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Employee Perceptions in Multinational Companies:
A Case Study of the Saudi Arabian Basic Industries
Corporation

by

Abdullah Hamad Al-Salamah

A thesis submitted to the Faculty of Social Science
in candidacy for the degree of Doctor of Philosophy
in Economics

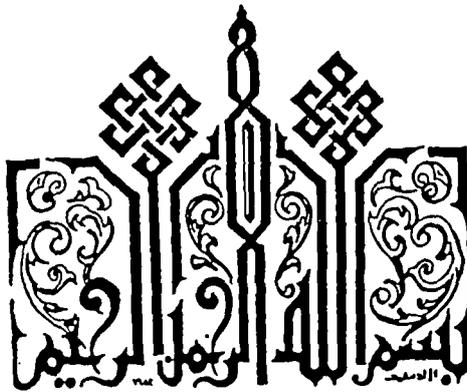
Department of Economics, University of Durham

April 1994

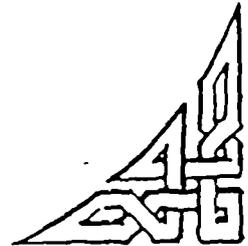
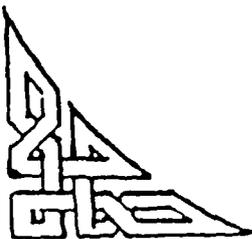
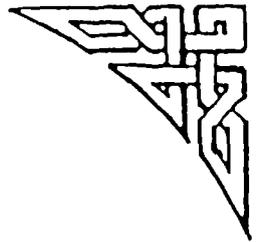
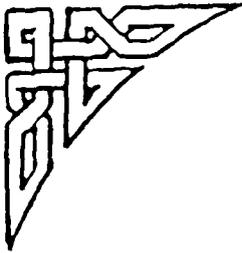
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IN THE NAME OF ALLAH,
THE MERCIFUL,
THE MERCY-GIVING



Abstract

This thesis discusses perceptions of work environment and job satisfaction among the employees of the multinational companies which make up the Saudi Arabian Basic Industries Corporation (SABIC); and also the impact of multinational companies (MNC's) on human resource development in Saudi Arabia in general. Chapter 1 outlines the research contents. Chapter 2 describes and analyses Saudi economic planning and development, in order to gain an understanding of economic growth over the major planning periods and of how oil income has been used to improve the economic sectors, as well as to point to some problems which still exist in the economy. Chapter 3 analyses and discusses industrial and petrochemical development, in order to assess the government's role and policy in such development. Chapter 4 reviews the literature on MNCs in developing countries, in order to gain the information required for an assessment of the role MNCs play in the economy. Chapter 5 is concerned with Saudi Arabian culture and working practices, an important topic from the point of view of judging the role of MNCs on the economies of host countries such as Saudi Arabia. Chapter 6 discusses the research methodology and techniques used in the study and their rationale. Chapters 7, 8, 9 and 10 discuss and interpret the data obtained. The main objective is to examine SABIC's and its foreign partnerships' attitudes towards attracting and keeping local labour, and to examine whether local employees are satisfied on various matters such as training, salaries, promotion opportunities and participation in decision-making.

The study findings indicate that the majority of SABIC employees are Saudi nationals and that SABIC activities have helped in creating job opportunities directly and indirectly. The findings indicate that MNCs do not participate effectively in training local employees in their home countries. However, most employees of all nationalities were satisfied with the management system from the point of view of participation in decision-making, relations with manager or supervisor and job evaluation.

Chapter 11 examines the impact of MNCs on capital investment and concludes that foreign companies have been unable to transfer large financial resources to the Saudi economy, but have increased the mobility of local money and have attracted greater local investment. The Saudi balance of payments has benefited from the production of various goods for export and for import substitution. Regarding transfer of technology, the study found that great benefits have accrued from using advanced technology which has made hydrocarbons more productive and valuable products. However, foreign partnerships have not participated in R & D activities, and this has represented a lost opportunity. Finally, the study found that economic sovereignty has not been harmed by the activities of MNCs owing to the joint ownership of capital.

Dedication

I wish to dedicate this doctoral thesis to my brother, Saad, in grateful appreciation of the encouragement he has given me in my work and the support he has offered to my family during the time I have spent abroad in the United States and Great Britain.

Declaration

The work presented in this dissertation is entirely my own and was carried out between October 1991 and April 1994 at the University of Durham. This material has not been previously submitted to any other university for a degree or diploma.

Note on Copyright

The copyright of this thesis rests with the author, Abdullah H. Al-Salamah. No extract from it should be published without his prior written consent, and all information derived from it should be acknowledged.

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First and foremost I am grateful to Allah (S.W.T) for His blessings. Through His will and with His help I have been able to complete this thesis.

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I am also deeply indebted to my wife and children, who have shown great patience during the course of my study. I also wish to express my heartfelt thanks to my loving mother in Saudi Arabia.

List of Abbreviations

ARAMCO: Arabian American Oil Company
BTU: British Thermal Unit.
CPO: Central Planning Organisation.
DCs: Developing countries.
EC: European Community.
EDC: Economic Development Committee.
GCC: Gulf Co-operation Council.
GDP: Gross Domestic Product.
GNP: Gross National Product.
GSP: Generalised System of Preferences.
HADEED: Saudi Iron and Steel Company.
IBN HAYYAN: National Plastic Company.
IBN SINA: National Methanol Company.
IBRD: International Bank for Reconstruction and Development.
ICRD: Industrial Complex for Research and Development.
JP: J. P. Morgan
K-W: Kruskal-Wallis. One way analysis of variance by rank.
LDCs: Less Developing Countries.
MNCs: Multinational corporations.
OPEC: Organisation of Petroleum Exporting Countries.
PE: Polyethylene
PETROMIN: Petroleum Ministry
PIF: Public Investment Fund.
RD: Research and Development.
REDF: Real Estate Development Fund.
SAAB: Saudi Arabia Agriculture Bank.
SABIC: Saudi Arabian Basic Industries Corporation.
SADAF: Saudi Petrochemical Company.
SAMA: Saudi Arabia Monetary Agency.
SAMAD: Al-Jubail Fertilizer Company.
SCB: Saudi Credit Bank
SHARQ: Eastern Petrochemical Company.
SIDF: Saudi Industrial Development Fund.
SPB: Supreme Planning Board.
SPSS: Statistical Package for Social Science.
SR: Saudi Riyal. Exchange rate fixed at \$1=SR3.75.

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Chapter One

Introduction

1.1 Introduction

The aim of this chapter is to provide an introduction to the contents of this study. It seeks to justify each chapter and explain its purpose within the study. There is a statement of the problem, and why this has been chosen as an area for study.

The main motivations for this study were: the growing activities of foreign companies in Saudi Arabia; the lack of significant studies in this area, especially in Saudi Arabia; the growing importance of the private sector in the Saudi economy; and the proliferating literature during the 1990s on the problems of employing more Saudi workers in the private sector.

1.2 Structure and scope of the study

The study has twelve chapters, which cover the most important current issues with respect to the multinational corporations' effect on the economy of Saudi Arabia, taking the foreign partners of the Saudi Arabian Basic Industries Corporation (SABIC) as a case study. This study concentrates particularly on the effect on human resources, discussing and analysing the problems of employment and job satisfaction with special reference to the employment of local people. The purpose of this is to examine whether SABIC and its foreign partners are committed to their avowed aim of employing more Saudi nationals, to point out any problems facing the employees, and to suggest ways that these might be solved if SABIC wishes to attract and keep its employees more content, so that they can serve in the company for a longer time.

Chapter 1 is an introductory chapter, providing a framework for the discussion, as well as explaining the environment of, and the motivation for, the study.

Chapter 2 describes and analyses the economic situation in Saudi Arabia, beginning with the start of oil production, and taking the income from oil as the

cornerstone from which the economy was able to develop other economic sectors. The discussion of Saudi oil policy includes arguments about oil production and its rationality, and how it relates to the diversification of the economy, to enable the country to avoid being dependent on a single natural resource, and modifying and creating the infrastructure of a modern economy.

Planning and development as a basis for economic growth is also analysed to provide information about the performance of the economy as a result of the government's extensive support of the private sector, from which SABIC benefits considerably.

Chapter 3 is devoted to an analysis and discussion of industrial and petrochemical development, starting with a discussion of the industrial sector which indicates the problems of the industries and the government's policies for overcoming these problems by creating government agencies to finance the industrial sector. It analyses the impact of direct funding by the government on the industrial sector in general and the hydrocarbon industries in particular. The new financial policy which changed the source of funding has had an impact on SABIC's finances.

Chapter 3 also contains a comparative discussion of industrial success. SABIC's objectives and the reasons for it engaging in joint ventures with foreign companies, rather than taking full responsibility for industrial operations, are also discussed. These issues have been made the focus of this chapter because it is important to understand the significance for the Saudi petrochemical industry of its choosing such a policy. The chapter provides a discussion of the petrochemical industry, analysing the advantages and disadvantages of such products, and how the foreign partnerships should solve these problems.

Chapter 4 concerns the relevant literature on multinational companies (MNCs) in developing countries. The introduction points to the various different beliefs about the impact of MNCs in these countries, and the chapter addresses seven main issues concerning the long term effects of MNCs' involvement in host country economies. These are: effects on capital investment; transfer of technology; research and development; management and management skills; effects on trade and on the balance of payments; effects on local employment; and effects on sovereignty. Since the study is more concerned with the human aspects of industry, attention is given to literature about the role of training strategy, and its effectiveness. This chapter aims to provide a basis for the other points to be discussed in this thesis, examining whether the Saudi economy has accrued net benefits or losses as a result of SABIC's activities.

Chapter 5 is concerned with the culture of Saudi Arabia and Saudi working practices; it starts by discussing and analysing literature on cultural behaviour and its relation to job satisfaction. Saudi Arabia is characterised by unique working values; hence there is a need for an understanding of its people's views about work, such as which types of work are and are not acceptable to them. The influence of religion and the management decision making style is discussed. The reason these issues are discussed is so as to provide a better understanding of Saudi cultural values, as these affect SABIC's joint venture partners. The chapter focuses on the literature concerning the employment of Saudi nationals in the private sector, in order to point out the problems seen by the employers, the employees and Saudi officials. This is necessary in order to establish a clear view about how to encourage local employees to accept working in the private sector. The last point in the chapter concerns previous studies of the impact of MNCs on Saudi Arabia.

Chapter 6 deals with the methodology of the research, and includes a discussion of the objectives and scope of the research and the rationale behind choosing specific variables in examining SABIC's and the MNCs' policies towards

employment. This is followed by a discussion of the research instrument (a questionnaire) which was used in collecting the data. The justification for using both interviews and questionnaires, in that this gives the researcher the ability to support the arguments of both SABIC and its employees to serve the aims of the study, is provided in this chapter. The pilot study and its objective are also discussed. This is followed by an explanation of the questionnaire and its contents, and an acknowledgement of the people who have been consulted. The chapter also has a section devoted to the target population, and how and why they were chosen. Finally, the chapter presents and discusses the choice and use of the statistical techniques which were employed in the presentation and interpretation of the data obtained from the questionnaire, in order to justify the researcher's use of these techniques.

Chapters 7-10 deal with the data presented, discussed and interpreted, which was obtained from randomly selected SABIC employees working in the six companies discussed in Chapter 6. The interviews conducted with SABIC's top management are also used in this section to analyse and discuss the answers in order to gain a clearer idea about the problems which could face the employees, with special reference to local employees. It was decided to divide the various nationalities of the employees into three groups to guide the discussion; these groups are Saudi employees, western employees and employees from developing countries. In order to help the reader follow the discussion more clearly, it was decided to place the tables close to the discussion in the text.

The analysis, discussion and interpretation of the data in relation to the sampling characteristics from the questionnaire is important. This relates to social issues such as marital status, the number of people in the family of the employee, the family's acceptance of the employee's job, and the time spent with the family. This provides a basis for examining whether the employees are satisfied or not with the social issues in connection with their work. This was discussed so as to find out which

issues they are happy with, and which they are not. It is very important to know more about the number of people in the family because this could be used as an indication for the level of remittance sent abroad.

Chapter 8 also presents data regarding the companies' policies on human resource development including training and experience acquisition, to provide more information about the employees' level of satisfaction with respect to various issues in training and about how the foreign partners participate in such activities.

The employees' level of satisfaction with respect to salary, pay increases and promotion opportunities is also discussed in Chapter 9. The aim was to provide a better understanding of problems which could appear in this area, to find out whether the employees are satisfied and attracted by such factors.

Chapter 10 provides an analysis of the data with respect to job satisfaction and the management environment, the aim being to explore the issues in this area, starting with a discussion of participation in decision-making and relating that to the question of social values discussed in Chapter 5. This is followed by a discussion of the relations between managers and supervisors, and the attitudes of managers towards their employees. Job regulations and procedures, job evaluation, working conditions and the environment, and job requirements are all discussed in this chapter. The aim is to provide a clear understanding about whether SABIC is attractive or unattractive to local employees. If there are any problems regarding any of these issues it will be suggested that they be taken into account by SABIC in the future.

Chapter 11 addresses five issues regarding other effects of SABIC's foreign partners. These are: capital investment; the balance of payments; the transfer of technology; research and development; and sovereignty. These economic variables and the long term effects of the impact of the MNCs are discussed, since the effect of

management on employment and training has already been discussed in the previous data analysis and interpretation. This could provide a complete assessment of SABIC's and the MNCs' effect.

Chapter 12 presents a general conclusion to the study, and summarises the work as a whole. The main results and findings are followed by a set of recommendations to solve the problems which are identified in this study: first, those which deal with SABIC officials, where the management of SABIC should solve the problems; and second, those problems which should be solved by Saudi government officials.

Finally, the researcher hopes that the study may add to the knowledge relating to the impact of MNCs in their host countries, especially countries like Saudi Arabia, which concentrate on using MNCs as joint partners in their most significant industrial sectors as a basis for diversifying the national economy.

Chapter Two

Saudi Economic Planning and Development

2.1 The Saudi economy before 1937

Before King Abdul-Aziz bin Abdullrahman Al-Saud's unification of Saudi Arabia in 1932 there was no economic integration or economic organisation in that country, in terms of either the government or private sectors. In the north and south of Saudi Arabia economic activity was confined to the raising of livestock by the Bedouin, basic agriculture around the sources of water, fishing on the east and west coasts and the production of simple tools by craftsmen to serve other simple activities.

However, in the west of Saudi Arabia, in Hijaz, there was greater economic activity, specifically in the trade and services sectors, resulting from pilgrims visiting the holy sites of Mecca and Medina. The population of this region was completely dependent on the consumption and other spending of this pilgrim group. People in other parts of the country could not benefit from this economic activity, due to the problems of security. Most of the population were too poor even to have sufficient livestock to survive. However, the unification of the country in 1932 completely solved the security problem, and this created appropriate conditions for economic development.

In 1925, King Abdul-Aziz had £3,000 and \$4,000 in the treasury; the treasury revenue was approximately equivalent to \$500,000 per annum, which was received from two sectors: charges paid by pilgrims to the holy places (the main source); and the *Zakat* which was paid by every person who had what was called the *nesab*. This was determined by Islamic law at a very low proportion of the real value or net profits generated from the renting of property, or from commercial activities. Therefore it can be argued that there was no solid tax base that the Saudi government could rely on; this will be discussed in greater detail below.

2.2 The Saudi economy after 1937

Between 1932 (the date of unification) and 1960 Saudi Arabia received a measure of foreign aid. During the 1960s the United States was a leading source of aid, particularly military assistance; this was a result of the involvement of American oil companies in Saudi Arabia, a process started by the Standard Oil Company of California in 1933, followed by Texaco, Exxon and Mobil. During the mid and late 1970s Saudi Arabia undertook the role of assisting other poor countries as a result of the increasing revenues from oil production.

Oil was first produced in 1938, and in that year it generated \$100,000. This was insufficient to meet the government's requirements. Because of this, foreign assistance was needed.

Figure 2.1 Total amount of Saudi oil revenue 1938-1993 (billions of dollars at current prices)

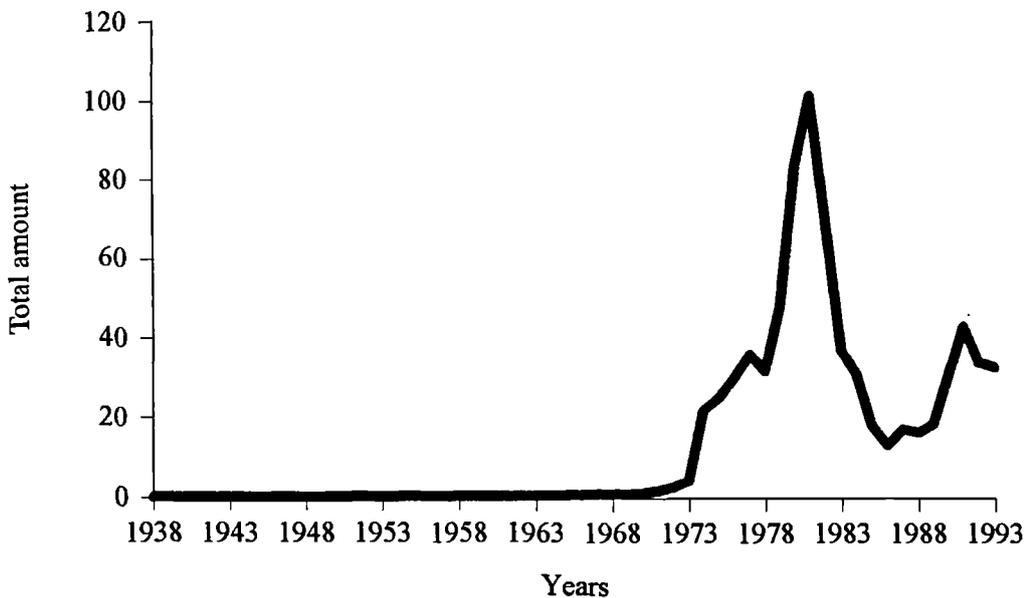


Table 2.1
Saudi oil revenue 1938-1993 (millions of dollars at current prices)

Year	Total amount	Year	Total amount
1938	0.1	1966	789.9
1939	3.2	1967	903.6
1940	1.2	1968	926.4
1941	1.0	1969	949.1
1942	1.1	1970	1,214.0
1943	1.1	1971	1,884.9
1944	1.7	1972	2,744.6
1945	4.3	1973	4,340.1
1946	10.4	1974	22,573.5
1947	18.0	1975	25,676.8
1948*	52.5	1976	30,754.8
1949	39.1	1977	36,538.3
1950	56.7	1978	32,233.8
1951	110.0	1979	48,435.2
1952	212.2	1980	84,466.4
1953	169.8	1981	102,095.2
1954	236.3	1982	70,478.6
1955	340.8	1983	37,351.6
1956	290.2	1984	31,470.3
1957	296.3	1985	18,322.9
1958	297.6	1986**	13,554.8
1959	313.1	1987	17,489.3
1960	333.7	1988	16,638.0
1961	377.6	1989	18,860.0
1962	407.9	1990	31,122.2
1963	607.4	1991	43,700.0
1964	524.2	1992	34,642.0
1965	664.1	1993	33,215.0

*The 1948 figure looks like a clerical error. If the revenue were proportional to the oil production the total revenue would be less than 52.5 million dollars.

**Excluding participation profits.

Source: Figures for 1938-61, are from Young (1983, p. 125). The other figures are from SAMA Annual Reports, except for 1991-3 which has been estimated.

Figure 2.1 and Table 2.1 show the increasing rate of the oil revenue which rose continuously from 1944 to 1981. The slow increase in the period between 1940 and 1944 related to the Second World War and the problems of exporting oil. The tremendous rise in revenue between 1974 and 1981 was caused by a rise in Saudi oil production and a rise in prices. For example, in 1980 Saudi oil production reached eleven million barrels per day and the price of crude oil reached \$38 per barrel on the world market. This was due to the impact of the Iranian revolution and the Iran-Iraq War in 1980.

From early 1982 onwards a world glut of crude oil led to a decline in both sales and production of Saudi oil. The period 1983-88 was the most difficult time faced by all oil exporting countries, especially Saudi Arabia as its economy is especially dependent on the revenue from oil. During this period the Saudi government was acting positively to protect the oil price through the acceptance of quota ceilings. In the spring of 1983 daily production fell to below three million barrels per day. In 1986, Saudi oil policy changed to accept the role of a 'swing' producer to prevent a price war. This would only be done if the other OPEC members accepted their quotas and did not over-produce, which did not happen. This led to the negative 'swing producer effect' on Saudi oil revenue, as is shown in the entry in the table for 1986, when the revenue (excluding participation profits) declined to \$13,554.8 million.

Oil revenue started to rise continuously from 1989 up until 1992. Strong global demand for oil enabled Saudi Arabia to increase its quotas above five million barrels per day. Following Iraq's invasion of Kuwait in 1990, Saudi Arabia increased its production, to compensate for the shutdown of Iraqi and Kuwaiti exports, to the level of eight million barrels per day. This level of production was maintained through 1991 and 1992.

Saudi Arabia is a developing country struggling to develop its domestic economy, as it depends on the oil sector as a predominant resource. The fluctuation of the price of oil deeply affected economic development. For example, during the Fourth Development Plan (1985-90) the Saudi government was forced to decrease its spending below the level of the planned expenditure of SR1,000 billion. Beyond this the government was forced to use its reserves to finance the budget deficit, which was itself a result of the decline in oil revenues. The government reserve declined to \$13.712 billion in 1991 to finance this budget deficit. The government was forced to borrow locally to cover its expenditure with bond issues, and to borrow from the international banking community.

2.3 Saudi oil policy

Table 2.1 also shows that between 1979 and 1981 Saudi Arabia produced more oil than it wanted to from a purely financial point of view. The purpose of this was to control the increasing price of oil so as to minimise the negative impact on the world market of the loss of Iranian and Iraqi oil production.

Saudi oil policy benefits the oil importing countries, but it has been seen by some economists as increasing the voice of Saudi Arabia in world affairs, and as being of benefit to Saudi Arabia as a means of financing its economic development and protecting its overseas assets held in dollars.

For example, Stevens in 1982 argued as follows:

A very high oil price or problems over oil availability could seriously damage the economic health of customers as a result of recession or balance of payments problems, and so on. For Saudi Arabia this appears to have been a very major consideration in their calculations ... A large part of the Kingdom's foreign assets are held in dollars. Thus any action that would damage the dollar would also damage the value of these assets. (Stevens, 1982, p. 37)

Clearly, Stevens has specified Saudi benefit as the only motivation behind Saudi policy-makers' decisions over the level of oil production. It is implied that when the Saudis increased oil production this was done to protect the value of the dollar. It is not correct, however, to specify this reason, or any other reason which could imply a benefit solely for the Saudi economy, as the reason for Saudi oil production policy. Clearly Saudi Arabia's and other countries' benefit has been considered when the Saudi government takes such a decision, but this is not necessarily the only reason. Saudi policy-makers had reacted positively in 1979, when the world oil market lost four million barrels per day because of the Iranian revolution, followed by the Iran-Iraq war in the 1980s; when these problems were reduced, production was reduced to seven million barrels per day. If Saudi oil production had not expanded to ten million barrels per day to reduce the impact of the Iran-Iraq conflict on the price of oil, then the price of oil would have reached an unacceptable level for the consumer. A further example of this attitude on the part of the Saudi government is the events of 1990-91, when Saudi oil production was increased to cover the shortage resulting from the Iraqi invasion of Kuwait.

The above argument does not imply that Saudi Arabia did not reap its own benefit when it decided to increase its production. The main reason for the Saudi decision to increase the oil output was to secure the long term health of the oil market, which depends on the long term health of its consumer. This requires adequate supplies and reasonable prices. Raising the price of oil on the world market would speed up the substitution of other energy sources for oil, which would not benefit the Saudi Arabian government. It would not wish to see the main national resource being undermined in the world energy market.

The second reason for the Saudi decision is that increasing the oil production increased the total revenue that could be used for the diversification of the economy

away from its virtually total dependence on crude oil exports. This is shown by the development of the other industrial sectors, especially the movement 'downstream' in the petrochemical industry as a whole. This movement could result in structural changes in the Saudi economy such as increasing the value added of natural gas which had no value before 1980. This will be discussed later.

The third reason was that, as a developing country, Saudi Arabia needs to develop its basic infrastructure such as roads, ports, schools and hospitals, all of which could be financed only through oil revenue. There are minimum revenue requirements for creating such infrastructure and services.

The final reason is a political one. Saudi Arabia would like to have good relations with other nations, especially those of the west. This could have a positive impact on the security of the country. This policy benefited the country in the Gulf Crisis in 1990 when Iraq invaded Kuwait and threatened Saudi Arabia; the western nations helped Saudi Arabia to defend its land to stop Saddam Hussein from threatening Saudi Arabia, and brought about the eventual liberation of Kuwait.

From the above arguments it can be concluded that it is in the interests of both Saudi Arabia and the oil importing countries to increase the Saudi output of oil. The supply of oil must be strictly controlled as there is no equivalent policy for dealing with the long term needs of the country, as each barrel of oil represents part of the country's total capital stock which is not replaceable: that is, any barrel extracted is no longer in the reserves. Saudi crude oil reserves could last for only eighty years, after which time the country needs to be completely independent of oil revenue.

Another important issue is that the equilibrium condition to maximise the profit from oil production does not occur when the marginal revenue equals the marginal cost, as there could be a situation where the marginal revenue is greater than the

marginal cost and the country could not afford to produce more because this is a depletable resource.

Because of this, if part of the revenue is not invested to generate diversified future economic activity this would represent a long term problem for the Kingdom. Since domestic productive capacity cannot be expanded at the same rate as oil revenues, as in the past, a proportion of oil revenue must be directed to the western world for investment. The important issue that economic policy-makers have to be aware of is the future of such investment. The real value of these assets may shrink because of inflation in the western economies and foreign exchange fluctuations. A study by Aburdene has shown that, in 1974 dollar prices, the \$129.5 billion foreign assets of OPEC countries in the industrial countries would be worth only \$75.1 billion in 1978, in other words the power of the dollar has fallen by 42% simply because of the devaluation of the dollar (*Middle East Economic Survey*, vol. xxii, no. 6, 27 November 1978, supplement).

In 1983, the Saudi Arabian government was holding a total of approximately \$120 billion in foreign assets; this amount was submitted to a reduction of 5 per cent per annum in real terms, due to world inflation and the decline in the value of foreign currencies. The oil policy-makers of 1979 to 1982 could be blamed for deciding to deplete the valuable oil resources to run up current account surpluses that promptly depreciated. It would be far better to slow and limit the oil exports to the amount required for the development plans. This would not benefit oil importing countries as it would cause greater fluctuations in the world oil price than those of the late 1970s and early 1980s. This would result in greater inflation, slower growth or deeper recession, with more unemployment for the oil consuming countries.

From the above discussion we can argue that Saudi oil policy has benefited both Saudi Arabia and other countries.

2.4 Planning and development

Planning is considered an important factor for developing countries aiming to improve their economies. It is vital for a developing country to build up its basic economic infrastructure and develop its economic sectors to contend with other countries with a more advantageous status. The nature of the planning is predetermined by the needs and requirements of the country and its society. It is most important to establish a plan which matches the needs of the country and of the people. Saudi Arabia is seen as a developing country and it has both a unique economic structure and a unique society.

As was made clear earlier, Saudi Arabia was one of the poorest countries in the world, with no basic economic infrastructure. Consequently it was crucial to create and carry out economic development plans which could change the economic structure and develop the country, in this way changing the lifestyle of the people. This is particularly true following the oil windfall of the 1970s. The country's resources should be used according to rationally determined priorities in the pursuit of essential goals.

Formal planning only began to be carried out in 1970, but it had been formulated before this date. An example is in 1958, when the country was facing tremendous financial problems, and was facing further challenges and problems, as discussed below.

According to Aba-Alkhail (1988), Prime Minister Faisal (King Faisal) established an Economic Development Committee (EDC) in 1958. He appointed Anwar Ali, a highly qualified Pakistani, as the new Governor for the Saudi Arabian Monetary Agency (SAMA). The main reason for creating the Committee was not to produce a development plan; its aim was to overcome the immediate financial

problems. The EDC included six financial, economic and industrial advisers, including the Governor of SAMA, and the Committee was under the supervision of the Minister of Finance and National Economy. There were also additional members from other government departments, such as commerce, agriculture, education, health, oil and minerals, and communication.

This body did not have an easy assignment, especially since, when the EDC started its planning, there was little reliable data, no skilled personnel, poor communications, and a shortage of money to finance the project. This situation forced King Faisal in 1960 to request assistance from the International Bank for Reconstruction and Development (IBRD). Experts were brought to Saudi Arabia to study the economic problems and suggest the best way to develop the available economic resources.

After visiting the Kingdom the experts of the IBRD had written their report which suggested that Saudi Arabia should begin a programme of modest economic development, to be accelerated yearly. The experts also suggested that the Saudi government should create an economic development board to take responsibility for planning economic development activity in the public sector. The report also specified that financial and economic stability 'were to be maintained as a necessary prerequisite to sound economic development' (Aba-Alkhail, 1988, p. 96). The Saudi government was advised to start with public projects to generate the maximum benefit to the greatest number of people. Examples of these projects were improvements in the water and electricity supply, the improvement of agricultural output to encourage livestock production, and investment in communication facilities, education and health.

Many recommendations of the IBRD were accepted and the Supreme Planning Board (SPB) was created in January 1961. Policies were drawn up for economic development among the various government departments, and the Board would follow up their implementation. However, the six members of the SPB were also members of the Council of Ministers, which led to replication and overlapping of discussion.

The SPB did not succeed as had been expected, because it faced the same problems as the EDC. There were shortages of qualified personnel, technicians, engineers and other experts. This situation could be seen as the main reason for the failure of both the SPB and the EDC. The Saudi government asked the United Nations to send a Reconnaissance Mission to study the problem in 1964, and invited the Ford Foundation to study the same problem. This led to a suggestion to establish a new organisation to take responsibility for the economic development plan, called the Central Planning Organisation (CPO), which was formed in 1965. Planning units were created in each government department to form links with the CPO in all issues of planning. The role of the CPO was determined in a Council of Ministers resolution:

It was to report on the economy of the Kingdom, the scope of progress achieved and projected developments. The organisation was also to prepare a five year economic and social development plan to be approved by the Council of Ministers. The Five Year Plan was incorporated into the country's annual budget. In addition, the organisation was to advise the King on technical matters when necessary and assist ministers in their planning affairs. (Aba-Al Khail, 1988, p. 99)

The CPO actively studied the projects sent from the other ministry's planning departments and then tested the projects in terms of their feasibility, the social priority of the projects and the government's ability to provide the necessary expenditure.

2.4.1 The First Development Plan (1970-1975)

The First Development Plan was drawn up by the (CPO). The total cost of the plan was estimated to reach SR41 billion. The stated objectives were: to develop the human resources of the Kingdom; to increase the participation of the various sectors of the economy to enable them to share in the development; and to diversify the economic resources enabling them to participate more effectively in the national revenues. The diversification actually meant reducing the country's overwhelming dependence on oil revenues; for example, in 1969 oil accounted for approximately 50 per cent of GNP. The Plan aimed to reduce this to 47 per cent.

From its objectives it is clear that the Plan aimed to reduce the country's dependence on oil income and improve the living standards of the people. This would serve to maintain economic and social stability.

The Plan had an aim of increasing the total GDP from SR16 billion in 1969/70 to SR26 billion by 1975/76, which would represent an annual growth of 9.8 per cent.

It is not so difficult for a country to develop and carry out such a plan, but the most important component is its results. During the first Five Year Plan more than 260 new factories were set up, and GDP growth reached 13.5 per cent annually. The objective of the Plan was to increase the share of non-oil output in GDP. Unfortunately this fell due to the oil sector's share of GDP increasing from \$3.89 billion to \$39.65 billion in 1975, which reduced the share of the non-oil sector from 46.3 per cent to 20.8 per cent.

The first Five Year Plan was largely experimental and reached some of its objectives for improving living standards such as improving the water supply, the roads, health and educational facilities, and housing.

2.4.2 The Second Development Plan (1975-1980)

The Second Development Plan was for the period from July 1975 to May 1980. It was more ambitious than the First Plan, providing total government expenditure of SR498 billion (about \$142 billion). Approximately SR314 billion (63 per cent of total expenditure) was directed to economic and social development. In addition, 18 per cent (about SR39 billion) of the total expenditure was allocated to defence spending. Of the remainder, SR93 billion was directed to the administration and other spending, including foreign aid, respectively.

The aims were: to build up productive capacity in the industrial, agricultural and mineral sectors (to decrease the dependence of the economy on the oil sector); and to develop manpower and improve the social services, while maintaining 'the moral values and heritage of Saudi Arabian people' and the country's 'national security and defence' (*Quarterly Economic Review*, 1975, p. 7).

It is clear that the First and Second Plans did not significantly differ in their objectives. The diversification of the economic resource was the main theme for both plans; also to bring about greater investment in the physical infrastructure and to develop the indigenous human resources. The objective of increasing the contribution of non-oil output in GDP was successful as this increased from a 1975 level of 20.8 per cent to 35.5 per cent in 1980.

The expansion of government expenditure and the increasing of personal income both contributed to an increased level of liquidity, while the country was suffering from serious congestion at the ports. This created an inflationary situation in the Saudi economy, which led to an annual inflation rate of 30 per cent during this planning period. The government reduced the level of liquidity, invested more in building seaports and expanded the existing resources. This decreased the waiting

time for incoming loaded ships to 24 hours instead of 6 months. An example of the investment to reduce the unloading time is the SR 20,740 million (\$5,530.6 million) allocated to the transport and communications sector in the budget for 1977; of this total, SR 7,591 million (\$2,024 million) was directed towards investment in ports.

2.4.3 The Third Development Plan (1980-1985)

A comparison between government expenditure in the Third Plan and in the previous Plans shows that this Plan comprised the largest expenditure programme, a total of SR782.8 billion (\$208.7). Actual spending was only SR562.3 billion (\$149.95 billion); this reduction was caused by a decline in oil income.

