specifications:
   ASTM C150 - 62 Type 2.

4. Quick-hardening cement. This kind is produced for special orders. (3)

Expansions Decided Upon

1. Expansion of the Falluja cement factory. This is to be achieved by adding two more kilns to produce 400,000 tonnes of clinker annually, bringing the total annual output to 600,000, starting from the beginning of 1977.

2. The new Kufa cement project with a production capacity of 2,000,000 tonnes. This project will be set up near the present factory. Production will start in the beginning of 1978. (4)
1.8 METHODOLOGY

Difficulties with Questionnaire

After preparing the questionnaire, which was designed as a means of collecting data and then to assess the current management control systems in the Iraq Cement Public Company (See Appendix A), the researcher travelled to Iraq at the beginning of September, 1976. The Iraqi Ministry of Higher Education and Scientific Research wrote a letter to the Company permitting the researcher to submit the questionnaire. Before using the questionnaire, a pilot test was carried out with six individuals, two technical experts at the State Organisation for the Construction Industries, which supervises all the Iraqi Cement Companies, and four others who were members of the National Centre for Consultancy and Management Development; of the latter four, two occupied specialist positions in management and two were assistants to specialists in management. A visit was then paid to the Company administration in Baghdad, and subsequently to the Baghdad factory, the Falluja factory, situated some 45 miles from Baghdad, the Seddat al-Hindiya factory, situated 60 miles from Baghdad, and the Kufa factory, 90 miles from Baghdad. It was found that translation of the questionnaire into Arabic was not easy. Some difficulties were encountered in rendering managerial terminology in a different language, as the respondents must understand the same thing from the questions, if the comparison of responses is to have significance.

(203)
The respondents in the Company administration were given two days
to answer the questionnaire; those of them who misunderstood certain
questions were dealt with personally and their difficulties removed.
Managers in the Baghdad and other factories were met personally as
soon as the questionnaire had been distributed. Each meeting with the
managers in every factory lasted between 2 and 3 hours.

Distribution of the questionnaires directly to the subjects,
rather than being sent by mail, gave the researcher an opportunity
to explain any questions which proved difficult to understand, and
the purpose of the questionnaires and the study, to the subjects and
to emphasise the confidentiality of the information. This approach,
certainly, increased co-operation to a greater extent. The researcher
resorted to this rather tedious and time consuming approach for a
number of reasons.

First of all, a large number of the questions which are included
in the questionnaire involve evaluation of superiors and the company
performance of management control by subordinates, which is rather
a sensitive matter. In order to solicit co-operation from the respondents it was necessary to convince them about the confidentiality of the information they were asked to give. Any involvement of their organisation in distribution of the questionnaires would have attracted some suspicion. As a matter of fact, several managers in the Company suspected the researcher's intentions, since he was authorised by the Ministry of Higher Education and then by the General Manager of I.C.P. Co.

Immediately after distribution of the questionnaire to the respondent managers,
the researcher explained to them his title at Basrah University, and the reasons for doing this research. After the subjects were assured that each respondent answering the questionnaire should not simply give the researcher the answer they think he wants to hear, they were requested to give their answers on the questionnaires individually without letting anybody interfere while writing their answers.

The researcher's experience in lecturing and conducting courses in Iraqi industrial organisations, gave him access on how to handle the Iraqi managers' way of thinking and gain their confidence, and then obtain the required result.

The actual result was so frank and accurate, that it exceeded optimistic expectations. The researcher believed that the respondents had given at least 90% correct and honest answers, after they had been convinced that the researcher and his research was under no influence of the Ministry of Industry and Mines, and that the information obtained via the questionnaire or oral interview, would be treated in the strictest confidence, and in such a manner that it would not be traceable to any one individual.

All the data obtained from the respondents in I.C.P.Co. were computerised according to frequency distribution processes in the Computer Unit at the University of Durham. An initial examination of the frequency tables produced from the data of empirical research, enabled the user the ensure that each variable had sufficient variability to be used in subsequent relational analysis. Further more, it permitted the user to check the validity of the data to ensure that it had been coded, punched and input to the desired specifications.
The Population

All persons who occupied managerial positions, from General Manager down to Supervisors, were asked to answer the questionnaire. It was found impractical to ask foremen, although they are responsible for the jobs of other people, because of their illiteracy and inability to grasp the real meaning of the questions, and because their reluctance to answer, despite offers of help.

Seventy two managers completed the questionnaire, distributed as follows:

1. Baghdad Cement Factory 13 managers
2. Falluja Cement Factory 15 "
3. Seddat al-Hindiya Cement Factory 13 "
4. Kufa Cement Factory 10 "
5. Administration office 21 "

Total 72 managers

In the questionnaire there were 169 questions and sub-questions, the total number of responses being $72 \times 169 = 12,168$. Out of this total only 102 answers or subquestions were considered lacking in relevant data (less than 1%).

Advantages and Disadvantages of Questionnaires

There are advantages and disadvantages in using questionnaires in management research. In their favour is the large number of questions which can be put to a large number of people. This would be impossible with other methods of research such as interviewing and observation. Secondly, they give the respondents flexibility in the time spent on answering. Finally, the data collected lends itself to objective analysis, whether statistical or otherwise. On the other hand, questionnaires are always open to response bias. If the questions are slanted, then the respondents may answer in a certain way, regardless of the real point. Also, if respondents
do not have much time, then answers will be hasty and ill-judged. Furthermore, if the respondents are left alone to interpret the questions, their interpretations may vary. In order to minimise the effects of such response problems, a wide selection of responses is necessary.
4. C. Empirical Research in Iraq Cement Public Company

The questionnaire was divided into four main sections:

1. Basic questionnaire
2. Questionnaire about training
3. Questionnaire about cost control
4. Questionnaire about management control systems.

The aim of the field research is to examine the current practices of Management Control Systems, in order to find out deficiencies in application. Comparison can then be made with the principles of management control, to find out ways of overcoming the deficiencies. Among the several deficiencies which became apparent during the analysis of the responses, the following four types have considerably influenced the creation of the current Management Control Systems in the Company. It was therefore decided to use the last three sections of the questionnaire to assess these four by ascertaining:

1. The extent to which there was a difference between authority and perceived influence.
2. The extent to which lack of appropriate training had led to inattention to the improvement of management information systems.
3. The degree of satisfaction with current control systems.
4. The relationship between the influence exerted by personnel and the obtaining of information.

Introduction

The aim of this Chapter is to explore the current practices in Management Control Systems, Cost Control, and Training, at the Iraq Cement Public Company. In order to do this and to reach a better understanding of these three areas, practical empirical field research is necessary. A suitable questionnaire, therefore, has to be designed in order to investigate and collect the right kind and amount of data with which to examine these three areas. Together they should give a greater understanding of the actual current application of Management Control Systems in the Company. Cost Control is considered one of the major tools (especially for developing countries) in the management control processes and training in management is considered a realistic method of understanding and applying properly, the processes of Management Control Systems. These considerations made it imperative to explore the two areas of cost control and management training in addition to and within the framework of Management Control Systems. The questionnaire was specially designed to fit the managerial situation in the Iraq Cement Public Company, and to suit the Iraqi environment in general,
in order to give a picture of the actual practices of Management Control Systems, cost control and training that were in use. This would enable a comparison to be made between the principles held by the U.K. and U.S.A., to apply to these three areas and the actual practice discovered in the Iraq Cement Public Company. (This comparison will be the aim of Chapter five).

Chapter two was based on field research in seven different companies (one of them being I.C.P. Co.), selected from the five qualitative state organisations, which supervise and control the whole of Iraqi State Industry, and its purpose was to produce a comprehensive understanding of Management Control Systems in the state industry in general. In this field research I compiled a check-list of questions. Only those questions relevant to a particular respondent were asked. Respondents were selected so as to give a fairly wide range of answers to the questions.

The responses to the questions in the first field research project, which took place during May and June, 1975, together with the replies to the questionnaire in the second field research project, which concentrated on I.C.P. Co. and took place in September and October of 1976, have been aids to accuracy in the investigation of the general subject of this research.

B. Basic Questionnaire

The first part of the questionnaire, consisting of five questions, was aimed at discovering basic information about the respondent manager's grade, his length of service in that grade, and
in the Company, his academic qualifications and the category of work he performed.

This information provided a basis for understanding and interpreting the responses to the rest of the questionnaire.

The first question of the preliminary section concerned the grade of the respondent managers, and it was found that most of the respondents occupied supervisory positions: of the 72 managers who replied to the questionnaire, 33 were in supervisory positions. The other respondents, who held higher positions in the Company, were distributed as follows:

13 Managers of Departments, 19 Managers of Divisions, 4 Factory Managers, 1 General Manager, 1 Assistant General Manager for Technical Affairs, and 1 Assistant General Manager for Managerial Affairs. Although the number of Managers of Divisions was greater than the number of departments, this did not reflect the real situation in the Company. The researcher attributed the discrepancy to the poor definitions of the responsibilities and authority of the two levels of management. Because of this, a small number of managers who performed the job of Departmental Manager were able to categorise themselves as Managers of Divisions.

The next question concerned the number of years each respondent manager had spent in his present grade. It was found that the majority, 38 of the 72 managers, had held their positions for more than six years. This indicated that the turnover of managers was rather slow. The responses to the
next question, about seniority in the Company, showed that 46 managers, 63.9% of the total, had spent more than six years in the Company. This means that the Company had an almost stable managerial situation. The replies to the question concerning the academic qualifications of the respondent Company Managers, showed that about half, 45.8% held B.sc. or B.A. degrees. The percentage of managers who had a secondary education, Diplomas or higher degrees, was 37.5%. These percentages show that a considerable proportion of the managers of this Company were well qualified. It is worth noting in this context that about 50% of the population of Iraq was illiterate at the end of 1976.

The last question in the preliminary questionnaire concerned the work category of managers. Forty managers were found to be involved in production, 18 managers were involved in services to management (i.e. accounting, personnel, etc.), while only 11 managers were involved in marketing or sales. As the Cement Industry is considered one of the oldest and largest industries in Iraq, with the greatest home demand and a flourishing market abroad, this figure reflects inadequate marketing activity.

Rank and pay in Iraq depend largely upon scholastic attainment, which according to Lord Salter

Bears little relation to merit or aptitude. At one end of the scale young persons who may not be fit for any other employment are able to enter the Civil Service at a fixed salary because they have spent the requisite number of years in a primary, intermediate or secondary school. On the other hand, students who have spent many years studying abroad and have gained high educational qualities are discouraged from entering the service because they will receive the same low salary as a person who, for example, has passed four years in the Law College.
C. Training Questionnaire

Aim: This was the first area of the questionnaire, which had been compiled to examine the current training situation in the Iraq Cement Public Company. The analysis of the answers was intended to reveal the actual level of training followed by the Company. From this information, it was hoped to discover how far the training had led to the use of better control systems.

The first question in the training section, revealed that (54.2%) of those managers who responded had not attended any training programme. This means that more than half of the managers had learnt their jobs by trial and error, involving considerable waste and low quality work, as well as tense relationships with superiors. This lack of training I considered one of the major reasons for low productivity and the high cost of production. The second part of the question indicated that the majority of these managers who had attended training programmes had been to between 1 and 3 programmes during their time with the Company. These facts emphasise that top management were not appreciative of the benefits of training programmes.

Question 2 concerned training programmes. Most of the managers who answered had attended the training programmes either as a result of the advice of their supervisors or on their own initiative; none mentioned any arrangement by a training office, because there was none in the Company.

The responses to question 3 revealed that only 10 Managers had attended a general management course, and only 13 Managers had attended a management information systems course, which reflects on the poor appreciation of managerial tools.
Question 4(a) concerned the type of course currently needed; 23 managers indicated that they needed a general management course, 14 managers indicated that they needed a management information systems course, and 44 managers wanted a specialist technical course that would apply to their present duties. Thirteen managers felt they were in need of a course, although the kind was not specified. This result demonstrates that all the managers felt they needed to attend a training course, and some felt themselves in need of more than one type of training programme.

In part (b) of the same question, about the required length of any course chosen, 36 managers, (exactly 50%), preferred the course to last more than one month, but less than six months. This gives emphasis to the need and importance of training.

Experience indicates that the first step in any management development programme must be to find out how the individual in that company relates to the organisation. As F. Dinsmore put it in his book of 1975: (6)

It is necessary to determine and analyse the most fundamental sources of power and satisfaction for the individual and for the organisation. There are many factors which enter any such equation, and these must be carefully culled with emphasis on maximum simplicity. The fundamentals are those factors which are inherent in all individual and organisation performance and which most directly determine the level of results achievement. These basic factors can be grouped into four categories, which will be called the four R's - requisites, resources, responsibilities and results.

Question 5(a), dealt with the country in which the managers would prefer the training to be held. Twenty eight preferred to receive their training abroad; 10 of these 28 managers stated that they would prefer to have their training in England, 5 in
Denmark, 1 in Japan, 5 in West Germany, and 5 in any European or developed country. This means that at least 21 managers out of the 28 would have liked their training to be held in western block countries, while only 2 would have preferred to be trained in an Eastern block country. Of these 2, one named Poland and the other Czechoslovakia. Of the 44 managers who preferred to be trained in Iraq (Section b), 8 wanted to be trained in their own company, 20 in the National Centre for Consultancy and Management Development, and 13 in any other training centre. As the (N.C.C.M.D.) is considered to be the biggest, most experienced and best equipped centre for managerial training in Iraq, the fact that only 20 out of 72 managers preferred to be trained by the organisation shows that the Centre's performance is not highly valued.

The researcher was in fact one of the first specialist staff who had worked in this Centre, and he found from his experience that it needed to take a real lead in Iraqi management if it was to minimise the complaints about its performance and fulfil its objectives.\(^7\) The Centre could only do this if all its staff, from the level of the assistant specialists up to the General Manager, had both the morale and the ability of leaders in management, since the purpose of the Centre is to lead and develop other managers. The Centre would also have benefitted from having specialised personnel with plenty of experience locally and internationally, who had acquired a good grasp of management skills and the ability to adapt to changing circumstances. In order to achieve success, the Centre must also reward its specialised personnel with more authority and material incentives,
so that posts in the specialised fields attract the right people.

In Questions 6, 7 and 8 the respondents had to tick particular scores between 1 (none) to 5 (a great deal), or to answer yes or no. These questions attempted to determine the extent to which managers experienced a difference between authority and perceived influence. As the assessment of this difference is the first finding from the analysis of this field research, some detail is essential.

Question 6(a) aimed to determine how much influence managers could exert to obtain the training they required. If the process of cumulative frequency distribution is used as a statistical tool to illustrate how much influence the managers had, the results shown in Table No. 22 are obtained.

<table>
<thead>
<tr>
<th>Degree of influence</th>
<th>Number of Managers</th>
<th>Percentage of F.D.</th>
<th>Cumulative percentage of F.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>26</td>
<td>36.1</td>
<td>36.1</td>
</tr>
<tr>
<td>2</td>
<td>9</td>
<td>12.5</td>
<td>48.6</td>
</tr>
<tr>
<td>3</td>
<td>19</td>
<td>26.4</td>
<td>75.0</td>
</tr>
<tr>
<td>4</td>
<td>12</td>
<td>16.7</td>
<td>91.7</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>8.3</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table No. 22

The cumulative f.d. from degree 1 to the degrees of influence between 2 and 3 was exercised by the managers as shown in Table 22. The result is: 36.1 + 12.5 + 13.2 = 61.8%. Thus, if we calculate the scores of influence that start between degrees 2 and 3 and range up to 5, 38% of the respondents are found to have possessed enough
influence to decide on the training programmes they felt they required. Moving to Section (b) on whether the respondent managers had the authority to arrange for the training outlined in Questions 4 and 5, the answers could be either yes or no. Table 23 shows their answers as a percentage of frequency distribution, as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Number of managers</th>
<th>Percentage of f.d.</th>
<th>Cumulative percentage of f.d.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>27</td>
<td>37.5</td>
<td>37.5</td>
</tr>
<tr>
<td>No</td>
<td>45</td>
<td>62.5</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table No. 23

Twenty seven managers (37.5%) answered 'yes' implying that they had the authority to arrange for the training, but 45 managers (62.5%) answered that they did not have authority to do this. In order to show the extent to which there was a difference between authority and perceived influence, the 37.5% of the respondent managers who had authority was compared with the 38.2% of the same managers who had a perceived influence. The comparison indicated that there was only a very slight difference. (0.7%).

The same procedures were applied to Question 7 section (a), on whether the respondent manager's superior had the authority to arrange for training as outlined in Questions 4 and 5, and the cumulative f.d. of their answers is shown in Table No. 24.
26.4% of the respondents believed their superiors to have that authority. Section (b) determines how much influence the supervisors had.

### Table No. 24

<table>
<thead>
<tr>
<th>Code</th>
<th>Number of Managers</th>
<th>Percentage of f.d.</th>
<th>Cumulative percentage of f.d.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>19</td>
<td>26.4</td>
<td>26.4</td>
</tr>
<tr>
<td>No</td>
<td>15</td>
<td>20.8</td>
<td>47.2</td>
</tr>
<tr>
<td>Do not know</td>
<td>38</td>
<td>52.8</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The cumulative f.d. ranging from between 2 and 3 degrees of influence up to 5 degrees (a great deal), as shown in Table No. 25, is: $21.5 + 5.6 + 8.3 = 35.4/100$. This signifies that 35.4% of the respondent managers believed that their superiors had the influence to make decisions on training. The comparison between the percentage of the actual authority of the superiors (26.4%)
and the percentage of their perceived influence (35.4%), shows that managers tended to believe that their superiors exercised more influence than was in keeping with their actual authority. This belief was largely imaginary and is probably related to the "cultural structures" of the country. It could, however, be true in certain circumstances, when the superior is in the first echelon.

Question 8 deals with the respondent manager's authority to arrange for his subordinate's training. The answers were either a simple yes or no. Since only 20 managers answered yes, we find that a mere 27.8% of the total respondents had enough authority to order the training of their subordinates. Looking at Section (b) of the same question, regarding the manager's influence, we see that there were also 20 managers (if one counts half of the managers who gave their degree of influence as 3), who indicated that they had enough influence (see Tables 26 and 27.)

<table>
<thead>
<tr>
<th>Code</th>
<th>Number of managers</th>
<th>Percentage of f.d.</th>
<th>Cumulative percentage of f.d.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>20</td>
<td>27.8</td>
<td>27.8</td>
</tr>
<tr>
<td>No</td>
<td>52</td>
<td>72.2</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table No. 26

<table>
<thead>
<tr>
<th>Code</th>
<th>Number of managers</th>
<th>Percentage of f.d.</th>
<th>Cumulative percentage of f.d.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>31</td>
<td>43.1</td>
<td>43.1</td>
</tr>
<tr>
<td>2</td>
<td>16</td>
<td>22.2</td>
<td>65.3</td>
</tr>
<tr>
<td>3</td>
<td>10</td>
<td>13.9</td>
<td>79.2</td>
</tr>
<tr>
<td>4</td>
<td>7</td>
<td>9.7</td>
<td>88.9</td>
</tr>
<tr>
<td>5</td>
<td>8</td>
<td>11.1</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table No. 27
Figure 4.

Relationship between Authority and Influence

(220)
The conclusions from the last three questions, proved that there was only a slight difference between the authority and the influence of managers in this Company. This means that perceived influence was not higher than actual authority, except at the level of the General Manager, his two Assistants, and members of the Board of Directors. This established the first finding about the relationship between authority and influence in the Iraq Cement Public Company. (see Figure 4). Moreover, it was also found that the influential managers always occupied the upper line of management as will be demonstrated in the coming stages of this analysis.