This Plan placed particular emphasis on the development of the human resources and on assuring the defence and internal security of the Kingdom. The justification for investing more in the first of these objectives was the shortages in the national labour force and the growing need for foreign workers to participate in economic activities. The second objective can be explained by the Iranian Revolution and its threat to Saudi Arabia and the entire region, especially once the Iran-Iraq war began. Consequently defence expenditure was set at SR245 billion (\$73.8 billion), which was 31.4 per cent of the total plan expenditure.

At the beginning of this period, the government was facing the following problems:

1. A growing imbalance between the growing demand for labour and the local supply of labour.
2. The private sector was reluctant to employ the local population. This had two probable causes: the lack of training opportunities for the

national labour force, which caused shortages of skilled and semi-skilled labour; and the failure of the law to provide greater protection for Saudi citizens, especially as foreign workers accept lower salaries than the local workers.

3. The government's share of the labour force could be more than is required. This could be due to the government policy of reducing the level of unemployment among its citizens.

The government invested more to increase both the quality and quantity of labour. It is estimated that SR129.6 billion was spent in the Third Plan, which exceeded the combined total expenditure in the First and Second Plans, 'raising the total number of educational institutions in the Kingdom to about 11,490' (*SAMA Annual Report*, 1985, p. 124). During the Third Plan 3,900 schools were opened, an average of two schools every day. The total number of students reached 1.7 million, an annual growth rate of 7 per cent.

Higher education also had expanded faster; the Kingdom had seven universities, and there were ten girls' colleges. The number of students enrolled in higher education reached 91,978 (*SAMA Annual Report*, 1985, p. 127).

The country was affected severely by the shortage of technicians, electricians and engineers, the sort of skilled workers needed for development activities. The government realised this and set up several educational training centres, vocational and pre-vocational centres and training institutes. In 1985 there were 254 students studying at higher technical institutes. In addition there were 4,027 pupils enrolled in secondary technical schools.

By the end of the third Five Year Plan the vocational training provision included 24 centres spread around the country, in which there were 9,235 students. Beyond this there were eight pre-vocational training colleges in the Kingdom with a total of 1,233 students.

Despite these increases in government expenditure, the numbers of graduate students left the Kingdom far short of self-reliance in the labour market. More than 1,500,000 foreign workers were employed in various jobs, whose positions could be filled by nationals. Such a situation created urgent issues to be faced, and therefore the government gave this problem more priority in the subsequent development plans.

During the period of the Third Plan the non-oil GDP registered an average annual growth rate of 6.4 per cent, exceeding the target of 6.2 per cent. This was mostly a result of growth in the private sector, which grew by an average of 7.9 per cent between 1980 and 1985.

The most important point to be mentioned is that during this period oil revenues were declining significantly, as the oil sector real GDP decreased by 15 per cent. This was due to the decline of the oil price on the world market and a decrease in the quantity of oil exported.

The Saudi Arabian Monetary Agency *Annual Report* shows the growth of the productive sectors such as the utilities sector (electricity, gas and water). It expanded at an average rate of 10 per cent. The value added in agriculture rose in real terms by 2 per cent, due to the increase in government subsidies to this sector.

The manufacturing sector (excluding refining) increased its share of non-oil GDP, to reach about six per cent in 1985. This was also due to the government's policy of encouraging private sector investment in this area. This included free land to

build factories or low rental, reduced electricity or fuel costs, exemption from import duties for machinery and provision of long term loans with no interest. This policy will be discussed later in greater detail.

2.4.4 The Fourth Development Plan (1985-1990)

The Fourth Plan emphasised the following objectives: reducing the number of foreign workers by encouraging and improving the local labour supply, by ensuring the efficiency and quality of the workforce through education and vocational training; diversifying and expanding the industrial, agricultural and service sectors; encouraging the private sector to take a leading role in economic growth; investing more in and improving the existing facilities; and strengthening the economic and social integration of the members of the Gulf Cooperation Council (GCC).

This was the first time that the development planning process had emphasised the aims of efficiency and productivity. The private sector was also given more attention and was focused on as taking a leading role in economic activity, which is an indication of the increasing role of this sector in areas such as agriculture and industry. This Plan also had a new methodology, of concentrating on the economic programme and macro policies rather than specific projects.

Aggregate public spending for the Fourth Plan, including military spending, was set at SR1,000 billion (\$266.66 billion). Civilian expenditure was anticipated at SR687.5 billion, which was higher than the final expenditure of the Third Plan. The conflict between Iran and Iraq required greater expenditure to improve the military capability in order to guarantee the security of the country. This caused a higher proportion of government expenditure to be aimed at non-civilian projects. The plan forecasted an average growth of 4 per cent per annum in GDP at constant prices. It aimed to increase the annual growth of the oil sector by 5.6 per cent compared to an

annual decline of 15 per cent during the Third Plan, and to expand the non-oil contribution to GDP by 2.9 per cent per annum. The manufacturing sector was expected to grow by an average of 15.5 per cent annually.

An increasing share of government expenditure was directed to human resource development: SR135.3 billion (19.7 per cent of civilian expenditure) was used for developing this sector during this period as opposed to SR129.6 billion (16.6 per cent) in the Third Plan. The number of students enrolled at all levels of education stood at three million.

Higher education has seen a major growth in both male and female students, as by 1990 more than 130,298 students were studying at Saudi universities and colleges. In 1990 the number of graduating students in higher education was 15,766.

Technical education was extended in the Fourth Plan, including areas such as industry, commerce, agriculture and technical subjects. In addition to the Higher Technical Institute in Riyadh, there were six intermediate technical colleges with 3,379 students enrolled, as well as 7,375 students at eight secondary Industrial Institutes.

At the beginning of 1990, 9,064 students were engaged in vocational training, of whom 6,142 graduated, giving a pass rate of 67.8 per cent.

The most important issue in relation to the increased expenditure on education is whether this is successful in meeting the shortages in the local supply of labour. This will be discussed in the conclusion of this chapter.

During the Fourth Plan period, real growth rates in the oil sector fluctuated, with different levels of oil production, as is shown in Table 2.2.

Sectors	1985	1986	1987	1988	1989	1990
Total GDP	-4.1	5.7	-1.4	6.6	0.5	10.8
Oil sector GDP	-18.9	40.3	-11.6	20.9	-2.2	22.3
Non-oil GDP	0.7	-3.3	2.4	1.9	1.5	6.4
Manufacturing	12.2	0.2	12.8	9.2	-2.7	5.5

Table 2.2 Percentage growth in oil and major non-oil sectors

Source: SAMA Annual Report (1991, p. 17).

The sharp increase in overall GDP in real terms in 1990 was attributable mainly to the oil sector recording a high growth rate of 22.3 per cent. The table shows also that, except in 1986, the non-oil sector rose throughout the period of the Plan which may have been caused by the increase of agricultural and petrochemical output. The manufacturing sector recorded a positive growth rate during this period except in 1989, when it showed a negative growth rate, which could be due to a negative growth rate of 8.3 per cent in 1989 in the refining industry.

2.4.5 The Fifth Development Plan (1990-1995)

The fifth Five Year Development Plan emphasised the expansion of education and health, the expansion of electricity services, and growth in the agricultural sector.

	2nd plan		3rd plan		4th plan		5th plan	
	%	SR bn	%	SR bn	%	SR bn	%	
Economic Resource	20.5	261.8	33.4	130.7	19.0	69.9	14.0	
Human Resource	13.0	129.6	16.6	135.3	19.7	141.1	28.3	
Social Development	7.6	61.2	7.8	89.7	13.0	87.2	17.5	
Physical Infrastructure	40.4	249.1	31.8	144.3	21.0	97.9	19.7	
Development Expenditure	81.5	701.7	89.7	500.0	72.7	396.1	79.5	
Administration	5.5	31.4	4.0	70.2	10.2	102.1	20.5	
Reserves and Subsidies	13.0	49.6	6.3	117.3	17.1	-----	-----	
Total Civilian Expenditure	100.0	782.8	100.0	687.5	100.0	498.1	100.0	

Table 2.3 Government expenditure on development (SRbillions).

Source: Ministry of Planning, the Third, Fourth and Fifth Development Plans.

Table 2.3 shows the steady decline of government spending on economic resource development and physical infrastructure. This can be explained by the previous improvement in both areas, which reduces their priority compared to other

areas such as human resource development and improving the level of Saudi employment. Human resource development is the only area that has received a steady increase in government expenditure, from 13.0 per cent in the Second Plan to 28.3 per cent in the Fifth.

Expenditure on administration received an increasing allocation in each of the four plans. This can be explained by increases in the cost of government administrative services as a result of employing more Saudi nationals to reduce the level of unemployment, especially among graduates. The private sector did not participate effectively in employing Saudi nationals. The government sought to solve the problem of unemployment by taking on staff, even if in some cases there was no immediate need for additional staff in the administrative services.

The oil sector was expected to grow at 2.7 per cent. This target had to be disregarded as Saudi Arabia increased its oil production from 6.4 to 8.1 million barrels per day to compensate for the loss of Iraqi and Kuwaiti production in 1990. This increase in production with a rise in the price of oil resulted in increases in oil revenue and a positive impact on GDP in real terms at constant prices (*SAMA Annual Report*, 1991, p. 75).

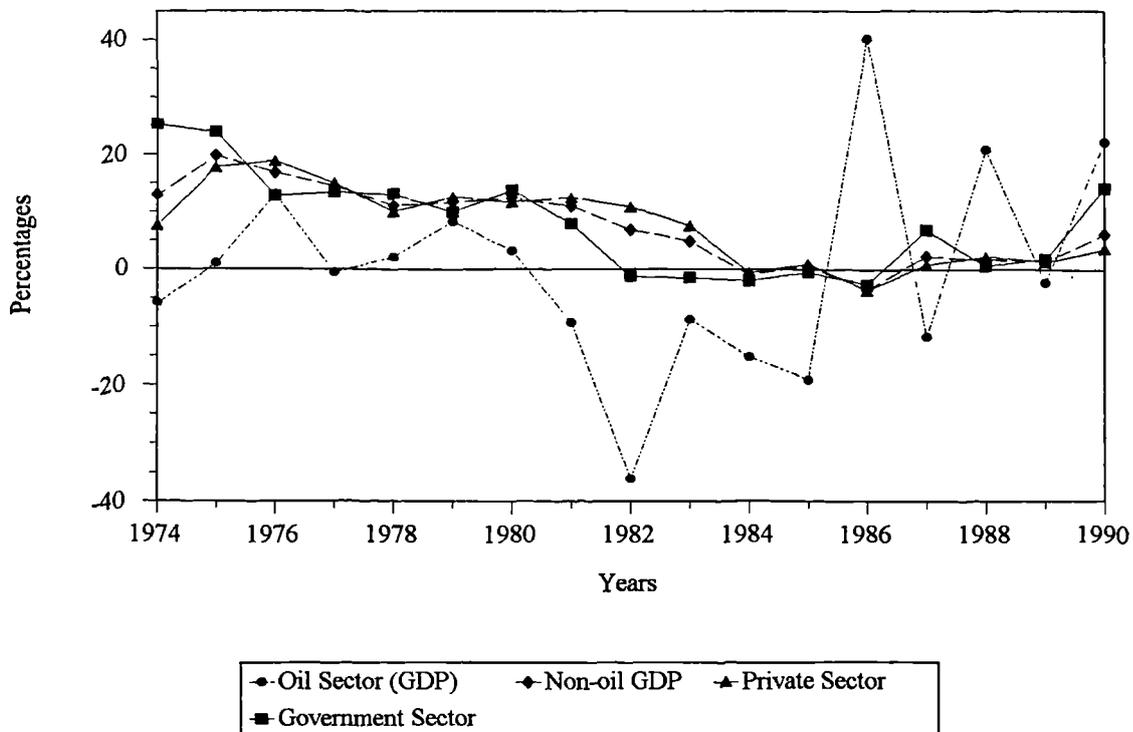
The non-oil sector was expected to grow at 3.6 per cent annually between 1990 and 1995. In the first year it was expected to exceed this target as a result of increases in government spending during the Gulf crisis that benefited the private sector.

2.4.6 Economic growth over all the plans

The performance of the economy was excellent, especially the growth of the non-oil sector, as is shown in Figure 2.2. This was a result of extensive government support

for the various private sector activities, such as in the industrial, agricultural, commercial and service sectors. Such support stemmed from the creation of five government credit institutions. All have similar terms for loans and have either low or zero interest rates. The bodies are the Real Estate Development Fund (REDF), set up to provide loans to Saudi nationals for accommodation purposes; the Saudi Arabian Agriculture Bank (SAAB), set up to extend loans, grants and subsidies to farmers; the Saudi Credit Bank (SCB), set up to give loans to lower income Saudi nationals for personal matters such as housing maintenance and marriage support; the Saudi Industrial Development Fund (SIDF), set up to make loans to private industry; and the Public Investment Fund (PIF), set up to provide loans to the public corporations. All of these credit organisations were behind the increase in the contribution of non-oil GDP through providing loans which amounted to SR153 billion.

Figure 2.2 Growth in oil and non-oil sectors (annual real rates of growth in per cent)



Source: SAMA Annual Reports (1983, p. 71; 1984, p. 15 and 1991, p. 17).

Agriculture contributed heavily to the non-oil GDP, as this sector had a positive rate of growth throughout the last twenty years as a result of SAAB loans, which have a total value of SR25 billion in medium and short term loans. These were used to expand the grain crop area of the Kingdom and to adopt modern production techniques.

One of the most important products responsible for agricultural growth is wheat, which farmers delivered to the grain silos and flour mills at a very high supported price of SR3,500 per ton until 1984, when the price was reduced to SR2,000 per ton, which was still higher than the world market price. The annual total of government spending to buy wheat from farmers was more than SR6 billion; a quarter of this total could have been used to import a similar amount. This led to disagreements about wheat production in the Kingdom, given the scarcity of water resources, as production consumed 9 billion cubic metres of water. This was especially true after self-sufficiency was achieved in 1985, when the country started to export produce to developing countries as part of the Saudi Arabia Aid Program. This over-production is costly for Saudi Arabia, as water is a very costly resource. The cost of this amount of water could exceed SR64.5 billion every year if the water is desalinated. It is better to reduce production, through further reductions in the support price, and shifting to other crops which require less water.

Saudi farmers are deeply involved in loans, as discussed above, but there is sufficient time for them to enjoy a high rate of profitability, which will enable them to repay these loans.

As Figure 2.2 shows, the oil sector's contribution to real GDP declined continuously through the period 1981-85 (by -9.2%, -36.1%, -8.7%, -15.0% and -18.9% each year); this was due to the decline in demand for oil and the world market

price, which was discussed previously. By contrast, the shrinkage in non-oil real GDP was less than 1 per cent in 1984. Other fluctuations in the oil contribution to real GDP were reported in 1987 and 1989, and had the same causes.

The government sector has improved its performance by increasing the emphasis on infrastructure, which increased the government's contribution to real GDP continuously during the Third Development Plan which started in 1980. This sector has emphasised more domestic spending in the Third, Fourth and Fifth Development Plans, as broadening the industrial base has been given more attention, which explains its growing contribution to real GDP.

2.5 Conclusion and summary

The analysis above indicates that increases in the price of oil have helped the Saudi government to improve the Saudi economy and the living-standards of the Saudi people, as well as building up the basic infrastructure. The government has created and improved the private sector in various respects, which helps the non-oil sector to increase its share of GDP. Saudi Arabia is still heavily dependent on oil revenues: any decline in these revenues will have an immediate impact as a decline in government spending. This will affect the performance of the private sector, because this sector is dependent on government spending and subsidies.

When the government decided to increase the efficiency and productivity of its workforce it had to overcome the problem of the reluctance of the private sector to employ Saudis. This sector has always had problems in employing all types of labour, whether unskilled, semi-skilled or skilled.

Saudi Arabia has always faced shortages of well-qualified personnel in terms of both quality and quantity. This results in the importing of more than 4 million

expatriates to meet its labour needs in a period of vast rapid economic development. This situation continues despite the government's policy of calling on the private sector to employ local people who are seeking work and cutting back on the number of expatriate workers. The number of foreign employees has continued to increase and large numbers of Saudi citizens who have been trained and wish to work are unemployed.

Saudi Arabia started to recognise the problems of the employability of its citizens when the number of foreign employees reached 4,000,000. The problem is not a shortage of Saudi technicians, engineers, managers or other types of skilled labour. The problem is that the private sector prefers employing foreign workers from low wage countries (especially other developing countries) who accept very low wages compared to local employees. The wages differentiation between the local employees and foreign workers seems to favour the foreigners; this will be discussed elsewhere.

In summary, the problems of the Saudi economy are as follows. There is an average per annum increase in civilian employment, particularly in the service sector, but most of the opportunities are taken by foreign workers rather than Saudis. The private sector is increasing its role in economic activities, but its growth and performance are still dependent on government expenditure, it relies on many government subsidies, and the government is the largest customer for some industries.

The decline in oil revenues leads to a huge deficit in the government budget since oil is the only major resource. The government is unable to implement a policy of taxation to generate more non-oil revenue because this would not be acceptable to the people, who believe that this would be in conflict with religious commandments. The holy Qur'an asks the people only to pay the *Zakat* (as mentioned earlier) .

Chapter Three
Industrial and Petrochemical Development

3.1 Introduction

Saudi Arabia as a developing country relies on the industrial sector as the cornerstone of its economic development, and is aiming to diversify its economic resources. The government aims at generating income and giving the country a greater degree of economic independence in preparation for the depletion of the oil reserves. The development of the industrialised economy led to the choosing of the petrochemical industries as a central source from which the country could be successful in liberating its economy from relying on a single economic resource while at the same time supporting the private sector in various ways.

Prior to the oil boom of 1973 the country had an almost total lack of modern economic infrastructure. Firms in the service sector and in the areas of trade and commerce dominated the economy. Industry was characterised by the small number of employees per establishment, the typical level being one to four employees. There were only 190 small operating industries, which employed a total of 5,344 people and which had a total capital of SR 171.5 million (\$45.74 million). Food and beverages, and cement and non-ferrous metal products, were the dominant industries, as they accounted for 50 per cent of the total national product.

There was little foreign investment; by the end of 1971, the Ministry of Commerce had established only 82 industrial sites, and approved a further 42. The total capital was SR 71.8 million, of which the foreign share amounted to SR21.7 million, or 30 per cent of the total.

The main products of the industrial sector were foods and beverages, textiles, weaving, furniture and fixtures, paper products and printing, leather, plastics, chemicals, cement, non-metallic mineral products, machinery, appliances and transport

equipment. Production was less effective than in more recent years, due to limited finance, poor transportation and communication, only basic facilities in industrial locations and at ports, imperfect information about local and international markets, and little government protection. The government recognised this and adopted an appropriate policy to overcome these problems.

The Council of Ministers in 1973 endorsed a government statement on industrial policy which explained the government's aims of encouraging and expanding the industrial sector by (1) the provision of loans and equity participation; (2) increasing aid to those setting up businesses, via provision of feasibility studies, advice and evaluation; (3) exempting imported equipment and primary materials from customs duties; (4) exempting foreign partnerships from income taxes in accordance with the foreign investment laws; (5) giving preferential treatment to local products when the government makes purchasing decisions, and imposing protective customs tariffs on competing imports; (6) providing land (including all necessary industrial facilities and services) at very low rents; (7) granting subsidies for training local employees; (8) giving more assistance in exporting products (*SAMA Annual Report*, 1972, p. 64).

The following major steps have been taken by the government to encourage industrial development. The first step was the creation of three industrial sites in the cities of Riyadh, Jiddah and Damman. The second step was the establishment of the PIF and the SIDF, both of which play a vital role in the industrial development of Saudi Arabia.

3.2 Public Investment Fund

The government established the PIF headquarters in Riyadh in 1971. The PIF approves the direction of loans and grants to projects, by studying the costs and

profitability and other methods of financing the project, and determines the appropriate time of execution. It also takes responsibility for meeting the financial needs of the state-owned corporations, which are the Saudi Arabian Airline (SAUDIA), SABIC, Petroleum Ministry (PETROMIN), and the electricity programmes. These consist of very low interest rate loans, at around 3 per cent. The other objective of the PIF is its participation in the equity of newly established industrial, agricultural and commercial enterprises.

SABIC has also benefited from long term loans provided by the PIF for creating and expanding its factories, as have PETROMIN and SAUDIA. SABIC and its partners are only required to provide 30 per cent of the capital costs (15 per cent each), while 60 per cent is provided by the PIF; the remaining 10 per cent of the costs are provided by private banks. From 1971 to 1991, PIF's outstanding loans totalled SR74.5 billion, including SR37.9 billion to develop the electricity sector. It is worth mentioning that its role has been diminished as a result of declining oil revenue caused by the downturn in oil revenues. The demand for loans has not fallen, as is indicated by the long waiting period for obtaining the loans. In recent years SABIC has been advised to finance its new projects through other private banks if such projects cannot be delayed, as will be discussed later in this chapter.

3.3 Saudi Industrial Development Fund

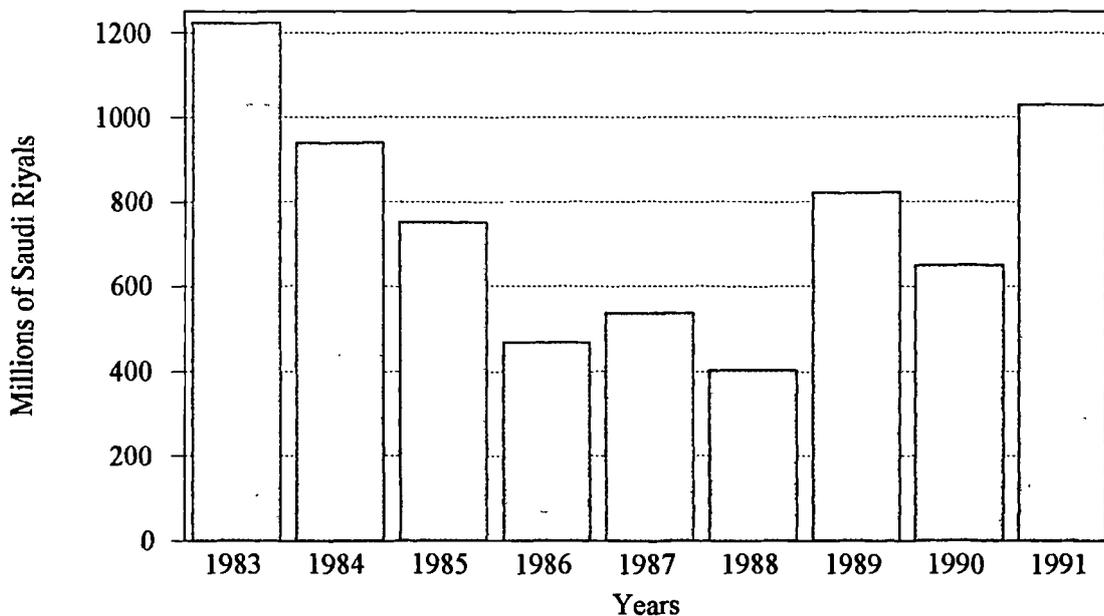
The government established the SIDF in 1973 as one of the most important and effective sources of low interest loans to businesses, with only 3.5 per cent charged as a service fee. The loan includes establishing and expanding manufacturing projects within the Kingdom. The SIDF also takes responsibility for financing the electrification programme by providing interest free loans to electricity projects.

The SIDF provides 50 per cent of the total costs of industrial plants for both local and joint venture manufacturers, on condition that the Saudi contribution should be at least 50 per cent of the total. If the foreign contribution exceeds 50 per cent, the SIDF will grant the loan, but it will only match the Saudi percentage of the equity.

The government conditions state that construction and other equipment must be purchased locally if it is available, to strengthen the backward linkages with the local economy. The fund would predetermine the equipment required from local producers at the time of studying the viability of the project.

From the date of its creation until 1983, the government supported the SIDF directly. The total of government funding was SR8.5 billion to fund its loans, but from 1983 the SIDF has fluctuated and reduced its loans, because of the government's financial policy and budget constraints, which will be discussed in greater detail below.

Figure 3.1 Distribution loan by the SIDF from 1983 to 1991



Source: Ministry of Industry and Electricity p. 143 and SAMA Annual Reports 1988-91

Figure 3.1 shows the significant fluctuations in the amount of loans between 1983 and 1991, which depend upon the government's direct funding which was reduced and the level of repayment which was increased from year to year.

The figure shows the significance of the support the government gave to the industrial sector through SIDF loans. The amount of the loans distributed by the fund fluctuates according to the amount of money available, which depends on the level of repayments as well as the government funds. From 1974 to 1983, the government supported the SIDF with spending of SR8.5 billion to fund its loans, which it reduced until 1989, when the fund financed itself through the repayments.

Cumulative loans disbursed by the SIDF from the date of its creation to the end of 1991 exceed SR13.9 billion, of which 16.6 per cent (SR2,323.2 million) was directed to the chemical materials sector, 11 per cent (SR1,540.6 million) to the metal products sector, 7.3 per cent (SR1,024.4 million) to the foodstuffs sector, 24.4 per cent (SR3,407.8 million) to the cement industry and 11.9 per cent (SR1,663 million) to other construction agencies. Approximately 71 per cent of total disbursement went to these areas.

The private commercial bank also began to increase its role in financing industrial investment by increasing its loans to the private sector. These rose from SR712 million in 1962 to SR73,616.2 million in 1991. This explains the strong demand for private bank funds, the ability of the commercial banks to meet this demand and the confidence of the banks in the private sector.

The government policy of 1973 introduced a ten year tax holiday for new industrial plants and a 20 per cent tax on competitive imports, and discharged tax on foreign investment in expansion of existing investments. Industrial estates had expanded to cover a total area of 33.7 million square metres and the facilities and

services provided to industries had a total cost of SR1.9 billion. The estates were located mainly in the largest cities, such as Riyadh, Qasim, Jiddah, Makkah, Dammam and Al-Ahsa. The government was also establishing two huge industrial cities in Jubail and Yanbu.

The government has clearly assisted the industrial sector and provided all the necessary support to increase the role of the industrial sector in the Saudi economy. This corroborates the argument in Chapter 2, where the government's support encouraged the growth of the private sector.

3.4 Main principles of government industrial policy

In 1974, the government published a statement to determine the main policy towards the industrial sector, aiming to give Saudi nationals full opportunities to benefit from industrial development. The statement outlined the following principles:

1. Manufacturing industry ought to be encouraged in the various sectors which effectively contribute to the national income and diversify the economy.
2. The economy of the Kingdom is based on encouraging both private industrial and private commercial enterprises, and therefore the government will give the private sector full freedom to implement industrial projects.
3. The government believes that competition between producers is the best way to choose the projects which would be appropriate for the local market at a reasonable price.

4. The private sector will enjoy the full support of the government during the preparation, establishment and operation of industrial projects.
5. The government will not impose quantitative restrictions or seek to control the prices as a way of carrying out industrial policy, unless a monopoly situation exists.
6. The government will take responsibility for investing in large industrial projects which are beyond the ability of the private sector, and the private sector will be given opportunities to participate in the project depending on its ability.
7. The government will not restrict the entry and exit of money to and from the Kingdom, as part of the effort to attract foreign capital, and foreign expertise and participation.

From these main industrial principles the state has created an environment for competition among businessmen in Saudi Arabia with the full support of the government as well as attracting foreign partnerships. In a situation where the private sector is either unwilling or unable to pursue a project, the government will take responsibility for that project; an example of this is the massive state involvement in petrochemical plants, in the hope of turning them over later to the private sector.

The government chooses to invest in this sector for several reasons. The value added generated from investment in the petrochemical industry is a great motivation; until 1983, the associated natural gas of crude oil production plants was burnt off in significant quantities - at a level of 10 million barrels per day in 1981. This had no value in the past as it was burnt off, but it is now used within the petrochemical industry or exported.

No private investors in Saudi Arabia are financially capable of undertaking such projects, as they require huge capital expenditure over a long period before they show a profit. This represents a higher risk, and for this reason it is important for the government to take part.

There are other risks that put off private investors; for example, Saudi Arabia has drawn considerably from its reserves to build the projects, as the final cost often overruns. In 1975 the government would invest a total of SR190 billion (\$50.7 billion) in hydrocarbon-based industries. The total cost of the gathering, treatment and distribution of gas was estimated at SR10.87 billion (\$4.5 billion); on completion the project costs totalled more than SR60 billion (\$16 billion).

This industrial sector is closely related to the oil sector, which creates problems in implementing the government's oil policy. This aims to benefit the Kingdom from the oil revenue, and the level of production depends on price. This policy may be damaging to the petrochemical industry; for example, according to the Ministry of Industry and Electricity, the level of oil production needed to supply sufficient associated gas to run the Saudi petrochemical plants is no fewer than six million barrels per day.

The connection between foreign investment and oil entitlements required the involvement of the government to guarantee the entitlement. The working formula is 1,000 barrels per day for each \$1 million of foreign capital investment in the partnership. This helps to attract foreign investment to the Kingdom, especially in the petrochemical industry.

The final reason is the maximising of backward linkages, especially in the building of the infrastructure of Al-Jubail and Yanbu industrial cities. The Royal

Commission had given Saudi firms contracts totalling \$1.3 billion, but the value of these contracts could be misleading. Most of the local contractors were joint ventures with foreign partnerships, or involved the subcontracting of work to foreign companies, meaning that they could import goods and supplies from abroad.

It is worth mentioning that the government gave contracts to local companies, which might have increased the overall costs of the projects, especially in the 1970s and early 1980s, when the government was able to be more generous to these companies. The contractor could then subcontract the actual work out and so gain a profit.

3.5 Government support for hydrocarbon based industries

The government has shown its commitment to develop large scale hydrocarbon-based and energy-intensive industries by the creation of the Royal Commission for Al-Jubail and Yanbu, which is in charge of the general infrastructure of the cities, and SABIC, which is responsible for building and operating the heavy industries and co-ordinating with the foreign partnerships.

The government established the Royal Commission in 1975 to plan, design, construct and operate the physical infrastructure such as ports, roads and utilities required by the various heavy, light and support industries in these cities, as well as training the local population to take the place of foreign workers.

The urban-industrial complexes in both cities constitute the centre-piece of the national heavy industrialisation programme through their unique strategic locations in the Kingdom. Yanbu is close to the Suez Canal and has access to the markets of Europe, while Jubail lies at the heart of the country's petroleum deposits, making it a relatively inexpensive source of fuel and raw materials. The other advantage for Jubail

is that it is on the deep navigable waters of the Gulf, making it an excellent choice for a large port complex.

The Commission has enjoyed complete freedom in its development of the industrial city because of the importance of the project for the government. The Royal Commission has its own very flexible budget which is directly communicable to the Ministry of Finance and National Economy to avoid administrative and financial problems. This minimises the time-lag involved in the administrative process.

The total spending of the Commission in the early 1980s was estimated as exceeding \$45 billion, which shows the government's level of commitment to this industrial sector.

3.6 New financial policy

The establishment of the PIF and the SIDF led to an increase in the role of the industrial sector within the economy of Saudi Arabia in the 1970s and early 1980s. Both of these funds were dependent on government funding to finance their activities. From 1983 the government sought to reduce its level of spending and make these agencies self-sufficient; they should be financed by the repayments of loans which they have made in the past.

The government has been very generous to the industrial sector, and it is now the responsibility of the firms to find finance for new and expansion projects through their own resources. This new policy is practised already by major companies such as SABIC, who in 1991 were asked to make their own financial arrangements for extending some of their projects if they were not to face delays. SABIC affiliates, such as HADEED, the iron and steel subsidiary, borrowed \$133 million from the Saudi American Bank (SAMBA); the petrochemical and fertiliser subsidiaries and joint

ventures are now also doing so. IBN ZHR required \$500-\$600 million, SHARQ required \$500-\$700 million, and SAFCO was looking for a \$120 million loan.

ARAMCO went further by asking the international bank J P Morgan to provide a syndicated loan of \$1.5 billion, to finance part of the new capacity expansion programme. This is estimated as costing \$20 billion, most of which has to be found from its own resources.

The private sector follows a similar policy, as it borrows from local commercial banks to establish new industries or expand existing ones. This explains the increased role of the local private banks in industrial investment, as was pointed out earlier.

This represents a marked change in the established pattern of finance, which could mean that government equity and subsidies from PIF and SIDF are no longer available. The Saudi government makes sure that the industrial sector is able to operate properly. In other words the time has come for the private sector to stand on its own feet and justify its borrowing requirements to Saudi banks.

3.7 Industrial success

The result of the government's support for industry is clear. By 1992 the number of operating industrial units was 2,000 in general manufacturing, characterised by small units; there are 307 petrochemical and plastic units with a capital investment of SR73.1 billion (63.7 per cent of the total capital of the industrial sector); construction materials industries accounted for 393 units with a capital investment of SR14.5 billion (12.6 per cent of total); metal products, machinery and equipment industries had 544 units with a capital of SR10.2 billion (8.4 per cent); lastly, food and beverages occupied 298 units with a capital of SR6.8 billion (5.9 per cent). These industries represent 91.1 per cent of total industrial investment.

Foreign investment had reached 359 units by the end of 1992, with a capital investment of SR68.2 billion. Most of this investment was directed to the petrochemical and chemical industries.

A comparison can be made between the industrial sectors in 1973 and 1992. Unit occupancy had increased from 190 to 2,500, including the larger industries such as petrochemicals. Employment had increased from 5,344 to 156,000 in various industries, satisfying local demand and providing exports, thus fulfilling the objectives of both boosting exports and substituting for imports.

The growth of the manufacturing sector can be judged through the annual percentage rates of growth, which have been positive throughout the period from 1973 to 1992, except for -2.7 per cent in 1989.

3.8 Saudi Arabian Basic Industrial Corporation (SABIC)

The Saudi government recognised that the country should not rely on oil as its sole economic resource, and to diversify the economy it established, in 1976, a public share holding company, SABIC. It had an initial capital of SR10 billion (\$2.937 billion), which was divided into 10 million shares, of which the Saudi government held 70 per cent and the remaining 30 per cent were taken by citizens of Saudi Arabia and other GCC states.

SABIC defined its main objectives in its Annual Report of 1991: the setting up of petrochemical, fertiliser, iron, steel, aluminium and other hydrocarbon-based industries; the execution of projects necessary to supply SABIC with its raw material requirements and the marketing of industrial products inside and outside the Kingdom of Saudi Arabia.