Question 9 deals with the manager's feeling about training. Fifty four managers said a training programme would be useful in the future, but 36 managers said a training programme would be of immediate use to them in their present job. Only 10 managers said, that as many of their colleagues had attended training programmes, they thought they should do likewise. This means that 75% of the respondents felt that training would be useful in the future, because they knew it would help considerably towards their promotion. They also realised that training would increase their aptitude for any new position they might expect to hold in the future. The answers to the next question (No. 10) proved this expectation. Here 39 managers (54.1%), who scored from 3 to 5, agreed that, "staff who have attended training programmes are promoted more quickly than those who have not attended them."

Question 11 asks whether the respondent's superior was in that position because:
A. He was more experienced than the respondent
B. " " qualified " "
C. " " older than the respondent
D. For other reasons.

In answer, they were allowed to tick one or more possibilities, with the following results:

A. was ticked by 47 managers
B. " " 42 "
C. " " 11 "
D. " " 23 "

The last figure means that 31.9% of the total respondent managers felt that their superiors had gained their position for "other reasons", with or without the first three reasons. This indicates that quite a high proportion of the managers felt that their superiors had got their positions, (a) because of their political attachments or (b) because they had connections with one or more influential individuals in the Ministry of Industry and Mines or in other corporate bodies, or (c) because they had a charming personality. It seems then, that the principle of "putting the right man in the right place" was not always strictly followed. This kind of situation is likely to create bitterness in the others, which will have an effect on the level of job satisfaction, which in turn will greatly influence the level of productivity in the Company, and ultimately the level of profitability.

F. Jalal wrote in his published Ph.D thesis:

No doubt seniority, in the sense of maturity and cumulative experience is a relevant consideration in promotion, but in
Iraq seniority meant merely time spent in the service. Another wasteful practice was the misplacing of people, it takes luck, influence or both for a person to be assigned where he can make the best use of specialised training. Moreover, officials were frequently shifted from one position to another without regard to their qualities and experience. This was partly caused by political instability, and after each cabinet change a number of senior Civil Servants were removed. (8)

S. al-Samawi, admits that:

Partisan attachment, or the appearance of it, should not be a pre-requisite in selecting a responsible leading manager; the task of building a new society, is the task of all nationalist progressive subjects. It should not be allowed to detract from any serious and true ability to participate in any subject who has the required managerial responsibility. (9)

He adds that:

The person who is not partisan, but is efficient and sympathetic to the party and the revolution, is better and more useful than the person who is partisan, but does not have the knowledge that is needed for the place he occupies, and relies on empty talking and appearances. (10)

Question 12 concerns the information available for judging which training programmes are the best. Forty six respondents answered in the affirmative, indicating that they had the information needed to judge which would be the best or most suitable programme for their needs. This means that 26 managers (36.1%) did not have the necessary information to enable them to decide which programme would suit their needs. One can therefore conclude that training in general was not highly valued by top management.

In answer to Question 13 on whether other people in the Company had better information on the subject, 21 managers answered "No" and 25 managers answered "I do not know." This
means that 63.9% of all the respondent managers believed that other people in the Company had no better information upon which to base decisions on the best training. This reinforces the previous conclusion.

Question 14(a), on whether it was somebody's job to decide on the best training for the respondent managers, produced the following responses: 47.2% said "yes", 11.1% of them said "no", and 41.7% said "I don't know". These figures indicate that making decisions about the best training for the managers was in the hands of specified people in the top echelon. Consequently, the lower and middle levels of management had very little power to decide on their own training.

Section (b) asks (if the answer to the previous section was "yes"), how often does the person with this authority discuss training with the respondent? The results showed that the person in authority who took decisions on training, never discussed the subject with them. This indicates that the Company followed a highly authoritarian policy.

As there was a lack of appropriate training, and as only 13 managers had attended management information programmes (which was clear from the replies to Question 3), one can easily understand why there was also little stress on the improvement of management information systems. This instances the second type of causal relationship, viz. that the lack of appropriate training had led to a lack of attention to the improvement of management information systems.
To conclude on the training situation in I.C.P. Co., and in the Iraqi State Industry as a whole, the Government has emphasised the importance of vocational and management training, but the development of the country has been hindered by a lack of technical cadres and competent managers, especially in middle management. This situation is reflected in low productivity and a low rate of growth. In order to overcome this problem, which increases daily as the rate of development increases, intensive effort is required at the political, executive and trade union levels. A solution could be arrived at through the establishment of central training institutions with the task of assembling all training facilities and establishing new organisations for this purpose. The central body would co-ordinate plans for present and future training to meet the needs of different projects. In addition emphasis would have to be placed on submitting policies for the retraining of manpower to bring their management skills and technological awareness up to date. This task ought to be the responsibility of the executives of the organisations, and should be considered a pre-requisite for the efficiency of the top management structure.
D. COST CONTROL Questionnaire

Aim: The aim of this part of the questionnaire is to explore one of the fundamental tools of Management Control Systems, which is cost control. It concentrated on obtaining information about the system used by the Iraq Cement Public Company.

Understanding budgetary control, standard costs and reporting is essential to good management control.

The first question in the Cost Control questionnaire asked which costs the respondent managers directly controlled. They were supposed to tick one or more possibilities. The categories of cost were as follows:

- **Labour:** 41 Managers ticked this.
- **Material:** 39
- **Machine use:** 33
- **Administration overheads:** 15
- **Others (specified by respondent):** 14
  - 8 Managers specified; stationery and furniture
  - 4 Managers specified; factory building
  - 2 Managers specified; printing

It seems that the first three cost control areas were under the most immediate control of the majority of respondents, since most of them worked in industrial factories.

Question 2, Section (a), asked whether the managers compared the actual costs incurred with a standard cost which had been set
Their answers were as follows:

2 Managers answered Yes
70 " " No

Section (b) asked the reasons for negative answers to (a)
50 Managers answered that there was no standard
14 " " available information about the fixed standard.

8 Managers answered that information was available, but that they had not seen it.

The answers gave a clear picture of the accounting situation in the Company. As only one of the three reasons given in 2(b) could be ticked, the results indicated that there was no standard accounting procedure in the Company approved by the Accounting Division Manager, simply because no such system had been prepared, and this was due to the lack of competent cost accountants.

Question 3 asked how well managers controlled the costs for which they had direct responsibility. Here they had to tick a score starting from 1 (very badly) up to 5 (very well). A total of 40 managers ticked 4 and 5 degrees, and this is 55.5% of the total number. Question 4 dealt with the source of the information used by the managers in assessing their own performance in answer to the previous question. Most of the managers (47) ticked a sentence which said, "my own experience of doing the job". Only 28 managers (38.9%) ticked the sentence which said, "Information supplied by other departments, i.e. Accounting, etc.". One can therefore assume that the managers had to rely mainly on their own judgment, rather than on other persons in authority. They showed little trust in the judgment of others and this reflects the absence
of agreed objective standards and fair control measurements.

Question 5(a) asked whether the managers had all the necessary information to enable them to control the costs efficiently. Thirty nine managers answered "Yes". Section (b) asked, what sort of additional information would be useful if the answer to (a) had been "No". Most of the answers to (b) indicated that the respondents needed information about Industrial Relations, Job Specifications, Management Principles, Inventory Processes, the cost of each step of production, Cost Accounting, Work Study and that they also required training in the English Language. They believed that knowledge could be acquired from their superiors or from the National Centre for Consultancy and Management Development, or from training abroad. This is yet another instance of the inadequate supply of information, and the respondents' consequent desire to acquire more information to enable them to control the costs for which they were responsible.

Question 6(a) asked how often the respondent managers prepared a report on their cost control. The f.d. showed that 25 managers never prepared reports, and 9 managers did not know how often a report was prepared. These figures indicate the level of efficiency in the cost control systems of the Company.

Section (b) asked for whom the managers prepared a report on their cost control. Fourteen managers prepared a report for their General Manager, 3 for their immediate Boss's Superior, 29 for their boss, and 1 did not answer.
Question 7 asked how often the respondent's superior prepared a report on his control of cost. The answers were distributed as follows:

7 respondents said their superiors prepared a report daily
2 weekly
12 monthly
8 annually
12 never prepared a report
31 they do not know.

Question 8(a) asked whether someone other than the respondent or his superior prepared a report on their control of cost.

35 managers answered Yes
37 No

If the answer was Yes, Section (b) asked whether the managers received a copy of that report.

23 managers out of 35 ticked Yes.

The answers to the last two questions support the comment on Question 6(a).

Question 9(a) and (b) asked for the positions held by those who expressed views on the respondent's control of costs, and for the degree of influence actually exerted upon the respondent's control of costs by the views of each different category of people.

Respondents could tick more than one answer to (a), and the results were as follows:

41 indicated that the factory manager expressed views
19 members of B.D.
38 their superiors

(229)
16 indicated that their colleagues expressed views

13 " " " subordinates " "

16 " " other members of the Co. expressed views.

The first figure shows that the most frequent expression of views came from the factory managers; this is only what one would expect, since they were in charge of the actual running of the factory. The second figure (19) indicates that the members of the B.D. expressed views far less frequently than the factory managers, although members of the B.D. are at the same level in the Company hierarchy. However, B.D. did include all the Factory Managers, the Divisional Managers from headquarters (the Administration Office) and two representatives of the work force. The Board had no direct control on the activities of the factories; they exercised control and influence through the Factory Managers. Thus most of the 19 managers who said that members of B.D. exerted influence must have been in the Administration Office. The person who exerted the most influence after the Factory Manager was the Factory Manager's superior. The 16 managers who ticked "other members of the Company" referred to the shop stewards in each factory and the top management of the Company.

Section (b) asked for an indication of the degree to which the manager's control of costs was actually influenced by the views of each category. The F.D. showed the people who were considered to have a high degree of influence, indicated by the respondents' ticking 4 or 5.

24 managers ticked factory managers

14 " " members of B.D.
36 managers ticked superiors
13 " " colleagues
10 " " subordinates
13 " " other members of the Company.

A comparison of the figures for 9(a) and (b) shows that there was a correlation between the expression of views on the control of cost and the degree of influence exerted upon the way in which managers actually controlled their costs. This again shows that the difference between legal authority and perceived influence was rather small.

Question 10 asked how often the managers prepared a report on their subordinates' cost control. Their answers showed that 33 managers never prepared a report, while 15 did not know how often a report was prepared. This means that at least 45.8% of the respondent managers never knew how efficiently their subordinates handled the costs for which they were responsible and one must assume that they had little control over their subordinates' performance. All these results were due to the inefficiency of the cost control systems in use in the Company. This inefficiency was considered partly responsible for a series of losses over the preceding four years; the other major reason being that the price of the products had remained almost the same since Nationalisation in 1964, as profit was not considered a major objective of Governmental Organisations. (11)

Question 11(a) asked if budgets were prepared for the department in which the respondent worked, or if one was prepared to cover the activities of the respondent himself. The answers were
69 ticked that budgets were prepared for the dept. they worked in their own activities.

1 did not answer.

Section (b) concerned the preparation of budgets for the department. The answers were as follows:

13 managers ticked that the budgets were prepared by themselves.

11 " " " " " " " their boss.

34 " " " " " " " themselves and their boss together.

14 " " " " " were prepared by someone else.

The answers to Section (a) indicated that budgets were usually prepared for departments and not for individuals, which is considered to be the right method.

Section (b) showed who was responsible for preparing the budget in each group of managers. The last figure (14) is either caused by the managers having no authority to prepare their own budgets or by their being unfamiliar with this kind of work.

Question 12 asked to what extent the respondents assisted their subordinates, when they were preparing their budgets.

In their answers they had to tick a score ranging from 1 (not at all) to 5 (a great deal), and the results were as follows:

20 managers ticked 1

11 " " 2

6 " " 3

20 " " 4

15 " " 5
This F.D. showed that more than half of the respondent managers (58.5\%) gave a great deal of assistance to their subordinates (degrees of assistance from 4 to 5). This could be interpreted as showing the existence of co-operation between managers and their subordinates.

In reply to Question 13, on whether the managers used budget committees:

39 managers ticked Yes
33 " " No
In their answers to Question 14, the respondent managers indicated the degree to which their budgets were imposed on them.

1 manager indicated that the budget was imposed on him
14 " said they had a free hand with their budget
57 " " " " degree of freedom in drawing up their budgets.

Question 15 asked whether managers used budgeting and planning as a means of motivating their staff.

29 managers ticked Yes
41 " " No
2 " indicated that this was to some extent true.

Question 16 asked whether the respondent managers knew the return on its net capital achieved by their Company in the previous year?

15 managers ticked Yes
57 " " No
The last four statistics show that about half of the respondent managers did not use budget committees, from which it may be concluded that there were no serious studies on the budget and
that the Company's policy tended to be bureaucratic in nature. Again as only 14 managers had a free hand to get on with their own budget, a high level of centralisation of authority was indicated. Since only 29 managers believed in using budgeting and planning as a means of motivating their staff, budgeting and planning were presumably not considered important by the staff. The small number of managers (15) who knew the return on the net capital employed by their Company in the preceding year, would mean that only 20.8% of the Company managers had enough power to find this out. The inefficiency of the cost control systems in the Company can be ascribed to the following causes:

1. The lack of specialised technical cadres.
2. No financial incentives.
3. The lack of conviction by top management of the importance of cost control systems.
4. Delays by most of the departments in supplying cost accountants with the required reports and figures, and a lack of serious intent to supply them on time.
5. Insufficient time for the cost accountants to devote to cost control purposes, because they have to do other accounting jobs for other departments.
6. No co-operation between the personnel of the technical and the cost accounting departments.
7. Misunderstanding of the importance of cost control; there is no cost indoctrination among most of the managers.
8. No application of the technical processes of modern management such as:

(234)
- Analysing the break-even.
- The necessary studies to reduce cost.
- Job specifications prepared scientifically.
- Job descriptions prepared scientifically.
- Analysis of the graphic rating scale to assess the performance of all manpower.

Conclusion: The investigation of cost control in the Iraq Cement Public Company, together with the research on other aspects of the Industrial State Companies (see Chapter II), revealed that the companies were suffering from the same poor performance as companies in developing countries, a conclusion which was reinforced by my own experience. Their poor performance could be attributed to a failure to collect and disseminate necessary information. It will therefore be one of the major tasks of all the industrial organisations to develop cost systems in order to increase efficiency and productivity levels. It is important that top management in the I.C.P. Co. and other companies should begin to study the cost control systems now in use, to see how they can be improved and developed to serve the objectives of planning and controlling performance. Cost data would have to be collected, analysed and summarised and then the information could be presented to management at the appropriate times so that maximum use could be made of it.

The reports produced by the Cost Accountant for the different levels of management would also be important and would enable managers to exercise effective control over the cost elements within their own particular fields. For this to be achieved the reports
would have to be submitted periodically, and adapted to the management level, for which they were intended. The change would require a review of the jobs performed by cost departments at present. It is the duty of top management to develop the method of traditional accounting so that it becomes an important tool to help when decisions are taken about planning and control, thereby creating a correct managerial environment.

Another important point I noticed was the lack of any realisation of the importance of calculating costs on the part of the personnel in the organisations I visited during my two field researches in Iraq. This situation would obviously hinder any move towards cost analysis. In consequence none of the managers and top management would have great qualms about failing to provide information required by the Cost Departments.

Finally, it was found to be essential, not only for the I.C.P. Co., but for all the other industrial companies I visited, to employ modern cost systems to improve managerial control. The historical production cost system now employed in the companies with its attendant deviations and inaccuracies, has become an unsuitable basis for pricing and the control of cost.
E. MANAGEMENT CONTROL SYSTEMS Questionnaire:

**Aim:** The aim of this final part of the questionnaire was to analyse the Management Control Systems in use in the Iraq Cement Public Company, in order to test their levels of performance. This would then provide the basis for a conclusion on how to develop the Management Control Systems in the Iraq Cement Public Company specifically, and the state industry in general.

The first question in this part of the questionnaire enquired how much effort the respondent manager would be willing to make to increase the interest of members of his unit who had expressed a lack of interest in their jobs.

Here they were required to tick the appropriate point on a scale again graded from 1 (none) to 5 (a great deal).

Their scores were as follows:

1. Manager ticked point 1
2. Manager ticked point 2
3. Manager ticked point 3
4. Manager ticked point 4
5. Manager ticked point 5

This result showed enthusiasm on the part of most of the respondents to co-operate with the Company's objectives. The degree of co-operation among managers, is in fact acceptable, though not as great as the responses indicated. The framing of the question obliged almost any manager, whatever his real attitude toward responsibility and co-operation, to give a positive answer.
Question 2 asked how much influence the respondent personally had in determining the policies and actions of his colleagues at the same level of management. In reply exactly 50% of all 72 managers ticked degrees 4 and 5. This means that there was some degree of exchange of influence among managers at the same management level; this could be attributed to the social and cultural background of Iraqi employees, who tend to work together for long periods, and therefore acquire considerable influence with their colleagues. The preliminary questionnaire (Q.2.) revealed that more than 50% of the managers of the Company had spent more than 6 years in their present grade, which makes it possible to understand how mutual influence could be built up. This could be described as group behaviour, rather than specifically managerial influence.

Question 3 asked how much influence the respondent had on certain specific groups or persons in the Company.

The F.D. shows that 25% (18 respondents) indicated 4 or 5 as their degree of influence upon the actions of the Factory Manager. Seven respondents (9.8%) ticked 4 and 5 to show their influence on the actions of the Board of Directors, and 24 respondents (33.4%) ticked 4 and 5 for their influence on the actions of the members of the Company as a whole. The last percentage, 33.4% underline the comment made on the last question, that most managers felt obliged to have some social influence on the other members of the Company, especially those below their own level of management.
Question 4(a) asked how often the following people sought advice from the respondent managers or (b) sought assistance or (c) asked for instructions. The following are the figures ticked in their responses:

<table>
<thead>
<tr>
<th></th>
<th>(a)</th>
<th>(b)</th>
<th>(c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degrees of seeking advice</td>
<td>Degrees of seeking Assistance</td>
<td>Degrees of seeking Instructions</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Factory manager:</td>
<td>17</td>
<td>5</td>
<td>19</td>
</tr>
<tr>
<td>Members of B.D.:</td>
<td>46</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>Immediate superior:</td>
<td>13</td>
<td>5</td>
<td>24</td>
</tr>
<tr>
<td>Colleagues:</td>
<td>11</td>
<td>1</td>
<td>15</td>
</tr>
<tr>
<td>Other members:</td>
<td>23</td>
<td>3</td>
<td>16</td>
</tr>
</tbody>
</table>

Table No. 28.

If we look horizontally across Table No. 28, we see that under the heading "Colleagues", respondents had ticked degrees 4 and 5, and that it was most often colleagues who sought advice, assistance and instructions from the respondent managers. This indicates that when managers needed advice, assistance or instruction they looked to their colleagues, because these were considered easier to approach and more trustworthy, and this was partly the result of long-standing daily communication, which had established a friendly basis for communication. Thus there was considerable co-operation among managers at the same level. On the other hand
members of the B.D. were least often approached for advice, assistance and instruction. This was related to the fact (see Q.9(a), on Cost Control) that all the members of the Board had jobs in the Administration Office, except of course those who were Factory Managers. On looking at the figures for "other members" seeking instructions from the respondents, we find that only 29 managers ticked degrees 4 and 5. This figure is small, if we assume that it included the respondents' subordinates. The reasons for this are:

1. "receiving instructions" implies an obligation to carry out the instructions.
2. The influential people in the Company are rather few compared with the number of Company Staff.

Question 5 asked how often the respondents gave information concerning Company matters to the people mentioned in Question 4.

The numbers of respondents who ticked 4 and 5 as the degrees for information given, were as follows:

37 managers gave information to their factory manager
12 " " " " B.D.
40 " " " " immediate superiors
34 " " " " colleagues
42 " " " " subordinates
19 " " " " other members

Most managers gave information most often to their subordinates, then to their immediate superiors and then to their Factory Managers. This is considered to be the right distribution of information, since it is these three categories of people that are most involved with the respondents' performance. Members of the B.D. received the
least information from the respondents, because all of them, except the Factory Managers worked in the Administration Office. The respondents' channel of communication with members of the B.D. was through their Factory Manager, who also received information from the B.D. As the Iraq Cement Public Company is one among many cement companies under the supervision of the State Organisation of Construction Industries, a distinction is made between the B.D. of the companies which is called the "Consulting Committee", and the B.D. of the State Organisation of Construction Industries, which is called the "Board of Directors".

Question 6 asked how often the above-mentioned people gave the respondents information concerning Company matters.

The number and distribution of respondents who ticked degrees 4 and 5 to indicate that information was readily passed on to them was as follows:

- 30 managers received information often (indicated by 4 or 5 degrees) from their factory manager.
- 5 " " from their B. of D.
- 35 " " Superior
- 23 " " Colleagues
- 28 " " Subordinates
- 15 " " Other members

Most managers received information most often from their immediate superiors, then from Factory Managers, then from their subordinates, and finally from their colleagues. The answers to this question accord with the answers to the previous question,

+ See Chapter II on the Iraq Cement Public Company.
and imply the use of correct channels for receiving information from managers of the Company.

Question 7 asked whether the amount of information received by respondents to help them do their job properly was,

1. Much more than the respondents needed
2. More than the respondents needed
3. Exactly what the respondents needed
4. Less than the respondents needed
5. Much less than the respondents needed

Answers to this question were as follows:

4 Managers ticked possibility 1
7 " " " 2
27 " " " 3
33 " " " 4
1 Manager " " 5

The largest percentage of managers ticked possibility 4 (45.8%), which means that about half of the respondents believed they received less information than they needed. This indicates that there was a serious shortage of vital information reaching managers. This was because there was no written studied system of information in the Company.

Question 8 asked how satisfied the managers were with the present control systems in the Company.

The respondent managers had to tick a degree of satisfaction ranging from 1 (not at all) to 5 (very satisfied).
Their answers were as follows:

<table>
<thead>
<tr>
<th>Degree of Satisfaction</th>
<th>f.d. of managers</th>
<th>Relative percent- age f.d. of Managers</th>
<th>Cumulative f.d. of managers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>22</td>
<td>30.6</td>
<td>30.6</td>
</tr>
<tr>
<td>2</td>
<td>35</td>
<td>48.6</td>
<td>79.2</td>
</tr>
<tr>
<td>3</td>
<td>13</td>
<td>18.1</td>
<td>97.2</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>2.8</td>
<td>100.0</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>72</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table No. 29.

The frequency distribution of the respondent managers gives a very clear picture of the level of satisfaction with the present control systems in the Company. Only 2 managers ticked a high degree of satisfaction (4) and none ticked 5. If we add up the percentages of those who ticked degree 1 (not at all) and degrees 2, we find that 79.2% of the respondents were totally unsatisfied.

My experience would indicate the following reasons for this situation:

1. No complete, declared and binding specifications existed for raw materials, materials in process or finished products. There were also no written obligatory control systems for use by Company Managers.

2. There was a pressing need for definition and confirmation of instructions for the use of materials at all stages of production. Upper and lower limits of acceptable quality were also needed, as were process flow charts and set time tables for periodic inspections. In these
operations quality control activities consisted simply in corrective inspections rather than preventive measures. Written information about the process of material handling, storage and transport, both inside and outside the Company, was also needed.

3. There was a lack of co-operation between the cost accountants, other controlling departments the rest of the departments in the Company.

4. There was no adequate and fixed authority for all staff with a responsibility for control. This authority should clarify the managers' roles and explain their responsibilities to other departments, in order to prevent the overlapping of jobs or the omission of vital work because no one is clearly responsible for it.

5. There was no Standard Cost Accounting. Cost Accounting should be properly controlled to show productivity results in financial terms and to indicate the efficiency of managers.
The next figure taken from Table No. 29, assesses the third type of relationship, that between the number of managers and the level of satisfaction with current systems in this Company. The result is a skewed frequency curve, where the tail of the curve to one side of the central maximum is longer than the one to the other. As the longer tail is on the right, the curve is said to be skewed to the right, or to have positive skewness towards dissatisfaction.

Question 9 concerns the amount of uncertainty which managers may experience with regard to their responsibilities in performing their job.

Here the respondents had to tick one of the following alternatives:

(245)
31.9% of the respondents ticked "some areas of uncertainty, others O.K.", none ticked "a lot of uncertainty", but 15.3% of the respondents ticked that they worked out their responsibilities as they went along. This means that 47.2% of the respondents are not sure about their area of responsibility. This situation can also be ascribed to the lack of efficient control systems described in connection with the previous question.

Question 10 concerns the amount of information managers have access to when doing their job which is to co-ordinate the efforts of their unit.

The answers were as follows:

6 respondents ticked (No information at any time)
28 " " (occasional information)
11 " " (some areas of inadequate information, others O.K.)
6 " " (A lot of information)
21 " " (All the information they need)

The f.d. for the first alternative, which 6 managers ticked, shows that as far as those managers are concerned, either a) their responsibilities are too limited, or b) they believe themselves to
be so experienced in doing their job that they do not need information, or c) they perform the sorts of jobs which can be executed with very little information. But those 21 managers (29.2%) who ticked "all the information they need" must be doing their jobs conscientiously.

Question 11 asks how often the managers are held accountable for what they do. The results were as follows:

a) More than once a week: 12 respondents were held accountable formally and informally.

   

   \[
   \begin{array}{ccc}
   \text{formally} & \text{informally} \\
   18 & 19 \\
   \end{array}
   \]

b) Once a week:

   

   \[
   \begin{array}{ccc}
   \text{formally} & \text{informally} \\
   7 & 6 & 3 \\
   \end{array}
   \]

c) Once a month:

   

   \[
   \begin{array}{ccc}
   \text{formally} & \text{informally} \\
   9 & 8 \\
   \end{array}
   \]

d) Once a season:

   

   \[
   \begin{array}{ccc}
   \text{formally} & \text{informally} \\
   14 & 6 & 2 \\
   \end{array}
   \]

The largest number of respondents felt they were formally held accountable for what they did, the next largest number informally, the last both formally and informally. This means that managers are mostly (72.2%) held accountable formally for what they do and that 66.6% of the respondents are held accountable informally. This indicates that 17.8% and 33.4% of the total respondents feel that they are either not held accountable formally or not held accountable
informally. But the researcher was informed by a senior manager that in fact every one who works in the Company is held accountable for what he does. But, the degree of accountability varies according to the manager and whether he is supported by higher authorities or not. Some managers, especially in the lower echelons, who believe their job performance is good, do think they should not be held accountable for what they have done, or else they have never been held accountable. At least this is how they understood the question.

Question 12 asked whether the managers thought that people senior to them in the Company had their responsibility more or less clearly defined or as clearly defined as they themselves did.

18 respondents ticked "More clearly defined than themselves"
47 " " "As " " as " 
7 " " Less " " than "

Question 13 asks if the managers thought people in the Company junior to them had their responsibility more clearly, as clearly, or less clearly defined than themselves did.

13 respondents ticked "More clearly defined than themselves"
39 " " As " " as " 
20 " " Less " " than "

The major difference between the answers to the last two questions, lies in the number of respondents who thought that people senior to themselves had their responsibilities more clearly defined than they did, and those who thought those junior to them had their responsibilities more clearly defined. (The number of respondents who thought the latter was 13 or 18.1%). This means
that there is no clear-cut definition of responsibilities, and even some of the managers in the low echelon felt that they had their responsibilities more clearly defined than their superiors. This could indicate that a certain percentage, \(18.1\%\), have enough influence to obtain a more clear definition of their responsibilities than others. Another point which emerges from the comparison of these two questions, is that as we move down the managerial hierarchy the percentage of "Less clearly defined responsibilities" increases.

Question 14 deals with the question, whether this Company would achieve more if individuals' a) formal responsibility, b) formal authority and c) formal accountability, were:

1. More clearly defined
2. Less clearly defined

On Section (a) the respondents' answers were as follows:
70 respondents believed that the Company would achieve more if individuals' formal responsibility was more clearly defined.
2 respondents believed that more would be achieved if it was less clearly defined.

Answers to Section (b):
Again 70 respondents believed the Company would achieve more if individuals' formal authority was more clearly defined.
2 respondents believed more would be achieved if it was less clearly defined.

Answers to Section (c):
69 respondents believed the Company would achieve more if individuals' formal accountability was more clearly defined, and 3 that
more would be achieved if it was less clearly defined.

If we calculate the mean percentage of the managers' answers for the three sections, we find that 96.7% of the total number of respondents believed that the Company would achieve more if individuals' formal responsibility, authority and accountability were more clearly defined. This very high percentage gives a clear indication of the lack of proper definition of responsibility, authority and accountability, for there was no written job description clearly defining these for each job, and this in turn meant that a loose organisational structure existed in the Company. This is one of the main reasons why most of the managers were not satisfied with the current control systems.†

Question 15(a) asks how often the respondents seek advice or (b) seek assistance, or (c) seek instructions from the listed categories of people. Table 30 below gives the figures for their responses.

<table>
<thead>
<tr>
<th>Degrees of seeking advice</th>
<th>Degree of seeking Assistance</th>
<th>Degrees of seeking Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Factory manager:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 3 18 4</td>
<td>28</td>
<td>12 9 15 16 19</td>
</tr>
<tr>
<td>Member of B.D.:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>49 7 8 3</td>
<td>3</td>
<td>44 9 5 9 5</td>
</tr>
<tr>
<td>Immediate superior:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 1 15 15</td>
<td>27</td>
<td>11 9 14 17 21</td>
</tr>
<tr>
<td>Colleagues:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 15 10 14</td>
<td>18</td>
<td>19 11 15 12</td>
</tr>
<tr>
<td>Subordinates:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22 13 9 10</td>
<td>17</td>
<td>21 16 12 8 15</td>
</tr>
<tr>
<td>Other members:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29 2 11 9</td>
<td>14</td>
<td>30 12 13 8 8</td>
</tr>
</tbody>
</table>

† See my comment on Q.8 in the M.C.S. Section of the questionnaire, p. 242.
Looking horizontally across Table No. 30, we see that the respondents who sought advice from their supervisors, ticking degrees 4 and 5, constituted the highest percentage (42 respondents), a result which indicates a practical approach to getting advice. The next largest groups from whom advice was sought were Factory Managers and Colleagues, each with the same percentage. As most of the respondents' jobs are in the factories and as the factory manager has the authority to supply formal information, these figures reflect the importance of his position as a source of advice. The reason why the group of "Colleagues" scored the same percentage as the "Factory Manager" group, was because the cultural norms of most managers who remain on the same level of management for long periods of time would tend to increase their cognitive interconnectedness, and encourage them to seek all kinds of co-operation among themselves.† Looking at degrees of seeking assistance, we find slightly less assistance-seeking from superiors and colleagues, but slightly more from members of the Board of Directors. Although the number of members of the Board of Directors is small, they possess influence, especially in the Administration Office. Looking at the same degrees (4 and 5) for seeking instructions and comparing the figures with those for seeking assistance, we find the percentage slightly higher in the case of "Factory Manager", much higher in the case of "Immediate superior", lower in the case of "Colleagues" and exactly the same in the case of "Members of B.D.". This reflects very natural behaviour, as the first three categories of people have the authority to give instructions. It follows that the

† See comment on Q.4.
receiver of instructions has an obligation to carry them out. Besides these groups of people constitute the normal channels to which the respondents would look for instructions.

Question 16 Section (a) asks how much of the information used by the respondents in their job is supplied by the formal information system? Their answers were as follows:

5 Managers ticked less than 10%
5 " " between 10% - 25%
9 " " 26% - 50%
21 " " 51% - 75%
32 " " 76% - 100%

These results mean that only 44.4% of the total number of respondent managers believed that 76% - 100% of their information was supplied by the formal information system. This conclusion indicates that there is a lack of formal information supplied to the Company managers, simply because of the inefficiency of the information systems existing in the Company.

Section (b) asked whether the managers considered the percentage shown in Section (a) as an indication of:

a) Too many formal information systems.
b) Approximately the right number of formal information systems.
c) Too few formal information systems.

Their answers were as follows:
9 managers ticked a)
28 " " b)
35 " " c)
This means that only 12.5% of the respondents believed that there were too many formal information systems supplying feedback, and thus enabling managers to compare targets with actual performance, and to take corrective action when deviations occurred. A control system is usually designed to tell managers how near they are to the course the Company has planned, but if, as most managers believed, they did not get enough feedback, how could they assess their performance in relation to the planning targets set by the Company?

The researcher found that there were no serious studies to provide the Company with formal information systems to suit its objectives, nor was there any serious appreciation of information systems by top management, who behave mostly as authoritarian leaders, and prefer full information to be supplied only to certain members of the Company.

Questions 17 to 24 deal with the amount of influence the respondent managers have or should have over, (a) the development and design of the management information systems in their unit and in the Company as a whole, (b) the development and planning of the policies to be followed in their unit and in the Company as a whole.

The respondents had to tick the degree of influence on a scale running from 1 (none) to 5 (a great deal), degrees 4 and 5 implying considerable influence. The respondents' answers were as follows: (See Table No. 31)
## Table No. 31

### On Section (a)

<table>
<thead>
<tr>
<th></th>
<th>No. of managers who ticked degrees</th>
<th>% of f.d. of managers who ticked degrees</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>1. Managers answering on the amount of influence they have in their unit.</td>
<td>24</td>
<td>10</td>
</tr>
<tr>
<td>2. Managers answering on the amount of influence they ought to have in their unit.</td>
<td>23</td>
<td>31</td>
</tr>
<tr>
<td>3, Managers answering on the amount of influence they have in the Company as a whole.</td>
<td>9</td>
<td>4</td>
</tr>
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<td>4. Managers answering on the amount of influence they ought to have in the Company as a whole.</td>
<td>18</td>
<td>19</td>
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### On Section (b)

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<th>No. of managers who ticked degrees</th>
<th>% of f.d. of managers who ticked degrees</th>
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<tr>
<td>1. Managers answering on the amount of influence they have in their unit.</td>
<td>23</td>
<td>17</td>
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<td>2. Managers answering on the amount of influence they ought to have in their unit.</td>
<td>19</td>
<td>29</td>
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<tr>
<td>3. Managers answering on the amount of influence they have in the Company as a whole.</td>
<td>11</td>
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<td>4. Managers answering on the amount of influence they ought to have in the Company as a whole.</td>
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If we take a close look at the percentages of the respondents' answers to questions in Section (a), we find that 12.5% and 5.6% of them have a great and even a very great deal of influence (degrees 4 and 5) over the development and design of management information systems in the Company as a whole. Taking the mean percentage of the last two figures, we arrive at the conclusion that only 9% of the respondents have a great deal of influence on the Company regarding development and design of management information systems. If we follow the same procedure on Section (b), we find that 15.3% and 9.7% of the respondents have a great, and very great deal of influence (degrees 4 and 5) on development and planning of the policies and operation of the Company as a whole. Taking once again the mean percentage of the last two figures, we come to the conclusion that only 12.5% of the respondents have a great deal of influence on the policies and activities of the Company. If we take the mean percentage of (a) and (b), we can conclude that only 10.75% of the respondents have a great deal of influence on most aspects of the Company's activities. If we make comparisons between the last percentage and the percentage of respondents in the previous question where 12.5%, who believed that there are too many formal information systems in the Company, we can easily find a strong correlation between the percentage of influence and the amount of formal information available to influential managers.

This result helps us to assess the fourth set of related factors, and to discover whether there is a strong correlation between influence and the ability to obtain information, as shown in Figure 6.
Percentage of Influence and the amount of formal Information Available.
One final point: Almost all of the respondent managers felt that they should have had much greater influence than they actually had in their unit and in the Company as a whole, as is shown in both Section (a) and (b). This indicates that the Company needs to reassess its unspecified job descriptions, and become more flexible about concentrating authority; in other words, top management should adopt a less authoritarian policy.

Conclusion: This aims at improving management in I.C.P. Co., and other state industry, where poor application of Management Control Systems was uncovered by field research. We must first emphasise that Management Control Systems are complex, involving much more than just comparing, measuring, and taking corrective action. They require carefully developed control tools, considerable energy in uncovering hidden but significant factors and judgment in determining their importance, together with skilful execution to avoid negative backlash.

In solving management control problems and exercising management control, the perspective is therefore always that of a decision-making business manager. Such a manager looks at how and why controls are developed, i.e. at the reasoning behind a control system, and at possible ways of using the control tools to better advantage. A proper use of Management Control Systems requires that factors beyond the tools themselves are taken into account, e.g. the purpose of the objectives of a corporation, the basis of standards, the assumptions behind figures, and the methods used in collecting and disseminating information. An effective manager does not restrict himself merely to compliance. He also looks at the many
constructive ways in which the control tool or system can be employed to improve the use of corporate resources.

As we have seen from the analysis in this Chapter, there is a need to overcome several factors in I.C.P. Co. and other state industry as a whole, which adversely affect the efficiency of Management Control Systems, and are the cause of low productivity. I believe the most important of these factors to be:

It is vital that management leaders should accept responsibility for the development and growth of their society, should understand its history and present state, and should have a clear vision of its future. A manager should also be a specialist, and have an understanding of the burdens this will place upon him as he uses a technology and management techniques that are new to his own society. Iraq is now experiencing a period of social reorganisation, and she has to face the fact that the management apparatus at different levels has proved inadequate to the demand placed upon it by this transition.

With regard to the management executives in Iraq, I believe the following constitute the major obstacles to developing efficient Management Control Systems:

(a) Top management is considered the monitor of the Company's objectives. It is important, that they should acquire the skills to judge when environmental conditions require a change in objectives, and when and how such changes should be carried out.

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(b) There is a lack of knowledge, on the part of most managers, of scientific methods for the management and control of work in industrial units. This problem is also related to absenteeism and lack of the technical specialisation required for management control. It is essential in this context to apply the axiom, "Put the right man in the right place".

(c) Most managers are unable to cope with the problems arising from the principles, theories, and processes of the Management Control Systems which are suited to development and production techniques. In short many management tools which could improve productivity are left unused, consequently problems and obstacles abound.

(d) Managers are not willing to carry out their responsibility to discipline incompetent subordinates and to apply rules. There are several reasons for this, the most important of which is because of the political influence of those who fail, or whose subordinates fail in their duties. This situation creates ill-feeling among the rest of the manpower, from management to trade unions, and it reflects negatively on management control, on productivity, and finally on the profitability of the Company.