By the end of 1991, SABIC had eight subsidiaries dealing with marketing and production of various petrochemical and iron products, and seven joint ventures with leading oil and petrochemical companies, such as Shell, Mobil, Exxon, Hoechst, Texas, Eastern, and the Taiwan Fertiliser Company.

These companies have long term experience in dealing with capital intensive operations, working at very large scales of production, and using the best and latest technology and management techniques. All of these factors would help SABIC to operate at a more productive and profitable level and assure production quality.

Another important advantage is the close contact with skilled and experienced workers in areas such as management, engineering, and technical fields. This expertise would benefit SABIC during the construction of the plants and during their operation, and would also benefit the local workforce when they work with foreign workers or through training programmes carried out by SABIC and its partnerships.

There is also a benefit in terms of marketing, as these partnerships are with companies who have existing world-wide marketing and distribution systems, and they could give SABIC products an entry into global markets. The Minister of Industry and Electricity (chairman of SABIC) supports this argument, saying:

Marketing channels ... are in the hands of Exxon, Mobil and Dow. Our products will go to the same markets through forcing them to buy a production ratio sufficient to keep our new plants going. [This will require that the partner's market be] not less than 75 per cent of our production. (El-Ayouty and Flint, 1982, p. 84)

The country's previous experience could have been a significant factor in choosing to use partnerships, since most of the foreign companies have previously operated within Saudi Arabia or have exported oil from the country, and have dealt

with either the government or the private sector. For example, Exxon, Mobil, Shell Texas and Eastern have had relations of various kinds with the Saudi oil industry before joining SABIC in joint partnerships.

This experience could increase reliance on multinational companies and create a preference for dealing with them. The successful experience of ARAMCO is a good precedent to encourage the Saudi government to attract foreign companies into joint ventures. Some governments in the region believe in the negative impact of dealing with MNCs and have required them to leave their countries. Libya, for example, decided to develop its petrochemical industry through self-reliance rather than involving foreign companies in the building and operating of the plants, but this policy is still far from becoming profitable. The Saudi Arabian policy is to continue with the foreign companies, and to involve them in operating in and developing the industrial sector of the economy.

3.8.1 The economics of the petrochemical industry

Simple economic logic was behind the Saudi decision to base economic development on the petrochemical industry. Ghazi al-Qusaibi, a former Saudi Minister of Industry and Electricity, believed that the energy intensive industries should be close to the energy resources, while the labour intensive industries should be in Asia and Africa, and high technology industries should be in countries where labour is not freely available. Of course, SABIC would benefit from billions of barrels of oil production and trillions of cubic feet of associated gas, but cost disadvantages must be considered. This section studies the comparative costs and benefits of the Saudi petrochemical industry, compared to similar plants in developed countries, including construction, start-up, labour, running and location costs.

One would expect construction costs to be higher in a developing country with a warmer climate than for a similar plant in a developed country, as parts have to be brought from developed countries, as do workers with high technology experience. According to Al-Zamil, Minister of Industry and Electricity, the costs differentiation could be as much as 35 per cent, but the lower price of inputs such as natural gas could offset this cost, and also the lower energy costs.

Capital costs are also increased by the start-up costs, and by training costs for company staff who will run the plant efficiently, such as engineers, technicians, managers and accountants. These costs should be higher than in developed countries, due to the need for highly skilled and experienced workers, who require long and appropriate training at similar plants usually located in the developed countries. This means sending the local employee abroad for training rather than providing local training.

For example, the cost of training a Saudi before he starts work was estimated at an average of approximately SR262,500 (\$70,000), according to a personal interview with a SABIC executive, who pointed out that SABIC had spent more than SR1 billion to the end of 1992 on the training programmes at SABIC ventures. In addition there is a time-lag between starting and completing the training, which means spending more money for training the local employees while hiring expatriate workers - in effect, spending money on two employees to fill a single position. There is also the possibility that the employee will quit the SABIC job and transfer to a different job or company, which means a major loss on training to SABIC, as well as the cost of replacing the employee.

An American engineer working for SABIC is paid a higher salary than he would receive in his home country, but is also provided with suitable accommodation, and education for his family, as well as flights for him and his family to and from his

home country. The total costs could be three times as high as employing the same person in his home country. According to the interview conducted with SABIC executives, American engineers could receive more than \$9,000 per month, while they might earn \$3,000 per month in similar employment in their native country. (Appendix B)

Some economists, such as Johany, A. D., Michel Berne and J. Wilson Mixon, argue that labour costs are up to 40 per cent higher in Saudi Arabia than in Houston, Texas (Johany and others, 1986, p. 128). This is an under estimate. The above information indicates that labour costs are as much as 200 per cent higher.

Running costs could be higher in a Saudi petrochemical plant because companies must import some materials (such as processing materials, including catalysts and chemicals). Maintenance and spare part costs could be higher because of the differences in labour costs and the costs of importing the equipment, which are usually set by monopoly suppliers, often the original producers of the particular machinery.

Both the east and west coasts of Saudi Arabia have extremely hot weather and humidity. This can create an uncomfortable environment for the people working in the plants as well as decreasing their productivity and increasing the cost of labour, in particular the western expatriate workforce. There is also a risk from the extremely long hot summer, which could limit the capacity of the plants, since there is a danger of explosions and fire, as happened at a gas liquids plant in Qatar in the summer of 1977.

In addition to the location costs there is the cost of water desalination, including the constructing, running and maintenance of desalination plants, which should increase the costs of water for both industrial and residential areas in Jubail and

Yanbu. The real cost of one cubic metre of fresh water is approximately SR7.5 (\$2.50). In 1980, the Council of Ministers fixed the price of fresh water at SR0.25 per cubic metre, which meant reducing the price of fresh water to one-thirtieth of its real cost. These costs should be taken into account when the costs are compared; the government even has to subsidise the cost of water.

Given that SABIC products are export-orientated, there is an additional cost for Saudi plants of shipping, freight and insurance. These costs depend upon the distance to the target market and the security situation within the Persian Gulf, for example, during the second Gulf War, the cost of freighting and insurance was significantly higher. According to Mohammed Al-Mady, Senior Vice-President of the Saudi Petrochemical Company (SADAF), 'typically, distribution costs equate to around twenty per cent of total production costs' (Al-Mady, 1986, p. 76).

3.8.2 Advantages of the Saudi petrochemical industry

The profitability of the basic petrochemical industry depends to an extent on the cost of the raw materials, mainly natural gas. In the past this had been burnt off, so it is difficult to compare prices for inputs which had no value previously. SABIC benefits from cheaper raw materials; for example, it receives ethene at 55 cents per million British Thermal Units (BTU), which gives SABIC a competitive advantage over other producers. However, this is only the case at a time of higher oil prices.

The cost of the natural gas should be taken as the cost of collecting, treating and transporting it to the industrial cities of Jubail and Yanbu. This is estimated at SR60 billion (\$16 billion) plus 55 cents per million BTU. A comparative study of the advantages and disadvantages of the Saudi petrochemical industry should give this cost more consideration, in addition to the costs of operation and maintenance. This system of establishing the cost is different to that of Johany, Berne and Mixon (1986),

who state (p. 128) that the cost of providing the gas is only the cost of collecting and treating it.

The petrochemical industry could use either naphtha or natural gas. Some analysts and commentators, such as Young, believe that the whole Gulf region will retain, and probably strengthen, the advantage of using natural gas during the 1990s as oil and naphtha prices continue to rise, meaning a disadvantage for producers in industrialised countries (Young, 1991, p. 34). Study of the SABIC balance sheet of account shows that SABIC's profit declined significantly in 1992 after the price of oil declined.

At the present time, Saudi petrochemicals are being sold in the United States, China, Japan and Europe with a declining rate of return. A question that needs to be faced is how far these plants can continue in the face of a declining oil price. According to Chem Systems, a marketing consultant, Middle East petrochemicals are distributed and sold profitably in Europe even if the oil price is at \$19 per barrel (*The Economist*, 1987, p. 57). When the government decided originally to invest in the petrochemical industry in 1980, the oil price was \$30 per barrel. As the price of oil has fallen, the price of naphtha has also declined; manufacturers in more industrialised countries have been able to make their products more competitive.

The comparative advantages in this area may have been overestimated. For example, the energy costs of the aluminium smelting process are 30 per cent of the total costs, which could mean greater profit for SABIC, as it has cheap supplies of natural gas, which could compensate for the high capital costs and the need to import the raw processing material (bauxite). The change in technology made it possible to reduce the energy requirement through more advanced smelting techniques, which save up to 30 per cent of the energy costs, and recycling aluminium on a large scale, which can save 95 per cent of the energy input. Stevens (1982) has pointed out that

by 1985, 34 per cent of US aluminium consumption could be generated from recycling aluminium (p. 42).

The conclusion is that the competitive advantage of the Saudi petrochemical industry has been subject to erosion, especially after the recent decline in the price of crude oil.

3.9 Interaction between the oil and petrochemical industry

The decision to invest heavily in the petrochemical industry can be criticised, as it is so closely related to the oil industry that it may create constraints for oil production and export.

According to Al-Zamil, the level of oil production required to supply sufficient associated gas to run all the petrochemical plants is six million barrels per day without looking for the associated gas (Field, 1979, p. 97). This means that some plants should close when oil production is below this level. This implies that decisions on the level of oil production are constrained by the requirements of the petrochemical industry.

There are minimum revenues required to cover capital costs and subsidise the water and electricity, which can only be provided by income from oil. This could mean increasing the production of oil to meet these costs, which could require the accepting of a lower price for oil in order to sell a greater quantity, which would give an advantage to competitors in more industrialised countries, as it would eliminate SABIC's competitive advantage of a cheap energy source.

Setting the raw material prices below the alternative use price could be the reason behind imposing high tariffs on goods from other countries, especially those of

the European Community (EC), which had been a competitor. These manufacturers succeeded in pressuring their governments into imposing 20 per cent tariffs on all Saudi products, through their complaints about subsidisation, and forgot the cost disadvantage of SABIC industries.

SABIC production is still in need of government finance and tax holidays for its own plants, which means a continual need for a minimum level of oil revenues and for limiting income from taxation.

More importantly, SABIC could not export products successfully without using the power from exporting oil, but this policy will interact with the oil policy as the Saudi government is aware of the long term economic implications.

3.10 SABIC marketing problems

Global demand in 1984 helped SABIC to start exporting its products, especially to the European Community (EC). For example, in 1985, 58 per cent of total petrochemical exports by GCC countries went to the EC. This concerned the European petrochemical companies, who put pressure on their governments to impose tariffs against products from these countries. During that time SABIC tried to eliminate this problem by exporting more to the United States and considerably more to South East Asia.

This policy did not last because SABIC exports had gone beyond the Generalised System of Preferences (GSP) of entry free from duties and tariffs given to third world exports, which only allow the export of less than one day's production of methanol free of duties to Europe. European chemical firms have pushed hard for the imposition, believing that the new plants in Saudi Arabia enjoy an unfair advantage in lower costs of raw materials, energy and labour.

The Economist in March 1985 explained how the European companies have tried very hard through the media to warn their governments of the threat of Saudi products:

... in theory, petrochemical producers everywhere should be fearful of Saudi competition. For the rest of the decade, world demand for petrochemicals is expected by industrial analysts to grow by 0.4% a year, depending on which chemical is being sold. Saudi Arabia's additions to world production capacity will far exceed that. Japan, for example, stands to lose all of its petrochemical export markets, and much of its domestic market, to the Saudis and their fellow upstarts, the Canadians. (1985b, p. 63)

The result was the imposition of import duties, starting with 13.5 per cent on polythene, methanol, ethylene, glycol and other SABIC petrochemical exports. Later European tariffs were raised to 20 per cent.

The European market is very important to SABIC since it includes many significant industrial nations with large markets. At first SABIC looked for government support to negotiate tariff reductions with the EC countries. Saudi Arabia took this problem to its partners in the GCC to have more power in negotiations, but several meetings did not resolve the problem, owing to partners having different ideas for solving the problem; Gulf officials specified 'a free trade agreement or nothing' while the European officials were unwilling to give more than equal treatment to South East Asia's products controlled by the Asian agreements, which have been specified by Wilson (1988) 'as non preferential cooperation agreements, with no lowering of tariffs' (p. 96). The Saudi government did not use its economic power, since European exports of goods and services to Saudi Arabia were running at \$20 billion per year, while these countries were importing oil and other goods to a value of only \$8 billion.

The Saudi government could have retaliated by raising tariffs on EC goods and services exported to Saudi Arabia and this could have had a negative impact in the EC

more than in Saudi Arabia given that petrochemicals form only a small proportion of the Saudi exports to the EC while Saudi Arabia remains the largest Arab market for EC products. But it is dangerous to tie oil contracts only with those countries that buy Saudi products, especially when the world oil market suffers from a glut of crude oil. This could hurt Saudi Arabia more than the tariffs from the European countries by worsening the problems of declining oil revenues.

Despite the disadvantages of using the oil policy to open the European markets it is still an important alternative for the Saudi government, if it is willing to accept the negative impact in the short term, in order to benefit later. However, it seems that the government would not take any decision that might damage relations with other countries; it tries very hard to use a more friendly policy for a long time before doing so.

The alternative course of action, which seemed to be preferable, is to rely on the GCC countries to negotiate with the EC countries to reduce the petrochemical tariffs, while SABIC takes responsibility for marketing most of its products through marketing agencies around the world with a greater concentration on the Far Eastern markets, such as China, Japan and South East Asia (India, Pakistan and Taiwan). According to Al-Zamil, nearly 50 per cent of the Kingdom's petrochemical exports went to the Far East in 1986, compared with 28 per cent to Europe (*The Economist*, 1987). Via this policy the Saudi petrochemical industry could penetrate this growing market, and this will help the Asian countries to produce final goods and services that they could redirect to the important protected markets of Europe and the United States.

It is possible to blame the EC countries for their high tariffs against Saudi petrochemical products, since Saudi products are mainly primary products, providing important raw materials and intermediate products for labour intensive industries in

Europe, such as textiles, and cheaper raw materials for other industries, such as vehicles, agriculture, construction, boots and shoes. Higher duties increase the costs for the manufacturers who use the petrochemical products, which results in higher prices for final consumers within the EC and in export markets. This reduces the competitiveness of the product on the world market, lowers demand and results in fewer employment opportunities. This results from the protection of the European petrochemical companies, and does not take into account the employment benefits from a liberalisation policy.

3.11 Foreign partnerships and marketing problems

As a result of the above problems, some of the SABIC joint ventures did not behave as anticipated. For example, Shell has an agreement with Union Carbide to market SABIC products that Shell could not market itself in the United States and other countries. Due to these marketing difficulties, mainly caused by the continuing petrochemical glut, the joint ventures only involved themselves with SABIC in one project. One reason for foreign companies engaging in partnerships is not simply the profits available, but also agreements of oil entitlements which guarantee them secure supplies in case of problems. These companies have nothing to lose by signing agreements over the plants, and as they spend only 15 per cent of the total capital costs and enjoy long term, low interest loans from the Saudi government for plants that only become profitable in the long term. However, multinationals operating in today's market are feeling considerably less anxious about the former 'problem' of oil supplies in the international arena, especially with the current glut.

This should be seen as a reluctance on the part of the foreign companies who are taking part in the joint venture, compared to wholly owned or majority owned petrochemical plants in their home or a foreign land. Hence they are marketing part of the product, but not satisfying the wishes and intentions of SABIC. SABIC expects

them to regard the joint ventures as a full part of their international plant capacity. They may be reluctant to do this when they hold a stake of less than 50 per cent in the joint venture.

3.12 Conclusion

Clearly, the Saudi government has given the private and public industrial sector full support, in addition to financial assistance, which helps it to play an important role in the Saudi economy. Without such support, this sector would count for nothing. More than SR88.4 billion was directed to finance the investment, with little or no interest for the relevant government agencies, PIF and SIDF.

The government has spent more than SR187 billion (\$50 billion) on developing Al-Jubail and Yanbu cities, and SABIC has invested more than SR37.5 billion (\$10 billion) in its plants at these cities. Despite the problems of marketing the products and the reluctance of the foreign partners, SABIC still hopes to succeed, despite a cyclical downturn in the world market demand for this industry.

One of the best governmental remedies is to reduce the hydro-carbon base price in order to facilitate a more readily internationally-marketable end product.

Benefits could be realised through increased forward linkage, such as private investment in down-stream processing or through secondary petrochemical industries. Selling more sophisticated products could be less competitive because of the highly labour intensive nature of such plants, which would increase the cost of production, and the additional cost of hiring expatriate employees. Costs would also be high if the production process resulted in by-products which could be of no further productive use in the petrochemical industry.

SABIC can be criticised for building technology and capital-intensive plants which produce export-oriented products, which are only used by 140 Saudi firms for raw materials. It is not fair to criticise the government for choosing to support this type of industry, because it was the best option at that time. The forecasts were dependent on the high price of oil, which would have made it a more profitable industry, as it would have had a greater competitive advantage over its industrialised competitors. Such advantages were reduced, if not eliminated, because of other cost disadvantages associated with the decline of the price of oil.

The problem with marketing products of GCC countries is the absence of a customs union, which would make signing an agreement with the EC countries easier. It is important to develop such an organisation before attempting to negotiate and develop free trade agreements with a body such as the EC.

A different problem for all the Gulf states who are in the process of diversifying their economies is that they are choosing to expand the same industrial sector simultaneously. This could jeopardise their economic development as they are in competition with one another instead of co-operating and integrating their development. This situation continues even after the establishment, in Qatar in 1987, of a Gulf Organisation for Industrial Consulting, which has done little effective work. The GCC nations should not choose the same industries (such as hydro-carbons) to develop for the export market. It is dangerous to spend hundreds of billions of dollars to develop similar capital intensive plants in such a small market, as the total population of the area is approximately twenty million.

The greatest advantage to Saudi Arabia from introducing sophisticated technology is in the educational and skills gains for those Saudis involved and the introduction of new management, engineering and technical skills, as a result of working with western people who are familiar with the technology. Saudi nationals

could benefit directly or indirectly, and could then transfer their experience to other areas of economic expansion before or after the decline of the oil sector as the dominant element in the national economy.

Chapter Four

Multinational Companies in Developing Countries

4.1 Introduction

Many developing countries (DCs) are undergoing tremendous economic changes. These countries are investing large amounts of money (either from their own or from international financial resources). Some have introduced sophisticated technologies in order to modernise their economies. In such cases, attention is especially concentrated on the industrial sectors, particularly in those countries with the financial resources to fund development.

In the process of developing this vital sector of the economy, it may be difficult for less developed countries to achieve their aims without the participation of MNCs. An MNC can be defined as 'an enterprise which controls and manages production of established plants, located in at least two countries' (Caves, 1991, p. 146). Some firms operate a direct investment policy in less developed countries while others invest via a joint venture policy which can be defined as 'a co-operative agreement in which a separate unit is set up by two or more "parent" organisations and a degree of independence in decision-making is awarded to the "offspring"' (Neil, 1991, p. 137).

Existing literature on the advantages and disadvantages of the involvement of multinational corporations in less developed countries indicate three different beliefs: (1) those for such involvement believe that developing countries gain inherent advantages from the MNCs; (2) those against maintain that the activities of multinational enterprises are harmful to developing countries; and (3) the middle approach, incorporating elements of (1) and (2), sees both positive and negative aspects of MNC involvement in developing countries.

Krasner (1991) argues that even small developing countries are able to extract large concessions from MNCs, because of their sovereignty over their territories, and their ability to deny the companies access. Others argue that MNCs are harmful to the

host country, and any attempt by the host country to increase the benefits from the presence of the MNC will not have positive results, as the company may use negative policies, such as low reinvestment, and allow capital to flow out. Other writers, such as Schatz (1991), take a middle view, that there are mixed benefits and costs to the host country.

The impact of MNCs on the economic growth of developing countries can be assessed by studying their activities in host countries and noting the advantages and disadvantages accruing from their operation. For this reason this chapter reviews the long term effects of MNC involvement in developing countries under the main aspects of the following economic variables:

- effects on capital investment
- transfer of technology
- research and development
- management and managerial skills
- effects on trade and balance of payments
- impact on local employment
- the role of training strategy
and methods of information collection
- effects on sovereignty

These factors can also be affected by economic policies imposed by the host country to control the operation of the MNC. However, the above variables will be discussed in terms of their role as major determinants of economic change in less developed countries with MNC involvement.

4.2 Effects on capital investment

Host countries can benefit from MNC involvement through the supply of capital because these firms can obtain funds on better terms than other firms in the host country. If it is assumed that capital is locally scarce then foreign companies can increase a host country's productivity by increasing the level of investment in that country. MNCs are also of larger than average size with (or with access to) large financial resources. These financial resources can be used to fill the gap in the host country's economy between its investment aims and its lack of funds.

As well as the obvious benefits of an injection of capital, MNC involvement may have indirect positive effects in the host country. First, it may increase the mobilisation of a country's money by offering attractive investment to its national companies and individual investors. Additionally, money which would otherwise have to be allocated to investment can henceforth be devoted to less productive but nevertheless necessary expenditure within the country.

Secondly, and most importantly for this study, rich developing countries such as those with hydrocarbon resources can use MNCs to mobilise the oil revenues, bringing more productivity, as their own companies may not be able to cope with large scale ventures as effectively as MNCs.

Some economists argue that MNCs may not be transferring large financial resources to host countries, but that the capital often comes from reinvesting host country finances and profits made in the host country. Lall and Streeten (1977) pointed out that Trans-National Corporations (TNCs)

prefer to commit a small proportion of their own capital for initial investment and raise the bulk of their requirement locally. Thus it has been noted, for US TNCs in manufacturing, that in the period 1966-70 the amount of equity investment by the parents was only 21 per cent of the total expenditure on

investment and remittances; some 35 per cent came from local borrowing, 27 per cent from profits and 25 per cent from depreciation allowances. (p. 41)

However, in the case of capital being supplied by local savings, it is apparent that benefits may still accrue to the host country as MNCs use the host's financial resources very effectively, and more productively than they could have been used elsewhere in the host country's economy. Some economists' reports indicated that foreign firms are more efficient than the local firms in terms of cost minimisation. Koutsoyiannis (1981) refers to the Gray Report of the Canadian Government (1972), which stated: 'Foreign subsidiaries are more efficient and can produce at lower costs than domestic firms because they have access to the better technology and cheaper finance of parent companies.'(p. 358) On the other hand, if the MNC borrows locally and uses the money less efficiently, this will create a cost for the host economy. As Hood and Young (1979) point out: 'MNCs could divert domestic savings from other productive uses and use local savings hitherto devoted to less productive activities, local firms may thus be starved of investment funding' (p. 184).

However, reinvestment can be perceived in a different, more beneficial way: in many cases, reinvested profits can be considered to be the inflow of foreign exchange into a host country because, originally, such profit was generated by the financial investment and activities of foreign firms in the developing country.

To determine the inflow of capital from MNCs to the host country one must study and analyse the volume of foreign investment in that country. The share of foreign investment viewed as part of the total domestic investment may be a good indicator of the impact of such investment on the country's economy. However, if the MNC investment has been drawn from the reinvestment of local savings and profits, and national firms have been deprived of such investment, this means that there is a cost for the host economy and it will be better to determine the effect of MNC involvement through the study of the attributes of the foreign plants. This latter

method should answer questions such as: what types of industries are MNCs creating in their host countries? what is the nature of the technology used? are any economies of scale or other operating benefits to be derived from MNC activities in developing countries? The above is based on the assumption (true or false) that local firms which may be deprived of capital at the expense of investment in MNC activity cannot use capital in productive activities as effectively as MNCs.

4.3 Transfer of technology

The importation of advanced technology into a developing country can give significant benefits, especially in terms of speed of development. For example, labour and capital can be used in more productive activities than hitherto and the use of technology should, ideally, enable the host country to create a high level of growth. MNCs are an important vehicle for the production, innovation and transfer of technology. It must be stressed here, however, that the technology imported must be appropriate to the developing country. It is only then that the crucial role of MNCs is a key factor in the development of the host country.

Transfer of technology is also a major benefit from foreign investment. Sophisticated machinery which is controlled by the MNCs could be used to increase the growth of the industrial sector of the LDC. Such equipment is a rich potential source of valuable information. The ability of the LDCs to gain advantage from the presence of the foreign companies depends on their capacity to absorb new information, which in turn depends on the skill levels of the local employees.

The definition of 'appropriate technology' is based on a country's inherent resources (e.g. mineral resources) which we can term 'factor abundance'. Factor abundance differs greatly between developed and undeveloped countries and MNCs' technology is created in an environment where capital is cheaper than labour and,

consequently, is geared to this situation. In other words, it is evolved to serve a capital-abundant/labour-scarce economy and management and technicians alike are mainly familiar with this status quo. It has been argued that the transfer of this type of capital-intensive technology may not be appropriate to serve the needs of developing countries. For example, economically less developed countries with an abundance of unskilled labour may receive expensive capital-intensive technology which does not significantly reduce their unemployment problems. However, it must also be pointed out that not all developing countries have an abundance of labour. Some have a labour shortage (e.g. many of the Gulf states), and here capital-intensive technology can be very useful.

It can, however, be argued that the techniques devised to serve capital-intensive conditions may nevertheless generate employment and thus benefit host countries with unemployment problems. This may, however, be a long term effect of the technology, which eventually produces a surplus which can be reinvested. Such profits for reinvestment often come from economies of scale only possible with technology, and, often, the type of employment demand created is for skilled workers whereas many developing countries, even those with abundant financial resources, may have an abundance of unskilled labour. However, it is sometimes the case that technology can be used instead of skilled labour, or, in cases of underpopulation of the host country, to solve the problems of scarce labour resources, as in the case of some oil rich countries.

The above outlines some of the factors to be taken into consideration when assessing the advantages or otherwise of using capital-intensive techniques in developing countries. They lead us to pose the question, is capital-intensive technology the best solution to a scarcity of labour? The answer is not easily determined. The question cannot be answered simply through looking at the advantages of technology, because MNC technology is usually only one part of an overall 'package' offered by

MNCs and being implemented in host countries' activities towards development. In other words, the advantages and disadvantages of MNC involvement for developing countries must be weighed as part of the total 'package' and must also take into account the impact of the MNCs on capital, transfer of technology, research and development, trade, balance of payments, management, employment, etc.

The above explores the problems of typical MNC involvement for an 'average' host country. A host country may, of course, have a particular set of circumstances which has led it to seek MNC involvement. For example, a particular raw material may require capital-intensive technology to exploit it fully and the technology required is specific to a very few MNCs due to the sophistication and specialisation required. This is so in the petrochemical industry in developing countries, where the technology required is both highly capital-intensive and highly sophisticated, and host countries often have a limited choice of techniques they can use. However, even here, the correct choice of MNC involvement for the host country will also depend upon the processes and products being introduced matching local conditions and requirements.

The price of technology is an important variable for appropriations of technology. The situation here is quite different from that of an equilibrium price reached in a competitive market, since there is no free market in which a host country could buy knowledge. It is more likely to have a monopoly or oligopoly market because the technology is very expensive to produce and commercialise. The firm which produces knowledge must earn a suitable profit for effort and work. There is no price for such technology which could, a priori, be considered appropriate. Hood and Young (1979) point out that 'pricing formulae require that the amount of technology traded or transferred can be measured accurately and a price thereby determined' (p. 185). Here price determination depends upon the negotiation and bargaining which may create disadvantages for a developing country if that country is inaccurately informed of what it is buying.

The direct price may become a less important cost in obtaining technology than the associated terms such as technical services, intermediate parts, expensive machinery and other products required from the parent corporation. Direct price and associated costs are an important determination of appropriate technology. An LDC characterised by a weak bargaining position may pay too much for the technology received which becomes an indicator of disadvantages of transfer of technology through the MNCs.

4.4 Research and development

To ensure that the technology to be introduced to a host country is appropriate to its specific needs and thereby has a positive transfer MNCs may need to invest more in their existing technology to adapt it to that host country. This requires research and development (R & D). Investment in R & D will enable the foreign firm to ensure local conditions are taken into account in the creation of the most appropriate technology. The bargaining position of the host country thus becomes crucial in ensuring that R & D is undertaken. An example of pressure created by new industrialisation on the MNCs is an insistence from these firms to invest more in R & D, yet such countries (for example South Korea and Singapore) were dependent upon their bargaining position to receive support laboratories.

MNCs operating in LDCs have little reason to establish research facilities in their host country because the principal technologies controlled by the MNCs are located in their home countries. Lall (1984) argues that 'even if it is admitted that MNCs transfer the best production technology, they do not transfer the capability to generate new technology to affiliates in the Third World. They transfer "know-how" (production engineering) and not "know-why" (basic design, research and development)' (p. 10). The establishment of higher levels of R & D facilities can be

considered an important source of advantage of foreign firms and lower levels of R & D investment should be considered a disadvantage for, and by, the host country.

4.5 Management and managerial skills

The management and managerial skills possessed by the MNCs may benefit developing host countries through the superior management which may come from either greater efficiency of operation as compared with the local firms, or greater entrepreneurial ability to take the risk associated with uncertain world businesses, especially if the management and managerial elements are scarce factors. The managerial superiority may create three types of benefit to the host country: (1) managerial efficiency in operation, coming as a result of better training, more dynamic performance and faster communication with the affiliates around the world; (2) entrepreneurial ability in organising supplies and marketing; (3) external benefits from training programmes which could increase the skills level of the workers, who may leave the MNCs and work in the local firms with a 'spin-off effect'. Neil Hood and Stephen Young point out the following:

The inflow of entrepreneurial ability and skilled management thereby improves the balance of the local economy. The spin-off effects may be even more important: local personnel who are trained to occupy managerial, financial and technical posts in an MNC affiliate, may later leave the firm and help to stimulate indigenous entrepreneurship. (Hood and Young, 1979, p. 189)

However, external benefits may not be received by the host economy in LCDs because the training may be irrelevant to the local conditions. In this case, departing employees may worsen the effect of management, by creating management methods suited to large and complex firms.

Besides the spin-off effects, local suppliers and distributors may gain from dealing with the MNCs, since these firms have long experience of operating at high levels of managerial skill. However, if such firms recruit in their own countries, the

benefits to the host country may be less as the migrants will not only take the place of local labour but training opportunities for host country nationals to improve the skills of the local labour force may not exist. Such training is very important for the local worker and local business methods, not only because of the scarcity of training opportunities and managerial skills but also because, in the world of the MNC, the level of expenditure and knowledge available for managerial training is so much higher that it could confer many advantages once it becomes a part of the host country's economy.

4.6 Trade and the effects on the balance of payments

The balance of payments of the host country may benefit greatly from the influx of capital by foreign firms if there is no major adverse effect also attaching to the influx of foreign capital. The effect of foreign investment can be extensive, and there are losses as well as gains to the host country in inviting capital from abroad. Often, MNCs use the host country's own capital resources to produce import-substitutes or to produce goods for export, and this on the whole has a beneficial effect on the balance of trade as the host country can avoid excessive imports and gain valuable foreign exchange. On the other hand, MNCs may also use the host country's capital resources in importing goods, and as a result affect detrimentally the country's trade balance, especially if the import-producing activities are for non-essentials, for instance if the imports do not relate to goods to do with reinvestment.

The backward or supply linkage affects the balance of payment in direct proportion to the extent to which the MNCs utilise local resources or inputs, for example the host country's raw materials or its labour force. The utilisation of these inputs will benefit the host country's balance of payments by increasing local capital and a saving in foreign exchange, and so the linkage between local firms and those which are foreign-controlled is very important. Some economists, studying the linkage

between the MNCs and the local suppliers in small developing countries, have found that the supply linkage was not significant. For example, Hill, in his study of MNCs in the Philippines, demonstrated that 'extensive local procurement of components by foreign plants was the exception rather than the rule. Most of the components used by foreign plants were either imported or produced in-house' (Dicken, 1988, p. 369). Other economists' research has produced opposite results. For example, Lim and Fong, who studied three MNCs in Singapore, came to the conclusion that 'under certain conditions local vertical linkages are created by MNCs' (Dicken, 1988, p. 389). This condition may depend upon the policy of individual MNCs towards the host country, and also upon local economic conditions and other factors.

Transfer prices are an important issue for the host country's balance of payments. Transfer prices are prices charged on transactions that take place within a firm, regardless of whether or not the firm is located in different countries. This price can be used to shift profits clandestinely from the affiliates of the foreign firm back to the firm in its own country. Consequently, a market price may not exist for the produce or service being transferred - if a MNC wants to transfer funds from a particular country, it merely makes the price higher for imports to the subsidiary and makes the price paid for exports from the subsidiary lower.

Transfer pricing operated by a MNC is against the interests of any host country and usually reduces the gain from the foreign investment. The foreign firms operating it maximise their global profits and minimise the tax paid and can avoid the host country's restrictions on the remittance of profits out of the country. Any advantages involved accrue to the foreign firm, and the host country's balance of payments suffers. Therefore, the study of the impact of transfer pricing as a policy of some MNCs and the impact of government decisions on taxation on foreign investment is important for this study and affects what has already been said about the effects of MNCs upon the

balance of payments of the less developed host country in areas such as exports, tax payments, employment and supply linkages.

It may be impossible to quantify with any degree of accuracy all the effects of transfer pricing, but analysis and discussion of its effects - its advantages and disadvantages - are useful in determining the total impact of MNCs on host LDCs.

4.7 Impact of foreign investment on local employment

MNCs may create very large numbers of job opportunities in both developed and developing countries. Workers may be employed directly by the firms in the host country, and indirectly by other firms associated with or attracted by their establishment in that country. The number of jobs created directly in foreign firms will depend upon the size of the firm's activities and the type of technology used, that is, the nature of the industry. The number of indirect jobs created will depend upon the extent of local linkages forged by the MNC with domestic firms. Local linkages may vary from industry to industry: for example, export-oriented foreign firms may create fewer linkages with local firms. Another factor which affects the linkage of indirect jobs created is the income generated by the MNC - the higher the level of reinvestment, the greater the advantage the host country receives from the MNC's presence.