To end this conclusion, we would like to quote the statement of S. al-Samawi, which touches the core of management problems in Iraq:

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We are required to build the state organisations on a basis at once scientific and democratic. This objective will not be achieved by ignoring the basic principles and limitations of the modern structure of a state. Rather we must strike a balance between the necessity to organise the affairs of the state centrally, and the democratic understanding of the job of a revolutionary state. (13).
SUMMARY OF CHAPTER IV

This Chapter deals with the main field research in the Iraq Cement Public Company. Here the researcher submitted a questionnaire to all managers of this Company from the level of supervisors to the General Manager. Their responses showed that the Company suffered from a lack of good systems for control, and of sufficiently trained personnel. As a result of this, most the respondent managers showed poor satisfaction with the present control systems in the Company. The researcher's own experiences of the Iraqi environment, as well as an analysis of the economic and management climate in Iraq (see Chapters I and II), indicate that the major obstacles to effective management control are not always within I.C.P. Co., or the government bodies that implement planning and policies and direct this Company's productivity. The influence of the environment can often hinder effective control. Actually negative influences can stem from the environment, whatever its stage of economic evolution. Attitudes toward science, the status of technology, the provision of technical and managerial courses in universities, institutions, and firms, incomes, prices, regional development, the adequacy of transport system and the attitudes of trade unions. - all these can play a preponderant part in facilitating or obstructing the tasks of Management Control.
REFERENCES


2. Ibid.

3. Ibid.

4. Ibid.


7. According to Law No. 173, dated 8th December, 1974, which authorised the Centre to have direct supervision over all training programmes, held in the offices and organisations of the country.


10. Ibid., p. 96.

11. See Chapter II on I.C.P.Co.


 CHAPTER V

A COMPARISON BETWEEN PRINCIPLES AND PRACTICES OF MANAGEMENT AND CURRENT MANAGERIAL PRACTICES IN STATE-OWNED INDUSTRIES AND PARTICULARLY IN THE IRAQ CEMENT PUBLIC COMPANY.

1. The Purpose of this Chapter

This chapter is basically concerned with investigating the differences between two cultures with respect to the application of managerial principles and practices. The first culture is that of the developed industrial countries, including predominately private enterprise economies, mixed economies like the U.K., and state managed economies like those of the Eastern European Countries. This has been described by British, American or Eastern European scholars on management, as shown in Chapter III. The second culture is represented by Iraq itself. In Chapter IV we have investigated the actual practice of management in the case of Iraqi Nationalized Industries, represented by the Iraq Cement Public Company, in particular, while Iraqi Government policy and practices of management in Nationalized Industries in general have been presented in Chapters I. and II.

2. Comparisons and Importance of Management

Recently, there has been considerable concern about management practices in the third world. This concern was induced partly by the realisation of the important role management plays in economic development, and partly by the growth of international co-operation.

One of the major concerns of most governments today, especially in underdeveloped countries, is the need to increase the standard of living of their people. The important role of capital and
technical knowhow in economic development has been recognised for a long time. Until recently many economists have tended to believe that problems of economic development could be solved by transferring capital and technical knowhow alone. However, experience and the natural course of events have shown that besides capital and technical knowhow, the human element also plays an important role in economic development.

The writer, who recognises this fact, states in his research of 1974 that:

Economic development could flourish or decline depending on economic and technical factors, whose basic cause is "people". The skills of manpower in management knowhow, are essential to push the general developing processes forward in every country. But the important thing is "the attitudes" which will decide whether the opportunities for development will be taken or not. We could give a simple picture of the human factors which encourage or hinder development in any country, by showing to what extent the managers or other people in control of resources possess the following necessary qualities:

1. A flexible attitude towards change.
2. Broad mindedness and ability for long term planning.
3. Education and the required managerial skills.
4. The ability to function as Managers and still integrate with their environment.(1)

The recognition of the important role of management in economic development raises the question of whether management knowhow, can, like technical knowhow and capital, be transferred from developed countries to underdeveloped countries and used with similar effectiveness. In general the differences are much more fundamental than has hitherto been realised, as we shall see in this Chapter. It has become abundantly clear that management

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is indeed influenced by culture and other environmental factors, for management does not operate in a vacuum. Managers are constantly interacting with, and influencing their environment, while at the same time being influenced by it. Culture, education, economic conditions, social characteristics, the political atmosphere, and the legal framework of society most certainly affect managerial practices, philosophies and values. Individuals bring to their managerial positions their own culture and personality traits. Their behaviour and attitudes as managers and workers reflect their culture and personalities. M. Haire and his associates have made this comment:

When we look at the overall differences among groups of countries with regard to motivations and satisfactions in the managerial job, we encounter fairly large variations in the patterns of motivational feelings . . . The factors underlying these differences seem to be not only the degree of economic development of the country, but also the culture of the country in relation to business.(2)

Professor Anant Negandhi, in his recent study of cross-cultural management, summarised major findings on the subject as follows:

1. There is no one way of doing things, managers may achieve given objectives by various methods.

2. There is no universal applicability of either authoritarian or participating-democratic management styles. In general, the United States can best be characterised as democratic-participative in management style, while Germany, France, and most of the developing countries are authoritarian in their management style. Authoritarian style is not necessary dysfunctional in developing countries. This may be perhaps the "right type" of leadership for them.

3. There are both similarities and differences among the managers around the world. Similarities are explained in terms of industrialisation or industrial sub-culture. Differences are explained in terms of cultural variables.
4. More objective measures are brought to bear in making managerial decisions with respect to compensation, objectives, goal-settings, etc., in the developed countries; while much subjective judgment (emotions, religious beliefs) enters into the decision-making processes in developing countries.(3)

3. Transferability of Management Knowhow

From the controversy surrounding the transferability of management knowhow, two schools of thought have emerged, the universalist and the environmentalist. The "universalists" claim that management is universal: managerial practices, philosophies, and principles are basically the same in all nations. There is no obstacle to transferring management knowhow from one country to another; environmental factors, such as culture, do not have much influence on management.(4)

The "environmentalists", on the other hand, recognise the influence of environmental factors on management. They argue that managerial practices, philosophies and principles are different in different societies because of the many constraints imposed by the environment on those societies. Management is basically "culture bound". As this writer put it in his research publication of 1966:

Managers from developed countries, have to overcome real problems in order to conduct the managerial affairs in underdeveloped countries in proper situational harmony without moving away too much from the situational aspects in their homeland.(5)

Therefore, managerial knowhow from Britain or any other developed country cannot be transferred easily to underdeveloped countries, or British subsidiaries located abroad, and be used as effectively as in the United Kingdom.
It would seem futile to argue and try to prove the universality or otherwise of management. Instead, comparative studies in management should try to discover the differences in the various aspects of management, concentrating on Management Control Systems. A review of the available literature on the subject reveals the various ideals of Management Control Systems, and these then provide a standard for comparison with the current Management Control Systems in the Iraq Cement Public Company, in order to discover deficiencies in aspects of Management Control Systems in the Iraq Cement Public Company and the State Industry in general. It is this that forms the aim of this Chapter.

4. Statement of the Problem

The main purpose of this chapter is to investigate the differences between Iraqi managers and those in developed countries, (particularly the U.K., the U.S.A., and the U.S.S.R.) with reference to the following three major features:

1. Training
2. Cost Control
3. Management Control Systems

Beside their obvious meaning, these terms also involve questions of: central planning, profitability, environment, influence, authority, responsibility, information, and satisfaction etc. This has been demonstrated within the framework of Management Control Systems (see Chapter III) by a comparison of these features with Iraqi Government Managerial and Economic Policy, by the interviews with several managers in seven Nationalized
Companies, and by the replies of the 72 respondent managers (see Chapters I, II, and IV).

These factors have therefore, to be taken into account when we consider the differences and similarities between what is written on these subjects by British, American and Eastern European authors, and what the researcher discovered to be current practice in his research with the Iraq Cement Public Company in particular, and the Iraqi State Industrial Companies in general. The differences and similarities between the practices in Iraq and the principle and practice of developed countries are considered on two levels, the first being that of management performance in the factories, and the second being the level of state owned industries. The survey on this second level involves a comparison of management policies and practices.

First: Differences in Management Performance at Factory Level

A. TRAINING

With reference to the findings of Chapter III, I would like to quote G. Odiorne:

Training is a programme to be followed to change the behaviour of employees. A well-designed training programme cannot be constructed in isolation from the organisation in which the behaviour change is necessary. The assessment of training needs must begin with the determination of the differences between the desired conditions and the current conditions within that organisation. The factors causing this difference must then be isolated and the training needs built around those factors which training can give.

The British report by the Management Training and Development Committee emphasised the following factors:

- The significance for effective management development of the "climate" within the firm.
The need for senior executives to give the lead.

The fact that all managers have responsibility for training, and

The need to give scope for the individual manager's own efforts to improve his own performance.

Looking at the questionnaire about training in Chapter IV, especially the answers to questions 1, 2, 3, 4, and 5, we find a lack of training, a lack of appreciation of the benefits of training programmes by top management, the non-existence of a training office in the Company and a poor appreciation of managerial tools. The answers also pointed to a need for more than one type of training programme for all the respondent managers, and most of the respondents themselves emphasised the need and importance of training, whether this was undergone in Iraq or abroad.

When comparing what has been written on this subject in developed countries and to the actual situation in the Iraq Cement Public Company, we soon discovered that there is a big difference between what should be done in training and what is actually being done in the Company where the research was carried out. There is, of course, a deficiency in the training programme not only in the above Company, but in almost all industrial companies in Iraq.\(^6\) This deficiency can be considered one of the major obstacles to productivity in Iraqi industry as a whole.

The Ministry of Industry and Mines recently realised this fact and started making serious efforts to overcome this deficiency. As Patrick Cockham put the matter in his recent analysis of the Iraqi economic situation:

There is a chronic shortage of skilled manpower, especially at Middle Management Level . . . The Iraqi Government is particularly intent on increasing vocational training and raising the low level of productivity. This year's investment programme shows an increase of 84% in allocations for education.\(^7\)
B. COST CONTROL

The subject of cost control has been dealt with in Chapter III, under the heading of Management Accounting Techniques, Responsibility Centres, Standard Costing and Budgetary Control, and Responsibility Reporting. As all the information concerning cost control is considered to have applicability both in developed and underdeveloped countries, whatever their stage of economic evolution, so all the techniques of cost control could be considered stable points of reference for comparison with current practice in either developed or underdeveloped countries. Obviously each company has to design an accounting system that will reflect its own needs and objectives, according to up-to-date principles of cost accounting.

As we have discovered in Chapter IV, the use of accounting systems, especially cost control, is inefficient, and standard cost accounting has hardly come into use in any of the industrial companies. In addition, there are big differences between what is considered to be an efficient procedure in theory, and what really is one in practice, not only in the Iraq Cement Public Company, but in all industrial companies. This deficiency can mainly be put down to the lack of appreciation of cost accounting tasks in industry as a whole, and the lack of specialised technical cadres in most industrial companies.

Research which has been undertaken by teams of experts in the National Centre for Consultancy and Management Development in Iraq concerning cost systems in Iraqi industry, lead to the following conclusions:
60% of all the industrial companies claimed to be operating cost systems, but it is noticeable that all but 5% of these systems employed simple and traditional methods, characteristic of scientific infancy. These have not kept pace with technological and scientific development, and they employ mainly historical processes in calculating costs. If there is no integrated scientific system for costing in an industrial company, then there can be no integrated system for reporting and analysing any deviation in these companies.

As we have found, I.C.P. Co., like other industrial companies, still applies actual costing, and only one company uses standard costing. This means that the cost control system is not able to discover mistakes, and inefficiencies are not discovered until after the damage has been done.

C. MANAGEMENT CONTROL SYSTEMS

Here our comparison will deal mainly with factors which affect the efficiency and effectiveness of Management Control Systems, as follows:

1. Influence and Authority

Chapter III reviewed the discussion of influence and authority by authors from developed countries. We see that J. Miner, for example, wrote about influence:

A behaviour on the part of one individual which alters the behaviour, attitudes, feelings, and so on, of another. One person may influence another by virtue of control over sanctions, by persuasion, by playing upon attitudes held toward him, by exercising control over significant aspects of the other person's environment.

The theory of Bernard and Simon about the concept of authority namely, that a communication carries authority only if accepted by
the receiver, upset traditional assumptions about the flow of authority from the highest point of a hierarchical structure. They added that the right to act, although delegated from above, must be met by a willingness and capacity to act on the part of the subordinate in order to be effective.

As the definitions in Chapter III have a general application, and are part of management principle, they are readily applicable to the Iraqi environment. To check the responses of the managers in I.C.P. Co., relating to questions about influence and authority the following procedure was adopted. The responses of the managers to all questions regarding influence and authority, i.e. questions 6, 7 and 8 in the training part of the questionnaire, and questions 2, 3 and 17 to 24 in Management Control Systems part of the questionnaire were reviewed together. The responses showed that the majority of managers felt that there was a slight difference in degree between authority and influence in the I.C.P. Co. In general this means that the degree of influence is not higher than the degree of actual authority, except to a minor extent at the highest level of the organisation structure. This result indicated that there is not much difference with regard to these two aspects of management between principles formulated by authors in the developed countries and the practices current in the Iraqi environment. The answer to questions 2 and 3 on influence and authority, in the Management Control Systems questionnaire, indicated that half of the respondents exercised influence among managers on their own level, and 34% of the respondents influenced the other members of the organisation

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as a whole. However, this influence can be ascribed mainly to the social and cultural structure of Iraq which encourages people to work together for long periods, so that we can describe this relationship as group behaviour rather than managerial influence. Managers' answers to questions 17 to 24 indicated that only 10.75% of the respondents exercised a "good deal of influence" on most of the Company's activities. This proves that the majority of this Company's managers do not have enough authority or perceived influence to perform their jobs properly.

The comparison of the management principles formulated by authors from developed countries and held to be applicable in every environment, with the practice in I.C.P. Co., shows that there are real differences between the two and that the practice in the Company is less than efficient. These were our findings:

1. Most of the managers did not have authority equal to their responsibility.

2. Authority was centralised by top management and perceived influence even more so.

3. Most of the Middle and Lower level managers felt that there was no equal distribution of perceived influence.

2. **Satisfaction**

R. Anthony believes that control systems must derive from the needs of the total organisation and are intended to influence managers to perform actions, which are in both their own and the organisation's best interests. P. Drucker wrote on management by objectives as follows:

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The overall objectives of a firm generally are established by top management, yet it is desirable for each subordinate manager to have a voice in setting his own objectives; if he is involved in establishing his objectives, he will feel that the objectives are proper once they are set and will tend to accept them more readily.

M. Barns and his associates admitted that:

The healthiest organisation with the greatest potential for growth and the greatest success in human terms will be the organisation which can integrate its own objectives with the needs of the people and groups in it.

Question 11 in the training part of the questionnaire and Question 8 in the Management Control Systems part concern the level of satisfaction of the managers in I.C.P. Co. The responses to the first question indicated that 31.9% of the respondent managers felt that the principle of "putting the right man in the right position" was not always followed. The answers on question 8 showed that 79.2% of the respondents were wholly dissatisfied with the current control systems in their Company. Actually there are many reasons for dissatisfaction, as mentioned by authors from developed countries, but it is usually assumed that one major and practical way of creating satisfaction is through the integration of the objectives of the organisation with the needs of the people and group within it. Although this principle is considered to have universal application, the researcher does not entirely agree, since the needs of the people within the organisation differ so very greatly. The implementation of this inadequate solution in order to create satisfaction is the general trend in Iraqi management today.

In conclusion, we can say that the practice in the Company is unsatisfactory.
3. Information

Allen and Gerstberger expressed the view that:

The fundamental paradox facing the manager over a period of time is the establishment of causal networks without closing himself off from new kinds of information. Resolution of this paradox by the individual manager may be the clue to effective performance. Effective use of information depends, in part, on the ability to integrate the information.

Katz and Kahn argued that, multiple communication channels and checking procedures provide the manager with a mechanism, with which to avoid corrupting or being corrupted by his own information service.

Lawrence and Lorsch admitted that:

If poor relations force the manager to depend on bureaucratic sources of information and to rely on documents, or to attend to information about the group at the expense of other kinds of information, then the manager cannot cope effectively with the management system in which his group is embedded.

Although these ideas are supposed to show how to handle information in developed countries, they nevertheless reflect what is even in most developed countries simply an ideal. In Iraq, these ideas are seldom if ever applied in management performance, even though this would lead to a healthier situation.

As we have seen in Chapter IV, in the responses to questions 12 and 13 in the training part, 4 and 5 in the cost control part, 5, 6, 7, 10 and 16 in the Management Control Systems part, most of the respondent managers complained of the lack of suitable information and adequate feedback to enable them to improve their own job performance, either because they had little trust in the judgment of others, or because of the absence of honest judgment and fair control measurements. Most of the respondents claimed
that they needed information about industrial relations, job specifications, management principles, inventory processes, the cost of every step of production, cost account and work study.

Although most of the managers in I.C.P. Co. suffered from an information shortage, their answers to questions 5 and 6 in the Management Control Systems part showed that there are correct channels for receiving and giving information from or to members of the Company. The answers to question 7 proved that there is an inadequate supply of vital information reaching managers, simply because there is no written, studied system of information in the Company. Answers to questions 10 and 16 showed that in general there are too few formal information systems, as no serious studies have been made to provide the Company with a formal information system to suit its objectives, nor was there real appreciation of information systems by top management, who behave mostly as authoritarian leaders, and prefer full information to be supplied only to certain members of the Company. These findings make it clear that the information systems in this Company are largely unsatisfactory.

4. Power and Bureaucracy

As M. Barnes and his associates put it:

The healthiest organisation with the greatest potential for growth and the greatest success in human terms will be the organisation which can integrate its own objectives with the needs of the people and groups in it.

This concept can be applied to organisational units of any size, if only those in positions of authority recognise its importance.
M. Weber noticed that a third influence on organisational behaviour is the concept of bureaucracy. Webster's New World dictionary, defines bureaucracy as, "The administration of government through departments and subdivisions managed by sets of officials following an inflexible routine." M. Crozier elucidated bureaucracy by saying that any organisation must obtain from its members a variable but always substantial amount of conformity. Members will conform partly voluntarily, partly because of coercion.

The responses to questions 13, 14, 15 and 16 in the cost control part indicated that about half of the managers do not use budget committees, only 14 managers have a free hand to get on with their own budget, and only 29 managers believed in using budgeting and planning as a means of motivating their staff. This results in an indication that the Company's policy tends to be bureaucratic in nature. The same responses showed that only 20.5% of the Company managers have enough power to discover their own Company return on net capital employed.

When comparing practice with principle, we can conclude that there is a correlation between the two as far as bureaucracy is concerned. Human behaviour is now better understood and therefore more predictable. As a result today's organisations can and do rely more on indirect and intellectual means to obtain conformity, e.g. the communication structure and work flow, the technical setting of jobs, economic incentives. In respect of the power concept, there is a difference between principle and practice, and the principle is considered the more correct for achieving
satisfaction among managers. So the practice in the Company is on the whole unsatisfactory.

5. Responsibility and Accountability

C. Barnard describes responsibility in broader terms as, "The power of a personal code of morals to control the conduct of an individual." He added that "The behaviour of an organisation is affected by the individual moral code of those within it."

Returning to the respondent managers' answers to questions 12, 13 and 14(a) in the Management Control Systems part, we find the following results. The respondents believed that (25%) of the managers in the Company senior to themselves and (18.1%) of the managers junior to themselves, had their responsibilities more clearly defined than they themselves did. In response to question 14(a), 97.2% of the respondents believed that the Company would achieve more if the formal responsibility of individual members of staff was more clearly defined. It was also found that as we move down the managerial hierarchy, the percentage of "Less clearly defined responsibilities" increases.

A theory of accountability, in addition to that of responsibility, has been developed by some writers, notably Koontz and O'Donnell, who view it as, "The ability for the proper discharge of duties by the subordinate." The concept of accountability, although it may be useful in a military organisation, clearly has too strong an overtone of being a control technique.

With regard to accountability, the respondents' answers to questions 11 and 14(c) in the Management Control Systems part, showed that 72.2% of them are formally held accountable for what
they do and 66.6\% of them are held accountable informally. The researcher was informed by a senior manager in the Company that every one who works in the Company is held accountable for what he does either formally or informally. But the degree of accountability varies according to the individual manager and according to the degree of support he enjoys from higher authorities.

On comparing the principles of responsibility drawn from texts produced in developed countries with the practice in the Company, we find very big differences. These stem from the incorrect application of the responsibility principle in the Company.

As for accountability, this varies according to the percentage of accountability held by the respondents formally or informally in the Company. Again it is apparent that there are some differences between the principles of accountability as they appear in text books and the practice of accountability in the Company.

6. Reporting

R. Campbell describes responsibility reporting as a method for providing information for management control. He writes:

One concept that received a great deal of attention is responsibility reporting. The objective here is to identify results with the executive responsible for producing them. Responsibility involves performance measurement, in which actual results are compared with predetermined standards. This can be accomplished by introducing account classifications that parallel the Company's organisation plan in order that reports may be prepared to show, in financial terms, the results of the operations for which each individual is responsible.
So much for the text book account. To compare this with actual practice in I.C.P. Co. we have to examine the answers of the respondent managers to the questions 6(a), (b), 7, 8(a), (b) and 10 in the questionnaire about cost control. The answers to questions 6, 7 and 8 indicate a low level of efficiency in the cost control systems used by the Company. The answers to question 10 indicated that about half of the respondents never know how efficient their subordinates' performance is, because 45.8% of the respondents either never prepared a report, or did not know how often they prepared a report on their subordinates' control of cost.

The information about reporting as supplied by authors from developed countries suggests that it has comprehensive applicability in both developed and underdeveloped countries. There are however, big differences between the principles of reporting as laid down in text books and what is actually being practiced by the Company for we have already noted the inefficiency of cost control systems in the Company, (see Chapter IV). We can conclude, that the principles of reporting systems have not been properly applied.

7. Organisation

We have already discussed the concepts of western developed countries about organisation in Chapter III, under the headings of "Organisation", "What is an Organisation?", and "Modern Organisation Theory". If we compare these concepts with what we found to be the practice of organisation in I.C.P. Co., the result
will show whether the principle is inapplicable or the practice incorrect.

In Chapter III we cited some of the ideas current in developed countries. E. Brech's definition of organisation is:

The structure of the responsibilities allocated to the managerial, supervisory, and specialist positions of the 'formal' relationships that arise in the discharge of those responsibilities.

Koontz and O'Donnel considered organisation to be:

The establishment of authority relationships, with provisions for structural co-ordination both vertically and horizontally, between positions to which have been assigned specialised tasks required for the achievement of enterprise objectives.

From this it can be seen that it is the structural relationship which binds an enterprise together, and provides the framework within which individual effort is co-ordinated.

Let us now return to the respondent managers, who answered the questions relevant to the functioning of I.C.P. Co. and its efficiency as an organisation. The answers of the respondents to questions, 1, 2, 3, 7, 9, 12, 13 and 14 on the Management Control Systems part of the questionnaire were as follows: In their answers to question 1, most of the respondents showed enthusiasm for the Company's objectives, but in actual fact their answers do not represent the full reality of the situation, because the structure of the question was such as to provoke a positive answer from almost any manager, whatever his attitude towards responsibility. Answers to question 2 showed that there is some degree of exchange of influence among managers at the same management level. This can be ascribed mainly to the social and cultural structure of Iraq which tends to encourage people to work together for long periods of time, so that they tend to
influence their colleagues as a result of long standing every
day dealings with them. If we take a look at the basic
questionnaire, question 2, we can understand this situation even
better, since more than 50% of the managers of this Company have
spent more than 6 years in their present positions. This gives
further evidence of the stability of the management personnel
structure within the Company. Answers to question 3 indicate
that the managers in general feel some obligation to exert a
kind of social influence on some of the other members of the
Company. Answers to question 7, indicate that there are such
serious shortages in the amount of information getting through
to managers that their job performance is affected. Answers to
question 9, indicated that about half of the respondents are not
sure about the extent of their responsibility. The answers to
questions 12 and 13 showed that there is no clear-cut definition
of responsibilities. Answers to question 14, showed that the
majority of the respondents believed that there was a lack of
proper definition of responsibility, authority and accountability,
and this means that a loose organisational structure exists in the
Company.

The comparison between the principles laid down by authors
in developed countries, and what we have discovered to be the
practice in I.C.P. Co. indicates that these principles, regarded
as universal in their applicability, have not been adequately put
into practice in the Company.
Second: **Comparison of Management Policy and Practices at State Industry Level**

1. **Central Planning**

   It is obvious, that any successful Management Control System should depend on the simple principle of producing a plan, and then making decisions and taking action. The major difference between the planning produced in a free enterprise system and a state owned enterprise system is that the main objective of the first system is to satisfy shareholders and consumers. Plans in this system are drawn up mainly by the Board of Directors of the enterprise, and if the enterprise is of medium or large size, the Board of Directors considers suggestions drawn from middle management level. In state owned enterprises, plans are drawn up by a central committee which is part of the government, and the outline of these plans should harmonise with the central policy of the state. Theoretically the suggestions of the Board of Directors of state owned enterprises are taken into consideration before finalising the plan for the industry, but in practice the extent to which suggestions from the enterprises are actually adopted depends on the personality of the Board of Directors and their political influence.

   In Iraq the plans for long-term general policies on financing, production and investment, which embrace the public industrial sector as a whole as well as all other public sectors, are drawn up by the High Planning Council. For the public industrial sector, the Council determines and approves the suggestions prepared by the Consultation Council for Industrialisation.
Its suggestions are made in the light of preliminary studies of the economic and technical validity of any particular project.

Ota Sik admitted that in the Eastern European Countries "the rigid centralized planning and management became the main impediments to greater efficiency". He added:

The existing system of planned management was not only unable to overcome the contradictions between the production trends, but that the very system of central management, relying more and more on purely administrative methods, was deepening the discrepancies between the structure of production and the structure of requirements.

In the U.S.S.R., the September 1965 Plenum introduced reforms in central planning by granting greater independence to individual enterprises. The number of indices in enterprise plans fixed from above by central planners was drastically reduced.

If we refer to Chapter two (Public Company for Mechanical Industries in Alexandria), we notice according to statute No. 90 (1970):

The jobs of planning, following-up and co-ordinating, the issuing of financial statements and the supervision of the affairs of officers and employees, are all the responsibility of the State Organisation for Engineering Industry. However, every public company carries out the general plan by preparing the production requirements and manufacturing its products in order to fulfil its forecast budget.

From the above mentioned process of central planning we can see that Iraq virtually follows the pattern of planning adopted in Eastern European Countries. In Iraq, as in the U.S.S.R. the approach to administration is summarised in the concept of centralized planning combined with decentralized operational decisions.
2. **Authority**

The Presidium of the Council of Minister of the U.S.S.R. at the beginning of the 1960's started to delegate more powers to some of the enterprise managers. D. Granick wrote on the subject:

In actual fact, plant directors have possessed great authority. But in theory, they have not; and so they have constantly struggled to legitimate their power.

As we have seen in Chapter four, only the General Manager and his consultative committee in I.C.P.Co. have enough authority to carry out the general plan by preparing the production requirements and manufacturing the products in order to fulfil the forecast budget. The writer noticed that the limitation of the authority granted, according to Granick, to Soviet enterprise managers, could equally apply to Iraqi managers. For instance, in September 1976 when I asked the general manager of I.C.P.Co. about the possibility of travelling in one of the Company cars to Kufa Cement factory to present the questionnaire to the factory managers, he replied:

I am sorry I cannot help you because I have no written permission from the State Organisation for Construction Industry. Do you know that, if they appoint a person to a particular post, I do not even have the authority to purchase a chair and desk for his office.

I cannot see much difference between the enterprise Directors in Iraq and their counterparts in the U.S.S.R. in this respect.
3. Profitability Trend

A. Kosygin remarked in his speech to the Plenum, that:

The volume of profit to a considerable extent characterises the contribution of each enterprise to the net income of the country, and controls the extension of production and improvement of the welfare of the people. Prior to the September 1965 Plenum, profits and the rate of profit were not basic indicators, and there were many planned loss enterprises.

Iraq also realised that the State sector must not neglect profitability when considering investment. Of course, there are social and political objectives as well as profitability targets in the state sectors, but profitability represents an index of management capability in using the economic resources which are placed at its disposal. The Vice President of the Iraqi Revolution Command Council in September 1976 exhorted all presidents of the State Organisations:

To be responsible and to produce profit... Money incentives depend on profits from production and profits imply high quality and great quantity.

The thinking on profitability which took shape in Eastern European Countries in September 1965 is similar to the Iraqi attitude of September 1976, summarised in the previous quotation.

4. Environment

The environment within which the State-owned firms operate in Iraq can be classified as an environment of sudden, complex and rapid change, coupled with a high illiteracy rate among workers, and a middle management lacking in technical and organisational knowhow. This situation has lead them to dislike the methods of control applied to their performance. They consider that control methods exist only because top management
does not have enough confidence in them.

One of the layers of environment in any given nation, is the societal environment, which includes the economic, political, social, cultural and legal aspects of any nation. All these aspects played a decisive role in crystalizing the Iraqi environment, as we noticed from the findings in the field research in Chapters two and four. A. Negandhi in his recent study of cross-cultural management, found that:

Most of the developing countries are authoritarian in their management style. Authoritarian style is not necessarily dysfunctional in developing countries. This may be perhaps the right type of leadership for them.

In analysing Q14 of the Training Questionnaire, we found that I.C.P.Co. Management followed a highly authoritarian style. I believe that this style of management in Iraq is like that found in most of the developing countries and even in some developed countries, and the results from the impact of the societal environment of these countries. My experience indicated that this could sometimes be an effective style of leadership in Iraq.

D. Granick described the Soviet Manager:

If the manager's goals are established for him, their achievement is his personal responsibility. Often the drive to meet quotas will force him into illegal activities; this cannot be helped. It is a basic part of his task to determine what is necessary in order to "succeed".

This situation often leads him to behave as an independent business man in an authoritarian style.

M. Ellman believes that the major social problem of the U.S.S.R. is:

The irresponsibility of the administrative apparatus leading both to an unwillingness at all levels to take
responsibility for decisions, and to an arrogant treatment of the population by all officials from petty clerks upwards.

The analysis of the findings of the field research in Iraq proved that there are a lot of similarities with the social problems of the management environment of the U.S.S.R.

As a conclusion to this Chapter my major observations are:

Iraq has chosen a central planning method for its development, and this basically requires previous planning to develop the managerial apparatus; the question now arises as to what strategies must be adopted in the process of managerial change. The researcher observes that it is essential to take account of the political and social indices of the Iraqi environment. Change should be introduced gradually, step by step, so that it can be gently absorbed into the Iraqi environment. Changes should be understood fully and objectively, and full account taken of social and economic circumstances in the country, of the nature of its current industrial development and of the level of its production capacity. A subjective diagnosis of the social situation and its problems should then be made and upon this basis clear concepts should be developed for the operation of the country's managerial apparatus. The basis of successful managerial change is to start with that small part which attracts overall interest, to allow the change to prove its efficiency there and then to extend to other managerial spheres. According to this analysis, therefore, it is necessary to be flexible in adapting to the prevailing environmental circumstances within which Iraqi state apparatus works.
Summary of Chapter V

This chapter is primarily concerned with the differences and similarities between, on the one hand the concepts, principals and practices of management and Management Control Systems put forward by authors from the U.K., U.S.A., U.S.S.R. and Czechoslovakia (see Chapter III), and on the other hand the current practices of Management Control in the Iraq Cement Public Company in particular (see Chapter IV), and the State Industrial Sector in Iraq in general (See Chapters I, and II). To examine the differences and similarities, we have concentrated on three major areas:

1. Training
2. Cost Control
3. Management Control Systems

These three areas necessarily involve questions of influence, authority, the supply of information, satisfaction, central planning, profitability trends, the environment, etc.;

Within the framework of Management Control Systems, The Chapter is divided into two sections:

The first investigates the differences between the principles which have universal applicability described by authors from Western developed countries, and the practices currently applied by I.C.P.Co. This investigation concentrates on the differences in performance at factory level.

The second section concentrates on the comparison between the managerial practices in the State-owned industries in Eastern European Countries, as described by U.K., U.S.A., and Eastern
European authors, and the practices currently applied by Iraqi State-owned industries (see Chapters I and II) The findings in the first section show that the differences in nearly all the investigated areas are rather large. These differences are considered one of the major obstacles to efficient Management Control Systems in the Company, and a major cause of the low level of satisfaction among the managers. The finding in the second section show that here the differences are much smaller.
REFERENCES


6. See Chapter II.


8. Please see the analysis on the responses to question Nos. 13, 14, 15, and 16, on cost control part of the questionnaire (Chapter IV).

CHAPTER VI
CONCLUSION

1.a Introduction

The researcher believes that managerial processes tend to reflect the political and economic development of the country in which they operate. In industrial countries managerial sciences have kept pace with the general development of the country. Ever since the industrial revolution the expansion of production has required the setting up of a managerial structure to deal with the ensuing problems. Iraq was unable to develop these structures at the time they were developed in industrial countries, due to foreign domination of the country. Iraq remained isolated until a few decades ago not only from technological development as such, but also from its organised framework, i.e. modern management knowhow. More recently, as Iraq has moved closer to a more advanced level of technology, new problems have been created, because of the imbalance between the managerial requirements of an underdeveloped society and those of modern technology. Industry may not achieve its full potential unless scientific processes are adopted and the thinking and behaviour of society become more disciplined. Now Iraq faces a shortage of trained manpower as well as a serious lack of managerial knowhow for industrial processes at their most basic level. In addition she has inherited a number of attitudes which in various ways conflict with modern managerial processes, and as a result have effectively hindered the adoption of modern techniques. An instance of this is the tendency towards bureaucracy and the feeling of arrogance to the people commonly held by members of
management. These factors are major obstacles which must be dealt with to ensure the smooth running of industry. Industrialisation is not an economic phenomenon in isolation, but requires a qualitative change in the structure of the society as a whole. Now Iraq has the financial ability to make vast improvements in her economic situation and the desire to benefit from progressive techniques. The problems are likely to arise from human factors in general and from their effect in management in particular. The underdevelopment of management will tend to have a limiting effect on the ability to execute new projects and it decreases the capability of management to exploit available energies. This in turn leads to low productivity, both qualitatively and quantitatively.

The contribution of the private sector to gross domestic industrial products is rather small, but by 1980, as important state projects are completed, this contribution will be smaller still. Industrial production in Iraq is dominated by five important qualitative State Organisations and the companies they control. At present the economic development of Iraq is dominated by public organisations in nearly all fields of economic activity, including the industrial.

As the development of industry in Iraq is considered to be in its infancy, it is obvious that its most common problems are similar to those of the public sectors in general and derive from the way its present size was attained. The public sector of industry has expanded greatly during the short period that has elapsed since 1970/71, and this has placed an enormous responsibility upon the
inefficient and over-burdened management apparatus.

(b) General Conclusions

The general problems of the public sector of industry may be summarised in these two major considerations:

1. The public sector's performance is hindered by control systems which are not relevant to the new requirements of business. At present a high number of control bodies fail to see the difference between a public enterprise and an ordinary government department. As a consequence, the bureaucracy and routinism of managers of public companies is usually more apparent than their initiative and efficiency. What is needed is a new formal control system for public enterprise in industry, incorporating a clear understanding of such requirements for efficiency as cost control analysis and productivity measurement. It may be the case that the scarcity of skills is responsible for the failure to employ these tools, but this would only imply that more effort must be devoted to the development of the appropriate skills.

2. A huge industrial public sector, such as that in Iraq, definitely requires rational overall planning of its investment and production programmes. Iraq's planning efforts are certainly ambitious, and this places a great strain upon the management machinery.
"Though the five-year plan for the years 1976-1980 has not been published, the investment programme for this year envisages spending $7.9 bn., compared with an allocation of about $5 bn. in 1976. Of this $3.2 bn. is earmarked for industry. (1) The planners might have been expected to take account of the capacities of the middle and lower executive units, but they have not done so, with the result that their plans have become little more than statements of intent. The remedy would seem to be, at least in the foreseeable future, to plan carefully taking into consideration actual managerial capabilities. The immediate need is for more trained personnel, better informational and statistical services, and a change in attitude towards the application of modern management control tools. The public sector of industry, which is under the direction of the Ministry of Industry and Mines and thus follows a policy in line with the overall government programmes, should be encouraged to develop a series of annual programmes for production. If the authoritative bodies succeed in promoting the habit of programming at all managerial levels, and at the same time succeed in improving information systems, statistics, and also control systems, then there may be a gradual move towards the stage where the ambitious five-year plan could become a reality.
2. **Analysis of the First Field Research: Background to Management Control Systems in the State Industry.**

The information gathered during the first field research with seven state industrial companies in Iraq, and reported in Chapter two, together with the information contained in the introduction to Chapter one, led the researcher to make the following feasible recommendations for the improvement and development of the Iraqi industrial apparatus as a whole:

1. A general survey of management problems should be made, including scientific studies of their roots and causes, and of the influence of the historical and social background. Iraqi industry will not find solutions to its problems unless the origins of these problems are taken into account.

2. It is important that the basic axiom of "centralised planning and decentralised execution" should be applied.

3. Continuous training should be given to staff and workers to increase the level of expertise and competence, and to create a supply of managers with the skills needed to carry out their jobs effectively.

4. The National Centre for Consultancy and Management Development, should be expanded and further enriched with specialised personnel. This will give it more authority to serve and advise in the different managerial fields. Thus it would aid the National organisations in both a more comprehensive and a more specific way.
5. The long-term solutions to the problems of the management apparatus must be the subject of a scientific plan divided into various stages. The first stage should propose the solution to the immediate problems. This would encompass recommendations for exact job descriptions and for the application of training programmes etc. In the long term school and university curricula should be reviewed, as it is essential that education should consider the needs of industrial production, of the service sector of the economy and of the overall development of the country.

6. Emphasis should be placed on material and moral incentives for workers throughout the national organisations and a clear scheme should be set up to establish a system of work assessment based on studied stages, and an equal salaries and wages policy related to the economic situation.

7. Clear scientific specification for jobs and the qualifications of employees should be established in order to eradicate the influence of prejudices among the workforce. Thus, those most suited for particular jobs would be selected irrespective of personal feelings or moods. This would bring greater reliability to the system of job assessment, and through the right person being given the right post,
would also create a spirit of justice in the organisation.

8. A working plan should be provided for each department; it should be divided into stages while remaining flexible enough to allow for sudden problems.

9. Attention should be paid to comparative scientific studies of control systems and rules in developed countries and in Iraq.

10. A policy should be pursued of strengthening good human relations and directing them towards the service of productivity.