The direct and indirect effects of the MNC can be traced by studying the way the wages and salaries paid by the MNCs to their employees (and those of the employees of the firms where employment has also been generated by the presence of the MNCs in the host country) are spent. The most important question to answer is whether these wages are spent locally or abroad. The answer depends very much on the source of employment - whether the foreign firms employ more local labour or more foreign labour. If the MNCs employ more local people, there is a positive impact

as their wages are used to purchase local products much more than are the wages of foreign workers. Consequently, the employment of local labour generates increased spending, enhancing the domestic economy and increasing the amount of money available in the host country.

Empirical study can determine the advantages and disadvantages of employment of MNCs for the host country. However, Dicken (1988, p. 372) reported that calculating this could be fraught with difficulties because of the counter-factual nature of the problem. Difficulties may arise, especially in the study of indirect employment linkages, because the extent of such linkages may be difficult to measure.

The type of employment created by MNCs in the host country is also important. Ideally, jobs created should be appropriate in terms of the skills and needs of the local labour force. The type of employment created depends upon the nature of the industry and the technology used, and also the scale of production. In an industry where the MNC uses advanced technology and has high volume productivity, it will create a demand for highly skilled workers in the host country. If the host country does not possess this type of worker, foreign firms may resort to employing labour from their own or other countries. Meeting the need for labour not available locally often results in the importing of large numbers of migrants. This may create problems for the host country's trade balance, as the remittances of the foreign workers flow out of the country.

The amount of remittances will depend on the country of origin and the salary level of the employee. There are two types of expatriate workers. The first group is made up of workers who leave their dependants in their home country, and save a high proportion of their salary and spend a lower proportion. The impact of their sending such a high proportion of their salary to their dependants at home could make the host

country's balance of payments worse, especially if the expatriate workers represent the majority of employees, as is the case in Saudi Arabia.

The second group is comprised of those who bring their families to the country where they are working, and spend a much higher proportion of their income in the host country than the former group. These people will have a greater impact on the consumption level of the host country. However, the net impact of their consumption on the aggregate demand may be met either from importing more goods, which would affect the balance of trade, or from increased domestic production.

In order to shed light on the effects of MNCs on employment in host countries, empirical study should concentrate its resources on answering the following questions:

1. Does the entry of a foreign corporation create new jobs?
2. What kind of jobs are they?
3. Are the wages paid by the MNC higher or lower than those of local firms?
4. Can the demand for labour be satisfied locally?
5. How much of the salary and wages are spent locally?
6. How much training does the MNC provide for the local workforce?

From the point of view of the host country, the MNC should train the local labour force, thereby reducing local unemployment and also increasing the level of skills available in the host country.

4.8 The role of training strategy

Training is needed throughout any company from the head of the organisation to the shop floor, but it has been practised in a variety of different ways depending on the

philosophy of the MNC and its training strategy. Some organisations practice 'non-systematic training courses' without making appropriate plans or selecting the trainees thoroughly. Often they decide the course structure without up-to-date knowledge of the work methods and standards required. In this case, organisations wish to train specific numbers of their workers in order to fulfil commitments which have been agreed with the local government.

Other organisations may act differently, having a more systematic training method, through which they can identify what training is needed. They prepare appropriate training plans, which are designed to meet the needs of each individual, to help the employees acquire more skills and knowledge. They also check the effectiveness of the particular training programme, and, if possible, make modifications to it according to the changes in the requirements of each individual.

The first stage is the identification of training needs. Training officers should identify precisely the needs of the new and older workers depending on the responsibility of the employees. Kenney and Donnelly (1972, p. 14) add that the training officer should identify those parts of the job which they are likely to find difficult to learn and where work errors are costly. They investigate the learning gap between the required level of competence and the present level of competence, and the role of the training officer in filling this gap.

This is not an easy task, as it requires detailed planning of the training programme and there are many requirements: identifying of the type of skills needed, finding appropriate and sufficient time for the training courses, choosing qualified trainers, providing the necessary equipment and materials, choosing an appropriate location for the training given the nature of the trainees' work, and determining the cost of the training and the ability of the organisation to cover this cost.

4.8.1 Methods of information collection

There is no single method of assessing training needs that training officers can rely on. They can analyse the organisation's records, such as personnel, accident and training records; for example, the training officer could obtain information from the personnel department which could include personal records including the job requirements, extensions or changes in the organisation's practices, promotion of the employees, and labour retainment and turnover.

In addition to this, officers could consult the top management of the organisation who draw up the long and short term objectives for the organisation; this will help the training officer to draw up a plan for both the short and long term needs of the organisation to match the objectives. Kenney and Donnelly (1972) stress the importance of this factor in information gathering:

The training officer obtains from top management indications of any anticipated variations in the business such as technical, products or marketing changes, future capital expenditure, or predicted adjustment in the labour force. These have significant training implications if they result in a demand for new expertise, or an increased requirement for existing categories. (p. 39)

The nature of the organisations' activities also plays an important part in the process of the training information gathering. These typically include the labour requirement, and the ability of the labour market to meet this need. If there is a shortage in the qualified labour supply, the training officer should be aware of this. The marketing of the products also needs to be considered, because the expanding of the market also requires expansion in the production process, which means that more employees will be needed to meet the extending production or more sophisticated machinery associated with the skilled labour being dealt with. Either of these situations will require changes in the training that is available.

It is very important that the training's effectiveness should be tested while training is taking place, as well as after it has been completed. This can be done by both the trainers and the trainees.

Any problems that arise during the training process should be seen as lessons to be learnt and should be taken into account in the following training programme. One of the most important and effective way of testing the effectiveness of the training is by a questionnaire, which should be well designed, relating to specific job levels or positions within the organisation.

Nowack (1991, p. 70) suggests that the questionnaire should include three main sections: first, questions on employee attitudes; second, on job dimension summary ratings; and third, on demographic information. Nowack aims to pinpoint the internal and external barriers that may influence training effectiveness through identifying the employees' feelings about the organisation's policies and procedures, work environment and management procedures. The section on job dimension summary rating should include a list of dimensions extracted from the job profile. Finally, the demographic section should include the employees' job position, location, and length of experience in the organisation and in the current position.

It is worth noting that the answers to the questionnaires should be analysed carefully by specialists who will also be able to interpret the results and identify the significant differences between the respondents' answers depending on the demographic variation. For example, analysts could use the employees' job positions, locations and lengths of experience as the main variables to determine the significant differences among various employees. This will help the organisation to identify the problems regarding its training activities and which of its employees are dissatisfied with any training issues, and to determine the best way to solve the problems depending on any other information which is available from employees.

Buller and others (1991, p. 58) argue that training outside the company could be nothing more than excuses for busy managers to take holidays away from their work, if it is not designed and executed according to sound learning principles. They point out several questions which should be answered, such as 'Does the training make any difference to the work performance for the target employees?' and 'Does it affect the organisations' outcome?'

The paper of Buller and others suggests various ways of increasing the benefit from such training, starting by suggesting, following the learning model proposed by Whellen and Cameron in 'Developing Management Skills' (1984) that the study should be limited to management training outside the company, rather than discussing training issues in general. The most important element is that training officers should connect the strategic goals to the priorities of the sponsoring organisation. This leads back to the importance of identifying the needs by investigating the skills shortages of the employees.

On-the-job training is one of the most effective methods of gaining skills and learning. Rothwell and Kazanas (1990, p. 53) define this form of training as 'training that occurs at the workplace rather than outside the company'. (p. 53) It is dependent on the experiences of other expert employees in order to benefit the new employee by observation or practice in a similar plant where similar work is done, or by reading technical and procedure manuals.

This is a useful method when it is used to upgrade the skills of employees (both new and old), especially if there is a need to upgrade skills or to change their type of work. It also has to be well planned in order to explain the needs and requirements of specific jobs; this can be related to what has been previously said about the strategy of identifying individual needs for new employees and setting plans to fulfil requirements.

Well-qualified employees are needed to carry out the plants operation, as well as to develop the plan.

Rothwell and Kazanas made an exploratory study of the issues and practices involved in on-the-job training. They found that manufacturers conduct large amounts of on-the-job training because of the nature of their industrial activity. One interesting finding of their research was that the supervisors receive the greatest benefit from on-the-job training, which could mean that supervisors have more opportunities than others to receive such training as they have more power to acquire it.

4.9 The effects upon sovereignty of MNC involvement

MNCs may cause some loss of economic independence for the host country and this can be a disadvantage. The extent of the loss depends upon how much of a host country's economic activity is controlled by foreign firms, and how these firms control decision-making. Regarding the former, if foreign firms have invested substantially in a host country, the results may be that, although host country management and techniques may become more reliable, along with decision-making, the host country becomes technology-dependent and thereby, while the result may be growth, it is a less self-generated growth for the host country. Where MNCs have more opportunity to influence and/or control decisions on investment and foreign policy, marketing, purchasing, employment and trade policy, this weakens the sovereignty of the host government and this can be seen as a disadvantage for LDCs.

In joint venture enterprises, the effects of MNCs on sovereignty can be determined in the same way as those above, except that co-operative agreement should be the norm for such MNC involvement. The effect on the autonomy of the host country of any agreement can be made explicit in any agreement. Co-operative agreement should determine the regulations of the plant which is set up as a separate

unit and, theoretically, it should mean independence in decision-making for the plant established in the host country. Nevertheless, the main corporate objective of any business is to make a profit rather than enhance its host country's economy, and thus it could be argued that the establishment of an MNC in an LDC always carries with it some disadvantages.

Marxist schools of thought concerning the nature of the industrial process argue that the process of dependent development which is taking place in many LDCs, dominated by MNCs and their interests and controlling technology and markets, may inhibit the development of indigenous firms. This is especially the case if the foreign firm does not create local linkages or if local firms are squeezed out by the competitive strength of the foreign firms. Britton and Gilmour (1978) explore the impact of foreign dominance on the host economy and point out that

as the proportion under foreign control rises, an industry becomes a shell. In terms of its products, the industry seems to be complete and comprehensive, but large elements of the production system are missing or deficient. Each increase in reliance on a differential technology, which comes with each increment in proportion on foreign control, increases the industry's propensity to import capital equipment, parts and components, as well as managerial, technical, administrative and marketing, scientific and other skills. Ultimately, the growth potential of the foreign dominated industrial groups is severely curtailed.(p. 98)

Most economists believe in the negative relation between economic sovereignty and domination by foreign firms. In other words, the level of foreign activity in a host country will always decrease that country's economic sovereignty in direct proportion to the amount of foreign domination present in MNC involvement.

4.10 Conclusion

Theoretically, it is difficult to come to a clear-cut conclusion about the net effects of MNCs operating in LDCs because of the complexity of the problem and the variety of other factors which may be present, clouding the situation. For example, the MNCs' impact on the balance of payments cannot be judged by whether there is more money available in the host country for saving or spending, and whether there is a saving of foreign exchange. Any conclusion regarding the effect of MNCs in LDCs must also take into account the mobilisation of the local money resources and its use in more (or less) productive activities. Thus the financial impact of MNCs in a host country is not solely seen in its balance of payments. Empirical study tends to bear out the aggregate effects of the MNCs on LDCs' economies. This study will examine the effects of MNCs on capital, transfer of technology, research and development and balance of payments, as well as the effects on employment and sovereignty in the Saudi Arabian context.

Chapter Five

Saudi Arabian Culture and Working Practices

5.1 Introduction

The MNCs cannot be judged fairly unless we understand all of the contributory factors in the working practices of the host country. These are: cultural values; working values; religion and the managerial decision style. Cultural values refers to the way in which critical factors in a business environment are seen by the managers; working values refers to the way in which work is seen by those who do it; religion and the managerial decision style refers to how Islam influences the practices of managers in Saudi Arabia. All of these factors have a significant influence on the behaviour of MNC employees.

There is no better way to judge the good intentions of the MNCs in employing local people than by the job satisfaction of their employees. Such satisfaction may be affected by the working practices of the MNCs, but it may also be related to the other cultural values of the host country.

One of the best ways to analyse the working practices in Saudi Arabia is in terms of the employment situation in the private sector, highlighting the problems of employee and employers' attitudes and the problems of education and training.

5.2 Cultural values

Multi-national Corporations have steadily increased their operations throughout the world, and as a result of this there has been an increasing interaction between the cultural values of employees. This has affected the management strategies with respect to decision making and job satisfaction for the employees. In fact, one should not expect cultural behaviour to be similar among employees gathered from different cultures, contrary to the tenets of the universal school of thought as exemplified by commentators such as Koontz (1969), Child (1982) and Bartels (1982), which claims that there are no real differences in managerial principles. These authors claim that if

there is a difference in the managerial principles, it must be related to the differences in the behaviour of the individuals concerned, or the nature of the work in the organisation.

Harris and Moran (1970) discuss the influence of culture on organisational behaviour, and state: 'Culture affects the way a manager views even critical factors in the management process. From decision making and problem solving to supervision and appraisal.' (p.5) They explain this further, stating: 'Management functions will be affected by a belief, value, attitude or assumption which is part of culture in that it is shared by a large number of people in any culture.' (p. 5)

The literature on job satisfaction shows that an understanding of the culture of any society is very important. It is a central concept that has been found to play a major role in the value systems as a predictor of work satisfaction. Authors who have researched in this area include Ali and Paul (1985), Ali (1987), Ali and Al-Shakis (1985) and Ali (1989).

Ali and Paul (1985) sought to shed light on the relationship between decision-making and job satisfaction. Their sample included 83 managers in Riyadh, Al-Hasa and Damman. Using a work satisfaction index, they measured the organisation through items extracted from the survey, including seven sub-scales which measure the satisfaction of the employees in terms of the following categories: work group; supervisors; pay; job organisation; promotion; and future chance of getting ahead in the work. In addition to this, they studied leadership and decision-making.

The findings showed that a participative manager tends to inspire confidence and trust among his subordinates, while the autocratic manager fails to develop such confidence and trust among his subordinates. They explained this finding by stating that Arab managers are not oriented towards a delegative style, which could be a result of the manager's preference to not let others be involved in his business affairs. Arab

managers who tend to use delegative styles reflect the influence of Islamic and tribal values.

They also found that 28 per cent of the sample managers are oriented towards a pseudo-consultative style; they refer again to the Islamic and tribal influence in Saudi society as a basis for this management style of decision-making. They conclude their discussion by raising very important issues, that pay is determined by personal connection - in other words, nepotism.

Ali and Paul's study used cultural values as the main determinant of work satisfaction and decision-making styles; it is very important for the employer to be aware of any reasons for dissatisfaction with their manager among employees in the workplace.

Although there are slight variations among the various studies in defining the impact of cultural values on job satisfaction, the overall tendency suggests that the understanding of job satisfaction will require the understanding of the cultural values and environment as prerequisites. For example, Ali (1987) found that the conformist value is positively related to job satisfaction with respect to organisation, promotion, and future advancement. He stated that conformist managers are oriented towards duty and loyalty and that they like to be directed by their supervisors. They have a high respect for written work, policies, procedures and work duties. They see loyalty to their organisation as a key to present and future rewards. Any promotion and advancement should be given in such a way as to reinforce loyalty and the recognition of seniority and the meeting of performance objectives by 'top management'.

Ali investigated the role of the tribalistic value system and found that it related to satisfaction with the work group, pay, and future advancement. He found that the leadership dimension of tribalistic values is positively related to satisfaction with the work group. Tribalistic managers expect their subordinates to perform as well as other

people do in similar work; they also like to be directed by their immediate superiors, to tell them exactly what to do and how to do it. This argument is similar to the previous one, and makes it clear that Arab tradition and culture have influenced the Arab workplace.

Human values can be seen as determining managerial practices and behaviour, but one should not generalise on this basis without taking into account the change which could happen in a given society. Modern values could also develop through the rapid growth of industrialisation and modernisation. Ali and Al-Shakhis (1985) studied managerial value systems in Saudi Arabia and support Yamani, who believed that it is necessary to change the mentality of Arab people, to adopt a more western-style business approach. They found that Saudi society is a 'prismatic one', meaning that in such a society the modern and traditional values could work together. They believe that Saudi society has been able to absorb the modernisation process and western methods without a major conflict. They suggest that managers working in multinational corporations should watch carefully the changes in the value profile, giving more attention to the new generation of managers and professionals. These people are probably more receptive to modern western values.

The evidence of the absorption and acceptance of modernisation and western culture without conflict is the fact that Saudi Arabian organisations are becoming more similar to western ones, especially in the areas of management and management style. This requires a change in the work value of the employees. Research findings indicate that most Saudi employees are satisfied with the management environment, such as their participation in decision making and their relations with their managers.

Ali and Al-Shakhis found that managers working with foreign or private organisations are highly conformist compared to those who work in public enterprise. They explain this by arguing that 'Saudi public enterprises are not highly structured and

rules are not clearly defined'. This finding conflicts with their earlier argument about the ability of Saudi society to absorb western values.

A higher position in an organisation's hierarchy could be an indication of a greater control of managerial power in dealing with subordinates. This could be owing to the nature of a growing society, where the manager's aim is to create wealth and the techniques of wealth gathering. In other words, this type of manager would be more materialistic in his relations with the people working with him.

Al-Twajri (1989) made a comparative study of the cultural values of management; he aimed to answer the question as to whether Saudi and American managers differ in their feelings of job satisfaction in the Saudi cross-cultural environment. He randomly selected fifty joint ventures working in various industrial sectors in Saudi Arabia and specified their top management. He compared the job satisfaction of the Saudi managers with that of the American managers and indicated that the difference that existed could be related to the difference in the level of experience between the two groups, since the American managers were older and had gained more experience whereas the Saudi managers were younger and less experienced. He also found that the Saudi managers were more ambitious.

The two groups showed a difference in attitude to their working conditions, location, and equipment in their office; the Saudis gave greater importance to these features than the Americans. This reflects the difference in cultural values and beliefs. Both groups are satisfied with their job security; this could relate to the nature of contracts in Saudi Arabia, because many local managers feel that they have the right to be rewarded for the work they have done in the past for their companies; Saudi employment law states that employees should be paid at the end of their contract period for the work that they have done. This helps the Saudi employees to feel more

secure, and the Americans have their chance in Saudi Arabia or in their home country working for another subsidiary of their employer.

Al-Twajjri found also that the two groups are equally satisfied with their self-esteem, their prestige outside the company, their degree of authority and their opportunities for independence in their activities in their work. There are differences in the feelings of satisfaction with personal development chances: the Americans feel more satisfied because they are working in an unfamiliar environment, which gives them the chance to learn how to deal with and interact with the new environment; Saudi managers believe more than American managers that supervisors should give assistance to their subordinates.

The Saudi managers seem to be less oriented towards paternalism in relation to questions of transferring jobs, despite the disapproval of relations and family. This finding seems inappropriate, and it does not accord with the findings which are presented in the third part of this chapter, which discusses the influence of religion and management decision-making styles.

Al-Twajjri suggests in his conclusion the following:

Human resource management strategy should be adopted at all levels for all nationalities involved in the MNC. If the MNC is interested in maintaining and recruiting Saudi managers, these research findings point to the fact that the MNC should encourage providing authority and opportunities for independence in business activities.

Unlike the study by Al-Twajjri, which involved only Saudi and American top managers, Al-Meer (1989) made a comparative study covering various nationalities and various levels and kinds of work, aiming to compare the level of organisational commitment to their organisation of Saudi and expatriate workers. He used the answers from 239 employees in several types of organisation, including public and private sectors; this may represent a problem, as it would have been more appropriate

to choose the private sector alone in order to have more specific findings, which could then be generally applied to all private sector employees. It is clear that there are various aspects of job issues which affect an employee's commitment to his organisation, such as salary and wage levels, the nature of the work, and the types of contract, which are completely different between the public and private sectors.

Al-Meer found that the expatriates from developing countries were more individually committed to their organisation than the Saudi Arabian employees. He states that this is a result of the improved levels of pay in Saudi Arabia as against the employees' home countries; this may be explained by reference to their cultural values in their home countries, countries such as Pakistan, India, the Philippines, Sri Lanka and Thailand. They have more loyalty, and serve their organisation with a higher level of commitment. The lesser commitment of Saudi employees is owing to the work, which requires more discipline, but a further reason for it is the discrimination against Saudi employees in terms of wages.

The Saudis are in a difficult situation in this respect, as their employers should include the local employees in their calculations of the costs and benefits of employment, but they prefer expatriate workers from developing countries as they are comparatively less expensive and more committed than Saudi workers. Saudis could be substituted for employees from the developing countries for unskilled and semi-skilled jobs; however, western employees did not consider this in their calculations because they felt that Saudis and employees from developing countries are difficult to substitute for employees from developed countries due to the nature of the work, which is related to the transfer of technology.

The lack of commitment of Saudi employees is one of the main reasons why the employers are reluctant to employ them; they see local employees as unreliable and likely to change jobs as they desire a higher salary or greater self-esteem, either by

working for a government department or in a different organisation, which would offer them more chances of training either locally or abroad, as well as faster promotion. This subject will be discussed in greater detail in this chapter.

Al-Meer concludes his study by commenting on the positive relation between tenure of employment and organisational commitment. It is likely that the reasons for the difference are the salary increases, the improved social services for the employees, and the developing of friendship among the employees.

5.2.1 Work values and cultural values

According to most recent studies carried out in both the developed and the developing countries, people's values differ widely. In a society which has its unique values the people have seen some sorts of work as 'low level' and they prefer not to be involved in such work, because they regard it as shameful both for themselves and for their family; in Arabic, this is called 'Aib work'. Examples of such work in Saudi Arabia include carpentry, plumbing, metalwork and other construction trades. The families believe that some forms of work are shameful and would not expect their children to be involved in such a 'low level' job. If a person ignores the shame that he is bringing to his family, and accepts such a low prestige occupation despite the reaction of his family, they will stop him, if necessary by force.

Palmer and others (1984) support this argument and state:

Similarly, when respondents were asked to choose between family values and occupation prestige, approximately 65 per cent of the university students and bureaucrats selected being close to their family over prestige. For young people, this figure was 87 per cent. (p. 25)

One solution to the problems that this attitude represents is to work through the education system, but this requires more time to show results. The effect of such a policy is shown by the difference in the percentages for university students and other

young people studying at a lower level. This suggests that the education system is a more appropriate solution for this problem, considering the time-scale for solving a problem of this sort.

Strong attention should be given to the importance of family relations in a tribalistic society, which could constrain the willingness of people to accept work away from their home and where their families live. Palmer and others (1984, p. 24) found that 89 per cent of the young people sampled preferred a moderately well-paid job near their family to a well-paid one far away. This does not only apply to those in the lower levels of education, but it extends to the university students and bureaucrats, only 22 per cent of whom showed a willingness to accept a job far away from their family for a higher salary. This study was carried out in 1984, when the employment situation was very different to that of the present time. The demand for labour, especially in the Saudi public sector, and work opportunities, have declined in recent years.

5.2.2 Role of Culture in Labour Supply

The basis for assistance for the unemployed is the close relation between children and their parents and relatives, as most people who are out of work can get financial assistance from their families; this could lead to a reluctance to accept low wages. Some Saudi nationals might wait for a year or more for a job offering better wages, depending on the wealth of his relatives and the hostility. Such a situation could affect the local labour supply by causing wages below a certain level to be rejected.

Local employees would not be ready to accept the wage level of other employees who are hired from the developing world. Such employees might be able to agree to work for only \$200 per month, which would not be sufficient for nationals,

who would see their friends, relatives and other Saudi nationals receiving much more than them. This could lead to problems.

Why do local people not take the job opportunities offered to them rather than be unemployed? The answer is in the cost of living in Saudi Arabia, where a wage of around \$200 per month would not be sufficient to meet a person's needs, and if local employees accept such low wages, this could lead to inequality among the Saudi employees.

In Saudi Arabia there is no unemployment benefit or other system for people who are out of work. There is only social insurance, which provides some benefit for nationals who have no supporting family, or who are disabled, elderly or poor people with no work to benefit from. This situation makes the family relationship stronger, as people who are searching for work can rely only on their relatives.

5.3 Religion and managerial decision styles

The discussion of the impact of culture values would not be complete without a discussion of the impact of religion as part of those cultural values, particularly in the tribalistic Muslim society of Saudi Arabia.

The Middle East is the birthplace of three major religions, Christianity, Islam and Judaism. Most of the workforce in the region are Muslim, although people of other religions are also present. In Saudi Arabia, most western expatriates are Christian, and the employees from the developing countries are a mixture of Muslims, Christians, Hindus, Buddhists and others.

Muslims have two sources of Islamic teaching, the Holy Qur'an and the Hadith of the Prophet, which are the main guides to life. The organising of business activities, including the relation between employers and employees as well as more specific issues

such as decision-making, is discussed in these sources in order for people to be guided in their various business affairs. These things are made clear in the Holy Qur'an in the various sura: 'This reward will be for those who hearken to their Lord, and establish regular prayer; who [conduct] their affairs by mutual consultation; who spend out of what we bestow on them of sustenance' (Sura Al-Shura, verse 36).

Another example of the Qur'an's teaching on the decision-making styles that God requested from the prophet Mohammed [*peace upon him*] is 'Take counsel with them in the conduct of affairs' (Sura Al-Omran, verse 159). The Prophet engaged in consultation with his companions on various social, political and economic issues; for example, at the Battle of Khandak in 630 he accepted Suleiman al Farisi's suggestion to dig around the city of Al-Madinah in order to protect the city from the enemy.

The literature on employee participation in decision-making in Saudi Arabia and other countries, such as Al-Jofary (1983), Muna (1980), Russell (1986) Ali (1985, 1989) and Al-Meer (1989), all indicates the importance of understanding the cultural values of Arabic society, which are influenced by Islamic teaching and guidance. Ali (1992), for example, studied decision styles among Arab executive managers, and found that the consultative style was predominant in his sample. He supported his findings by referring to Islamic teachings which view consultation as a positive religious value, as well as tribal customs, which reinforce consultation in all aspects of Arab culture.

Russell and Nejdert (1986) made a comparative profile of Islamic and western organisations, and found that in the Middle Eastern organisations decisions were devolved from the top management, while in the western organisations there was a far more elaborate management information system which develops and informs the decisions.

There seems to be a disagreement between Ali (1992) and Russell, because the latter tends to eliminate the role of Islamic teaching about taking consultation. This is no real disagreement, however, because Ali discusses the process of decision-making, while Russell discusses decision-making in its final stages; managers in charge of decision-making would consult their subordinates, but the decision is finally made by them, and they will shape their decision by their beliefs depending on their self-confidence. This is not the same sort of consultation as that which is used in western organisations, which Ali calls pseudo-consultative.

5.4 Employment and the private sector

The unique character of labour and economic development in Saudi Arabia has led to a situation of heavy dependence on expatriate workers; in order to meet the over-demand for labour, to fulfil the requirements of economic development, many workers have been brought to the country from abroad. The MNCs cannot be blamed for their negative attitude towards employing local people without investigating issues of employment in the host country. It is known that the MNCs tend to seek lower-costing workers from other developing countries by establishing new subsidiaries in foreign countries, but this is not true in Saudi Arabia. The attractive variables are the availability of natural resources and capital investment rather than the cost of labour, and the well-qualified and trained workers.

The literature written on the private sector and national employment shows that there are problems. The most recent and important study was carried out by Al-Gaith and Al-Mashouk (1993). They aimed to determine the issues of Saudi local employment by analysing the quantitative and the qualitative information gathered from questionnaires, including 660 randomly distributed samples; recipients included employees, employers and executive officers representing Saudi and non-Saudi

nationals. They also analysed the responses from those Saudis who were seeking employment.

The study was well prepared as it covered employees of various nationalities and in various positions, thus enabling the expression of different points of view. The study was flawed by a repetitiveness in the questions, which were expressed in a number of different ways, in order to support the reliability and validity of the study.

The primary conclusion of this study was that the number of Saudi employees was less than that of the foreign workers at all levels of work, including administration and technical work, and production and service jobs. It indicates that only 3 per cent of Saudi employees are university graduates, which indicates the reluctance of this sector to employ local people rather than a problem with the Saudi educational system. It could be misleading to take this finding as evidence of lower quality education in Saudi Arabia. Al-Gaith and Al-Mashouk found that 50 per cent of local employees had no previous experience, a factor caused by the recent development which has taken place in the last twenty years.

The study did not consider the lack of job continuity, meaning the transferring of employment from the private sector to the public sector, or the attractiveness for Saudis of working in the government departments, as problems. This disagrees with other papers which were also presented at the Conference of National Labour held at an Institute of Public Administration in Riyadh in 1993, such as Ministry of Labour and Social Affairs (1993), Al-Nofaie (1993), Al-Dakhail and Al-Omi (1993), SABIC (1993), Saudi National Company for Sea Transport (1993), Council of Chambers of Commerce (1993), Riyadh Chamber of Commerce (1993), Al-Rajhi Banking and Investment Corporation (1993), Joint Saudi Company for Electricity in the Central Region (1993), and Al-Riyad House (1993). All of these papers have referred to the attractiveness of government employment as a major problem, as it results in Saudi

citizens working for the government and not for the private sector. Transference from the private sector to the public has not happened to a significant extent. The method used to gather information could not lead to accurate results, because the authors included employers and job-seekers together, rather than treating the employers separately.

Taking the cost of employing local people into consideration, Al-Gaith and Al-Mashouk indicate that the respondents had various points of view on this. Employers and foreign executives believe that employing Saudis costs more, while the Saudi executives and job seekers believe the opposite; therefore cost differentiation could play an important role in the denial of employment opportunities to local people. The foreign employers do not consider the macro-benefits to the country, only to their companies.

These organisations do not participate in training as they should. The study did not give a reason for this, but it is due to a shortage of training facilities and a lack of training experience, as well as to the cost of the training, which seems to be very difficult to meet, especially in the case of small firms.

The lack of training presents a new problem. For example, private companies may have to recruit local employees who are qualified in English as this is the language of business in Saudi Arabia. If employers are dependent on what their Saudi employees have learnt at school or at university, they will find this insufficient for their needs. Language training centres in Saudi Arabia are not able to train to a high enough standard, because of the short period for studying, as well as under-qualified teachers who come from developing countries, such as other Middle Eastern countries. The teachers learn the language in their country, and could have weaknesses in their own writing, reading and speaking of the language.

Al-Gaith and Al-Mashouk (1993) argue that the nature of the work could affect the ability of the private companies to employ local workers because they find that foreign workers are willing to accept transfers to anywhere in the Kingdom of Saudi Arabia, following the requirements of the company, while the Saudi employees would not readily agree to this. The reason for this is social, because the Saudi people prefer to remain with their families and relatives. This should not conflict with what is indicated in Chapter 7, that SABIC employees were satisfied with the acceptance by their families of their work. This raises the question of the relation between salary and the importance of family acceptance for Saudi employees. The findings of the study indicate that short holidays and long working hours reduce the growth in the number of local employees.

The last important issue is that the quick and easy way of bringing in foreign employees reflects the preference of the private sector for foreign employees, as does the fact that it is considerably easier to dismiss them.

It is clear from the above that Al-Gaith and Al-Mashouk's is not a complete study, as it does not fully analyse the data produced. The aim of the study is to present the data without fully discussing the meaning and implications of what was found.

All of the papers at the Conference of National Labour mentioned above can be discussed under the following topics: salaries and wages; job requirement and environment; educational and training issues; and other problems relating to the policy of Saudization.

5.5 Salaries and wages

Saudi local employees working in the private sector believe that their salaries and wages are very low considering the long hours and the nature of work in this sector,

while their employers believe the opposite. Employers, however, know that local employees cost more than expatriate workers, which means that they prefer foreign workers, who will agree to lower salaries than their Saudi equivalents. Foreign workers will be happy to work in any job, in any working conditions, and will spend more time without complaining or asking for higher salaries, bonuses and promotion. Such a situation frustrates the local employees who are seeking better positions with higher salaries. One question that should be asked is whether it is fair to create a highly competitive labour market which works against local employees. This will be discussed in Chapter 7.

Small companies are not able to compete with large companies including the MNCs, which have the ability to pay higher salaries to attract local employees. The smaller companies cannot offer such attractive job conditions; they only wish to employ expatriates who will work for a lower salary and have enough patience to remain in their job for a long time in harsher working conditions.

5.6 Job requirements and environment

The working environment had been considered as an unattractive factor for Saudi workers in the private sector. Local employees are slow to adapt to new working conditions in the private sector which involve various different nationalities; for example, a new employee could face problems adapting to his new colleagues, including cultural differences. The foreign workers could make problems for the local employee, and force him to leave, as they are in a majority and hold much of the executive power in these companies.

The local employees would not accept a job away from their family. This prompted a study by Palmer and others (1984) into mobility values. The study argues that most Saudi young people prefer a moderately-paying job near their families to a

well-paying position away from their family (Palmer and others, 1984, p. 24). In addition to this, Saudi employees do not like to work in some types of job, in so-called 'lower level jobs', owing to the culture values discussed above. This is supported by the Al-Rajhi Banking and Investment Corporation paper (1993). This later paper points out that the Corporation found difficulty in employing local people due to their dislike of the work, which included security and maintenance work, electrical operations, cleaning, and other services, such as computer work. The Corporation adds that people are unwilling to accept work requiring manual tasks or work involving a special uniform (p. 337).

Some of the private companies believe that the local employees do not like to work in the private sector, owing to the nature of the job and its requirements, such as long hours or working in the evening. This is also clear in the paper by Al-Rajhi Banking; it was pointed out that Saudi young people are not familiar with working in the evening, nor do they like long hours of work, and this caused problems in hiring local people rather than expatriates. Saudi people quit their jobs after costly training to go to another private organisation or a government department, which could require fewer hours and would offer them longer holidays, weekends off and less hard work. This happened despite the high salaries provided by the Corporation. This makes the whole problem more complex, since increasing salaries does not solve the problem of job instability.

5.7 Education and training issues

The private companies use the weakness of general education and training programmes as a reason for their reluctance to hire local employees. This is clear from a review of articles and studies prepared by private companies and organisations connected to the private sector, such as Council of Chambers of Commerce (1993), Riyadh Chamber of Commerce (1993), SABIC (1993) and ARAMCO (1993), and other studies such as

Al-Dakhail and Al-Omi (1993), Al-Nofaie (1993) and Ministry of Planning (1993). All blame the education and training output because all are unable to meet the training requirements of the private sector for local employees.