11. Opportunity should be given for low management levels to participate in decisions through committees and general meetings. This would enable correct decisions to be made and would give the lower managers a chance to develop their abilities and be promoted.

12. Attention should be given to influencing managers so that they become more positive and creative, and develop a sense of responsibility for their work; this would eliminate the carelessness and lack of interest associated with a negative attitude.

13. If local organisations are made more independent, problems associated specifically with a particular region and the organisations working in it, could be more easily dealt with. Decentralisation could also help promote good human relationships and a general awareness of personal responsibility, and could facilitate the 'definition' of authority and
14. The managerial structures of all industrial companies should be reviewed so that duplication of responsibilities is minimised and the structure is sufficiently flexible to meet demands made by unforeseen changes. This could help to:
   
   (a) decrease the overall size of the managerial apparatus and its attendant costs.
   
   (b) decrease dependency on routine.
   
   (c) create simple and good methods of communication between the leadership and its subordinates, and between the subordinates themselves.

Successful communication would allow the objectives of the company to be fully clarified and would guarantee that they were understood by those at the lower levels. It would also encourage top managers to consider the needs of lower level of management and the workforce.

15. The tools of control systems should be modernised, control systems should be more widely used and more importance should be given to them.

3. Management Control Systems

The first part of Chapter III discussed in detail, management control systems, techniques and training. The second part explained the managerial processes of the U.K. nationalized industries, and also considered the ideas and experience of management in State-owned enterprises in Eastern European Countries. The conclusions of the discussion are:
An organisation is seen as a reflection of national political thinking, which is largely concerned with co-ordinating tasks through the use of legitimate authority. An organisation is based on the fundamental, and usually implicit assumption, that the behaviour of people is logical, rational and moreover within the same system of rationality as that used to formulate the organisation. People are thought of as the means by which objectives are accomplished. The distinctive qualities of modern organisational theory are its conceptual analytical basis, its reliance on empirical research data and its integrated nature. These qualities presuppose the assumption that the only meaningful way to study organisation is to study it in terms of a whole system. As to the purpose of organisation: one must conclude that organisation helps people to work together effectively towards the accomplishment of specific goals. It unites people involved in inter-related tasks. For work to be fully effective, a manager must know what specific activities he is to manage, who is to help him, whom he should report to and who should report to him. In addition he should understand the structure of the entire group working together, his own place in it, and the official channels of communication. In brief, organisation is
essential to good management, without it managers cannot function properly, and management control systems become obsolete.

A control system is a means of bringing performance into conformity with planned action. According to T. Jerome,

Control has one purpose and that is to act as a catalyst for lower management. A control system should be open-ended and emphasis should be on how to stimulate imagination and not how to force compliance. Management control should be concerned with balancing of the organisational parts into a harmonious whole.(2)

R. Mockler admits that,

Despite the diversity of control tools and situations, the basic approach in using these tools and dealing with each control situation is the same.(3)

He adds that the management control process should:

1. Diagnose the situation in order to define the problem and the method for dealing with it.

2. Examine the control problem and review the facts in order to find the key factors affecting the problem and its solution.

3. Develop tests, and evaluate alternative control tools and systems, and ways to implement them.

4. Exercise control.

5. Prepare a written report if necessary.

Financial control ensure that the business enterprise operates within the funds available. The first step is to create a budgeting system where the costs of operation are estimated annually far ahead of time. This is an excellent method of control, because it
reviews the facts related to future operations and requires a justification of the need for these operations. Real financial controls begin to operate when there are funds available for spending. Funds are allocated to the various departments of the Company on the basis of their needs. When money is about to be spent actual control is exercised through auditing. Regulations on procurement guide funds judiciously. Auditors and accountants should be highly trained technicians. The maintenance of efficiency in financial control depends on success in training and motivating subordinates.

Information is the lubricant of the control system. It is the vital force upon which the organisation depends. Methods of providing it include teaching, communication and co-ordination. On the one hand the provision of information involves formal reports that deal with the causes and solutions of certain problems in business, or control reports that review trends. On the other hand, the provision of information includes merely informal talks. Whether formal or informal, information should relate to trend comparisons and should be limited to critical factors.

As for training, it must be the policy of the Board of Directors to see that the importance of management development is recognised throughout the Company, as the British Central Training Council stated. It will be the particular respons-
ibility of the senior executives to keep under review the training policies of the organisation as a whole.

Against the background of rapid technological and social change, management training and development should be regarded as a continuous process applying to all managers, both as individuals and as members of a team.

- In the western developed countries, firms make decisions by reference to the profit-motive; in the Eastern Socialist Countries all decisions must be based on and conform to the plan. This generalization, while not wholly accurate*, does underline an essential difference between the systems, even if considerations other than direct profit expectations do influence the actions of managers in the west, and profit expectations do affect to some extent the behaviour of managers in the Eastern bloc.

- For instance the primary task of a Soviet manager, as we have noticed in Chapter three, is to fulfil the plan, or more strictly plans, since he is judged and rewarded according to a number of plan indicators.

- The role of the budget is "in all countries" to transfer resources, in accordance with government decisions, from one part of the national economy to another. The Eastern Socialist Countries are no different in this respect. However, the relative importance of the budget is very great there, because of the direct responsibility of the state for the bulk of economic life.

*It does not apply, for instance, to most nationalized industries in the west.
We could conclude that the pressure to reorganise in order to keep up with the complicated progress of technological advance, will be great in the next decade. As the rate of technology increases, the tools of control systems will become increasingly important. It is doubtful whether many companies in the future will be able to survive without major changes in production methods and the maintaining of a skilled work-force. Managers who want to face change with confidence have to keep in touch with up-to-date management knowhow.

4. Discussion of Findings in the Iraq Cement Public Company

The empirical research in the Iraq Cement Public Company showed that the Company suffers from serious deficiencies in applying knowledge of management control systems. These deficiencies may be summarised as follows:

1. The Company suffers from lack of training and a lack of appreciation of the benefits of training programmes by top management. Besides this, there is no training office
in the Company, and most of the managers in the Company emphasised the need and importance of training, while about half of the respondent managers mentioned their interest in receiving their training abroad. This result not only indicates that the managers feel there is a serious shortage in training, and that they are interested in overcoming this shortage, but it also implies that they have little confidence in the method and efficiency of any training which could be given in the Company or in the country. For instance, the National Centre for Consultancy and Management Development is considered to be the biggest, most experienced and best equipped Centre for managerial training in Iraq, but even so, only 20 respondents out of a total of 72, preferred to have their training in this Centre.

2. Most of the Company's managers complained of insufficient authority and influence. Their responses showed that the responsibility they held was much greater than their authority. Also the degree of actual authority of the respondents' superiors and degree of their perceived influence, mean that managers always tend to believe that their superiors have more influence and authority than responsibility, especially when the superior is in the first echelon. This means that there is high authority and perceived influence concentrated in the hands of top management. This situation would cool the enthusiasm of middle and lower management, and decrease their
initiative and confidence in their abilities.

3. The responses of the respondents showed that the Company information system is not efficient, since the majority of the respondents indicated that they do not have enough information to enable them to function properly in their jobs, and mentioned areas where they need more information. Besides this lack of information, more than half of the respondents indicated that the higher levels of management followed rather an authoritarian policy, although we found that the Company used reasonably correct channels for giving information to and receiving it from managers. Only 12.5% of the respondents believed that there were too many formal information systems available to provide feedback. Without feedback information, managers cannot compare targets with actual performance, and then take corrective action where deviation occurs. The researcher found that there were no serious studies to provide the Company with a formal information system to suit its objectives, nor was there any serious appreciation of information systems by top management, who mostly provide authoritarian leadership, and prefer full information to be supplied only to certain levels of the Company. As a result we can say that influential managers are significantly different from non-influential managers in the amount of information they find available to assist them in their work.

4. The accounting system, especially the cost control system, is not helped to fulfil its task of producing accurate costing at the right time, because the Company, up to the
time when the research was made, had no standard costing system. This, the Manager of the Accounting Division attributed to the lack of competent cost accountants. Further evidence of poor performance in the cost control system is that about half of the respondents either never prepared reports on their cost control or answered that they did not know how often they prepared reports, and similarly most of them either never prepared a report on their subordinates' cost control, or did not know how often they prepared such reports. This result indicated clearly that a good percentage of this Company's managers do not know how efficiently their subordinates handle the costs for which they are responsible, and this means they have a loose control over their subordinates' performance. This deficiency in the Company system is considered one of the main reasons why the Company accumulated losses, as shown in most of the final general balance sheets in Chapter II.

About half of the respondents do not use budget committees, which means that there are no serious studies on budgets, and that the Company's policy tends to be bureaucratic in nature. Again only 14 managers have a free hand to get on with their own budget, which indicates a high level of centralisation of authority, and similarly only 29 managers believed in using budgetary and planning as a means of motivating their staff, which indicates how much budgeting and planning can mean to the staff. We also found that only 15 managers knew the return on net capital employed by their
Company last year.

5. Although the research indicates that there is quite a good exchange of influence among managers at the same level of management, this kind of influence could be described as a sort of co-operation or social influence, stemming mainly from the social and cultural structure of the Iraqi people, who tend to work together for a long time. On the other hand, we found that the influential people in the Company are few and concentrated mainly at a high level of management. This influence in business was found to be connected with authority, since middle and lower management were discovered to suffer from the lack of a degree of authority equal to the degree of their responsibility.

6. Over 96% of all the respondent managers indicated that the Company would achieve more if individuals' formal responsibility, formal authority and formal accountability were more clearly defined. This very high percentage gave a clear indication of the lack of proper definition of responsibility, authority and accountability, due to a lack of properly formulated job descriptions for each post. This means that the Company structure is inadequate.

7. Almost half of the respondents were not sure about the limits of their responsibilities, and we found, moving down the managerial hierarchy, an increase in the percentage of "Less clearly defined responsibilities". When there is no clear-cut definition of the managers'
Responsibilities, the information given to Company staff will tend to be less predictable. This and most of the other shortcomings mentioned above were the result of the absence of known and written management control systems suitable to the objectives of this Company.

8. Only 10.75% of the respondent managers have a "good influence" on the majority of the Company's activities. Another point is that almost all of the respondents felt they should have had much greater influence than they had in their unit and in the Company as a whole. This situation emphasises the need to reassess unspecified job descriptions, and to have more flexibility regarding the concentration of authority by top management, and to adapt the principle of "putting the right man in the right place", if the Company is to achieve manpower satisfaction. To obtain this sort of satisfaction in Iraq, a very complex solution is required. In the researcher's experience, when Iraqi managers feel that their superior is just, and has all the required qualities of a leader, then dissatisfaction is much reduced. To understand this attitude in present-day Iraq, we have to realise that at the root of it lies a distrust towards superiors, bred by several centuries of untrustworthy rulers. Only by considering all the factors which have shaped the current standards of the Iraqi people's social behaviour, can top management hope to overcome all the managerial problems and

+ Please see No. 3 above.
other shortcomings, mentioned in Chapter IV in the analysis to the answers to question 8 in the Management Control Systems section and question 11 in the training section. This alone will ensure the best possible satisfaction of the work-force, conducing to raised productivity and increased prosperity for their organisation.

The empirical research in Chapter IV assesses four factors and their interrelationships, namely:

A. The extent of any difference between authority and perceived influence.

We found after analysing the responses of the respondents, that there is a slight difference between authority and influence among the managers of this Company. This means in general that perceived influence was not higher than practiced authority, except at top level management, where high authority and influence were both maintained.

B. The extent to which the lack of appropriate training had led to lack of improvement of management information systems.

Analysis of the managers' responses regarding training indicated that there was a serious lack of appropriate training, and as we found that only 13 managers had attended management information programmes, we could understand the strong correlation between these two factors.
C. The level of satisfaction with current control systems.

We found that 79.2% of the respondent managers were completely dissatisfied with current control systems in the company.

D. The relationship between influence and the obtaining of information.

The research showed that only 10.75% of the total number of managers in the Company had "a good deal of influence" on the majority of the Company's activities, and only 12.5% of the total number of managers believed that there was too much formal information in the Company. A clear relationship between these two factors was found to exist.

5. Comparative Study
a) Section One

In the first section of Chapter V, a comparison is made between the principles of Management, and Management Control Systems, discussed in Chapter III, part one, and usually taken to have universal applicability, and the practice of Management and Management Control Systems presented in Chapter IV. The first major finding is that practice at factory level does not conform to the accepted principles.

However, it is recognised that these principles have been published by authors from western developed countries, while the practice described is that of Iraq. The next question to be considered is, therefore, the significance of this mis-match between principles and practices. Does practice in Iraq simply
fall short of a theoretical and practical ideal because of ignorance or lack of experience? We found that the environmental elements, and especially the cultural context within which managers have to operate in Iraq, do not in fact correspond with the life and experience of managers in developed countries.

The comparison between principles and practices concentrated on these following areas within the framework of Management Control Systems, in order to point the way in which the I.C.P. Co. should develop: training, cost control, influence and authority, satisfaction, information, power and bureaucracy, responsibility and accountability, reporting and organisation.

Current practice in the Company could be considered generally unsatisfactory, but this practice should nevertheless, only be developed after careful consideration of the influences stemming from the environment. It is essential to adapt modern principles and management knowhow to suit the environment, and the transition must be tackled through a better understanding of the present position.

b) Section Two

The second part of this Chapter draws upon the information about the managerial and economic systems in Iraq presented in Chapters I and II. It examines their effect upon the managerial task, comparing them with practices in the State-owned industries in Eastern European Countries. The second main finding of the Chapter is that while these systems have effect at the level of industry-wide policy-making, they do not have an immediate influence at factory level.
SUMMARY OF CHAPTER VI

This Chapter is the conclusion of the whole-thesis, and illustrates the complexities of the last five chapters. These chapters presented an integrated view of management control by focusing in Chapter I on the nationalisation policy, on how the cement industry was established in Iraq, the position of the public sector in economic life, and the attitude of the public sector towards management.

Chapter I could be considered a summary of the background of Iraqi industry from the standpoints of management and economics.

Chapter II was the result of field research in Iraq, of interviewing several Iraqi managers in seven different industrial state companies. These companies were selected from the five dominant qualitative Industrial State Organisations, in order to obtain comprehensive background information about the Management Control Systems in Iraqi state industry. Discussion focussed on these subjects: the current objectives of the company, management structure, budgets, control reports, cost control, information systems and how problems concerning the efficiency of the companies were investigated. The research disclosed a seriously low productivity level, and an accumulation of losses in almost all the companies included in the field research. This result reflected the lack of skilled manpower in both technical and managerial aspects, the deficiencies of cost control and information systems, and generally inefficient systems for control. The purpose of
this Chapter is to present an accurate picture of the current managerial situation and the standard of Management Control Systems followed in Iraq State Industry as a whole.

Chapter III contains two parts, the first one is an analytical survey of the literature on Management Control Systems theory. The second part explains the managerial processes of the U.K. Nationalised Industries, and discusses the ideas and experience of Management in State-owned enterprises in Eastern European Countries. This enables inferences to be drawn from the difference between what is generally accepted in Management Control theory, as presented by British or American authors, and the practices tested by the researcher in I.C.P.Co. at factory level, and then at the level of industry-wide policy making, and recorded in Chapter IV.

Chapter IV deals with the main field research in I.C.P.Co., and the findings stemming from the responses of managers to the presented questionnaire, which was designed to test the current Management Control Systems and the training level in the Company. It revealed that there is a lack of good systems for control, and of sufficiently trained personnel. As a result of this, most of the respondents showed dissatisfaction with the present control systems in the Company. The empirical research presented in this Chapter assessed four factors and their inter-relationship, namely:

(a) The extent to which there was a difference between authority and perceived influence.

(b) The extent to which the lack of appropriate training
had led to lack of attention to the improvement of management information systems.
(c) The level of satisfaction with current control systems.
(d) The relationship between influence and the obtaining of information.

Chapter V focused on the comparison between the principles, drawn from a survey of the literature on Management Control Systems (Chapter III), and the practices of Management Control Systems revealed through the empirical research in I.C.P. Co. (Chapter IV). After assessing the comparisons, we found that the practice at factory level could be considered generally unsatisfactory. The second part of the comparative study draws on information about the managerial and economic systems in Iraq presented in Chapters I and II. It examines their effect upon the managerial task and draws a comparison with the situation in the State-owned enterprises in Eastern European Countries. The finding in the second section shows that here the differences are much smaller.

The comparison between industry-wide policy-making in Iraq and the experience of Eastern European Countries in this respect, concentrated on these areas; central planning, authority, profitability trends, and environment.

The finding of this second section is that the differences between practices in Iraq and in State-owned industry in Eastern Europe are much smaller than the differences discovered in Section one between Iraqi practices and the commonly accepted principles of Management and Management Control Systems.
The central problem, reflected in the specific recommendations recorded in the separate Chapters and summarised above, is the need to improve the attitude of the work-force and their ability to co-operate, and this holds good both for the I.C.P.Co. and for state industry as a whole. Positive co-operation among workers and management, can only be achieved if the authoritative bodies in the Ministry of Industry and Mines first consider the environmental influences in order to understand the present situation better. Modern know-how can then be adapted to the needs of Iraq and a situation created in which balanced control can exist, in which compliance can be combined with creativity, and co-ordination with efficiency. The specific recommendations in this work are put forward as means to this end.
REFERENCES


APPENDIX A

EXHIBIT ONE AND QUESTIONNAIRE
EXHIBIT ONE

1. Does the organisation have clear objectives  
   IF YES - what are they?  
   YES - NO

2. Who sets the objectives?

3. How often do objectives change?

4. Does the organisation have a clearly defined structure?  
   IF YES - obtain a copy.  
   YES - NO

5. How often is the structure reviewed?

6. What purpose does the structure fulfil?

7. Whose responsibility is it to monitor the success or failure of the structure?

8. Does the organisation prepare a budget?  
   IF YES - obtain a copy and/or find out.  
   YES - NO

9. For how many years ahead is the budget prepared?

10. Is it computer-based?  
    YES - NO

11. Is there a manual to help managers construct the budget?  
    IF YES - obtain a copy  
    IF NO - how do managers prepare their budgets?  
    YES - NO

12. Is the budget prepared by the organisation's senior management or by their accountants?

13. For a given department - say maintenance - who prepares the department's budget? -  
    (i) The manager on his own  
    (ii) The manager with his boss

I
(iii) The manager with his supervisors
(iv) The manager with the accountant
(v) The manager in consultation with the production supervisors
(vi) The manager is told by his boss.

14. How frequently are control reports sent to the manager of, say, maintenance?

15. Obtain a copy of the control documents sent.

16. Does the organisation use standard costing to control engineered cost? YES - NO

17. If YES who sets the standards?
   - Production management
   - the accountants
   - work study officers

18. If NO - what is the system of control of engineered costs - this year v.
   last year
   this year's costs

19. What other non-accounting measures are used to control costs such as materials?

20. What other non-accounting measures are used to control direct labour costs?

21. What information systems are used to plan for manager cost - such as maintenance, research, development, quality control, technical, etc.?

22. Is there a document, such as a management plan, which lists the objectives for such departments. YES - NO
   If YES obtain a copy.

23. Is there a document, such as a management plan, which outlines how the supervisors and managers in these
departments are going to set about achieving the objectives?

24. Is each supervisor responsible for the costs under his control?

25. Is there any system which enables each supervisor or section-head or manager to find out precisely what is expected of him?

General

1. Which are the easiest costs to control?

2. Which are the hardest costs to control?

3. What information not currently available would be of most use to managers?

4. Is exporting activity controlled with the same information systems used or have different ones had to be designed?

If different ones are used obtain a copy.

Final question

If you were seconded to the organisation for a period to work full-time on a problem in connection with making the organisation more efficient and effective - what would the problem be?
I am very pleased that you are taking part in the study called (Management Control Systems). This is an academic study prepared as research for a Doctorate in Business Administration, and is completely independent of both your organisation and your union. Information obtained via this Questionnaire or oral interview will be treated in strictest confidence, as it will be presented within a Doctorate dissertation, in such a manner that it will not be traceable to any individual.

Please complete the enclosed Questionnaire as honestly as you can. If you have any doubt in answering any particular question, please leave that question and answer the next one. After the completion of the Questionnaire I will try to clarify any questions which have caused difficulty.

Tomorrow I will return to collect the completed questionnaire.

Thank you.

The researcher.
QUESTIONNAIRE

Basic Questionnaire

Please answer the following questions by placing a tick in the most appropriate box.

Q.1. What is your present grade?
   A. Supervisor
   B. Manager of Department
   C. Manager of Division
   D. Manager of Factory
   E. General Manager or his assistant

Q.2. How many years have you been in your present grade?
   A. Under 1 year
   B. Between 1 and 3 years
   C. Between 3 and 6 years
   D. Over 6 years

Q.3. How many years have you been in your Organisation?
   A. Under 1 year
   B. Between 1 and 3 years
   C. Between 3 and 6 years
   D. Over 6 years

Q.4. What academic degree do you hold?
   A. Elementary
   B. Intermediate
   C. Secondary
   D. Diploma
   E. BSc./BA
   F. Higher than BSc./BA

Q.5. Into which broad category does your work fall?
   A. Marketing or sales
   B. Production
   C. Services to Management (i.e. Accounting, personnel, etc.)
   D. General Management
Questionnaire about TRAINING

Q.T.1  (a) Have you attended any Training programmes?  
        "Please tick the appropriate box"  
        Yes  
        No  

(b) If yes, approximately how many training programmes have you attended?

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<th>1 - 3</th>
<th>4 - 6</th>
<th>7 - 10</th>
<th>More than 10</th>
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(Please tick the appropriate box)

Q.T.2 Did you attend the Training programme(s)?

A. On the advice of your supervisor?  
B. On your own initiative?  
C. Arranged by training office?  
D. On advice from someone else?  
E. On advice of a colleague?  
F. On advice from outside your employing Organisation?  

(Please tick one or more)

Q.T.3 Please write the type of training programmes or courses which you have attended, in the box opposite the type concerned.

A. General Management Course  
B. Management Information System  
C. Specialist Technical Course  
D. Any other Course.  

(Please tick one or more)

Q.T.4(a) Which type of course do you feel you currently need?

A. General Management Course  
B. Management Information System  

II
C. Specialist technical course as it applies to your present duties.

D. Any other course

(Please tick one or more)

(b) How long would you choose this course to be?

(Tick one).

A. One day

B. One week

C. Between 1 week and one month

D. More than 1 month and less than 6 months

E. 1 year

F. More than 1 year

Q.T.5 Where would you like to have your training programme to be held? (Tick one).

A. Abroad - state the country -

B. In Iraq

C. In the Training Office in your Organisation

D. In the National Centre for Consulting and Management Development

E. Any other training centre

Q.T.6 (a) How much influence do you have to obtain the training you want in Q.4?

(Please indicate in the scale your influence degree)

1 2 3 4 5
None great deal

III
(b) Do you have the authority to arrange for the training outlined in Q.T4 and Q.T5?  
(Please tick one) Yes □ No □

Q.T.7 (a) Does your superior have the authority to arrange for the training outlined in Q.T4 and Q.T5?  
Yes □ No □ I do not know □

(b) How much influence do you think your superior has on obtaining the training you have outlined in Q.T4 and Q.T5.  
(Please indicate in the scale your superior influence degree)  
1 2 3 4 5  
None great deal

Q.T.8 (a) Do you have the authority to arrange for subordinate Training?  
(Please tick one) Yes □ No □

(b) How much influence do you have to obtain training for your subordinate?  
(Please indicate in the scale your influence degree)  
1 2 3 4 5  
None great deal

Q.T.9 Indicate the sentence which is most expressive of your feelings about the training outlined in Q.T4 and Q.T5.  
A. The training programme will be useful to □
me in the future
B. The training programme will be immediately useful to me in my present job.
C. Many of my colleagues have attended training programmes so I think I should.

Q.T.10 How accurate is the following sentence as a description of what happens in your Organisation?
"Staff who have attended training programmes are promoted more quickly than those who have not attended"

1 2 3 4 5
strongly disagree strongly agree

Q.T.11 My superior is in that position because,
A. He is more experienced than me
B. He is more qualified than me
C. He is older than me
D. For other reasons
(Please tick one or more).

Q.T.12 Do you have the information to judge which is the best/most suitable training programme to meet your needs? Yes No

Q.T.13 Do other people in the Organisation have better information on which they decide the best training for you? Yes No I do not know
Q.T. 14 (a) Is it somebody's job to decide the best training for you?

Yes [ ]
No [ ]
I do not know [ ]

(b) If the answer to Q.T. 14(a) yes, then, how often does he discuss training with you?

(Please tick one)

Once every month [ ]
Once every three months [ ]
Once every six months [ ]
Once a year [ ]
Never [ ]
Questionnaire about COST CONTROL

Q.C.1 Which of the following costs do you directly control?

(Please tick one or more)

Labour
Material
Machine use
Administration overhead
Others - please specify -

Q.C.2 (a) Do you compare the actual costs incurred with a
standard cost which has been set? Yes

(b) If no is this because:

A. There is no standard
B. There is no actual information prepared
C. There is actual information prepared but
you do not see it

(Please tick one)

Q.C.3 How well do you control the cost for which you have
direct responsibility?

1  2  3  4  5
very bad  ___________ very well

Q.C.4 What is the source of the information which you used
to judge your own performance in Q.C.3?

A. My own experience of doing the job.
B. My boss's view of how well I am doing

VII
C. Information supplied by other depts. - accounting, etc.  

D. I compare my performance with that of my colleagues.  

E. Others, please specify:  

(Please tick one or more)  

Q.C.5 (a) Do you feel you have all the necessary information to enable you to control the costs for which you are responsible?  
Yes  
No  

(b) If no, what sort of additional information would be useful? (Please specify by ticking one or more)  
1. Sort of information 2. Who should supply it  


Q.C.6 (a) How often do you yourself prepare a report on your control of cost? (Please tick one or more)  
1 Daily  2 Weekly  3 Monthly  
4 Annually  5 Never  6 I do not know  

(b) For whom do you yourself prepare a report on your control of cost? (Please specify)  
1 Your G.M.  2 Your boss's boss  3 Your boss  

Q.C.7 How often does your superior prepare a report on your control of cost? (Please tick one or more)  

VIII
1 Daily □ 2 Weekly □ 3 Monthly □ 4 Annually □ 5 Never □ 6 I do not know □

Q.C.8(a) Does someone other than yourself and your superior prepare a report on your control of cost?

   Yes □ No □

(b) If answer to Q.C.8(a) is yes:

   Do you receive a copy of that report? YES □ No □

Q.C.9(a) Which of the following people express views on your control of cost? (Please tick one or more)

A. Your factory manager □
B. Member of your Board of Directors □
C. Your superior □
D. Your colleagues □
E. Your subordinates □
F. Other members of the Company □

(b) In respect to those you ticked in (a) can you indicate how much the views which they express influence the way in which you control cost?

A. Your factory manager 1 2 3 4 5
B. Members of B.D. 1 2 3 4 5
C. Your superior 1 2 3 4 5
D. Your colleagues 1 2 3 4 5
E. Your subordinate 1 2 3 4 5
F. Other members of the Company. very little □ a great deal □
Q.C.10 How often do you prepare a report on your subordinates control of cost? (Please tick one or more)

Q.C.11 (a) Is a budget prepared for your department, if you have a yes, or your own activity if you do not have a department?
1. My department □
2. My own activity □

(b) If for your department, is the budget prepared:
A. By you □
B. By your boss □
C. By you and your boss together □
D. By someone else □

(Please tick one)

Q.C.12 To what extent do you assist your subordinates when they are preparing their own budgets?

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<td>not at all</td>
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<td>a great deal</td>
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</table>

Q.C.13 Do you use a budget committee?
Yes □
No □

Q.C.14 Are budgets, (a) imposed on managers, for example, an x% reduction in last year's actual, allowing for volume changes is expected or (b) are managers allowed to get on with their own budget, and it is only when submitted that it comes under review? (Please tick one).
A. Imposed □
B. Free hand □
C. In between □

X.
Q.C.15 Do you use budgeting and planning as a means to motivating your staff? Yes No

Q.C.16 Do you know the return on net capital employed, achieved by your Organisation last year? Yes No
Questionnaire about Management Control Systems

Q.M.1 Suppose that members of your unit expressed general disinterest in their jobs, how much effort would you be willing to spend to build up their interest?

(Please tick by ticking the appropriate point on the Scale)

1 2 3 4 5
None a great deal

Q.M.2 How much influence do you personally have in determining policies and actions of your colleagues at your level of management?

1 2 3 4 5
None great deal

Q.M.3 In general, how much influence do you personally have on what the following groups, or persons, do in your organisation?

A. On what the General Manager does

1 2 3 4 5

B. " " " Board of Directors "

1 2 3 4 5

C. " " " Member of the Organisation as a whole does No a great deal of influence

Q.M.4 (a) How often do the following people seek advice from you?

A. Your factory manager

1 2 3 4 5

B. Member of B. of D.

1 2 3 4 5

C. Your superior

1 2 3 4 5

D. Your colleagues

1 2 3 4 5

E. Other members

1 2 3 4 5

Never very often
(b) How often do the following people seek assistance from you?

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<th>Role</th>
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<td>A. Your factory manager</td>
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<td>B. Member of B. of D.</td>
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<td>C. Your superior</td>
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<td>E. Other members</td>
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(c) How often do the following people seek instruction from you?

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<td>A. Your factory manager</td>
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<td>B. Member of B. of D.</td>
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<td>C. Your superior</td>
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<td>D. Your colleagues</td>
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<td>E. Other members</td>
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Q.M.5 How often do you give information, concerning company matters to the following persons?

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<td>A. Your factory manager</td>
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<td>B. Member of B. of D.</td>
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<td>C. Your superior</td>
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<td>E. Your subordinates</td>
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<td>F. Other members</td>
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Q.M.6 How often do the following persons give you information concerning company matters?

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<td>A. Your factory manager</td>
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<td>B. Member of B. of D.</td>
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<td>C. Your superior</td>
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XIII
Q.M. 7 In terms of doing your job properly, the information you receive is:

(Tick one box only)

A. Much more than you need
B. More than you need
C. Just what you need
D. Less than what you need
E. Much less than you need

Q.M. 8 How satisfied are you with the present control systems in your Organisation?

1 2 3 4 5
not at all very satisfied

Q.M. 9 When doing your job, how much uncertainty do you experience in respect of your responsibilities?

(Tick one box only)

A. No uncertainty at any time.
B. Occasional uncertainty
C. Some areas of uncertainty, others O.K.
D. A lot of uncertainty
E. Your responsibility is not defined at all, so you work it as you go.

Q.M. 10 When doing your job how much information do you have to co-ordinate the effort of your unit?

(Please tick one)
Q.M.11 How often are you held accountable for what you do? (Please tick one in each column).

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<th>Formally</th>
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<td>D.</td>
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Q.M.12 Do you think people in the Organisation, senior to you have their responsibility: (Tick one box only)

A. More clearly defined than yours
B. As clearly defined as yours
C. Less clearly defined than yours

Q.M.13 Do you think people in the Organisation junior to you have their responsibility: (Tick one box only)

A. More clearly defined than yours
B. As clearly defined as yours
C. Less clearly defined than yours

Q.M.14(a) This Company would achieve more if individual people's formal responsibility was:

A. More clearly defined
B. Less clearly defined
(b) This Organisation would achieve more if individual
people's formal authority was:
A. More clearly defined
B. Less clearly defined

(c) This Organisation would achieve more if individual
people's formal accountability was:
A. More clearly defined
B. Less clearly defined

Q.M. 15(a) How often do you seek advice from the following people?
A. Your factory manager
B. Member of B.D.
C. Your superior
D. Your colleagues
E. Your subordinates
F. Other members
never very often

(b) How often do you seek assistance from the following people?
A. Your factory manager
B. Member of B.D.
C. Your superior
D. Your colleagues
E. Your subordinates
F. Other members
never very often

(c) How often do you seek instruction from the following people?
A. Your factory manager
B. Member of B.D.
C. Your superior

XVI
Q.M.16(a) How much of the information you currently use to do your job is supplied by the formal information system? (Please tick one only)

A. Less than 10% □  B. Between 10% - 25% □
C. Between 26% - 50% □  D. Between 51% - 75% □
E. Between 76% - 100% □

(b) The percentage shown in (a) indicates that: (Please tick one)

A. There are too many formal information systems □
B. There are about the right number of formal information systems □
C. There are too few formal information systems □

Q.M.17 How much influence do you have over the development and design of the management information systems in your unit?  

1 2 3 4 5
none a great deal

Q.M.18 How much influence do you think you should have over the development and design of the management information systems in your unit?  

1 2 3 4 5
none a great deal

Q.M.19 How much influence do you have over the development and planning of the policies and operation in your unit?  

XVII
Q.M. 20 How much influence do you think you should have over the development and planning of the policies and operation in your Unit?

Q.M. 21 How much influence do you have over the development and design of management information systems in the Company as a whole?

Q.M. 22 How much influence do you think you should have over the development and design of management information systems in the Company as a whole?

Q.M. 23 How much influence do you have over the development and planning of the policies and operation in the Company as a whole?

Q.M. 24 How much influence do you think you should have over the development and planning of the policies and operation in the Company as a whole?
APPENDIX B

Charts, Tables and Figures
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1. Organisational structure of the Ministry of Industry and Minerals

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3. Organisational Structure of the Public Company of the Paper Industry

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5. Organisational Structure of the Iraq Cement Public Company

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2. Main Outlays of the Current Investment Programme by Sector.


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5. Balance Sheet of the Public Company of the Fertiliser Industry as at 31st March 1974

6. Report about Control Processes of the Fertiliser Industry

7. Quality Report of Fertiliser Industry Company

8. Balance Sheet of the Public Company of Paper Industry as at 31st March, 1974

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CHART 2
Prepared by Organisation and Productivity Department of the Public Company for Fertiliser Industries.

CHART 1
ORGANISATIONAL STRUCTURE OF THE PUBLIC COMPANY FOR MECHANICAL INDUSTRIES IN ALEXANDRIA OF 1975.

CHART 4.
Source: 'Alam al Sina'a Magazine, No. 13, 1975.'
### Balance Sheet of the Public Company for the Fertiliser Industry as at 31st March, 1974

<table>
<thead>
<tr>
<th></th>
<th>I.D.</th>
<th>I.D.</th>
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<tbody>
<tr>
<td><strong>Fixed Assets</strong></td>
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<td><strong>Fixed Liabilities</strong></td>
</tr>
<tr>
<td>Non-movable Assets</td>
<td>9,212,845</td>
<td>Capital</td>
</tr>
<tr>
<td>Stock held &amp; work in progress</td>
<td>301,368</td>
<td>Financial Allocation</td>
</tr>
<tr>
<td><strong>Liquid Assets</strong></td>
<td></td>
<td><strong>Liquid Liabilities</strong></td>
</tr>
<tr>
<td>Stocks &amp; Documentary Credit</td>
<td>1,114,329</td>
<td>Creditors</td>
</tr>
<tr>
<td>Sundry Debtors &amp; balances due</td>
<td>1,418,108</td>
<td>Diff. Credit Accounting</td>
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<tr>
<td>Cash in Hand and at Bank</td>
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<td>Overdraft</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>12,046,986</td>
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<thead>
<tr>
<th>Date</th>
<th>Product Capacity (%)</th>
<th>Quantity Produced (Tonnes)</th>
<th>Working Conditions &amp; Changes in Production Capacity During the Month</th>
<th>Maintenance during the Month</th>
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Table No. 6.
## MATERIAL BALANCE SHEET

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>UNIT</th>
<th>INSTRUMENT</th>
<th>QUANTITY</th>
</tr>
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<tr>
<td>N.O (FOR PROCESS)</td>
<td>BU/D</td>
<td>PR-1103</td>
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<tr>
<td>N.O (FOR FUEL)</td>
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</tr>
<tr>
<td>PROCESS AIR</td>
<td></td>
<td>PR-1104</td>
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<tr>
<td>UR (RAW WATER)</td>
<td></td>
<td>FS-1125</td>
<td>(FS-5117)</td>
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<tr>
<td>UF (FIL. WATER)</td>
<td></td>
<td>FS-1126</td>
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</tr>
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<td>UF (FIL. WATER)</td>
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<td>FS-1124</td>
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<tr>
<td>D.F.W. (FILTER WATER)</td>
<td>KG/D</td>
<td>FS-1122</td>
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</tr>
<tr>
<td>S3 (3% STEAM)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>S10 (10% STEAM)</td>
<td></td>
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</tr>
<tr>
<td>S23 (23% STEAM)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N2O. P2O5</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>N2O. SO3</td>
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<tr>
<td>H2S</td>
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</tr>
<tr>
<td>NH3</td>
<td></td>
<td></td>
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<tr>
<td>CMP FOAMS</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>CIL</td>
<td>1/D</td>
<td></td>
<td></td>
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<tr>
<td>POWER</td>
<td>KG/D</td>
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</table>

### 2. CUT PUT

<table>
<thead>
<tr>
<th>AL. LIQ NH3</th>
<th>KG/D</th>
<th>FS-1A99</th>
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<td>AL. GAS NH3</td>
<td>KG/D</td>
<td>FS-1A05</td>
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<td>AL. AQU NH3</td>
<td>KG/D</td>
<td>FS-1A07</td>
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<td>TOTAL NH3 PRODUCTION</td>
<td>KG/D</td>
<td>BY CALCULATION</td>
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<tr>
<td>C2P (CONDENSATE)</td>
<td>KG/D</td>
<td>PC1-1203-1205</td>
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<tr>
<td>C2F (LOW PRES. Cond)</td>
<td>KG/D</td>
<td>FS-1200</td>
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<tr>
<td>PURG GAS</td>
<td>KG/D</td>
<td>FS-1A04</td>
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<td>CO2 TO UREA PLANT</td>
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<td>FS-1207</td>
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<tr>
<td>S35 (3% STEAM)</td>
<td>KG/D</td>
<td>FS-1117</td>
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### GENERAL

<table>
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<tr>
<th>CAP. OF SEC. 1100%</th>
<th>INH. LIQ STORED</th>
<th>CAP. %</th>
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<tr>
<td>1100%</td>
<td>a) BY CALCULATION</td>
<td></td>
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<tr>
<td>PLANNED CAP OF 1200%</td>
<td>b) BY INDICATOR</td>
<td></td>
</tr>
<tr>
<td>ACTUAL</td>
<td>% = %</td>
<td>Mo. OP SHUT DOWN</td>
</tr>
<tr>
<td>(ACT./PLAN.) CAP %</td>
<td>CARD ISSUED</td>
<td></td>
</tr>
<tr>
<td>NH. LIQ TO UREA(T)</td>
<td>CARD CANCELLED</td>
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</tr>
<tr>
<td>NH. GAS TO A.S. (T)</td>
<td>PERMIT ISSUED</td>
<td></td>
</tr>
<tr>
<td>NH. GAS TO A.S. (T)</td>
<td></td>
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</table>

**REMARKS:**

N.-A/24/11

TABLE No. 7
**BALANCE SHEET OF THE PUBLIC COMPANY FOR THE PAPER INDUSTRY AS AT 31ST DECEMBER 1974**

<table>
<thead>
<tr>
<th>Fixed Assets</th>
<th>I.D.</th>
<th>Fixed Liabilities</th>
<th>I.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-moveable Assets</td>
<td>18,435,363</td>
<td>Capital</td>
<td>18,514,701</td>
</tr>
<tr>
<td>Stock held &amp; work in progress</td>
<td>2,790,155</td>
<td>Financial Allocation</td>
<td>878,360</td>
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<tr>
<td>Liquid Assets</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Stocks &amp; Documentary Credit</td>
<td>2,768,673</td>
<td>Creditors</td>
<td>1,721,508</td>
</tr>
<tr>
<td>Sundry Debtors &amp; balances due</td>
<td>890,548</td>
<td>Diff. Credit A/c.</td>
<td>1,412,069</td>
</tr>
<tr>
<td>Cash in Hand and at Bank</td>
<td>25,373</td>
<td>Overdraft</td>
<td>2,383,494</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>24,910,112</td>
<td><strong>TOTAL</strong></td>
<td>24,910,112</td>
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</tbody>
</table>

*Table No. 8*
THE PUBLIC BATA COMPANY

Comparison Table of Actual and Forecast Sales for 1973/74 with Previous Year.