The paper by the Riyadh Chamber of Commerce (1993) indicates that graduates from the colleges of Humanities, Social Sciences and Art are significantly exceeding in numbers the graduates from Science and Technology colleges; the study found that the respective percentages were 71 per cent and 29 per cent. As far as vocational training is concerned, the study shows that graduates from Institutes would not be sufficient to meet the demand for skilled or semi-skilled labour . The number of non-national employees has reached 4.6 million, of whom more than 310,000 are working in manufacturing. Only 51,376 Saudis will graduate during the fifth Five Year Plan (1990-95); this will not be enough to meet the demand for skilled workers. In addition to this, Vocational Training Centres are not able to provide a complete set of courses in any particular area (1993, p. 266).

This corroborates the findings of Al-Nofaie (1993). Al-Nofaie argued that there are weaknesses in the vocational training to meet the demand of the requirements of development for both private and public sectors. The students prefer to study in Art, Humanities and Social Science colleges, which creates a large gap between the demand for science graduates and the actual number of science graduates. Al-Nofaie related this to the weakness of communication between the educational organisers and the private sector owners. The educational organisers should take into account the sort of skill that will be needed. This does not happen. In addition to this, vocational education does not develop to meet the demand for skills in high technology. As a result of this, training is insufficient to meet the quantity and the quality of skills required.

The need for an appropriate education and training output was also criticised by Al-Dakhail and Al-Omi (1993, p. 127), who work in the General Organisation for Technical Education and Vocational Training. They argued that there is a gap between the recent developments in technology used by the private companies and the level of education and the curriculum of the educational and training programmes.

The Saudi education system is deficient in providing students in general education and training programmes with mental skills such as analysis and argument. This could create a problem, especially if the employing private company does not provide additional training.

The private companies do not participate in designing the training to relate it to their needs. This responsibility is only taken by the government via the establishing of a large number of Institutions, which are not successful in attracting students and which also face a high percentage of withdrawals from programmes by students. An example of this is the preparation programme carried out by the Institute of Public Administration, where 65 per cent either did not attend at all or else withdrew after the start of the course.

Al-Taib, the General Director of the Private sector programmes in the same Institute, indicated that this could be due to the lower financial scholarship funding, as against the alternative of starting in a job without completing the training. He gives as a second reason the lower ability of high-school students qualified in mathematics and English.

Graduates from high schools and universities did not have sufficient knowledge of the labour requirements of the Saudi economy; they believed that accepting a job in the private sector may give less security than seeking a public sector job, from which they cannot be removed by law.



Private Training Centres are limited to teaching certain skills, such as computer administration, are commercially aimed, and seek to make a profit quickly. According to the Riyadh Chamber of Commerce (1993, p. 237), 64 per cent of the Training Centres in the country are oriented to computer training, while only 10 per cent dealt with technical training.

Some of the local and joint venture contractors do not participate in training their local employees. This could be due to the Government not making this a requirement of their contract, especially in the past. The companies use such contracts as an opportunity to recruit from abroad, in which case they do not have to train the employees, and do not have to employ and train Saudi people. Al-Dakhail and Al-Omi argue that most private and foreign companies who engage in government contracts do not have any commitment to employing or training local employees (1993, p. 127).

5.8 Other Saudisation problems

There is no clear policy to implement substitution of expatriates by local employees; the only existing government policy is the Saudi Labour Law of 1969, which was designed to organise labour in the country and which included thirteen chapters containing general and specific laws concerning the relation between employers and employees. None of the Law's regulations discusses the substitution specifically except Article 50, which states that employers should prepare their local employees vocationally to replace foreigners by improving their technical skills, and prepare a list of the Saudi employees who replace foreigners in accordance with the conditions, rules and duration decided by the Minister of Labour (p. 23). Up till now, no regulation has been published to create a timetable for this process.

Implementing the existing regulation is another problem. Article 49 states that

foreigners shall not be recruited to work or be authorised to do so with companies or private establishments without the agreement of the Minister of Labour and without getting a work permit in accordance with the rules and regulations decided by the Ministry of Labour. The work permit shall not be granted unless the following conditions are fulfilled:

- the foreign labour must have entered the Kingdom legally with complete compliance to the conditions required by the residence regulations
- he must be one of those highly qualified professionals or have educational qualifications needed by the Kingdom, and whose occupation is not available with local citizens, or the number of those citizens is not enough

A review of the relevant legal Articles makes it clear that there is no clear definition. Employers have the right to claim that they need expatriate workers, and will fight for the Ministry of Labour's permission to recruit from abroad, depending on their needs; they argue that jobs cannot be carried out by local citizens, or that the number of citizens is not enough, due to the scarcity of appropriately qualified professionals. Some private companies exaggerate the need for experience and qualifications by asking for a high level of qualifications and extensive experience in positions which do not call for such strict requirements.

A paper by the Ministry of Labour and Social Affairs (1993) claims that exaggeration of qualifications and experience required was one of the reasons hindering local employees from job appointments in the private sector. Such experience cannot be gained by people who have just graduated and have not had the opportunity to work; they have to have opportunities to work as a prerequisite for gaining experience. It is not fair to compare the local employees with expatriates, who have better opportunities to gain experience either at home or in Saudi Arabia itself. Saudi Arabia, as a country which has recently undergone development, has only recently gained a better-educated generation, and this generation should not be

compared with expatriates, who come from countries more advanced in their educational system than Saudi Arabia.

The existing regulations have helped the private companies to ask for more expatriates, since they cost less than the local employees, and since papers and visas can easily be obtained for them at no cost. The Council of Chambers of Commerce, which represents the private companies in Saudi Arabia, and the Riyadh Chamber of Commerce agreed that ease of recruiting from abroad was largely responsible for the propensity for employing expatriates. The Council's paper states that 'it is possible to get foreign employees in quantities and qualities needed in a quicker and easier way than local employees, who are characterised by a scarcity of qualified employees; it requires a long time to find qualified, trained local employees' (Riyadh Chamber of Commerce, 1993, p. 209).

5.9 Studies in Saudi Arabia

In reviewing the literature on Saudi Arabia, no studies can be found which discuss the impact of MNCs in Saudi Arabia on employment, management and management skill transfers of technology, and capital investment. Most of the studies relate to job satisfaction, management decision styles, and managerial value systems of work, and they are cross-cultural comparisons. None of the studies has considered the impact of MNCs in Saudi Arabia with respect to the above variables. They either study the various private sector organisations or study the public sector without considering the impact of the foreign firms on the economic, business and social aspects of Saudi Arabia.

The only study of the impact of managerial thinking in SABIC is a thesis by Aba-Alkhail which related to job satisfaction and motivation among middle managers in the company. The study was produced in 1988, and was socially-oriented. The

object of the study was to analyse the similarities and differences in managerial thinking, taking the managerial attitudes, job satisfaction and motivation of the middle managers working for SABIC as the main theme. The study found that the managers came from various countries, including both developing and developed countries. The field-work studied 240 middle managers of the company and found that socio-cultural influences, stage of economic development and other industrial and business factors were the major influence in the managerial thinking of the study group.

The analysis of the data indicates that despite the variation in national origins, the respondents believed that the job itself was the main reason for their involvement in the country. In relation to leadership style, Aba-ALKhail's findings indicated that most of the respondents believed in a democratic style of decision-making. The target sample ranked the most important motives for joining the company differently according to employees' national origin: for example, Saudi employees were attracted mostly by working conditions, whereas most non-Saudis were attracted by salary.

It is clear that the study was limited to the middle level of management and oriented to social and managerial issues, especially the decision-making style. It did not take into account the differences of the joint company nationalities, and it studied only the middle management of SABIC in general.

Another politically-oriented study is that by Helal (1981), who generally discussed the problem of extracting technology transfers from the MNCs to the host country, taking rich underdeveloped countries as case studies. The purpose of the study was to reveal the impact of the oil companies. The main questions were: How important is the need for technology to economic development? Does the MNCs' technology lead to large local benefits, either through high employment, training, etc.; or through generating large revenues for the government? Why does technology have two different meanings, one for the MNCs and another for the host country?

The study pointed to the importance of the technology transferred to the developing countries, but this is designed to extract raw materials rather than to be more transferable. Helal supported his argument by referring to Saudi Arabia, Iran and other oil countries, where he found no sign of the effective transfer of technology. The relation between the host countries and the MNCs is an organic one, as the companies are closely related to the governments of their home country (and their governments also work together), while the companies have interests conflicting with those of the host countries.

In the above study there is no economic analysis or discussion. The author depends on a more general view rather than a real supported argument, which makes the study incomplete. He points only to the negative political problems without discussing the positive impact of the MNCs.

Al-Babtein (1986) studied Saudi Arabian and US MNCs and, unlike Helal, believed that MNCs play a positive role through their supplies of skilled manpower and efficient technologies, which are transforming Saudi Arabia into a world class centre of modern infrastructures and industrial complexes. The intervention of the MNCs leads to a situation which benefits both the host and the home countries. He states:

The Saudi Arabian experience shows that it is possible for the parent country, the host country and the multinationals as parties to the investment process to balance their interests. It is also rewarding that the three parties have been able to optimise the benefits of their relationships over such a long time span. (p. 17)

Al-Babtein supported his argument about the benefit to Saudi Arabia, as he refers to the involvement of skilled manpower working in the MNCs such as administrators, doctors, lawyers, scientists and teachers. This is to draw attention to a particularly great benefit to the host country. More empirical investigation is needed in this area.

Chapter Six
Research Methodology

6.1 Introduction

The area of this research is the impact of the multinational corporation companies on human resource development and employee perceptions at the Saudi Arabian Basic Industries Corporation (SABIC). In fact, no empirical investigation has even been attempted before as a means of studying this impact, covering different aspects of human resources. The main objectives of this study are to examine whether SABIC companies are committed in their intention to employ Saudi employees, and to examine whether SABIC employees are satisfied about various aspects of the job.

6.2 Objectives and scope of the research

The objectives and scope of the study in general are discussed in Chapter 1. The specific objectives of the research are as follows:

1. To present an assessment of SABIC's employees' nationalities.
2. To present and analyse the qualifications of SABIC employees.
3. To explore the nature of the work of SABIC employees in relation to their nationalities.
4. To study and analyse social and economic issues and their relation to job satisfaction.
5. To examine and analyse the employees' satisfaction with respect to:
 - training and experience acquisition
 - salaries and wages
 - promotional opportunities available
 - participation in decision-making
 - relationship with higher management
 - job regulations and procedures
 - job evaluation
 - work conditions and environment

- job requirements

The rationale behind choosing the above variables is to examine the MNC's policies towards employees, with special concentration on the local employment, taking SABIC companies as a case study. The main reason for the research, as was discussed, is to examine and analyse the above-mentioned variables. The aim is to discuss the satisfaction variables as well as the level of dissatisfaction. This is in order to suggest that companies give greater consideration to the dissatisfaction variables if they aim to have better job conditions and a more favourable environment. This is necessary if they aim to attract local employees and reduce local labour turnover.

6.3 The research hypothesis

The main hypothesis of this research is that the joint venture nature of Saudi Arabia's basic industries, in addition to its positive economic contribution, also produces important adverse effects on Saudi Arabia. This general hypothesis, separated into more specific hypotheses, will be examined in the following study thus:

1. *The MNCs can benefit the Saudi economy through the supply of capital and by releasing Saudi financial resources for other uses.* However, the firms operating in Saudi Arabia may not be transferring financial resources to the Saudi economy but rather transferring them to their home countries and so Saudi financial resources may be required in MNC activities, thereby depriving other activities of these Saudi resources.
2. *Advanced technology transferred by the MNCs to Saudi Arabia may increase Saudi economic growth by reducing the demand for labour and the production of petrochemical products by cheap raw materials.*

Nevertheless, the importation of such technology may have adverse effects, such as increasing the demand for skilled labour, which is scarce in Saudi Arabia and which therefore may itself need to be imported.

3. *The MNCs may invest more in R & D in order to take account of local conditions in Saudi Arabia. Or they may not - in which case, Saudi Arabia may suffer from the heavy investment of foreign technology.*
4. *Management and managerial skills possessed by MNCs could benefit the Saudi economy greatly if these can be promulgated. MNCs, however, may import their management and their highly skilled labour force from abroad. This would reduce the advantages of their operations to Saudi Arabia, unless such firms create training programmes for the Saudi labour force in order to replace expatriate workers with Saudis.*
5. *The Saudi balance of payments may benefit from the greater profits accruing from Saudi investment in the activities of MNCs in the country, as well as the profits accruing from the raw materials available in Saudi Arabia. If, however, MNCs transfer profits to their home countries this creates an adverse effect on the Saudi balance of payments. In addition, the degree of supply linkage of MNCs in Saudi Arabia can create a positive or adverse effect on the Saudi economy.*
6. *The MNCs may create more job opportunities both directly and indirectly (directly by employment of local labour in the foreign firms, and indirectly by job creation due to linkage). However, while more job opportunities may have a positive effect in increasing Saudi consumption*

and the amount of money available for investment, job opportunities may be taken up by migrant workers, which will have a negative impact on the balance of payments as they tend to send most of their earnings back to their home countries.

7. *MNCs may operate under co-operative agreements which are governed by Saudi Arabia's Joint-Venture regulations which take into account the importance of the country's economic independence and decision-making autonomy, especially in the spheres of management investment, financial policy, marketing, employment and trade.* However, there is a danger that co-operative agreements may be weak and may allow foreign firms to affect Saudi's independent decision-making ability on the above variables, thereby reducing its economic sovereignty.

6.4 Research instruments

The literature written on the impact of MNC reveals that there are a number of methods of information gathering that can be used to identify such impacts. The following methods were considered:

1. Secondary data used, such as government publications, SABIC annual reports and other SABIC official publications.
2. Other secondary data such as books, dissertations and articles used for gathering the information.
3. A questionnaire directed to the companies' employees used as the most important method or instrument of information gathering.
4. In-depth interviews employed as a means of collecting data. The personnel involved are from the following government departments: the Ministry of

Industry and Electricity; the Ministry of Finance and National Economy; the Institutes for Technical and Vocational Training; King Abdulaziz City for Science and Technology.

5. Finally, and more importantly, SABIC official depth interviews.

The justification for using both interviews and a questionnaire is to determine the agreement and disagreement between both sources of information; to discuss the differences between what the officials reported and what the employees stated. This way of information gathering is highly recommended by the social scientists Cohen and Manion. For example, they state the following:

The interview may be used in conjunction with other methods in the research undertaking. In this connection, Kerlinger suggests that it might be used to follow up unexpected results, for example, or to validate other methods, or to go deeper into the motivations of respondents and their reasons for responding as they do. (Cohen and Manion, 1980, p. 293)

SABIC official publications, as well as SABIC's officials, may give exaggerated data which could show SABIC companies holding perfect policies in respect of their employees. Therefore, researcher will use both methods (questionnaire and interview) to create a comparative study to compare the information released by employees and the officials of SABIC to follow up unexpected answers. This means that the type of data to be collected and purpose of the whole study predetermines the methods of data collection. Ferber and Verdoorn (1962), for example, state that:

in general, the conditions under which the data are to be obtained will predetermine the collection method to be used (p. 209)

6.5 The pilot study

In June 1992, the pilot study was carried out in Saudi Arabia. This was started by visiting SABIC headquarters in Riyadh and meeting the SABIC executives and managers in their offices after scheduling the interviews conducted with more than twenty executives and managers from SABIC. Visiting the plants in Al-Jubail City required a letter of permission from SABIC's Vice-Chairman and Chief Executive Officer. In addition to the SABIC interviews, some important persons from the Ministry of Finance and National Economy as well as the Ministry of Industry were interviewed.

Since the questionnaire is an important part of the research methodology, the pilot study objectives were:

1. To determine the respondents (how they were selected).
2. To determine the size of the sample.
3. To discover the difficulty and sensitivity of any questions.
4. To determine the appropriateness of the time to answer such questions.
5. To find out about the costs and the time consumed for the fieldwork study.
6. To find out about the possibility of the questionnaire being handled personally by the interviewer. Because of the sensitivity of the questionnaire the target population might not answer the questions accurately if they received the forms through their managers.

The questionnaire was also tested via a small random sampling which had been carried out in the pilot study, through distributing 50 questionnaires to the sample employees, who were asked to answer all of the questions, write down any

observations or suggestions concerning the clarity of the questions and measure the time needed to complete all of the questions.

6.6 The Questionnaire

The questionnaire has been defined clearly by a number of social scientists. Evans (1978), for example, defines it as a:

series of questions with some psychological, social, educational, etc. topic or topics, sent or given to a group of individuals, with the object of obtaining data with regard to some problems. (p. 56)

In constructing the questionnaire for this research, these points have been taken into account to make the process of answering the questions as clear as possible to guarantee a high degree of response. For example, in the first part the respondents are required only to put (x) next to the appropriate answer; in the second part of the questions they are required to circle the value which matches their degree of satisfaction.

Open-ended questions were minimised to decrease the time and effort required to fill in the questionnaire; the reason for this was to encourage the respondent to answer the questions, a method suggested by Cohen and Manion (1980) when they stated:

The open-ended question is a less satisfactory way of electing information. Open-ended questions, moreover, are too demanding of most respondents' time. (p. 107)

In addition, the last open question aims to find any predetermined responses and to give the respondents the chance to add any relevant information which may not be included in the questionnaire.

Finally, the respondents were from different nations, which required Arabic and English to be used as the languages of the questionnaire. Choosing these two languages satisfied the respondents' need, because some of the Saudi Arabian employees may have difficulty filling in the questionnaire using another language. Since the English language is the most important and widely-used international language, it has been chosen to satisfy the foreign employees' needs in answering the questionnaire.

The questionnaire is intended to cover a different area and achieve a certain purpose (see Appendix A). Questions 1-9 are general questions that can be answered easily. The questions are about age, marital status, number of family dependants, accompanying family, nationality, years of experience with SABIC, subsidiary company involved, highest qualification, and nature of work. Questions 10-15 are specific questions about training courses. Question 10 and 11 aim to elicit whether the subsidiary companies actively hold training courses, as well as eliciting the role of the foreign partnership in training courses. Question 12 is about the number of training courses an employee is involved in. Moreover, the surveyed employees are asked to specify the places of the training courses that they have been involved in. The comments to be added to the training courses have a specific place in the question.

The employees' satisfaction with respect to training opportunities available and the application of the skills which they acquired from training are elicited from questions 32, 43 and 55. Question 15 asks the employees to give the degree of importance of certain job attractions in regard to their involvement in SABIC.

Questions 16-20 contain questions about pay aiming to elicit the employees' pay increases as well as specifying the last percentage increase. Question 18 asked whether Saudi employees should be paid less, the same or more than non-Saudis, the main reason being to find whether there is a problem facing local employees with respect to wages and salaries as opposed to the other group. The sampled workers were also asked in Question 19 if there were international marketing difficulties, and whether or not they would accept a salary reduction to maintain their jobs; it aimed to find out about the level of the employees' salary, and their satisfaction with respect to salary, in an indirect way. The surveyed employees were also asked in Question 20 about their willingness to accept a pay freeze if this meant more Saudis could be employed.

In Question 21 the employees were asked to give the degree of importance of certain statements when salaries are revised; this question aims to elicit the employees' preference for pay increases as well as elicit information about the cost of living in Saudi Arabia, and the current pay scales in government departments and private companies. They were also asked whether they wanted their pay to match the profitability of SABIC or the change in their workload or responsibilities.

The remaining questions are about various issues of the job with regard to participation in decision-making. Questions concerning job regulations and procedures, relations with higher management, job conditions and environment, job requirements and social and economic issues were all aimed at eliciting the degree of employee satisfaction with respect to the above variables which could play an important role for MNC's attracting or rejecting local employers in Saudi Arabia through the companies' involvement in SABIC activities.

Items adapted from the Minnesota Satisfaction Questionnaire (MSQ) were employed in measuring respondents' job satisfaction (Weiss, Davis, England and Lofquist, 1967). The second part of the questionnaire included questions related to such aspects of the job as supervision, pay and advancement conditions, job security, working conditions and environment. These were all reworded in order to be appropriate for the Saudi Arabian working environment. The reason for choosing MSQ is that it has been widely used in measuring employees' job satisfaction.

6.6.1 The Questionnaire consultation

The questionnaire was revised by specialists, starting in the Department of Economics at Durham University, where Dr Rodney Wilson gave advice about rewording questions so that they would better serve the purpose of the study from an economic point of view. It was also taken to Dr David Byrne, in the Department of Sociology, who checked the validity of the questionnaire with respect to social issues. He also suggested coding each response before distributing the forms, which would save time later when entering the data.

When the questionnaire had been revised several times, it was taken to the Computer Centre at Durham University to be checked by Dr Gilbert Roberts, who asked the researcher various questions relating to the purpose of the study, and the number of the targeted and sampled population. He also agreed that the Statistical Package for Social Sciences (SPSS) could be used for statistical tests because most of the questions include five scale values with specific numbers for each value. This would allow the researcher to make a correlation between the variables. There are a very limited number of open-ended questions, which could be regarded as a positive reason for using SPSS. The three specialists mentioned above have all affirmed that the questionnaire is suited to the purposes of the study.

6.7 The population

So far as the study was concerned, the target population were SABIC employees in Saudi Arabia, and the sampled population were the employees of the following SABIC companies: Saudi Petrochemical Company (SADAF); Eastern Petrochemical Company (SHARQ); Al-Jubail Fertilizer Company (SAMAD); National Methanol Company (IBN SINA); Saudi Iron and Steel Company (HADEED); and National Plastic Company (IBN HYYAN). These firms are located in the industrial city of Al-Jubail. The sampled population has been chosen according to the firm's nationalities, the products differentiation, the number of employees and their nationalities.

Tables 6.1 and 6.2 show the distribution of the target population and the sampled population. Table 6.1 shows that the sampled companies account for 48.5 per cent of all SABIC employees (4,466 out of 9,201 employees), compared with the rest of the companies. Having taken into account the total number of 4,466 employees, 900 questionnaires were randomly distributed among the employees. Only 333 were collected, however. Of these, 21 were discarded because 14 were uncompleted and 7 were inconsistent in response. This leaves a total of 312 forms which could be used, giving a response rate of 34.7 per cent, which could be considered as acceptable for the statistical tests. Having such a rate of return does not necessarily mean that the sample is biased, because there is no systematic reason not to respond.

In addition, the share of the production of such firms accounted for 43.5 per cent of all SABIC production. Furthermore, the sampled companies are producing different products, mostly exports to the international market, except for HADEED products which are used locally to meet the local demand for steel, rubber, coils and wire. Also, the important reasons for choosing the above six sampled companies are the economic

backgrounds of the partnerships which provide enough diversity in the level of economic and industrial development.

These include five different nationalities, American (Hoechst-Celares, Texas Eastern and Shell), Japanese (led by Mitsubishi), South Korean (Lucky Goldstar Group), Chinese (Taiwan Fertiliser CO) and German (HADEED Company, now a Saudi-owned company). Finally, the companies of the target population and sampled population are companies which use capital intensive technology, which minimised the number of employees required to run the firms.

Since the main reason for this research is to examine the impact of SABIC's MNCs on local employment, studying the above firms' policies towards their employees through the questionnaire, it is appropriate to use random methods in order to give each member of the sampled firms an equal chance to be selected, including Saudi and non-Saudi employees. The aim of the random selection is to elicit findings that can be generalised beyond the confines of those included in the study. Bryman and Cramer (1990) justified the choice of the above method as follows:

Clearly some populations can be very large and it is unlikely that all of the units in a population can be included because of the considerable time and cost that such an exercise would entail. (p. 98)

Table 6.1 SABIC's industries and affiliates (sampled population)

Affiliate	Location	Partners	Products	Employees S + NS = T	Capacity 000 mt/y
HADEED Saudi Iron and Steel Co.	Al-Jubail	Was DEG, Germany	Steel rebar, coils and wire	827 1309 2136	1400
SAMED Al-Jubail Fertilizer Co.	Al-Jubail	Taiwan Fertilizer Co. Republic of China	Urea	310 138 448	600
ABN SINA National Methanol Co.	Al-Jubail	Hoechst-Celanese and Panhandle Eastern, USA	Chemical Grade Methanol	215 78 293	770
SADAF Saudi Petrochemical Co.	Al-Jubail	Shell, USA	Ethylene, Crude Industrial Ethanol Ethylene Dichloride Caustic Soda Styrene	565 182 747	760 300 560 450 360
SHARQ Eastern Petrochemical Co.	Al-Jubail	Consortium of Japanese Companies led by Mitsubishi	LLDPE Ethylene Glycol	458 128 586	184 452
IBN HAYAN National Plastic Co.	Al-Jubail	Lucky Goldstar Group of South Korea NIC, SAPCCO and APLACO of Saudi Arabia	Vinyl Chloride Monomer Polyvinyl Chloride	164 92 256	300 200
The sampled companies: HADEED, SAMAD, IBN SINA, SADAF SHARQ, IBN HAYAN	Al-Jubail	American, Japanese, South Korean, Chinese and German	Sum of the above products	2539 1945 4466	6336

T = Total number of the employees

S = Number of Saudi Arabian employees

NS = Number of Non-Saudi employees

Source: SABIC Annual Report (1990)

Table 6.2 SABIC's industries and affiliates (target population)

Affiliate	Location	Partners	Products	Employees S + NS = T	Capacity 000 mt/y
AR-RAZI Saudi Methanol Co.	Al-Jubail	Consortium of Japanese companies led by Mitsubishi	Chemical Grade Methanol	245 75 320	640
KEMYA Al-Jubail Petrochemical Co.	Al-Jubail	Exxon, USA	Polyethylene	292 116 408	390
YANPET Saudi Yanbu Petrochemical Co.	Yanbu	Mobil, USA	Ethylene Polyethylene Ethylene Glycol	738 553 1291	720 500 340
PETROCHEMYA Arabian Petrochemical Co.	Al-Jubail	No partner	Ethylene Polystyrene Butene-1	630 233 863	650 100 50
IBN ZAHR Saudi European Petrochemical Co.	Al-Jubail	Neste Oy, Finland Ecofuel, Italy APICORP, GCC	MTBE	171 111 282	500
GAS Saudi Industrial Gases Co.	Al-Jubail	Other Saudi producers of industrial gases	Oxygen Nitrogen	78 27 105	438 219

T = Total number of the employees

S = Number of Saudi Arabian employees

NS = Number of Non-Saudi employees

Source: SABIC Annual Report (1990)

Table 6.2 continued

Affiliate	Location	Partners	Products	Employees S + NS = T	Capacity 000 mt/y
SAFCO Saudi Arabian Fertilizer Co.	Dammam	Private Saudi shareholders and SAFCO employees	Ammonia Urea Sulphuric Acid Melamine	461 232 693	200 330 100 20
IBN AL-BAYTAR National Chemical Fertilizer Co.	Al-Jubail	SABIC's SAFCO affiliates	Ammonia Granular Urea Compound and Phosphate Fertilizers	372 145 517	500 500 810
SULB Steel Rolling Co.	Jeddah	Wholly owned subsidiary of HADEED	Steel rebar	137 89 203	140
Total target and sampled companies	Located in Saudi Arabia	Different partnerships	Sum of the above products	9201	14553

T = Total number of the employees

S = Number of Saudi Arabian employees

NS = Number of Non-Saudi employees

Source: SABIC Annual Report (1990)

6.8 The difficulties during the fieldwork

The researcher found some difficulty in gathering the information due to the sensitivity of the data itself. An example of this was the interviews conducted with government and SABIC officials. Some of them tried to evade being interviewed as they believed that some of the questions included important data, such as questions relating to the costs of production, costs of imports, net profits for each individual company, and the total of the reinvestments. This could be of interest to competitors. Moreover, every individual firm has its own data in respect of the above costs and profits, and this makes it difficult for data to be obtained.

Some of the Ministry executives interviewed requested a letter of agreement from their Minister or vice-Ministers, while SABIC executives requested a letter from their Vice-Chairman and Managing Director. They also requested a long time to read over the questions as well as requiring a long time for scheduling the interviews. The above requirements increased the time needed for obtaining the data.

The cost of finishing the fieldwork is another problem, mainly caused by the location of the firms in Al-Jubail industrial city, where SABIC provides the worker with free accommodation. Visitors to the city can only stay in the hotel, which charges a high rate.

6.9 Statistical techniques

Data preparation using the data obtained in the questionnaire was completed in January 1993 after the researcher returned from fieldwork. The data was obtained from that part of the questionnaire where I had categorised the respondents' answers to questions. The writer used the SPSS programme - a statistical package for social science for analysing the data obtained. The objective of the questionnaires was to elicit statistics of a descriptive nature, such as frequencies. However, descriptive

statistics alone was not in itself sufficient and other elements needed to be incorporated, namely the cross-tabulation and the Kruskal-Wallis test. The objective was to combine relevant statistics with explanatory material (Alreck and Settle, 1985, p. 324). Frequency tables alone do not include enough information for the purposes of the study, as one of the aims of the thesis was to define relationships among several variables. Norusis (1990) states:

Frequency tables, bar charts and histograms are not of much help in answering questions, like those questions that involve relations among several variables. (p. 105).

Because of the problems involved in the demands upon the statistics, the Kruskal-Wallis tests will be used for data inherent in ranking which is a major part of the questionnaire. Siegel (1956) states:

Non parametric statistical tests are available to treat data which is inherently in ranks as well as data whose seemingly numerical scores have the strength of ranks. That is, the researcher may only be able to say of his subjects that one has more or less of the characteristic than another, without being able to say how much more or less. (p. 33)

Siegel also defined the data which was appropriate for non-parametric methods thus:

If data is [*sic*] inherently in rank, or even if they can only be categorised as plus or minus (more or less, better or worse), they can be treated by nonparametric methods, whereas they cannot be treated by parametric methods. (ibid.)

Since this research aims to find out whether there are differences among the samples, for the data which contains three or more independent variables the K-W test should be the appropriate statistical test. The variables will be examined to analyse the

differences among the samples using the statistical test K-W, which is also used for ordinal ranking of data. Siegel (1956) defined the K-W test thus:

The Kruskal-Wallis one way analysis of variance by ranks is an extremely useful test for deciding whether K independent samples are from different population. (p. 184)

Thus for example given a nominal variable (nationality), with 3 classes, Saudi, western, others a comparison between these areas in relation to job satisfaction (a non-parametric variable) would utilise a K-W test. The group variable nationality, the independent variable is job satisfaction and the resulting statistics is a chisquare with 2 degrees of freedom (3 classes-1).

In the cross-tabulation test one has to exercise caution in interpreting the data, when the percentage of cells with an expected frequency of less than 5 is more than 20 per cent of the total. The researcher has to combine the classes within variables in such cases. In these cases he combined the 'Western' and other employees, from 'developing countries', for subsequent analysis. Bryman and Cramer (1990) state that the

chi-square should not be used when any expected frequency is smaller than 1 or when more than 20 per cent of the expected frequencies are smaller than 5. In this situation it may be possible to increase the expected frequencies in a category by combining them with those of another. (p. 122)

Thus, for this study, cross-tabulation is used for comparative purposes to examine the independence of two nominal variables in order to analyse the results of the data. The chi-square of cross-tabulation is used where more appropriate, which is in fact a test of independence.

An example of using a chisquare generated from a cross-tabulation table is shown on page 130. Here there are two nominal variables, nationalities with 3 classes and companies with 6 classes, leading to a chisquare with $(3-1)(6-1) = 10$ degrees of freedom. However, Western employees and employees from developing countries are combined in the chisquare analysis, due to the low expected frequency, which gives a chisquare with $(2-1)(6-1) = 5$ degrees of freedom.

In this chapter a cross-tabulation table is shown even when the appropriate statistics for analysis is a K-W test. This is done to show the explicit pattern of the relationship between the variables, and used in conjunction with the chisquare generated from the K-W test. This, of course, means the degrees of freedom relate to the K-W test and not from the cross-tabulation directly, which would of course have much larger degrees of freedom.

It is important to note that the SPSS programme reports that the K-W statistic with its associate approximate χ^2 P-value (whereas in fact the K-W statistic comes from an exact F-distribution under the truth of the null).

Finally, the null hypothesis is a hypothesis containing no differences. It is used mainly for the purpose of being rejected. When, and if, it is rejected, the alternative hypothesis (H_1) may be used. The alternative hypothesis is the actual statement of the experimenter's research hypothesis. That is to say, the results of the statistical tests (cross tabulation, and K-W tests) will be examined by rejecting the null hypothesis H_0 in favour of the research hypothesis H_1 , if these statistical techniques yield a value whose associated probability of occurrence under H_0 is less or equal to the probability or significance level of ($P < .05$).

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Chapter Seven

Characteristics of SABIC Employees

7.1 Introduction

In the following chapters (7-10) the writer will present and analyse the data obtained from employees' questionnaires and from the interviews conducted with selected officials from SABIC. The rationale behind using this method was explained in the previous chapter.

In accordance with the objectives of this study mentioned in the previous chapter, the research will examine SABIC foreign partnerships' policies towards their employees, both Saudi and non-Saudi, with special regard to aspects of job satisfaction such as training and experience acquisition, salaries and wages, promotion chances available, participation in decision-making, job regulation and procedures, relation with director(s), job evaluation, job requirements, and other social and economic issues.

7.2 Nationality of employed individuals

The discussion and interpretation of results will begin with an explanation of the frequency tables. These give the nationalities of the target population, aiming to examine whether SABIC companies are well-meaning in their intentions to employ Saudi employees, or otherwise.

Nationality	Value	Frequency	Percentage
Saudi Arabian	1	171	54.8
Arab	2	11	3.5
South Asian	3	67	21.5
Japanese	5	1	0.3
American	6	11	3.5
European	7	12	3.8
Other	8	39	12.5

Table 7.1 Frequency table of the nationality of the employees

Table 7.1 shows that a majority of company employees were Saudi - 171, 54.8% of the sample - while the rest of the workforce was made up of South Asians

(Phillipinos made up 21.5%, 67 employees), Arabs and Americans (3.5%, 11 employees each), and Europeans (3.8%, 12 employees). The lowest figure for a nationality employed by SABIC was that of Japanese people - one employee.