<table>
<thead>
<tr>
<th>Actual Sales 1972/73</th>
<th>Sales Figure (I.D.) 1973/74</th>
<th>Percentage of Actual Sales to Planned (Forecast)</th>
<th>Percentage Difference from 1972/73</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,116,702</td>
<td>4,362,600</td>
<td>105%</td>
<td>+47%</td>
</tr>
<tr>
<td></td>
<td>4,585,299</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(i) The annual Report of the Ministry of Industry & Minerals does not mention final accounting for the Public Bata Company. Above Table is from the same source P. 102, showing marketing of actual production more than the Planned (Forecast). This indicates that the Company have sold most of last year's stock.

Table No. 9

<table>
<thead>
<tr>
<th>Fixed Assets</th>
<th>I.D.</th>
<th>Liabilities</th>
<th>I.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>4,532</td>
<td>Auth. Capital</td>
<td>10,794,987</td>
</tr>
<tr>
<td>Constructions &amp; Building</td>
<td>4,354,031</td>
<td>Reserves &amp; Finan. Allocation</td>
<td>3,830,788</td>
</tr>
<tr>
<td>Various Machines</td>
<td>5,381,269</td>
<td>Profit &amp; Loss</td>
<td>(381,663)</td>
</tr>
<tr>
<td>Vehicles &amp; Furniture</td>
<td>500,748</td>
<td>Loans</td>
<td>2,876,923</td>
</tr>
<tr>
<td>Tools, Spare Parts &amp; Equipment</td>
<td>146,444</td>
<td>Credit Payment</td>
<td>1,814,825</td>
</tr>
<tr>
<td>Suspended Income Exp.</td>
<td>254,662</td>
<td>Creditors &amp; Credit Balances</td>
<td>1,928,820</td>
</tr>
<tr>
<td>Goodwill Assets</td>
<td>7,409</td>
<td>Unpaid Amounts</td>
<td>88,306</td>
</tr>
<tr>
<td>Projects under Constr.</td>
<td>712,263</td>
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<td></td>
</tr>
<tr>
<td><strong>Total Fixed Assets</strong></td>
<td>11,361,358</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Depreciation</strong></td>
<td>1,116,038</td>
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<tr>
<td><strong>Liquid Assets</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash in Hand &amp; at Bank</td>
<td>917,620</td>
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</tr>
<tr>
<td>Sundry Debtors and Balances due</td>
<td>2,503,218</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Documentary Credit &amp; Commodities</td>
<td>288,044</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stores Assets</td>
<td>4,766,538</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>20,952,786</td>
<td><strong>TOTAL</strong></td>
<td>20,952,786</td>
</tr>
</tbody>
</table>

Table No. 11
### Balance Sheet of the Public Vegetable Oil Company

**As at 31st March, 1974.**

<table>
<thead>
<tr>
<th></th>
<th>I.D.</th>
<th></th>
<th>I.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fixed Assets</strong></td>
<td></td>
<td><strong>Fixed Liabilities</strong></td>
<td></td>
</tr>
<tr>
<td>Non-movable Assets</td>
<td>7,950,973</td>
<td>Capital</td>
<td>3,367,612</td>
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<tr>
<td>Stock held &amp; work in progress</td>
<td>301,368</td>
<td>Reserves</td>
<td>5,675,386</td>
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<tr>
<td></td>
<td></td>
<td>Financial Alloco.</td>
<td>4,977,894</td>
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<tr>
<td></td>
<td></td>
<td>Long &amp; Medium Term Loans</td>
<td>202,323</td>
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<td><strong>Liquid Assets</strong></td>
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<td><strong>Liquid Liabilities</strong></td>
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</tr>
<tr>
<td>Stocks &amp; Documentary Credit</td>
<td>7,556,444</td>
<td>Creditors</td>
<td>2,864,299</td>
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<tr>
<td>Loans</td>
<td>110,000</td>
<td>Diff. Credit A/c.</td>
<td>518,868</td>
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<td>Sundry Debtors &amp; Balances due</td>
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<td>Overdraft</td>
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<tr>
<td>Cash in Hand and at Bank</td>
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<td>Investments</td>
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<td><strong>TOTAL</strong></td>
<td>18,683,252</td>
<td><strong>TOTAL</strong></td>
<td>18,683,252</td>
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*Table No. 1*
<table>
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<tr>
<th>DETAILS</th>
<th>OILS</th>
<th>SOAP</th>
<th>EXTRAGENTS</th>
<th>COSMETICS</th>
<th>IND. PRINTING</th>
<th>CARTONS AND BOXES</th>
<th>CROSS TOTAL</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Rashid</td>
<td>Maanun</td>
<td>Plastic</td>
<td>Rashid</td>
<td>Maanun</td>
<td>Amin</td>
<td>Rashid</td>
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<tr>
<td>Total Hours Available</td>
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<td>Total Hours Worked</td>
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<td>Total Standard Hours</td>
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<td>Total Hours Lost</td>
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<tr>
<td>106 Cleaning &amp; Oiling ½/o.</td>
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<tr>
<td>109 Preparing ½/o. &amp; for Driving Stoppages</td>
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<tr>
<td>110 Stacking ½/o. Product</td>
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</tr>
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<td>Losses/holidays</td>
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<td>121 Mechanics in Machines</td>
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<tr>
<td>122 Electrician in Machines</td>
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</tr>
<tr>
<td>123 Chemist in Machines</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>124 Power Failure</td>
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<td>126 Different Elements</td>
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<td>TOTAL HOURS STOPPAGES</td>
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<td>127 Inefficiency</td>
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</table>
## BALANCE SHEET OF THE IRAQI PUBLIC SPINNING & WEAVING COMPANY AS AT 31ST MARCH, 1974

<table>
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<tr>
<th></th>
<th>I.D.</th>
<th></th>
<th>I.D.</th>
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</thead>
<tbody>
<tr>
<td><strong>Fixed Assets</strong></td>
<td></td>
<td><strong>Fixed Liabilities</strong></td>
<td></td>
</tr>
<tr>
<td>Non-movable Assets</td>
<td>2,717,084</td>
<td>Capital</td>
<td>1,220,579</td>
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<tr>
<td>Stock held &amp; work in progress</td>
<td>2,832,845</td>
<td>Reserves</td>
<td>465,810</td>
</tr>
<tr>
<td><strong>Liquid Assets</strong></td>
<td></td>
<td>Financial Alloc.</td>
<td>1,974,045</td>
</tr>
<tr>
<td>Stocks &amp; Documentary Credit</td>
<td>1,884,515</td>
<td>Long-term loans</td>
<td>2,227,535</td>
</tr>
<tr>
<td>Sundry Debtors &amp; balances due</td>
<td>456,659</td>
<td><strong>Liquid Liabilities</strong></td>
<td></td>
</tr>
<tr>
<td>Cash in hand and at Bank</td>
<td>146,720</td>
<td>Creditors</td>
<td>538,181</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td>8,037,820</td>
<td>Diff. Credit A/c.</td>
<td>41,225</td>
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<td>Overdraft</td>
<td>1,570,445</td>
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**TABLE No. 16.**
Table No. 17.

THE IRAQI PUBLIC SPINNING & WEAVING COMPANY

No.: Maintenance Department Order

Date: From:

Please repair this material To:

<table>
<thead>
<tr>
<th>Sequence</th>
<th>Machine Model</th>
<th>Machine No.</th>
<th>Specif. of Material Requiring Repair</th>
<th>Remarks</th>
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</thead>
</table>

Departmental Head:

The above material repaired on:

By Technical Worker No.:


(Signature)
Factory Manager.
### Table No. 18

**STATE ORGANISATION OF SPINNING AND WEAVING**

**THE IRAQI PUBLIC SPINNING AND WEAVING COMPANY**

<table>
<thead>
<tr>
<th>No.</th>
<th>Name and function of part</th>
<th>Manufacturing Card</th>
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<tr>
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<td>Order No.</td>
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<tr>
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<td>Order Date</td>
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<td></td>
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<td>Originating Dept.</td>
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<tr>
<td></td>
<td></td>
<td>Costing Centre</td>
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<td>Part No.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Material used in Production &amp; Unit</th>
<th>Partial Amount</th>
<th>Whole Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mat.</td>
<td>Mat. No.</td>
<td>Qty. used</td>
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<tr>
<td>1.</td>
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<td>2.</td>
<td></td>
<td></td>
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<tr>
<td>3.</td>
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<td>5.</td>
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</table>

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Av. Hourly Wage</th>
<th>Hrs. Worked</th>
<th>I.D.</th>
<th>Files</th>
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</thead>
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<tr>
<td>Lathe</td>
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<td></td>
<td>I.D.</td>
<td>Files</td>
</tr>
<tr>
<td>Saw</td>
<td></td>
<td></td>
<td>I.D.</td>
<td>Files</td>
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<tr>
<td>Welding</td>
<td></td>
<td></td>
<td>I.D.</td>
<td>Files</td>
</tr>
<tr>
<td>Carpentry</td>
<td></td>
<td></td>
<td>I.D.</td>
<td>Files</td>
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<table>
<thead>
<tr>
<th>Machines</th>
<th>Hourly Machine Cost</th>
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</thead>
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<tr>
<td>Lathe</td>
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<tr>
<td>Saw</td>
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<td>Welding</td>
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<tr>
<td>Mining</td>
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<tr>
<td>Carpentry</td>
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<table>
<thead>
<tr>
<th>Other Expense</th>
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</table>

<table>
<thead>
<tr>
<th>Cost of one unit:</th>
<th>Stores Receipt No:</th>
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<tr>
<td></td>
<td>Workshop Engineer</td>
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<td></td>
<td>I.D. = 1,000 Files</td>
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*Date of Completion:*

(i) I.D. = 1,000 Files.
B.A: UNOE SHEET
OF
THE IRAQ CEMENT PUBLIC COMPANY

AS AT 31ST MARCH 197-

<table>
<thead>
<tr>
<th>First/Fixed Assets</th>
<th>I.D.</th>
<th>First/Fixed Liabilities</th>
<th>I.D.</th>
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<tbody>
<tr>
<td>Non-movable Assets</td>
<td>6,087,133</td>
<td>Capital</td>
<td>7,258,445</td>
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<tr>
<td>Machines &amp; Equipment</td>
<td>8,473,611</td>
<td>Reserve</td>
<td>4,920,225</td>
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<td>Tools &amp; Spare Parts</td>
<td>106,435</td>
<td>Long-term loans</td>
<td>3,938,541</td>
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<tr>
<td>Vehicles &amp; Transport.</td>
<td>1,190,426</td>
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<tr>
<td>Furniture, Clerical Equipment &amp; Books</td>
<td>260,760</td>
<td>Total Fixed Liabilities</td>
<td>16,117,211</td>
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<tr>
<td>Suspended Income Expenses &amp; Balance</td>
<td>372,135</td>
<td>Second/Liquid Liabilities</td>
<td>3,767,134</td>
</tr>
<tr>
<td>Projects under construction</td>
<td>3,601,667</td>
<td>Creditors &amp; Cr.Bal.</td>
<td>353,964</td>
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<tr>
<td>Depreciation</td>
<td>8,620,769</td>
<td>Fin. Allocations</td>
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<td>Overdraft</td>
<td>770,431</td>
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<table>
<thead>
<tr>
<th>Total Fixed Assets</th>
<th>I.D.</th>
<th>Total Liqu. Liab.</th>
<th>I.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>11,417,398</td>
<td>4,891,529</td>
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</table>

<table>
<thead>
<tr>
<th>Second/Liquid Assets</th>
<th>I.D.</th>
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</thead>
<tbody>
<tr>
<td>Stocks</td>
<td>4,419,598</td>
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<tr>
<td>Documentary Credit</td>
<td>923,123</td>
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<tr>
<td>Sundry Debtors and Balances due</td>
<td>2,190,892</td>
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<tr>
<td>Cash in Hand &amp; at Bank</td>
<td>311,578</td>
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<tr>
<td>Investments &amp; Loans:</td>
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<td>A - Dividends</td>
<td>566,151</td>
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<tr>
<td>B - Loans</td>
<td>180,000</td>
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<table>
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<th>Total Liquid Assets</th>
<th>I.D.</th>
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</thead>
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<tr>
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<td>9,591,342</td>
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<table>
<thead>
<tr>
<th>General Total of Fixed and Liquid Assets</th>
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<tr>
<td></td>
<td>21,008,740</td>
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Table No. 19.
## Table No. 20

Baghdad on: ~~/~

**STATE ORGANISATION OF CONSTRUCTION INDUSTRIES**

**THE IRAQ CEMENT PUBLIC COMPANY**

**Budget and Costing**

**Factory:**

**Date:**

1. **Production and Daily Supply & Balances**

<table>
<thead>
<tr>
<th>A - Cement</th>
<th>Resistant</th>
<th>Normal</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>T/K</td>
<td>T/K</td>
<td>T/K</td>
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<tr>
<td>1. Production</td>
<td></td>
<td></td>
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<tr>
<td>2. Sales</td>
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<tr>
<td>3. Balance</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   | B - Clinker |            |        |       |
   | 1. Production |          |        |       |
   | 2. Expense   |          |        |       |
   | 3. Balance   |          |        |       |

2. **Raw Materials**

<table>
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<tr>
<th>Lime Stone</th>
<th>Gypsum</th>
<th>Soil</th>
<th>Sand</th>
<th>Iron Stone</th>
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<tbody>
<tr>
<td>T/K</td>
<td>T/K</td>
<td>T/K</td>
<td>T/K</td>
<td>T/K</td>
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</tbody>
</table>

   | 1. Materials |        |      |      |            |
   | 2. Expense   |        |      |      |            |
   | 3. Balance   |        |      |      |            |

3. **Factory Problems and Major Machine Stoppages**

<table>
<thead>
<tr>
<th>(i) T= Tonne; K= Kilogram</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
</tr>
<tr>
<td>2.</td>
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<tr>
<td>3.</td>
</tr>
<tr>
<td>4.</td>
</tr>
</tbody>
</table>
FINANCIAL AFFAIRS MANAGER'S DUTIES

1. To supervise the accounts department and to ensure the efficiency of work and personnel.

2. To allocate work and duties to different departments according to general interest.

3. To prepare the annual forecast budget for the Company in concert with other divisional managers and heads of department within the committees created for this purpose and to follow the execution of the budget, and supervise credit expenditure by applying the required regulations.

4. To supervise the financial affairs of the Company and enter in the relevant journal all financial transactions which have taken place - payment, receipt, stores, production, sales, assets and liabilities - through relevant documents.

5. To pay salaries, wages allocations, gifts, loans and other expenses per regulations.

6. To supervise the stock inventory of the processes of the Company and verify stock levels per regulations.

7. To supervise check lists and tables and documents before spending, and ensure relevant budget allocations.

8. To check Company obligations and ensure their entry in the journal per regulations.

9. To study the problems of taxes and levies to be paid by the Company.

10. To supervise the Balance Sheet, Cash Statements and financial and production situation in addition to periodical and seasonal
11. To analyse the annual budget and delayed account, and the profit and loss account and present a point of view and recommendations.

12. To supervise the organization of the filing of documents specialising in the accounts division and its departments.

13. Any additional duties required.
APPENDIX C

Bibliography
BRITISH, AMERICAN AND EASTERN EUROPEAN PUBLICATIONS

R.L. Ackoff

Allen & P. Gerstberger

R.N. Anthony

R.N. Anthony

R.N. Anthony

R.N. Anthony, J. Dearden, R. Vancil

M. Barnes, A. Fogg, C. Stephens, L. Titman

L. Von Bertalanffy

R. Beresford Dew & K.P. Gee

C.I. Bernard

H.A. Black, J.E. Champion & R.G. Brown

K.E. Boulding

R.O. Boyce
<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Title and Details</th>
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<td>(h)</td>
<td></td>
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<td>Author(s)</td>
<td>Title/Details</td>
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<td>-----------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
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<tr>
<td>P.R. Lawrence &amp; J.W. Lorsch</td>
<td>Organisation and Environment, Boston, Harvard University, Division of Research, 1967.</td>
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<td>Title</td>
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<td>-----------------------------</td>
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<tr>
<td>Ota Sik</td>
<td>Economic Planning and Management in Czechoslovakia, Orbis - Prague, 1965.</td>
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</tbody>
</table>


Iraqi Publications


H.A. al-Dazaz

Education March during a year - al-Jumhuriyah Newspaper, 10th January, 1978, Baghdad.

M.A. al-Difai

Study of the actual and probable labour force required by the Organisations of the Ministry of Industry and Mines and the Mixed Sector, Baghdad, 1974.


G. Halaby


G. Halaby


A. al-Hamdani


Dr. A. Almanufi

Development planning in Iraq, Historical Perspective and New Directions, six lectures Baghdad, April, 1975.

A. Hussein


S. Hussein

Discussions of the factors that affect low productivity, for the period 7 - 9 September, 1976. Wa'ai al ummal. Weekly magazine issued by the Iraqi Trade Union, No. 380, 18th September 1976, Baghdad.

F. Jalal


T. al-Jazzrawi


H.A. Rashid *Toward new understanding of managerial leadership. Alam al-Sina'a Magazine, No. 16, 1974.*


S. al-Samawi *Management Apparatus and the Change of Tasks, Ath-Thawra Publications, Baghdad, 1974.*


Some of the clauses in R.C.C. Decree No. 222 of 24th May, 1972.


<table>
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<tr>
<th>Material Detail</th>
<th>Spec.</th>
<th>Quan.</th>
<th>Price</th>
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<th>Total Quan.</th>
<th>Price</th>
<th>Fils</th>
<th>Total</th>
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<th>Price</th>
<th>Fils</th>
<th>Total</th>
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**SLURRY ALLOWED TO BASIN**

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**KWH Meters:**

- R. M. 2.
- R. M. 3.