The research programme was based on six companies detailed earlier in Chapter 6. Table 7.2 shows the distribution of employees within each of these companies broken down by nationality. Due to the low cell values found in the table it was necessary to combine the 'Western' and 'other' groups together for subsequent analysis of the table. The analysis then compares 'Saudi' employees against 'non-Saudi'. This amalgamation of categories may in itself introduce some problems of interpretation as it is apparent that the separate companies do differentially employ western individuals. This problem will be taken up again in the following.

7.3 The Distribution of the companies' employees

Companies	Saudi	Western	Developing countries	Row Total
SADAF	32 (57.1%)	13 (23.2%)	11 (19.6%)	56
SHARQ	20 (45.5%)	1 (2.3%)	23 (52.3%)	44
SAMAD	27 (58.7%)	0 (0%)	19 (41.3%)	46
IBN SINA	18 (40.9)	2 (4.5%)	24 (54.5%)	44
HADEED	32 (57.1%)	8 (14.3%)	16 (28.6%)	56
IBN HAYYAN	42 (63.6%)	0 (0%)	24 (36.4%)	66
Total	171 (54.8%)	24 (7.7%)	117 (37.5%)	312 (100.0%)

Table 7.2 Distribution of sampled employees in the joint-venture companies by nationality

Note: Western employees and employees from developing countries are combined in the chi-square analysis.

A chi-square analysis showed that there was a non-significant difference between the companies in terms of the percentage of 'Saudi' employees (Chi-sq = 7.5899, df = 5, p = 0.18). Overall, 54.8% of the employees of the six companies are of 'Saudi' nationality and 45.2 'non-Saudi'.

It is apparent that combining two groups for statistical purposes may to some extent lead to some critical information relevant to the interpretation of data at a later stage being lost. Specifically, this revolves around the percentage of 'Western' individuals in some companies relative to the others. For example, the SAMAD company, which is a Saudi-Arabian Chinese-based company, may not have employed any Western employees due to the absence of any pressure (direct or indirect) for them to do so.

SHARQ also is a joint venture consortium of Japanese companies led by Mitsubishi, but only one employee (0.3%) is shown as Japanese in the table.

The Japanese case finding agrees with the information from interviews with SHARQ executives, who pointed out: 'The company will decide its manpower requirements on an annual basis, and this decision will be based on its own requirements.' (Appendix B)

These same officials determine the aggregate number of SHARQ employees seconded by the Japanese holding companies and this number currently (1992/3) is 18, all of whom hold executive posts. They also state: 'Either the executive Vice President or the President are recommended by the partnership.' (Appendix B)

The justification given by Japanese companies for filling executive posts with employees of their own nationality is mainly economic - they maintain the right within

the partnership with the developing country to control their investment, since they are investing solely for their own benefit.

On the whole, the policy of Japanese multinational companies is that overseas investment via partnerships with other countries is important for securing resources for the Japanese nation through exporting the advanced technology of Japan. Such resources include the natural resources of countries such as Saudi Arabia. Negandhi and Baliga (1981) state that

'the overall attitude of Japanese MNCs towards host nations was even more conciliatory than that of the Americans and Europeans. The overall Japanese view was *'we came here as guests, and our nation is small and needs natural resources, as well as foreign trade and investment to survive'*. (p. 75)

Labour shortages may play a significant role in reducing the willingness of the Japanese to work abroad in Saudi Arabia since they will get job opportunities in their countries. They may also have problems in reintegrating into Japanese society following a period abroad.

As Table 7.2 shows, the Japanese are not the only foreign companies investing with SABIC in Saudi Arabia which have not recruited significantly from their own nationals. IBN HYYAN is a Korean-Saudi joint venture where there are no Korean employees. This may be due to the lower percentage of the Korean share in the company: it is 15 per cent owned by the Lucky Goldstar Group of South Korea. In the later part of 1992 IBN HYYAN became a wholly Saudi company and this also may account for the fact that it employs no Koreans in its workforce.

Table 7.2 shows that the majority of the sampled employees of IBN HYYAN Company were Saudi Arabian (42 employees, 63.6% of the total workforce). This can be explained by the company's merger with Petrokemya, which is a 100 per cent Saudi

company. This increased the number of Saudi Arabian employees. The lowest ratio of Saudi Arabian to other employees is found in the companies of IBN SINA and SHARQ, who employ 18 (40.9%) and 20 (45.5%) Saudi nationals respectively. These numbers, however, differ from those issued in the SABIC Annual Report of 1991 (see Table 7.3), in that they indicate that the numbers of local manpower on the workforce are lower (except for HADEED) than claimed by SABIC in its Report. The company has a policy of 'Saudisation' of its workforce, that is, recruitment preferment for Saudi nationals, but as the figures in Table 7.2 show, this is still far from complete.

A review of Table 7.3, derived from SABIC Annual Reports, indicates that local employees have been offered greater opportunities than foreign employees. The table shows a continual increase in the local employees, but that this happened slowly, owing to the nature of the jobs, which involve work with sophisticated technology. In the future, Saudisation could be even slower than in the past, since the more sensitive high-skill jobs require special training and appropriate experience meaning longer times and higher costs involved in training. Any mistakes here could create big losses and disaster for the factories.

SHARQ has increased the percentages of local employees more slowly than other companies, but this is not on account of a reluctance to do so. As the table suggests, SHARQ started with the highest percentage of Saudisation (74%). However, the sensitivity of the jobs and their requirements as explained above, could account for the slow rate of change.

Despite the fact that the majority of SABIC employees are Saudi, a large number of job opportunities could be given to foreigners through both contracts and sub-contracts. Both are highly involved with the companies' activities and services. For example, SHARQ has been actively involved with contractors and subcontractors. There are ten large companies providing maintenance and service jobs, employing 454

employees, as well as fifteen other companies involved in sub-contracts dealing with maintenance and the health service and employing 2,089 people. The above argument has been formulated as a result of personal interviews conducted with SHARQ officials and personal observation during the field work, where it was very difficult to meet individual Saudi employees in either contract or sub-contract jobs.

Table 7.3 SABIC manpower in the sampled companies

Year Company	1985		1986		1987		1988		1989		1990		1991	
	S	NS												
HADEED	1959		1830		1804		1763		1918		1889		2136	
	31%		31%		30%		32%		35%		38%		39%	
	601	1358	562	1268	546	1258	558	1205	673	1245	727	1162	827	1309
SAMAD	429		398		412		383		407		417		448	
	53%		55%		57%		63%		67%		70%		69%	
	228	201	219	179	234	178	243	140	272	153	293	124	310	138
IBN SINA	211		191		187		207		210		213		293	
	64%		75%		73%		73%		73%		74%		73%	
	135	76	143	48	137	50	153	54	154	56	157	56	215	78
SADAF	1150		883		786		805		811		760		747	
	48%		60%		65%		64%		68%		75%		76%	
	546	604	527	356	507	279	519	286	549	262	568	192	565	182
SHARQ	403		256		370		447		469		463		586	
	74%		81%		77%		73%		74%		78%		78%	
	300	103	294	71	284	86	328	119	345	124	361	102	458	128
IBN HAYYAN	297		292		293		298		341		305		256	
	44%		54%		58%		60%		65%		67%		64%	
	131	166	157	135	171	122	179	119	220	121	203	102	164	92

S = Number of Saudi employees

NS = Number of Non-Saudi employees

% = Percentage of Saudi employees out of the total

Source: SAMA Annual Reports 1985-91

Table 7.2 also shows that the majority of foreign employees are from developing countries (83% out of 141 employees), with the Phillipines, India, Pakistan, China and the Arab countries contributing the main bulk of the foreign employees. This can be explained by their low wages. Like other companies, SABIC aims to maximise its profits and minimise its costs and consequently 'shops around' to find the lowest-wage labour force which, usually, means recruiting from Third World countries. Saad Al-Kathiri (1989, p. 65) argues that most multinational companies like to hire non-Saudis because their wages are lower than those of Saudis. This includes white-collar jobs such as accounting as well as the workforce on the shop floor. Such companies look for profits wherever they can. Most of these companies tend to exaggerate the cost of recruiting and employing Saudis.

According to a Study by the Ministry of Labour and Social Affairs (1993, p.52-54), there was a significant increase in the number of work permits given to the private companies for hiring foreign employees. Between 1985 and 1989, the number of work permits increased by 62%. The reason for this is the companies exaggerating the cost of recruiting local employees. In this way they provide lower wages which could not attract local employees since such wages could not meet their needs.

The above findings also agree with the views of SABIC executives in interview, who stated:

Those who manage the plants must be aware that labour costs must be reduced in order to compete in the market. (Appendix B Question 5)

It is clear from the experience of Saudi Arabian private sector over the last fifteen years that the demand for suitably skilled and experienced white collar workers cannot be met by Saudi nationals, and thus employers must recruit overseas. This has the unfortunate effect that, over time, employers cease to look among the Saudi

workforce for workers and concentrate their attentions on recruiting overseas or among the migrant workforce in Saudi Arabia. This situation is further exacerbated by the fact that there are no regulations governing the wages in the Saudi labour market. Therefore Saudis are being deprived of job opportunities because of the wages problem since there are no minimum wages. The result is a highly competitive labour market with cheap foreign labour.

The above is one major problem preventing the Saudization of the workforce of the Saudi private sector. Another major problem is that to employ labour from other countries in the Kingdom of Saudi Arabia is relatively easy - companies operating in Saudi Arabia simply have to fill in request forms and attach these to the identification papers of prospective employees. Then working permits are issued. In an effort to restrict the non-Saudi workforce, the government often cuts back on the number of applications for non-nationals received from companies. The companies circumvent this by asking for more workers than they actually need. A SABIC employee in interview stated that 'the difficulty in implementing the existing regulations for recruitment preferment of Saudis is the main weakness of the regulations' [personal interview].

Thus it can be seen that the government's current regulations designed to protect the local labour market are ineffective in protecting the Saudi labour force from competition from expatriates. The Labour and Work Law (1969) states that

employment shall be the right of every Saudi citizen; no-one shall be entitled to engage in it unless all conditions listed [in this regulation] are fulfilled. There shall be equal opportunities for Saudi employees with regard to labour throughout the Kingdom with no distinction being made between those of different classes of society (p. 32)

The most important condition in the regulations is that governing recruitment. Article 49 states that foreign labour

must be from [those expatriates in] one of the highly qualified professions or [those] of high educational qualifications needed by the Kingdom. It is allowable to recruit from abroad when such qualified workers are not available at all or in sufficient numbers within the local Saudi workforce.

The above reveals two major failings vis-à-vis protecting Saudis from competition in the labour market from non-Saudis. First, there are no clear directives given to private organisations or companies not to recruit from abroad and it is easy for employers to claim that their employment requirements are not available within the local workforce or that they are not available in sufficient numbers.

Secondly, the implementation of government regulations regarding protection of employment for Saudi workers is ineffective. Companies operating in Saudi Arabia find few or no restrictions imposed on them in recruiting abroad. To implement such a regulation the Saudi Ministry of Interior should be actively involved.

A browse through Saudi newspapers indicates that the demand for white-collar and blue-collar jobs are high and that in addition to qualifications, long experience is also required in many jobs. Many specify at least five years' experience, and as Saudi's workforce cannot meet these requirements in any great proportion, because of the high competition from foreign workers who accept low salaries and wages, employers can save time in recruiting overseas.

7.4 Qualifications of the employees

Qualification	Saudi Arabian	Western	Developing countries	Row total
Elementary	27 (96.4%)	0 (0)	1 (3.6)	28
Secondary	75 (86.2)	3 (3.4)	9 (10.3)	87
Community College	12 (34.3)	11 (31.4)	12 (34.3)	35
Bachelor of Science	31 (33.7)	5 (5.9)	56 (60.9)	92
Bachelor of Arts and Social Science	22 (57.9)	0 (0)	16 (42.1)	38
Higher Degree (Ph.D. and M.Sc.)	4 (12.5%)	5 (15.6)	23 (71.9)	32
Total	171 (54.8)	24 (7.7)	117 (37.5)	312 (100.0%)

Table 7.4 Percentage distribution of the surveyed employees according to qualification

Note: Western employees and employees from developing countries are combined in the chi-square analysis.

A chi-sq analysis (= 99.990, DF=5) showed that there was significance in the differences in educational achievement among the nationalities in the categories of employment. The probability level underlines the differences, also $P = 0.000$, which is statistically highly significant under the level of ($p < 0.05$).

The cross-tabulation of Table 7.4 indicates that 27 out of 28 (96.4%) of the Saudi employees had not continued their education beyond the age of 12. One reason for this is that Saudi Arabia is a developing country and the development of its educational programme is also in its early stages. Saudi Arabia has been hindered by the fact that it has a high level of illiteracy among its population and often such persons do not give priority to education for their children, nor can they necessarily provide the right background and support, which in turn influences the achievement of Saudi schoolchildren. Birks and Sinclair (1980) argue: 'The level of educational attainment

of Saudi nationals is low overall and very low among women. Of the total populations, only 30% are literate, and only 16 % of women are literate' (p. 98).

Birks and Sinclair's study depended on data collected before 1974, which relates to the generation who are the parents of the present youth of Saudi Arabia.

It is worth mentioning that many young Saudis are not equipped to take up the professional jobs in their country because they do not have the appropriate higher education. Many finish elementary or secondary school and then go on to technical education, such as agricultural, industrial or commercial courses, for insufficient time rather than continue at community college or university. Given the high qualifications and experience required by companies such as SABIC, this is another reason why foreign nationals are employed rather than Saudis.

Since the increase in oil revenues in 1973/4 (a direct result of both a rise in oil production and prices), the government increased its spending on education. The increased expenditure funded a project for improving the educational standards of the entire population as part of the government development plan: the development of its human resources. The plan is being implemented in five stages, government expenditure on education for the first (1970-5), second (1975-80), third (1980-5), fourth (1985-90) and fifth (1990-5) stage being respectively SR9.3, SR78.75, SR129.6, SR135.3 and SR141.1 billions. At the beginning of the development plan, the Saudi Arabia Monetary Agency Annual Report (1973) stated: 'The ultimate objective of the Government is to provide adequate facilities for education free of charge so that no-one who wishes to receive an education is deprived.' (p. 59)

Table 7.4 also shows that the highest percentage of employees within SABIC with first degrees (in Science and Engineering), as well as of those with higher degrees (masters degrees and doctorates) was of foreign nationals from developing countries.

This demonstrates the domination by educated people from other countries of the top jobs in Saudi industry and points to the country's problems in developing a skilled Saudi workforce at all levels. It also highlights a further problem for Saudisation in employment: highly educated foreign workers cost less than Saudis. The interviews with SHARQ and SAMAD officials confirm this: 'to recruit from India is the best policy, because you can get highly skilled, highly educated engineers from there at a reasonable salary.' [personal communication]

On the other hand, employees from western countries such as the United States and European countries comprised the lowest percentage of workers with a low level of education; only (3.4%) of the workforce were educated only to secondary level (18 years old). The western employees with a first degree count for 5.9 per cent of the entire sample who have achieved this level of education. The table also shows both a lower number and percentage for other levels of education. This can be explained by the small numbers of employees from the industrial countries hired by SABIC.

It is very important to note the difficulty in obtaining evidence of the specific number of unemployed in Saudi Arabia. It was not obtainable either from official sources such as the Ministry of Finance and National Economy (Central Department of Statistics), and the Ministry of Planning, nor from secondary data such as international statistics publications.

7.5 Nature of work of the sampled employees in the joint-venture companies

Nature of work	Saudi	Western	Developing countries	Row total
Technician	75 (73.5%)	4 (3.9%)	23 (22.5%)	102
Engineer	21 (30.4%)	8 (11.6%)	40 (58.0%)	69
Administrator	46 (71.9%)	3 (4.7%)	15 (23.4%)	64
Financial officer	14 (56.0%)	4 (16.0%)	7 (28.0%)	25
Security	13 (92.9%)	1 (7.1%)	0 (0%)	14
Others	2 (5.3%)	4 (10.5%)	32 (84.2%)	38
Total	171 (54.8%)	24 (7.7%)	117 (37.5%)	312 (100.0%)

Table 7.5 Percentage distribution of the employees by nature of work

Note: Western employees and employees from developing countries are combined in this chi-square analysis.

A chi-square indicating highly significant difference between the employees in term of nature of work (chi-square=84.366, df=5, p=0.000).

Table 7.5 shows that there are 75 (73.5%) Saudi technicians, 23 (22.5%) expatriate technicians and only 4 (3.9%) from other developed countries employed in the companies under study. This indicates the ability and willingness of Saudis to fill jobs involving capital intensive technology. However, these findings conflict with those of the Riyadh Chamber of Commerce's study (1991, p. 62), which seems to indicate that Saudi nationals are reluctant or unable to tackle jobs requiring concentration and technical skill, such as engineering. As the same table indicates, Saudi employees dominate the administrative jobs with 71.9 per cent of the administration being Saudis (46 employees), 23.4 per cent (15 employees) being expatriates from developing countries, and 4.7 per cent (3 employees) being from the West. These figures agree with those of the Riyadh Chamber of Commerce (1991) which states that: '69% of Saudis working in private sector have administrative jobs' (p. 61).

The above finding can perhaps be explained by the nature of the Saudi education system which gives the students freedom to choose their field of study. As a result, a large percentage of Saudi students graduate in Social Sciences and the Arts: for example, in 1987, 71 per cent of the students graduating from the universities and colleges in Saudi Arabia graduated in the Arts, Human and Social Sciences (ibid., p. 37).

Table 7.5 shows that 40 (58%) of 69 engineers were expatriates from developing countries, mostly from India. On the whole, Indian engineers tend to be very experienced in the work SABIC does, since most of them have long experience in the petrochemical industry or in other industries where their experience is transferable to the work. A SHARQ official states : 'Indian engineers mostly have good experience because they have worked in the petrochemical industries before they became SABIC expatriates.' [personal interview]

As previously mentioned, another reason for SABIC hiring engineers from India and other developing countries is that of cost minimisation: they are comparatively cheap. Saudi engineers comprise 30.4 per cent (21 employees) of the number of the sample SABIC engineering workforce, but neither the SABIC executive nor the government is satisfied with this state of affairs: both aim to increase the participation of Saudi employees in SABIC activity at all levels, including that of engineering. The Company's official view is stated below:

We find difficulty in attracting Saudi engineers because the numbers of Saudis graduating are not adequate to meet our needs. For example, graduate engineers come from the University of King Fahad and were more highly attracted to employment with ARAMCO. [personal interview]

Of SABIC's accounting staff, 56% (14 employees) were Saudi, 28% (7 employees) were from developing countries, mostly South East Asians, and the remaining 16% (4 employees) were recorded from the parent companies of industrial countries. Since SABIC companies include a joint venture undertaking, the financial officers looking after the investment of the foreign partnership in Saudi Arabia are from the parent companies, that is, non-Saudis.

Table 7.5 also shows that 84.2% (32 employees) of expatriates from developing countries holding other jobs at the technical and secretarial level. The training and experience for such jobs are not difficult to acquire and it is feasible that Saudis could be holding such jobs rather than expatriates. Thus, the data contained in this table suggests that SABIC officials need to work more actively to promote the Saudization of jobs at this level.

Security jobs differ from others in SABIC because the Saudi government established and successfully enforced regulations governing the conditions of security jobs. Government regulations state: 'Recruitment for security jobs shall be from the Saudi workforce, not foreign workers.'

The government regulation explains the big difference in the percentage of the Saudi workforce in this level of employment in SABIC: 92.9 per cent of security staff are Saudis. This finding demonstrates how the establishing of regulations ensuring Saudization succeeds but a general policy, merely stating that recruitment from the Saudi workforce is preferred, fails.

7.6 Social issues

Social conditions both inside and outside the workplace are also very important for both local employees and the immigrants working with SABIC. They will affect the

employees' job satisfaction as well as the level of the foreign employees' remittance. This study will begin by analysing marital status and other family-related issues.

7.6.1 Marital status

Nationalities	Single	Married	Total
Saudi Arabian	12 (7.0%)	159 (93.0%)	171
Western	2 (8.3%)	22 (91.7%)	24
Employees from other developing countries	19 (16.2%)	98 (83.8%)	117
Total	33 (10.6%)	279 (89.4%)	312 (100.0%)

Table 7.6 Marital status of employees

Comparing the groups statistically using the Chi-Sq test shows that there is a significant difference between the employees with respect to marital status (Chi-Sq=6.3844, df=2, p=.041).

Table 7.6 above shows that the common feature among the respondents is the high percentage of married workers. Saudi Arabian nationals showed the highest levels (93%), compared to Western employees (91.7%) and others (83.8%). These findings could be explained by reference to the age category of the employees, where 79.4 per cent of the SABIC employees were 30 years old or older. These individuals living in Saudi Arabia have a culture and religion where sexual relationships are prohibited except within marriage. The religious laws encourage people to marry, as well as encouraging foreign employees to bring their families with them, as indicated in Table 7.7.

7.6.2 Family combination of employees

The sampled SABIC employees were asked whether they were accompanied by their dependants. Economically speaking, immigrants who leave their dependants behind may consume less while those who do not may consume more and save less. This could increase the level of consumption and decrease the level of remittances to be sent abroad.

Does your family live with you?	Yes	No	Total
Saudi nationals	147 (86.0%)	24 (14.0%)	171
Western	16 (69.6%)	7 (30.4%)	23
Employees from other developing countries	48 (41.0%)	69 (59.0%)	117 (100.0%)

Table 7.7 Distribution of employees accompanied by families

Comparing the groups statistically using the Ch-Sq test shows that there is highly significant difference between the employees from various nationalities with respect to family combination (Chi-Sq = 64.3438, df=2, p=.0000).

Table 7.7 shows that 86 per cent of Saudi Arabian employees are living with their families in the Al-Jubail industrial city, while only 69.6 per cent of Western employees do so. Significantly, of employees from other developing countries a far greater proportion live alone, without their families. It is possible that these individuals may find difficulty in obtaining permission for their families to join them because of Saudi Arabian laws, which usually determine that only those individuals earning over a certain salary or employed in a particular technical or professional occupation are allowed to bring their dependants with them. This again may be a direct result of the lower salaries paid to employees from developing countries compared to native Saudi or Western employees.

The above findings also support the previous research finding (the discussion of SABIC employees' nationalities) when it was argued that the lower cost of employing labour from developing countries was behind SABIC's propensity for hiring foreign nationals.

Another important finding of this study is that the majority of the immigrants recruited by SABIC (from developing countries) left their dependants behind, and remittances were being sent home to improve their families circumstances. The justification for this is found in the economic and social studies of labour migration, most studies suggesting that the migratory movement occurs because the migrants commonly suffer some personal hardship. Therefore, economic depression is one of the most significant factors which cause international migration.

Economists such as Galor and Stark (1990), who employed an overlapping generation framework, found that migrants should save more than natives if they face a probability of return migration. This may be the same in Saudi Arabia, where the government uses short term contracts for foreign employees. This means that SABIC and any other foreign employees have to leave the country when their contracts expire. Those migrants may save a higher proportion of their salaries to be channelled back to their homelands through both formal and informal financial channels.

There have also been disputes about the inequality of treatment dealt to foreign employees coming from different countries. Western employees have been seen as receiving preferential treatment through their being provided with higher salaries and wages as well as offered more opportunities to bring their families with them. This could explain the greater percentage of Western employees who live with their families as against other foreign SABIC employees.

Via salaries being related to the employee's nationality, Western SABIC employees may send more remittances home because they receive higher wages than other SABIC employees. It will be noted in Chapter 9 that Western employees received three times the salary of Saudi Arabian employees and nine times more than foreign employees for doing the same job (personal interview with SABIC executives). The reason behind hiring Western employees despite the costly wages is the difficulty of finding adequate substitutes.

7.6.3 *Family's acceptance of the employees' job*

The degree of job satisfaction will also be affected by the employee's family's acceptance of their job. Such acceptability could help the individual to stay with his current post as well as improving his productivity.

Since this study does not aim to cover the subject of productivity, the most important task is to find whether SABIC's surveyed employees faced any problems regarding family acceptance of their employment.

Nationalities	Absolutely dissatisfied	Dissatisfied	Satisfied to some extent	Satisfied	Very satisfied	Total
Saudi Arabian	10 (5.9%)	18 (10.6%)	41 (24.1%)	70 (41.2%)	31 (18.2%)	170
Western	0 (0.0%)	3 (13.0%)	6 (26.1%)	13 (56.5%)	1 (4.3%)	23
Developing countries	2 (1.7%)	4 (3.4%)	32 (27.4%)	64 (54.7%)	15 (12.8%)	117
Total	12 (3.9%)	25 (8.1%)	79 (25.5%)	147 (47.4%)	47 (15.2%)	310 (100.0%)

Table 7.8 Percentage distribution of employees' degree of satisfaction with respect to their family's acceptance of their jobs

Table 7.8 shows that over all nationalities of SABIC employees, most of them were satisfied with their families' acceptance of their job.

Employees recruited from developing countries showed the highest percentage level of satisfaction with their families' acceptance of their jobs with SABIC (94.9%). This finding could again be explained by the personal hardship which they might face at home before coming to work for SABIC. Most of these persons left their dependants behind, influencing those dependants' acceptance of their employment since they are in need of the financial assistance.

Western employees also reported a high degree of satisfaction (87%) with their families' acceptance of their jobs. Western expatriates living in Saudi Arabia mostly live in special camps which include all the facilities they normally require. However, the host country has its culture, religion, language, values and history, which are totally different from what the expatriates are used to in their homelands (American, European and Japanese societies). This artificially-created living environment could create a feeling of alienation from the local population, affecting the expatriates' families' acceptance of their living in Saudi Arabia.

The table also shows that 83.5 per cent of the local employees were satisfied about their families' acceptance of their job. This finding disagrees with that of Riyadh Chamber of Commerce (1991b) when it argues (p. 61) that most Saudi Arabian families may not accept their children working in blue collar jobs.

7.6.4 The employees' available time to spend with their families

In the previous section it was found that SABIC's employees were satisfied with their families' acceptance of their job. In addition, the degree of the employees' satisfaction with respect to the time available to spend with their families is an important social issue because such factors could affect job satisfaction, which could also affect SABIC's attractive policy with regard to local employees.

Nationalities	Absolutely dissatisfied	Dissatisfied	Satisfied to some extent	Satisfied	Very satisfied	Total
Saudi Arabian	17 (10.0%)	43 (25.3%)	58 (34.1%)	44 (25.9%)	8 (4.7%)	170
Western	1 (4.3%)	6 (26.1%)	1 (4.3%)	10 (43.5%)	5 (21.7%)	23
Developing countries	21 (18.4%)	17 (14.9%)	15 (13.2%)	45 (39.5%)	16 (14.0%)	114
Total	39 (12.7%)	66 (21.5%)	74 (24.1%)	99 (32.2%)	29 (9.4%)	307 (100.0%)

Table 7.9 Percentage distribution of employees' degree of satisfaction with respect to the available time to spend with their families

Using K-W, a chi-square analysis showed that there was a significant difference between the employees groups in term of available time to be spend with their family (Chi-Square = 8.9394, df=2, p=0.0115).

Table 7.9 shows that almost two-thirds of the sample affirmed their satisfaction with the available time to spend with their families, while only one-third did not.

It should be mentioned in this context that, in the case of dissatisfied foreign employees, the figures might be influenced by those people who did not have their families accompanying them. Those employees can spend only their annual vacation with their families.

Finally, and most important for this research, we examine the satisfaction of the local employees. As Table 7.9 reveals, 35.3 per cent of the 170 Saudi Arabian employees complained about the time they have available to spend with their families. They believe that the time they start work (7.30 a.m.) and the length of the working day (to 4.30 p.m.) cause problems in the winter, as they arrive home at night in the dark. This issue is discussed below, in the working hours section.

7.7 Conclusion

Examining the data on the nationality of the employees it was found that the sampled company were giving national employees priority among other employees, as 171 of 312 were Saudis. In comparing the companies in the study it was found that there was no significant difference between them in encouraging national employees overall, as 54.8 per cent were Saudi nationals. This supports the sixth research hypothesis, that MNCs create job opportunities both directly and indirectly through their linkage activities in the Saudi economy (both backward and forward linkage). However, large numbers of jobs could be in the hands of foreigners who are employed by the contractors and sub-contractors dealing with SABIC. SHARQ for example has given job opportunities involving more than 2543 foreign employees to both contractors and sub-contractors.

It was found that the American partnership of SADAF represented by Shell USA prefer to recruit from its' home country, which could be an indication of their propensity to involve more American nationals in their activities abroad. However, the partnership of SHARQ represented by Mitsubishi showed the opposite behaviour. Due to the cost advantages, employees from other developing countries have greater opportunities in SABIC. Fillipinos made up 21.5 per cent of the foreign employees which could be an indication of the preference to employ such nationalities because of the lower costs and their skill levels.

Most of the graduate local employees hold Bachelor of Arts degrees rather than Bachelor of Science, but it was found that more than 73 per cent of SABIC technicians are Saudi nationals; this could be taken as evidence of the ability and willingness of local employees to fill jobs requiring special skills.

In terms of the family combination of employees, Western employees have more opportunities for obtaining permission to bring their dependants to Saudi Arabia than employees from other developing countries. This is due to the importance of the Western employees to the organisation, as they mostly hold professional jobs and earn high salaries, which meet the government regulations of obtaining permission for family composition.

Finally, since 45.2 per cent of SABIC employees are foreigners, mostly hired from developing countries leaving their dependants at home, most of their earnings could be sent to their homeland to improve their living conditions. This could also be the case for Western employees who are attracted by the high salary available in SABIC activities, as will be discussed in Chapter 9.

Chapter Eight
Human Resource Development

8.1 Training and experience acquisition

An important aspect of the development of human resources is training, which can be provided by transnational corporation companies (the foreign partnership of SABIC's companies). The impact of SABIC's companies on human resources in Saudi Arabia will be examined through the attitudes and the culture of the firms regarding training.

8.1.1 The companies' training activities

Employees were asked about training courses held within their firm. The following table (8.1) gives the result.

Does your company hold training courses?	Saudi Arabian	Western	Developing countries	Row total
Yes	164 (56.2%)	23 (7.9%)	105 (36.0%)	292
No	7 (35.0%)	1 (5.0%)	12 (60.0%)	20
Total	171 (54.8%)	24 (7.7%)	117 (37.5%)	312 (100.0%)

Table 8.1 Percentage distribution of the employees' attitudes about their companies training courses

The table shows that SABIC's companies are actively involved in training activities beneficial to the local employees as well as foreign employees. It shows that 292 employees (93.6%) of the whole sample agree that their companies are providing training courses, while only 20 employees (6.4%) of the whole sample responded that their companies are not providing training courses.

An important focus of this study is training location, because the training location can be used as an indication of the role of the foreign partnership in developing Saudi human resources. This is shown in Table 8.2.

8.1.2 Training locations

Where are these courses held?	Saudi Arabian		Western		Developing countries		Total	
	Yes	No	Yes	No	Yes	No	Yes	No
In the company	(89%)	(11%)	(96%)	(4%)	(91%)	(9%)	(90%)	(10%)
Elsewhere in the Kingdom	(81%)	(19%)	(71%)	(29%)	(74%)	(26%)	(78%)	(22%)
Mother company	(28%)	(72%)	(38%)	(62%)	(44%)	(56%)	(35%)	(66%)
Outside the Kingdom	(79%)	(21%)	(88%)	(12%)	(64%)	(36%)	(74%)	(26%)

Table 8.2 percentage distribution of the companies' places of training

Table 8.2 shows the location of training courses, and the data is significant as showing not only the degree of training taking place but also how much is in-house and how much undertaken elsewhere. It shows that a significant percentage of training is undertaken in the companies inside Saudi Arabia, where 90 per cent of the whole sample state that the firms were actively providing training courses for their employees in the companies' training centres (in-house training). It is encouraging to see the extent of the training taking place and also the companies' willingness to invest in training their labour force in and outside the Kingdom. Table 8.2 shows that 78 per cent of those questioned reported that the companies provided training courses in other places inside the Kingdom such as Jubail Industrial College (JIC), the Royal Commission of Al-Jubail and Yanbu (RCJ), the Institute of Public Administration in Al-Dammam (IPA), and King Fahad University of Petroleum (KFUPM). The table also shows that 74 per cent of those questioned knew that the firm's employees were being sent abroad to enhance the level of their skills.

However, the foreign partnerships included in this study did not actively participate in training local employees in addition to foreign employees, and this a serious problem which contravenes one of the government's main intentions in inviting multinational companies from the West to set up in Saudi Arabia, namely, so that the Saudi labour force can benefit from the expertise available from more industrially

developed countries. This finding shows that the partnerships are failing to fulfil one major purpose behind the SABIC companies' having invited them to participate in their developing economy. This is not in line with the argument put forward in this study that the multinational companies should train the local labour force, thereby reducing local unemployment and also increasing the level of skills available in the host countries. This should be considered as having a negative impact for the MNCs in SABIC because the parent companies are not training Saudis in their home countries in any significant number. The interviews conducted with companies executives reinforced this disturbing finding. Three of them state the following:

In the beginning, when the plants were built and started up, our employees were trained in similar plants in the parent company's homeland (e.g. Japan, Taiwan). However, at present we are utilising our own training centres for training since we have all the facilities in our own companies as well as experienced Saudi manpower to provide in-house training. In addition, local institutions are also available for training purposes.

In conclusion, SABIC's companies use three methods of training their personnel:

1. In-house training provided in the companies' training centres.
2. Local training provided through the co-operation of companies and Saudi institutions and universities.
3. Overseas training, with Saudi employees being sent abroad to centres other than parent companies to enhance the level of their skills.

8.1.3 Opportunities available for training

As far as opportunities available for training are concerned, the employees of SABIC's companies were asked about the number of the training courses they have been involved in. The answers were combined in three groups broken down by nationality of the sampled employees, as shown in Table 8.3.

Nationality	No training courses	1-3 courses	4-6 courses	7 and over	Row total
Saudi Arabian	23 (13.5%)	69 (40.4%)	38 (22.2%)	41 (24.0%)	171
Western	10 (41.7%)	10 (41.7%)	2 (8.3%)	2 (8.3%)	24
Developing countries	74 (63.2%)	36 (30.8%)	3 (2.6%)	4 (3.4%)	117
Total	107 (34.3%)	115 (36.9%)	43 (13.8%)	47 (15.1%)	312 (100.0%)

Table 8.3 Percentage distribution of the training opportunities according to the nationalities of the employees

The Chi-square Pearson Test = 92.847, and the probability value = 0.0000, which is a highly significant at level of ($P < 0.05$).

So far as the nationalities are concerned, Table 8.3 shows that the opportunities available for the training of SABIC's employees has benefited the local employees more than others. It shows that Saudis benefit from training courses undertaken by MNCs for their employees. It shows that 148 (86.5%) of Saudi employees have had the opportunity for some training, and that only 23 (13.5%) have not been offered the opportunity. On the other hand, the expatriates from other developing countries fare rather worse, with 74 (63.2%) being given no opportunities for training. This can be explained by the following:

1. SABIC companies are Saudi companies implementing a Saudization policy which gives priority for training to Saudi employees.

2. The main reason expatriates recruited from developing countries work in Saudi Arabia is financial: to improve their standard of living as well as support their dependants in their own country. Thus, many are not looking for, nor expecting, career training and development. Further study and analysis of training opportunities and their importance for the employees from the developing countries are presented in section 8.1.4.

Table 8.3 shows that 41.7% (10) of workers from the West had no opportunities for training, while the same number had been offered 1-3 training courses. While this may seem to put them on the same level as employees from developing countries as regards lack of training, on the whole Western employees, both expatriates and those seconded from parent companies, receive high wages and are often paid much higher salaries than Saudis and gain many other benefits by working in Saudi Arabia :

Some Western expatriates and secondees receive SR 60,000 per month in addition to free accommodation and free passage to their country of origin annual. [personal interview]

Thus it can be said that training opportunities may not figure high on the list of priorities of Western employees in SABIC. Further study and analysis of training opportunities and their importance for this group of employees are therefore required, and it is to this that the study now turns.

8.1.4 Importance of the training to the employees

Nationality	Least important	Not important	Important to some extent	Important	Most important	Row total
Saudi Arabian	5 (2.9%)	7 (4.1%)	30 (17.5%)	53 (31.0%)	76 (44.4%)	171
Western	13 (54.2%)	3 (12.5%)	6 (25.0%)	1 (4.2%)	1 (4.2%)	24
Developing Countries	15 (12.8%)	16 (13.7%)	10 (8.5%)	56 (47.9%)	20 (17.1%)	117
Total	33 (10.6%)	26 (8.3%)	46 (14.7%)	110 (35.3%)	97 (31.1%)	312 (100.0%)

Table 8.4 Importance of the training as a reason for employees' involvement in the companies

Performing a K-W test gave a statistic of 56.8783 ($D=2$) and the probability values =0.000, which is statistically significant under the accepted level of ($P<0.05$).

Combining column's 4, 5 and 6 together, Table 8.4 shows that 159 (93%) Saudi Arabian employees have seen training opportunities as an important reason for their involvement with SABIC. The study also indicates that 150 (87.7%) of Saudi employees are under 40 years of age; this group were looking to enhance their future prospects by improving their skills with SABIC companies and saw the training opportunities offered by SABIC as a major reason for working within the firms. This finding is in agreement with the point made by Jones and Goss (1991), who argue that 'workers are searching for employers who will offer them continued opportunities to develop and update their skills and experiences' (p. 29).

So far as Western employees are concerned, Table 8.4 shows that 16 (66.7%) were not unduly attracted to working for SABIC because of its training opportunities. This finding indicates that salaries, wages and other factors may play a more significant role in attracting foreign employees than training opportunities. However, expatriates from developing countries did give training opportunities as a reason for

being attracted to work for SABIC: 86 (73.5%) of them gave training opportunities as the reason for accepting their current job.

8.1.5 Employees' satisfaction with companies' training policy

The following section reflects the opinions of companies' employees with reference to training opportunities.

Nationalities	Absolutely dissatisfied	Dissatisfied	Satisfied to some extent	Satisfied	Very satisfied	Total
Saudi	30 (17.5%)	47 (27.5%)	47 (27.5%)	40 (23.4%)	7 (4.1%)	171
Western	6 (25.0%)	9 (37.5%)	4 (16.7%)	5 (20.8%)	0 (0.0%)	24
Developing countries	16 (13.9%)	33 (28.7%)	47 (40.9%)	16 (13.9%)	3 (2.6%)	115 (100.0%)
Total	52 (16.8%)	89 (28.7%)	98 (31.6%)	61 (19.7%)	10 (3.2%)	310 (100.0%)

Table 8.5 Employees' degree of satisfaction with respect to opportunities for training and development

Table 8.5 shows that 94 (55%) of Saudis were satisfied with the opportunities for training provided by their companies. This is consistent with the previous findings, which pointed out that local employees were benefiting more than others. However, 77 (45%) of Saudi employees indicated that they were dissatisfied with their training opportunities within their company. The answers to open-ended question (Q14) indicate some reasons for this:

1. There are no guidelines for those responsible for training.
2. Training opportunities are not provided evenly throughout the companies.

Further discussion of these two issues will be left for later. Moreover, there is a positive relationship between the level of satisfaction of Saudi Arabian employees and their opportunities for training.

In the case of Western employees 15 (62.5%) reported dissatisfaction with their training opportunities, as against 49 (42.6%) of employees from other developing countries. These differences may be explained by the opportunity for training as well as the nature of the training in the home country. Western employees could have more opportunity for training in their home countries than employees from developing countries; as a result the former employees may be more attentive to training opportunities than the latter.

8.1.6 *The companies' techniques for training*

This section reflects the degree of individuals' satisfaction concerning training techniques employed by their companies.

Nationalities	Absolutely dissatisfied	Dissatisfied	Satisfied to some extent	Satisfied	Very satisfied	Total
Saudi	30 (17.5%)	40 (23.4%)	60 (35.1%)	36 (21.1%)	5 (2.9%)	171
Western	3 (13.0%)	4 (17.4%)	8 (34.8%)	7 (30.1%)	1 (4.3%)	23
Developing countries	7 (6.0%)	23 (19.8%)	46 (39.7%)	35 (30.2%)	5 (4.3%)	116 (100.0%)
Total	40 (12.9%)	67 (21.6%)	114 (36.8%)	78 (25.2%)	11 (3.5%)	310 (100.0%)

Table 8.6 The companies' techniques for training

Comparing the groups statistically using the K-W test shows that there is a significant difference between the employees toward the companies' technique of training (Chi-Sq=9.0025, df=2, p=.0111).

Table 8.6 shows that 101 (59%) of Saudi Arabians were satisfied at some level with their companies' techniques for training, while 70 (41%) had some degree of dissatisfaction. Most of these dissatisfied workers complained about the inequality of training opportunities. A typical comment was:

Training opportunities are not equally provided to the employees. The personal relationship between the employee and his supervisor as well as those

in the executive office of the company determines if an employee is eligible for training. (open-ended Q14)

In Saudi Arabia, the personal relationship (both individual and family) plays a significant role not just regarding opportunities for training but also in all other aspects of life (e.g. job assignments, job promotions, distributing wealth). Louis (1963) who observed personal relationships in Saudi Arabia, states that

since the entire social structure has historically been based on kinship, it is not surprising to find a certain amount of influence being exercised in favour of relatives. In this society it is taken for granted that an individual will use his position to benefit his relatives, and failure to do so would generally be regarded as morally irresponsible. In the West such a practice is regarded unfavourably as 'nepotism'. (p. 1)

Saudi Arabian employees who are dissatisfied with SABIC's training techniques contributed some additional points. They believe that the companies do not have a clear policy to provide guidelines to those responsible for training. Also, they believe that the people responsible for training do not study the needs of the trainees and cannot therefore create training courses to match these needs. Some respondents stated that:

there is no link between the training courses and the development of the workers. In other words there is no link between changing the employee's responsibility and the training courses that he may be involved in. (open-ended Q14)

There is some disagreement between SABIC executives and employees, who believe that training decisions are based on the requirements of new plants and products. One can argue that the companies did not provide the training required for those selected for promotion in order to prepare them for their new responsibilities.

This is to disagree with Jones and Goss (1991), who argue:

High training companies manifest a strong sense of continuity provision, linked not only to the organisation objectives, but also to the needs of the individual

employees and to career progression as an ongoing organisational process. (p. 25)

In sum, the above problems may be caused by a lack of training opportunities for individual employees. Those who are responsible for training standards should be trained to be qualified to set clear goals which can be reached. At the same time, they should take into account the skill needed by the individual employee in order for him to undertake his job.

Turning to the Western employees, Table 8.6 shows that 16 (69.5%) of these employees were satisfied with their companies' techniques for training, as against 86 employees (74%) from developing countries. It may be the lack of training opportunities which causes dissatisfaction among the remaining percentage of both nationalities. Foreign employees often criticise their companies for showing a preference for 'native' individuals when training is allotted, whereas the view was expressed that non-native employees should be provided for equally. (open-ended Q14)

It is known that there is no perfect training policy which could satisfy all SABIC employees. SABIC aims to increase the native Saudi Arabian workforce, and the only way to replace foreign workers with native ones is to increase the training opportunities for the latter. This policy may increase foreign employees' dissatisfaction. In addition, SABIC employs workers under contracts giving SABIC the freedom not to train foreign employees unless the contracts specifically mention training.

8.1.7 The application of the training

The last and most important issue relating to training policy is the application of the skills which the employee acquired from the training courses.

Nationalities	Absolutely dissatisfied	Dissatisfied	Satisfied to some extent	Satisfied	Very satisfied	Total
Saudi	12 (7.9%)	14 (9.3%)	45 (29.8%)	59 (39.1%)	21 (13.4%)	151
Western	1 (7.1%)	0 (0.0%)	5 (35.7%)	7 (50.0%)	1 (7.1%)	14
Developing countries	2 (4.0%)	2 (4.0%)	15 (30.0%)	26 (52.0%)	5 (10.0%)	50
Total	15 (7.0%)	16 (7.4%)	65 (30.2%)	92 (42.8)	27 (12.6%)	215 (100.0%)

Table 8.7 Degree of satisfaction with the application of skills acquired through training

Comparing the groups statistically using the K-W test shows that there is no significant difference between the three employment groups (Chi-Sq = .5242, df=2, p= 0.7694). Overall, 184 (85.2%) employees were satisfied with the application of their skills acquired through training.

In all, 125 (82.8%) Saudis were satisfied with the benefits gained from training. Those who were dissatisfied 26 (17.2%) tended to feel that the time allocated for completion of the job was inadequate because the training official had not previously assessed the necessary training time.

Thirteen (92.9%) of SABIC's western foreign workers were satisfied with the application of their new skills, as were 46 (92%) employees from developing countries. The dissatisfaction expressed by the few individuals from these two groups was again related to the lack of training opportunities available to them, as noted earlier. It is apparent that a large number of workers (97) could not answer this question as they are not given any opportunity for training.

8.2 Conclusion

The MNCs included in this study do not participate in the training activities as was anticipated. In-house training in SABIC Industries, and in other places in Saudi Arabia, and overseas training are the dominant forms used by SABIC and its

companies rather than sending employees to be trained by the foreign partnerships in their home countries. Long experience of designing the appropriate training courses and the highly skilled trainers of the MNCs could not benefit SABIC employees as was expected. Only 28 per cent of the local employees have benefited from such courses. This does not come in line with the argument in the research hypothesis number four; in other words, foreign firms do not participate in training programmes by taking Saudi employees into their training centres in their homelands.

Considering each of the nationalities, it was found that Saudi employees benefited more than employees from Western countries and from developing countries, due to the Saudisation programmes carried out by SABIC (to substitute foreigners with locals). Western employees may not need training courses, and this finding is supported by their view of giving the training as a reason for their involvement; 66.7 per cent of them reported that they were not attracted to work for SABIC by the training courses, as their wages were the dominant attraction factor.

The majority of local employees have been satisfied with the company's training policy, techniques for training and the application of the skills acquired through training courses. However, dissatisfaction does exist, and this could be due to non-systematic training where it was found that the training was carried out with no depth of study of the skills needed to be gained, nor have they any link between training courses and the development of the workers to take new positions. Personal relations are more important in receiving training within an organisation, rather than the employee's skills or the job requirements.

Research shows that 62.5 per cent of employees from Western countries and 42.6 per cent of those from developing countries have complained about the inequality of training opportunities and criticise the companies for giving local employees preference when training is arranged.

Chapter Nine

Salary and Promotion Opportunities

9.1 Introduction

SABIC employees were attracted to their current posts by several policies, but such policies may have unequal influences on them. In addition, the influence may have a differential impact depending on the original labour market from which the individual was hired or recruited. This chapter will provide a discussion and analysis of the firm's attraction policies such as salaries, pay increases, percentage of pay increase, promotion opportunities, condition of job progress.

9.1.1 The importance of salaries and wages as an attraction policy

Nationalities	Least important	Not important	Important to some extent	Important	Most important	Total
Saudi	1 (0.6%)	0 (0.0%)	8 (4.7%)	55 (32.4%)	106 (62.4%)	170
Western	0 (0.0%)	0 (0.0%)	0 (0.0%)	5 (20.8%)	19 (79.4%)	24
Developing countries	1 (0.9%)	1 (0.9%)	3 (2.6%)	10 (8.5%)	102 (87.2%)	117
Total	2 (0.6%)	1 (0.3%)	11 (3.5%)	70 (22.5%)	227 (73.0%)	311 (100.0%)

Table 9.1 The importance of salaries and wages to the employees' involvement in the jobs

Comparing the groups statistically using the K-W test shows that there is highly significant difference between the three employment groups with respect to the degree of the importance of the salaries as attraction variables (Chi-Sq = 21.1613, df=2, p= 0.0000).

Table 9.1 shows that 99.4 per cent of the Saudi workers were attracted by salaries and wages. This is explained by the sampled companies (as suggested in Chapter 7) being joint ventures between SABIC and other foreign partners. At the same time, the Saudi government provided 70 per cent of the total Saudi investment. This may give the Saudi government more power to require the SABIC firms to attract local workers, high salaries being one of the principle attractions. This finding is also

supported by the interviews conducted with SABIC officials, who pointed out that a secondary school graduate receives SR 3200 as a monthly salary. This means that there is a considerable difference between the salary obtained in SABIC firms and that in Saudi government departments. A person with the same qualification working in a government department could receive only SR 2200 per month as a salary. Moreover, Saudi nationals work mainly in agriculture or in services as government or quasi-government employees. The 31 per cent difference in the salaries obtained by SABIC workers will attract local workers to these companies.

As regards the Western workers, 100 per cent of them indicated that salaries and wages were important to them. In addition they receive the highest salary levels of all workers. This finding agrees with Helal's argument in his study (1984) of the impact of MNCs on the transfer of technology to ARAMCO. Helal argues that 'even in salaries and wages the American employees receive three times more than the Saudi Arabian employees who have the same qualifications and experience' (p. 15).

The workers from developing countries show a similar response, in that 98.3 per cent of them consider wages and salaries an important factor for emigrating to Saudi Arabia and for working in SABIC companies. This supports previous findings that immigrants are looking for remittances to send to their families whom they have left behind. An example of the magnitude of the remittances from migrants from developing countries is the remittances of Yemenis, who in the early 1980s helped their government to finance annual imports in excess of \$1b, paid for almost entirely by remittances from their work in Saudi Arabia.

Finally, there were common features among SABIC employees, who see salaries and wages as the most important aspect of SABIC's attractive policies. However, this may not mean that these employees remain satisfied with their pay after they have been employed.

9.1.2 Pay increases

Pay increases are one of the rewards which could be used for attracting, retaining and motivating employees. If the local employees (Saudi nationals) are satisfied with their salary increases they will remain with the company. Table 9.2a shows when individuals last had a pay increase.

Has your pay increased in	1992		1991		1990		1989	
	Yes%	No%	Yes%	No%	Yes%	No%	Yes%	No%
Nationalities								
Saudi	70.0	30.0	34.9	65.1	30.8	69.2	43.2	56.8
Western	79.2	20.8	25.0	75.0	23.8	76.2	27.8	72.2
Developing countries	60.2	39.8	31.1	68.9	37.2	62.8	51.6	48.4

Table 9.2a Time since last increase in pay

Statistics				
Chi-Sq	4.683	1.144	1.702	3.402
Df.	2	2	2	2
Prob.	0.096	0.564	0.426	0.182

Table 9.2b Statistical results

Over all of the years, Chi-Sq of Pearson test show that there is no a significant difference between the three employment groups as shown in Table 9.2b.

Table 9.2a shows that the highest increase in the salaries of employees working for SABIC companies, not just for local employees but for all employees. Another common feature was lower percentages of pay increases in earlier years (1991, 1990, 1989).

Taking the nationalities of the employees into consideration, the table shows that more Western nationals received pay increases during 1992 (79.2%). However, fewer received pay increases in 1991, 1990 and 1989. Moreover, a smaller number of employees recruited from developing countries received increases in 1992, although more did so in 1990 and 1989.

Some Saudi Arabian workers have benefited from the companies' policy of increasing pay, but fewer of them compared to other groups, except in 1991, when 34.9 per cent of Saudi employees received pay increases.

It is too early to claim that there is pay discrimination against local employees although there were some indications that foreign workers did benefit more. Table 9.2a does not, however, provide the percentage of pay increase, which is considered in Table 9.3.

9.1.3 Percentage of pay increase

The individuals were asked to report the last percentage they have received.

Nationalities	No pay increase	1-5% pay increase	6-10% pay increase	Over 11% pay increase	Total
Saudi	6 (3.6%)	100 (59.5%)	61 (36.3%)	1 (0.6%)	168
Western	4 (16.7%)	12 (50.0%)	6 (25.0%)	2 (8.3%)	24
Developing countries	27 (23.3%)	58 (50.0%)	30 (25.9%)	1 (0.9%)	116
Total	37 (12.0%)	170 (55.2%)	97 (31.5%)	4 (1.3%)	308 (100.0%)

Table 9.3 Percentage of pay increase in 1992

The table shows that only 3.6 per cent of local employees did not receive a pay increase in 1992, a lower proportion than the other two groups. However, the Western employees showed a higher percentage (8.3%) obtaining an increase of more

than 11 per cent. Therefore one can argue that SABIC companies did not give local employees the same priority regarding higher pay increases as they did Western employees. This policy may create a lower degree of job satisfaction with respect to salary obtained.

9.1.4 Salary obtained in SABIC companies

Pay itself is the central issue relating to job satisfaction, because it provides the necessities of life. As such it is the essence of job stability. In this study one of the main objectives is to find whether the SABIC companies provide local employees with salaries which can satisfy their needs.

Nationalities	Absolutely dissatisfied	Dissatisfied	Satisfied to some extent	Satisfied	Very satisfied	Total
Saudi	14 (8.2%)	20 (11.7%)	62 (36.3%)	55 (32.2%)	20 (11.7%)	171
Western	1 (4.2%)	4 (16.7%)	5 (20.8%)	12 (50.0%)	2 (8.3%)	24
Developing countries	8 (6.8%)	23 (19.7%)	35 (29.9%)	45 (38.5%)	6 (5.1%)	117
Total	23 (7.4%)	47 (15.1%)	102 (32.7%)	112 (35.9%)	28 (9.0%)	312 (100.0%)

Table 9.4 Degree of satisfaction with respect to salary

Comparing the groups statistically using the K-W test shows that there is no significant difference between the three employment groups (Chi-Sq = 1.7397, df=2, p= 0.4190). Overall, 242 (77.6%) of employees were satisfied with their salary.

Turning to Saudi workforce, 80.1 per cent were satisfied with their salaries, slightly more than the other two groups. The reason for this could be their feeling that they receive a higher salary than other Saudi Arabian employees working with the government, as discussed above. This accords with the findings of Al-Odaily (1981)

when he states that 'the Saudis working in the private sector seem to be more satisfied with their salaries and wages than employees of the government departments' (p. 110).

An important point is that by 'the private sector' Al-Odaily could mean large companies such as SABIC and ARAMCO which are mostly owned by the Saudi Arabian Government. However, this finding disagrees with the conclusion of Al-Twajiri in a specific study of this issue (1989), where he argues that 'when Saudi managers compared their pay to their American counterparts, they indicated dissatisfaction' (p. 65).

This disagreement could relate to the nature of the study, because Al-Twajiri's sample only included the managers. The present study, however, includes a wider range of workers.

Table 9.4 also shows that most individuals are satisfied with their salaries. Such satisfaction may arise from SABIC companies' having a high net profit and being able to provide higher salaries.

A high degree of satisfaction could also be explained by the Saudi government's economic policy of controlling the inflation rate. For example, in 1988 and 1989 there was minimal inflation, but inflation rose in 1990 and 1991 to reflect the Gulf crisis. However, the government sanctioned reductions in utility tariffs and fuel prices so the middle income cost of living declined again.

9.2 Promotion opportunities

One of the important factors affecting job satisfaction is the opportunity available for promotion for an employee. This will depend on the company's reward philosophy. Promotion opportunities could be used by the company as a means of keeping its employees' loyalty. It is important, therefore, to assess the degree of satisfaction SABIC employees have with their promotion opportunities.

Nationalities	Absolutely dissatisfied	Dissatisfied	Satisfied to some extent	Satisfied	Very satisfied	Total
Saudi	32 (18.7%)	36 (21.1%)	66 (38.6%)	31 (18.1%)	6 (3.5%)	171
Western	9 (37.5%)	11 (45.8%)	2 (8.3%)	1 (4.2%)	1 (4.2%)	24
Developing countries	15 (12.8%)	40 (34.2%)	31 (26.5%)	27 (23.1%)	4 (3.4%)	117
Total	56 (17.9%)	87 (27.9%)	99 (31.7%)	59 (18.9%)	11 (3.5%)	312 (100.0%)

Table 9.5 Degree of satisfaction with respect to promotion opportunities

Comparing the groups statistically using the K-W test shows that there is a significant difference between the various employees in attitude toward the promotion provided by the companies (Chi-Sq=12.2383, df=2, p=.0022).

Table 9.5 shows that 60.2 per cent of Saudi employees were satisfied with their opportunities for promotion. The figure for those who were dissatisfied (39.8%) could be related to the size of SABIC companies, where there are a limited number of hierarchical levels. For example, an engineer may have difficulty in advancing to supervisor level in his division or in another related division because of the limitations of the hierarchical structure. This conclusion is derived from an interview with a SABIC executive, who stated that

one of the companies' problems is to protect the employees from ARAMCO, given that our own organisation is smaller, which creates problems for the company in promotional opportunities.

ARAMCO contains large organisations, which enables management to provide its employees with more opportunities for promotion.

This finding could indicate that there is a need for job security within SABIC firms, in order to protect their employees from competitive local companies by providing local employees with a faster advancement track.

There is a problem where SABIC projects with capital intensive technology, requiring limited numbers of high level skilled labour, minimise the opportunities for job advancement and promotion.

9.2.1 Conditions for job progress

SABIC employees were asked to report on their progress with regard to their jobs.

Nationalities	Absolutely dissatisfied	Dissatisfied	Satisfied to some extent	Satisfied	Very satisfied	Total
Saudi	34 (19.9%)	45 (26.3%)	61 (35.7%)	27 (15.8%)	4 (2.3%)	171
Western	6 (25.0%)	7 (29.2%)	7 (29.2%)	3 (12.5%)	1 (4.2%)	24
Developing countries	9 (7.7%)	33 (28.2%)	43 (36.8%)	28 (23.9%)	4 (3.4%)	117
Total	49 (15.7%)	85 (27.2%)	111 (35.6%)	58 (18.6%)	9 (2.9%)	312 (100.0%)

Table 9.6 Satisfaction with job progress

Comparing the groups statistically using the K-W test shows that there is a significant difference between the groups of the employees (Chi-Sq=7.9472, df=2, p=.0188).

Table 9.6 shows that almost one-third of all employees were only satisfied 'to some extent' with their prospects for advancement. The Western group seems to be less satisfied, with 54.5 per cent stating direct dissatisfaction. This finding could

indicate that Western employees might have left an organisation where job advancement might be given more priority than in their current post. The difference between the old and the new job policy could have caused the dissatisfaction with respect to SABIC job advancement and promotion.

Among the Saudi employees 46.2 per cent also showed some dissatisfaction. This could be due to the lengthy waiting period between advancements in the case of certain positions. This viewpoint is formulated because this study's earlier findings of employees' needs for job security indicated dissatisfaction (among 39.8% of Saudis). Therefore SABIC companies should take care not to prolong the advancement period for senior posts, because local employees might choose to leave the job prior to advancement being offered, perhaps going to a company offering greater opportunities. This view is put forward also because an interview of the researcher with one company executive indicated that in the last five years his company has lost 24 managers to ARAMCO. These findings support the findings of Al-Twajjri (1989), concerning Saudi managers when he states that

Saudi managers were less satisfied with their chances for advancement with the company. This could be due to the lengthy waiting period between the completion of the training and development for certain positions and the actual assumption of managerial duties within the company. (p. 67)

9.3 Conclusion

It was found that all the classes of employees were highly attracted to work for SABIC because of the high salaries and wages. For example, 99.4 per cent of Saudis, 100 per cent of Westerners and 98.3 per cent of developing country employees stated that they were attracted to work by their salaries and wages. However pay increases seem to fluctuate from year to year, and local employees could receive a lower proportion than the other two groups of nationalities (Western and developing countries). The reason

for this could be that SABIC has a policy of attracting and encouraging foreign employees to serve for as long as it can.

Most of the local employees were satisfied with the opportunities for promotion, but this does not eliminate the reservation expressed by 39.8 per cent who stated their dissatisfaction with advancement opportunities, which were also affected by the size of the organisation itself; this refers to a limit on the number of positions available for employees who had spent a long time in the same job level with no advancement. This is also supported by the 46.2 per cent who stated their dissatisfaction with respect to conditions for job progress due to the length of the waiting period between their fulfilling the conditions for receiving advancement and the actual advancement. In other words, SABIC could face problems from other large employers such as ARAMCO, who might seek to attract trained SABIC employees.

Chapter Ten

Job Satisfaction and Management Environment

10.1 Introduction

In the management literature there are several studies attempting to explain the relationship between job satisfaction and management environment. Several studies have shown employee satisfaction to be correlated with absenteeism and turnover. For the purposes of this study it was considered important to examine employee satisfaction in a range of perspectives with regard to their participation in decision making, relationship with manager/supervisor(s), job regulation and procedures, job evaluation, working conditions and environment, and job requirements.

10.2 Participation in decision-making

Looking first at participation in decision-making, initially the employees were asked to specify the degree of their satisfaction with respect to democracy in terms of self-expression, and the degree to which managers/supervisors would accept the employees' suggestions.

10.2.1 Democracy of self-expression

Nationalities	Absolutely dissatisfied	Dissatisfied	Satisfied to some extent	Satisfied	Very satisfied	Total
Saudi	20 (11.7%)	22 (12.9%)	51 (29.8%)	66 (38.6%)	12 (7.0%)	171
Western	1 (4.2%)	4 (16.7%)	5 (20.8%)	11 (45.8%)	3 (12.5%)	24
Developing countries	1 (0.9%)	8 (6.8%)	24 (20.5%)	64 (54.7%)	20 (17.1%)	117
Total	22 (7.1%)	34 (10.9%)	80 (25.6%)	141 (45.2%)	35 (11.2%)	312 (100.0%)

Table 10.1 Employees' degree of satisfaction with respect to job expression

Comparing the groups statistically using the K-W test shows that there are highly significant differences between the employees regarding their freedom to discuss problems with the management (Chi-Sq = 24.4918, df = 2, p = 0.0000). Overall, 256 (82%) employees were satisfied.

Table 10.1 shows that 129 (75.4%) Saudi employees were satisfied about self-expression in their jobs. This finding could be explained by cultural and social values in Saudi Arabian society, which is characterised by close ties, relationships and loyalties such as may affect employees' feelings about self-expression. In Saudi Arabia a father influences his children, the head of a tribe (a *sheikh*) controls his people, and his people will accept his decision. Such a climate creates a society where any limitation upon democracy or, upon participation in decision-making is accepted, as will be discussed presently.

Table 10.1 shows that the 19 Western employees have an even higher degree of satisfaction (79.2%) than Saudi-Arabians (75.4%) regarding democracy of self-expression. This could be explained by cultural factors at work and at home. Western people have open and unlimited self-expression to explain and discuss any problems relating to their jobs. They have come to transfer knowledge and expertise in return for relatively high salaries and other benefits, doing skilled jobs, holding higher positions in the hierarchy of the company. These employees, because of their importance to the organisation, have greater freedom of expression within their job.

So far as expatriates from developing countries are concerned, Table 10.1 shows that these employees registered the highest percentage (92.3%) of those satisfied with democracy of self-expression. This can be explained by the nature of work contracts in Saudi Arabia, where foreign employees may work only for the employer who hired them from abroad and may only change employment with that employer's agreement and that of the Ministry of the Interior. This kind of job contract limits the chances of finding better job conditions in Saudi Arabia, and since such employees would not like to have to return home, they will accept and be satisfied with any limitations on their freedom to speak about their jobs.

10.2.2 Accepting the employees' suggestions

SABIC employees were asked to state their attitudes regarding the level to which manager/supervisor accepted suggestions.

Nationalities	Absolutely dissatisfied	Dissatisfied	Satisfied to some extent	Satisfied	Very satisfied	Total
Saudi	11 (6.4%)	24 (14.0%)	66 (38.6%)	59 (34.5%)	11 (6.4%)	171
Western	2 (8.3%)	3 (12.5%)	4 (16.7%)	14 (58.3%)	1 (4.2%)	24
Developing countries	2 (1.7%)	6 (5.1%)	16 (13.7%)	72 (61.5%)	21 (17.9%)	117
Total	15 (4.8%)	33 (10.6%)	86 (27.6%)	145 (46.5%)	33 (10.6%)	312 (100.0%)

Table 10.2 Employees' degree of satisfaction regarding manager's/supervisor's attitude towards accepting suggestions

Over all the nationalities the K-W test shows that there is highly significant difference between the various employees regarding satisfaction with the management accepting suggestions (Chi-Sq = 39.9740, df = 2, p = 0.0000). Overall 264 (84.6%) of the employees were satisfied (to differing degrees) about the extent to which their manager/supervisor accepted suggestions.

Table 10.2 shows that 136 (79.5%) Saudi Arabians were satisfied to some degree with their manager's or managing director's acceptance of their suggestions. This finding may also be explained by Saudi Arabian culture and religion, which views consultation positively, as mentioned above. A tribal society believes that the members of the tribe and or family should be consulted on matters concerning their welfare. Furthermore, Islam, as a religion, requires that people consult one another. The *Qur'an* states clearly:

This reward will be for those who hearken to their lord, and establish regular prayer; who [conduct] their affairs by mutual consultation; who spend out of what we bestow on them for sustenance. (Sura Al-Shura, verse 36)

This is an important text from the *sura*, and suggests the ideal way in which a good man should conduct his affairs, so that, on the one hand, he may not become too egotistical, and, on the other, he may not lightly abandon the responsibilities which devolve on him as a personality whose development counts in the sight of God.

However, consultation does not mean the idea will be implemented when the manager/supervisor takes a decision. This inference is formulated as a result of the writer's experience as well as being the conclusion of other studies relating to employees' participation in decision-making in Saudi Arabia (Al-Jafary, and Hollingsworth 1983; Muna, 1980; Russell, 1986; Ali, 1985, 1989, 1992; Al-Meer, 1989). Overall, these studies found a consultative 'style', meaning a manager may appear to be consulting but is in fact only creating a 'feeling' of consultation. This pseudo-consultation differs from the genuine consultation practised in Western countries. Ali (1992) stated the following:

The consultative style, as opposed to an autocratic style, is characteristic of Arabic society. A tribal sheikh in the classical nomadic structure could not rule for long without the consensus of the tribe. In addition, Islam presents consultation with others as having a positive religious value. (p. 22)

In another verse in the holy *Qur'an* Allah says to the prophet Mohammed [*peace upon him*]: 'O Messenger, take counsel with them in the conduct of the affairs; then once you make your mind up to do a thing, trust in Allah and do it' (sura Al-i-Imran, verse 159).

The above verse supports my argument that a manager might not implement employees' suggestions because he might depend upon his own ideas.

Table 10.2 shows that 19 (79.2%) Western employees also showed their satisfaction with respect to their supervisors' acceptance of their suggestions. This can

be explained by the importance of those employees to the organisation. Western employees could well be those on whom the companies depend for doing important jobs; consequently they may be given more opportunity for participation in decision-making. In addition, Western employees originate from organisations orientated towards using experience to solve problems as well as encouraging questions from other members. Western managers believe that the independence of employees and considerable job freedom are important, at the same time taking the balance between organisation and individual needs into consideration. This Western style of management was developed long before these managers were hired by SABIC and westerners' familiarity with this management style could create a need for such conditions in Saudi Arabia.

Table 10.2 also shows that 109 (93.2%) expatriates from developing countries were more satisfied with respect to supervisors' acceptance of suggestions. The reason for this could be that employees are benefiting from SABIC's utilising Western management styles in decision-making. This could mean a sharing of the analysis of problems between the supervisor and his employees as a group. In short, employees from developing countries where consultation in decision-making is limited would probably find SABIC's consultative process quite satisfactory. In addition, these employees, who would face hardship in their own countries, would give a low priority to consultation.

10.3 Relationship with manager/supervisor(s)

The relationship between a manager and his employees plays a significant role in job satisfaction. Good relations will help companies to retain their workforce. This section concerns employees' opinions of their managers, beginning with an examination of individuals' attitudes towards the way managers/supervisors deal with them.

10.3.1 The way managers/supervisors deal with employees

Nationalities	Absolutely dissatisfied	Dissatisfied	Satisfied to some extent	Satisfied	Very satisfied	Total
Saudi	12 (7.0%)	20 (11.7%)	48 (28.1%)	60 (35.1%)	31 (18.1%)	171
Western	2 (8.3%)	6 (25.0%)	5 (20.8%)	9 (37.5%)	2 (8.3%)	24
Developing countries	5 (4.3%)	6 (5.1%)	18 (15.4%)	57 (48.7%)	31 (26.5%)	117
Total	19 (6.1%)	32 (10.3%)	71 (22.8%)	126 (40.4%)	64 (20.5%)	312 (100.0%)

Table 10.3 Employees' degree of satisfaction towards managers'/supervisors' way of dealing with them

The K-W statistical test shows that there is a significant difference between the three groups of employees (Chi-Sq = 16.0037, df = 2, p = 0.0003).

Table 10.3 shows that the majority of SABIC employees (83.7%) stated that they were satisfied with the way their managers dealt with them. Employees from the third world countries showed the highest level of satisfaction: 106 (90.6%) reported satisfaction, while local employees came in between the two groups, with 81.3%. Sixteen (66.7%) Western employees were satisfied with their managers.

10.3.2 The appreciation shown by managers towards the employees

Employees were asked to express their attitudes towards management's appreciation of their work.

Nationalities	Absolutely dissatisfied	Dissatisfied	Satisfied to some extent	Satisfied	Very satisfied	Total
Saudi	18 (10.5%)	22 (12.9%)	55 (32.2%)	59 (34.5%)	17 (9.9%)	171
Western	3 (12.5%)	4 (16.7%)	7 (29.2%)	9 (37.5%)	1 (4.2%)	24
Developing countries	1 (0.9%)	9 (7.7%)	23 (19.7%)	58 (49.6%)	26 (22.2%)	117
Total	22 (7.1%)	35 (11.2%)	85 (27.2%)	126 (40.4%)	44 (14.1%)	312 (100.0%)

Table 10.4 Employees' degree of satisfaction with regard to management appreciation of employees

Comparing the groups statistically using K-W test shows that there is a highly significant difference between the employees of various nationalities with respect to the management's appreciation of their work (Chi-Sq = 27.5498, df = 2, p = 0.0000).

Overall, 255 (81.7%) SABIC employees registered satisfaction. Employees from developing countries expressed a higher level of satisfaction: 107 (91.5%) of them were satisfied to varying degrees.

So far as Saudi Arabian employees are concerned, Table 10.4 shows that 131 (76.6%) of these employees were satisfied with their management's appreciation of them, while only 17 (70.8%) of the Western employees reported their satisfaction.

10.3.3 The way in which non-Saudi managers/supervisors deal with the employees

Individual employees were asked to report their attitudes with respect to their non-Saudi managers' way of dealing with employees.

Nationalities	Absolutely dissatisfied	Dissatisfied	Satisfied to some extent	Satisfied	Very satisfied	Total
Saudi	16 (11.0%)	11 (7.6%)	24 (16.6%)	63 (43.4%)	31 (21.4%)	145
Western	1 (4.3%)	2 (8.7%)	7 (30.4%)	13 (56.5%)	0 (0.0%)	23
Developing countries	3 (2.7%)	6 (5.4%)	14 (12.5%)	69 (61.6%)	20 (17.9%)	112
Total	20 (7.1%)	19 (6.8%)	45 (16.1%)	145 (51.8%)	51 (18.2%)	280 (100.0%)

Table 10.5 Non-Saudi managers'/ supervisors' ways of dealing

A Chi-Square analysis using the K-W test shows that there was a significant difference between the groups of employees in terms of foreign managers' ways of dealing with them (Chi-Square = 6.7112, $df = 2$, $p = 0.0349$).

Overall, 241 (86.1%) of the SABIC employees were satisfied with the way non-Saudi managers dealt with them. However, there were 32 missing observations from employees who were not accountable to non-Saudi managers. Once again employees from developing countries showed the highest level of satisfaction.

Table 10.5 shows that 118 (81.4%) of the Saudi employees were satisfied with the foreign managers' way of dealing with them. In the case of Western employees, 20 (87%) reported satisfaction. Employees from other developing countries showed the highest percentage of satisfaction, with 103 (92%) stating various levels of satisfaction.

The high percentage of employees satisfied with dealing with non-Saudi managers probably reflects the positive impact of MNCs in terms of the superiority of

their operation. Foreign managers will probably be seconded by the foreign partnerships to look after their investment. The manager or supervisor recruited from the Western nations would lay stress on promoting equality among his employees and minimising differences. Adopting the above way of communication may increase the level of employees' satisfaction with non-Saudi managers.

10.3.4 The methods that Saudi managers/supervisors use to deal with employees

Employees were asked to specify their attitudes towards the way in which Saudi managers/supervisors dealt with them.

Nationalities	Absolutely dissatisfied	Dissatisfied	Satisfied to some extent	Satisfied	Very satisfied	Total
Saudi	14 (8.2%)	19 (11.2%)	56 (32.9%)	60 (35.3%)	21 (12.4%)	170
Western	0 (0.0%)	4 (18.2%)	3 (13.6%)	12 (54.5%)	3 (13.6%)	22
Developing countries	1 (0.9%)	8 (6.8%)	18 (15.4%)	60 (51.3%)	30 (25.6%)	117
Total	15 (4.9%)	31 (10.0%)	77 (24.9%)	132 (42.7%)	54 (17.5%)	309 (100.0%)

Table 10.6 Saudi managers'/supervisors' ways of dealing

Comparing the groups statistically using the K-W test shows that there is highly significant difference between the employees from various nationalities with respect to satisfaction with the Saudi managers' method of dealing with them (Chi-Sq = 25.1209, df = 2, p = 0.0000).

Table 10.6 shows that a high percentage of employees were satisfied with Saudi managers/supervisors. Saudi and Western employees and employees from developing countries reported satisfaction levels of 80.6, 81.8 and 92.3 per cent respectively. One of the employees from a developing country expressed his feelings about his Saudi boss when he stated:

I am satisfied with my work as I am working systematically with the instruction of my Saudi supervisor and doing my daily work. (Open-ended question 58)

Such a statement indicates that Saudi tribalist managers or bosses like to tell their subordinates exactly what to do and how to do it. This kind of behaviour has helped to create authoritarian managers in Saudi Arabia.

Employees not satisfied with Saudi managers' methods specified the management technique of dealing with subordinates such that managers did not discuss work issues and did not yield to subordinates' suggestions. One of the employees stated:

The boss could be more informal. He could discuss things concerning the whole department with subordinates and accede to subordinates' feelings rather than pushing things from the top. (Open-ended question 58)

10.3.5 Methods used by the managers/supervisors to solve problems

The respondents were asked to assess their level of satisfaction with the methods used by their manager/supervisor in order to solve their problems.

Nationalities	Absolutely dissatisfied	Dissatisfied	Satisfied to some extent	Satisfied	Very satisfied	Total
Saudi	16 (9.4%)	26 (15.3%)	74 (43.5%)	46 (27.1%)	8 (4.7%)	170
Western	4 (16.7%)	3 (12.5%)	8 (33.3%)	9 (37.5%)	0 (0.0%)	24
Developing countries	3 (2.6%)	11 (9.5%)	28 (24.1%)	56 (48.3%)	18 (15.5%)	116
Total	23 (7.4%)	40 (12.9%)	110 (35.5%)	111 (35.8%)	26 (8.4%)	310 (100.0%)

Table 10.7 Employees' degree of satisfaction with managers'/supervisors' methods of solving problems

Comparing the groups statistically, using the K-W test, shows that there is a highly significant difference between the employees toward the method of solving problems (Chi-Sq = 29.8891, df = 2, p = 0.0000).

Individuals over all the nationalities were highly satisfied with the methods applied by their managers/supervisors to the solving of problems. One hundred and twenty-eight (75.3%) Saudi Arabian, 17 (70.8%) Western and 102 (87.9%) employees from other developing countries reported satisfaction. Therefore one may posit approximately the same percentage of satisfaction over all the variables discussed in this section (in relation to manager/supervisor).

10.4 Job regulation and procedures

It was necessary to investigate the management technique of implementing regulations, methods of job termination and transfer, and the vacation or leave system as variables which could affect employees' level of satisfaction with respect to job regulation and procedure. This process started by the researcher asking SABIC employees to state their degree of satisfaction with management techniques regarding implementation of regulations.

10.4.1 Management techniques to implement regulations

Nationalities	Absolutely dissatisfied	Dissatisfied	Satisfied to some extent	Satisfied	Very satisfied	Total
Saudi	24 (14.0%)	41 (24.0%)	63 (36.8%)	37 (21.6%)	6 (3.5%)	171
Western	3 (13.0%)	2 (8.7%)	12 (52.2%)	6 (26.1%)	0 (0.0%)	23
Developing countries	3 (2.6%)	13 (11.1%)	28 (23.9%)	61 (52.1%)	12 (10.3%)	117
Total	30 (9.6%)	56 (18.0%)	103 (33.1%)	104 (33.4%)	18 (5.8%)	311 (100.0%)

Table 10.8 Employees' degree of satisfaction with management techniques to implement regulations

Comparing the groups statistically using K-W test shows that there is highly significant difference between the employees from various nationalities with respect to the management technique (Chi-Sq = 42.5269, df = 2, p = 0.0000).

The majority of employees over all nationalities (62% Saudi, 78.3% Western and 86.3% from developing countries) were satisfied with management techniques regarding the implementing of regulations. Saudi employees who reported dissatisfaction specifically mentioned problems relating to personal evaluation. It would appear that evaluation does not depend upon job performance, but rather on personal characteristics/relationships. This problem will be discussed later under the heading of job evaluation.

10.4.2 Methods of job termination and transfer

Individuals were requested to assess their attitudes with respect to methods of job termination and transfer.

Nationalities	Absolutely dissatisfied	Dissatisfied	Satisfied to some extent	Satisfied	Very satisfied	Total
Saudi	10 (6.0%)	29 (17.4%)	74 (44.3%)	49 (29.3%)	5 (3.0%)	167
Western	3 (12.5%)	3 (12.5%)	9 (37.5%)	7 (29.2%)	2 (8.3%)	24
Developing countries	1 (0.9%)	12 (10.8%)	43 (38.7%)	49 (44.1%)	6 (5.4%)	111
Total	14 (4.6%)	44 (14.6%)	126 (41.7%)	105 (34.8%)	13 (4.3%)	302 (100.0%)

Table 10.9 Employees' degree of satisfaction with methods of job termination and transfer

Comparing the groups statistically, using the K-W test, shows that there is a significant difference between the employees degree of satisfaction toward job termination and transformation (Chi-Sq = 10.7556, df = 2, p = 0.0046).

Over all the nationalities studied, the majority of employees expressed their satisfaction with respect to methods of job termination and transfer. Expatriates

recruited from developing countries showed the highest level of satisfaction (88.3%). This can be explained by the benefits they received from being recruited in Saudi Arabia. As previously mentioned, they come from poor countries with a high rate of unemployment. Saudi Arabia, like other rich countries, is a prime destination for such employees. Past hardships could increase their level of commitment towards their organisation, minimising their dissatisfaction on any job related issues. This explanation is consistent with the findings of Al-Meer (1989):

There could be several explanations for the higher level of organisation commitment among individuals from Asian countries. First poor pay and/or high rates of unemployment in Asian countries often make it necessary for those people to look for employment opportunities elsewhere. (p. 81)

10.4.3 Vacation or leave system

Individuals were asked to report their attitudes towards the vacation or leave system implemented by their companies.

Nationalities	Absolutely dissatisfied	Dissatisfied	Satisfied to some extent	Satisfied	Very satisfied	Total
Saudi	14 (8.2%)	24 (14.0%)	49 (28.7%)	62 (36.3%)	22 (12.9%)	171
Western	3 (12.5%)	3 (12.5%)	1 (4.2%)	16 (66.7%)	1 (4.2%)	24
Developing countries	3 (2.6%)	11 (9.4%)	22 (18.8%)	67 (57.3%)	14 (12.0%)	117
Total	20 (6.4%)	38 (12.2%)	72 (23.1%)	145 (46.5%)	37 (11.9%)	312 (100.0%)

Table 10.10 Employees' degree of satisfaction in relation to the company vacation or leave system

Comparing the groups statistically, using the K-W test, shows that there is a significant difference between the three employment groups in terms of attitudes towards vacations and leave systems (Chi-Sq = 7.7268, df = 2, p = 0.0210).

Table 10.10 shows results similar to the previous ones. Overall, 254 employees (81.4%) reported satisfaction with respect to the vacation or leave system. In addition, employees from other developing countries exhibited the highest level of satisfaction (88%). Again, this is due to the difference in wages and salaries between home and host country (Saudi Arabia), as previously discussed.

Expatriates and seconded individuals not satisfied with the vacation or leave system, especially employees not accompanied by families or dependants, complained about the shortness of vacations. They believe that SABIC should extend the range of vacations, one of them stating as follows:

I believe long-serving, dependable employees should be entitled to longer vacations than new employees. Also long-serving employees should be entitled to hold multiple-exit re-entry visas. (Open-ended question 58)

The above suggestion conflicts with the Ministry of the Interior's aim of applying very strong controls regarding leaving and entering the country.

Article 153 of the 1969 Labour and Work Law passed to deal with this issue states:

Paid vacation leave ranges from fifteen days for a worker with one to three year's service, to twenty-one days for a worker with three years or more of service. With the employer's consent, an employee may defer his annual vacation, or part of it, to the following year but he may not forgo his annual vacation for more than one year. (p. 53).

From the above Article, one can argue that fifteen days may not be enough for an employee who spends one year in Saudi Arabia away from his dependants. Employees coming from India, Pakistan, the Philippines, Bangladesh and other developing countries having no permission to bring their dependants should be given a

longer vacation than fifteen days, or else they should be given permission to bring their dependants.

10.5 Job evaluation

Several studies such as Lawler, Kerr and Hamner (1987) which deal directly with reward allocation and implementation problems have indicated the importance of the evaluation system, that has a positive impact on individuals' motivations to participate and to perform positively in their jobs. However, there has been insufficient research examining such relationships in Saudi Arabia. This section discusses this issue, the investigation having begun with the researcher asking the employees to report their level of satisfaction with respect to job evaluation.

Nationalities	Absolutely dissatisfied	Dissatisfied	Satisfied to some extent	Satisfied	Very satisfied	Total
Saudi	4 (2.4%)	12 (7.1%)	50 (29.4%)	77 (45.3%)	27 (15.9%)	170
Western	3 (12.5%)	4 (16.7%)	9 (37.5%)	7 (29.2%)	1 (4.2%)	24
Developing countries	3 (2.6%)	16 (13.9%)	22 (19.1%)	61 (53%)	13 (11.3%)	115
Total	10 (3.2%)	32 (10.4%)	81 (26.2%)	145 (46.9%)	41 (13.3%)	309

Table 10.11 Employees' degree of satisfaction with respect to job evaluation

Comparing the groups statistically, using K-W test, shows that there is a significant difference between the employees from various nationalities with respect to the method by which their job is evaluated (Chi-Sq = 9.3704, df = 2, p = 0.0092).

Questioning of Saudi employees showed that 154 (90.6%) were satisfied with the method of job evaluation; 96 employees (83.5%) from other developing countries were also satisfied, but only 17 Western employees (70.8%) were satisfied.

Western employees found differences in the area of personal evaluation between their home countries and Saudi Arabia, where personal evaluation involves taking the individual himself into consideration rather than just his performance. This contrasts with personal evaluation in Western nations, where organisations evaluate the employee on his strengths and weaknesses regarding his job performance rather than his personality.

In the open-ended questions, 40 employees complained about personal evaluation. They believed that advancement towards higher positions, promotion, and salary increases are determined by personal connections and manoeuvring, nepotism and family relationships. This finding agrees with those of Ali and Paul (1985) and Russell and Nejdet (1986). For example, Ali and Paul state:

We know that in Saudi Arabia, and in the rest of the Arab States, salary is determined without regard to merit and performance and promotion and salary increases are largely determined by personal connections and manoeuvre, nepotism and sectarian and ideological affiliation. (p. 40)

10.6 Working conditions and environment

The following sections aim to explore employees' attitudes to their working conditions with regard to a number of different criteria. This is an important topic since it relates to the length of time employees may remain with their employer.

10.6.1 Working conditions

Employees were asked to state their attitudes towards their working conditions.

Nationalities	Absolutely dissatisfied	Dissatisfied	Satisfied to some extent	Satisfied	Very satisfied	Total
Saudi	10 (5.8%)	24 (14.0%)	57 (33.3%)	66 (38.6%)	14 (8.2%)	171
Western	2 (8.3%)	3 (12.5%)	5 (20.8%)	11 (45.8%)	3 (12.5%)	24
Developing countries	0 (0.0%)	7 (6.0%)	16 (13.7%)	71 (60.7%)	23 (19.7%)	117
Total	12 (3.8%)	34 (10.9%)	78 (25.0%)	148 (47.4%)	40 (12.8%)	312 (100.0%)

Table 10.12 Employees' degree of satisfaction with respect to working conditions

Comparing the groups statistically using K-W test shows that there is highly significant difference between the employees from different nationalities with respect to working conditions (Chi-Sq = 32.8347, df = 2, p = 0.0000).

Overall, the majority of employees (85.2%) were satisfied with their working conditions and environment, that is 80.1 per cent of Saudi Arabians, 79.2 per cent of Westerners and 94 per cent of employees from other developing countries.

Employees who were dissatisfied had given as a reason for their dissatisfaction the harsh nature of the work, especially of work requiring sustained concentration to deal with highly sophisticated machinery.

10.6.2 Temperature inside the factories

Employees were asked to give their attitudes towards the temperature inside factories.

Nationalities	Absolutely dissatisfied	Dissatisfied	Satisfied to some extent	Satisfied	Very satisfied	Total
Saudi	4 (3.4%)	13 (11.0%)	25 (21.2%)	50 (42.4%)	26 (22.0%)	118
Western	1 (4.5%)	2 (9.1%)	2 (9.1%)	15 (68.2%)	2 (9.1%)	22
Developing countries	0 (0.0%)	2 (2.0%)	6 (5.9%)	60 (58.8%)	34 (33.3%)	102
Total	5 (2.1%)	17 (7.0%)	33 (13.6%)	125 (51.7%)	62 (25.6%)	242 (100.0%)

Table 10.13 Employees' degree of satisfaction with temperature inside the factories

A Chi-Square analysis (K-W test) shows that there was a significant difference between the employees groups in terms of their degree of satisfaction about the temperature inside the factories in which they worked (Chi-Square = 18.8135, df = 2, p = 0.0001).

Most of the employees reported satisfaction here - 101 out of 118 Saudis, 19 out of 22 Westerners and 100 out of 102 employees from other developing countries.

So far as local employees are concerned, the study finding shows a high level of satisfaction with the working temperature of factories. This could be taken as evidence of the willingness of Saudis to fill jobs which may involve high-temperature conditions, such as jobs in the HADEED company, where factories produce steel, rubber and wire rods.

The number of responses to this question was less than that of responses to other questions. This was due to 'inapplicable' cases, only 242 respondents answering the question because the remaining 70 workers worked in administrative departments.

10.6.3 Safety and accident prevention

Employees were asked to state their attitudes towards the companies' approach to safety and accident prevention.

Nationalities	Absolutely dissatisfied	Dissatisfied	Satisfied to some extent	Satisfied	Very satisfied	Total
Saudi	6 (3.5%)	12 (7.0%)	41 (24.0%)	64 (37.4%)	48 (28.1%)	171
Western	2 (8.3%)	0 (0.0%)	3 (12.5%)	13 (54.2%)	6 (25.0%)	24
Developing countries	1 (0.9%)	1 (0.9%)	8 (6.8%)	59 (50.4%)	48 (41.0%)	117
Total	9 (2.9%)	13 (4.2%)	52 (16.7%)	136 (43.6%)	102 (32.7%)	312 (100.0%)

Table 10.14 Employees' degree of satisfaction towards the companies' safety system

Comparing the groups statistically, using K-W test, shows that there is highly significant difference between the employees from various nationalities with respect to safety and accident prevention (Chi-Sq = 18.1667, df = 2, p = 0.0001).

Table 10.14 shows that 89.5 per cent of Saudi employees were satisfied with the safety techniques employed by their companies, while Western employees and employees from other developing countries both showed even greater satisfaction at 91.7 per cent (22 employees) and 98.3 per cent (115 employees) respectively.

One of the Saudi Arabian employees of the ABNHYAN company raised a very important issue. He complained about inaccuracy in preparation of safety reports. He said:

The company management tries to minimise the accidents which have happened by reporting less accidents to SABIC officials. I believe that the company should take more into account the safety of its employees. (Open-ended question 58)

10.7 Job requirements

The following section concerns the opinions of employees regarding their satisfaction with job requirements. Employees were asked state their attitudes towards the system of working hours.

10.7.1 Working hours

Nationalities	Absolutely dissatisfied	Dissatisfied	Satisfied to some extent	Satisfied	Very satisfied	Total
Saudi	18 (10.7%)	17 (10.0%)	40 (23.7%)	60 (35.5%)	34 (20.1%)	169
Western	1 (4.2%)	2 (8.3%)	1 (4.2%)	13 (54.2%)	7 (29.2%)	24
Developing countries	1 (0.9%)	1 (0.9%)	5 (4.3%)	70 (60.3%)	39 (33.6%)	116
Total	20 (6.5%)	20 (6.5%)	46 (14.9%)	143 (46.3%)	80 (25.9%)	309 (100.0%)

Table 10.15 Employees' degree of satisfaction with respect to working hours

Over all of the nationalities the K-W test shows that there is highly significant difference between the various employees in terms of attitude towards their working hours (Chi-Sq = 35.5073, df = 2, p = 0.0000). Overall, 269 (87%) of the employees were satisfied, to varying degrees of satisfaction.

The length of working hours at SABIC satisfied the majority of employees, 79 per cent of Saudi Arabians, 87 per cent of Westerners, and 98 per cent of employees from developing countries.

Examination of the attitudes of local employees indicated 20.7 per cent dissatisfaction with working hours. These employees believe that working hours are longer than in government departments. Modern organisations like SABIC require longer hours of work than government departments where most of the Saudi Arabian workforce is employed. This situation creates dissatisfaction because employees spend

more time at work than those employed by Saudi government departments, who begin work each day at 8.00 a.m. and finish at 2.30 p.m. By comparison, SABIC employees start their job at 7.30 a.m. and are required to work until 4.30 p.m. The maximum weekly working hours for government employees is only 32.5 hours, while for SABIC employees it is 45 hours. This finding accords with those of Al-Gaith and Al-Mashouk (1993, p. 309), Riyadh Chamber of Commerce (1993), Saudi Council of Chambers of Commerce (1993, p. 210), Saudi National Company for Sea Transport (1993, p. 182), and General Organisation for Technical Education and Vocational Training (1993, p. 128). All these papers concede that the length of working hours in private companies is an obstacle in hiring local labour.

This argument was reinforced by one SABIC executive, who suggested that one way of attracting and retaining more local labour would be to reduce working hours to six per day. The thinking behind this is that the workers use highly sophisticated technology, requiring intense concentration which may not be facilitated by long working hours.

10.7.2 Scheduling of shifts

The employees were asked about their attitudes towards working shifts.

Nationalities	Absolutely dissatisfied	Dissatisfied	Satisfied to some extent	Satisfied	Very satisfied	Total
Saudi	8 (7.4%)	8 (7.4%)	44 (40.7%)	32 (29.6%)	16 (14.8%)	108
Western	0 (0.0%)	1 (5.3%)	4 (21.1%)	11 (57.9%)	3 (15.8%)	19
Developing countries	1 (1.2%)	0 (0.0%)	7 (8.1%)	53 (61.6%)	25 (29.1%)	86
Total	9 (4.2%)	9 (4.2%)	55 (25.8%)	96 (45.1%)	44 (20.7%)	213 (100.0%)

Table 10.16 Employees' degree of satisfaction with respect to scheduling of working shifts.

Comparing the groups statistically, using the K-W test, shows that there is highly significant difference between the employees from various nationalities with respect to their satisfaction about the scheduling of working shifts (Chi-Sq = 35.5717, df = 2, p = 0.0000).

Saudi workers doing shift work (i.e. nights or early mornings) were mostly satisfied with the scheduling of shifts (85.2%). This does not accord with the findings of the Saudi Council Chamber of Commerce study (1993, p. 210) which considered shift work or split shifts as the main problem regarding the hiring of local employees to work in private industry. An even higher proportion of employees from Western and other developing countries reported their satisfaction (94.7% and 98.8% respectively).

10.8 Conclusion

The discussion in this chapter indicates that all of the nationalities were satisfied with their ability to express themselves with respect to the job issues and were satisfied with the acceptance of their suggestions; this would not be the case if they found problems with these issues. The traditional cultural and religious values of the local employees could encourage their feelings about consultation while western employees came from organisations oriented towards practising consultation in decision making, and these people could be among those who hold higher positions in the companies, and who practice and support participation in decision making.

In terms of the relations with managers and supervisors the employees did express their satisfaction with respect to the way both Saudi and non-Saudi managers and supervisors deal with the employees, and the methods used by the managers to solve problems. This could be taken as evidence of the superiority of the SABIC management and managerial system. The other high degree of satisfaction came with respect to job regulation and procedure. The employees of all nationalities stated high

levels of satisfaction with respect to management techniques to implement regulations, methods of job termination and transfer, and the vacation or leave system.

The above-described high levels of satisfaction with respect to participation in decision-making, relation with manager/supervisor, job regulation and procedures, and job evaluation provides the strongest evidence for the superiority of the management and managerial skills possessed by MNCs. This supports the fourth hypothesis mentioned in Chapter 6, that MNCs' management and managerial skills could benefit the Saudi economy.

Despite the fact that the majority of SABIC employees reported their satisfaction with respect to job evaluation methods, some Saudi and Western employees expressed reservations about job evaluations which could depend on personal characteristics and relationships rather than performance.

Finally high levels of satisfaction were reported with respect to the working conditions and environment, referring especially to the temperature inside the factories, and the levels of safety practised in the work location. However, there are some complaints made about the length of working hours reported by local employees, who believe that they spend 9 hours dealing with sophisticated technology, which is much longer than the employment in the public sector where they would work for only six and a half hours.

Chapter Eleven

The Effect of SABIC's Foreign Partners on Capital Investment, Balance of Payments, Transfer of Technology, Research and Development and Sovereignty

11.1 Introduction

From the review of the literature on the impact of MNCs on their host countries, it is clear that there are problems in assessing the impact of these companies; this is shown by writers such as Dicken (1988) who points out the difficulty of such an analysis. It would be difficult for any study to draw conclusions about the involvement of MNCs in their host countries without making reference to the whole package of consequences. Economic variables such as the effect on capital investment, balance of payments, transfer of technology, research and development and sovereignty will all be reviewed in this chapter.

11.2 Effect on capital investment

The Saudi Government decided to invest in the petrochemical and steel industries in order to increase the value added by using the hydrocarbons which are associated with one of the largest crude oil production centres in the world. In the late 1970s, a visit to the east coast of the country provided the best evidence of the millions of cubic feet of natural gas which were available but which had no value. When SABIC was established and invited the various MNCs into joint ventures, it was decided that the MNCs should not bring a large amount of foreign capital investment into the local economy. As mentioned in Chapter 3, the PIF, which depended totally on government funding, was established with the responsibility for providing 60 per cent of the total investment in SABIC, while the foreign partnership had to provide only 15 per cent.

This does not eliminate the role of SABIC in helping to influence the industrial environment by increasing the mobility of money in the country through offering attractive conditions of investment to the MNCs. This is done by using SABIC output as raw materials to provide essential needs such as food, for example by providing the agricultural sector with its fertiliser needs to produce wheat, the output of which exceeded 4.5 million tons per year. In the industrial sector, hundreds of local

companies use SABIC products such as plastics and steel, and they convert these raw materials into final products which have a greater value. Table 11.1 refers to more than 32 different types of raw materials for consumer products, such as wire, food wrapping and injector moulded machine parts made of special plastics.

Table 11.1 Investment opportunities as a result of SABIC activities

Methane derivatives	Ammonia Methanol Methyl Tertiary Butyl Ether Urea
Ethane derivatives	Ethanol Ethylene Dichloride Ethylene Glycol High-density Polyethylene Linear low-density Polyethylene Low-density Polyethylene Polyvinyl Chloride Vinyl Chloride Monomer
Other derivatives	Benzene Butadiene Butane-1 Polystyrene Styrene Propane Butane Natural Gasoline Naphtha
Fuel	Diesel Fuel oil Gas Gasoline Kerosene LPG
Steel, iron and minerals	Prilled sulphur Reinforcing rods Sponge iron Steel billets Wire coils

Source: Royal Commission For Jubail and Yanbu (1991)

Future investment opportunities exist, if the private sector is interested in extending production using the raw materials in Table 11.1 to produce more consumer goods such as home furnishings, clothing, stationery, drafting materials, magnetic tape,

photographic films, bottles, laminations, home appliances, automobile parts, and plumbing and electrical parts.

It can be argued that SABIC's joint venture partnerships do not deprive local investors as they are using local capital from Saudi Arabia to increase their productivity; without such involvement it would be difficult for SABIC to operate productively and more efficiently, because the partnerships have access to more advanced technology and have the ability and expertise to produce in quantities, factors associated with better marketing techniques, which helps SABIC to greater profitability than other companies in the region.

Saudi firms are not deprived of investment as they have greater investment opportunities. The capital investment comes mostly from the Government through the PIF, which created SABIC and the other public corporations. At the same time, SIDF actively finances other private companies as discussed in Chapter 3.

This was the case in the early stages of raising capital for investment, but recently there has been a change, as SABIC has been asked to finance its new expansions and projects from Saudi commercial banks and external backers; nevertheless the benefits of such investment will be received by SABIC and its foreign partnerships. Ibn Salamah, Vice-Chairman and Managing Director of SABIC, supported this argument by stating in the 1991 Annual Report:

An important factor contributing to SABIC's vital growth has been and will continue to be the investment activity and technical support from the international companies who are our joint venture partners. (p. 13)

Reinvested profits could be considered as a capital inflow to Saudi Arabia since they are generated as a result of a foreign partnership, and thus have a positive impact on the Saudi economy.

Year ending 31 December	1985	1986	1987	1988	1989	1990	1991
Total reinvestment	2278	898	1161	3359	3017	2880	797

Table 11.2 Profits used locally for reinvestment in SR millions

Source: SABIC Annual Reports 1985-91

Table 11.2 shows SABIC investment for extending and building factories. In 1985 SABIC completed fifteen plants, and SR2278 million was spent on completing and extending other factories. The table shows a continuous increase in reinvestment from 1986 to 1988, and a decline in reinvestment from 1989 to 1991; this may be due to a cyclical downturn in the petrochemical industry and the hostilities in the Gulf, which reduced the willingness of SABIC and its partners to expand their investment.

The share of foreign investment in industrial units, especially in chemical and plastics production, reached SR52.5 billion invested in 84 industries, which could be seen as an indication of the impact of SABIC foreign partnerships on capital investment. It could be argued that if MNCs did not exist, this amount would be eliminated from the economy.

So far as productivity is concerned, SABIC and its foreign partnership operate at a high rate of profit; total net profits increased steadily during 1985-8, as shown in Table 11.3. There are two reasons for this. The first is the world marketing condition of petrochemicals which reached its peak in 1988, when profits stood at SR3,553 billion, an increase of 230% on the net profit level of 1987. The second reason is that new products came on-stream during 1985-8. But the situation changed during 1989-91, when profits declined continuously owing to the world cyclical downturn affecting petrochemicals, reaching their lowest level, a 27 per cent decrease on the previous

year, in 1991. Nevertheless the company still generates profits exceeding SR 2,000 billion.

Year ending 31 December	1984	1985	1986	1987	1988	1989	1990	1991
Net income	28	131	224	1078	3553	3370	2805	2050

Table 11.3 SABIC net income in SR millions

Source: SABIC Annual Reports 1985-91

11.3 Trade and the effect on the balance of payments

Foreign partners use Saudi capital to produce both import substitution and export goods; both have significant benefits for the Saudi economy. For example, SABIC fertilisers produced by SAMAD, SAFCO and IBN AL-BAYTAR have supported the Saudi agricultural sector, as about 900 million metric tonnes are used domestically each year. In addition to this, 900 million metric tonnes of fertilisers are exported to various countries in Europe, China, the United States and other parts of the world. As an additional 600 million metric tonnes of production come on stream in 1993, Saudi Arabia will become the third largest exporter of Urea after the former Soviet Union and Indonesia (SAMA Annual Report, 1991).

Table 11.4 shows total SABIC exports in the period 1985-91 for both export values and export sales revenues in SR millions. From 1985 to 1988 there was an increase in both these values; 1988 was a golden year for SABIC due to the improving of demand and the price of the petrochemical products, and this is the year when fifteen plants came on stream; from 1989 to 1991 there was a cyclical downturn in the chemical industry, a situation which continuously affected SABIC profits until 1992.

Year ending 31 December	1985	1986	1987	1988	1989	1990	1991
Export volumes	3522	5195	5845	6237	5913	6672	6410
Export sales revenues	2400	3827	6810	10638	8582	8179	7457

Table 11.4 SABIC export volumes (thousand metric tonnes) and sales revenues (million SR)

Source: SABIC Annual Reports 1985-91

The backward or input supply linkage is very important for determining the effect on the balance of payments. The companies included in this study are using large amounts of local raw materials, as is shown in Table 11.5. SADAF, SHARQ, IBN SINA, SAMAD and IBN HYYAN use local sources of raw materials. HADEED only used local natural gas, but this is very important because it is the energy for production requiring high temperatures, while the company imports scrap iron, iron ore and limestone.

Type of industry	Company	Feedstock	Source of feedstock
Petrochemical industries	SADAF	Ethane Salt Benzene	Produced locally Produced locally Produced locally
	SHARQ	Ethylene	Produced locally
	IBN SINA	Methane	Produced locally
Fertiliser industries	SAMAD	Methane	Produced locally
Mineral industries	HADEED	Natural gas Scrap iron Iron ore Limestone	Produced locally Imported Imported Imported
Intermediate industry	IBN HAYYAN	Ethylene Ethylene Dichloride	Produced locally Produced locally

Table 11.5 Source of feedstock of SADAF, SHARQ, IBN SINA, SAMAD, IBN HYYAN and HADEED

Sources: SABIC Annual Reports (1985-91); personal interview conducted with SABIC executives.

SABIC officials asserted that transfer pricing could not apply to SABIC because the product is sold on the international market at well-known prices, either through foreign partners or through SABIC marketing agencies. They stated that

most of the feedstock products are produced locally. The utilising of local hydrocarbons is the main objective and rationale for these industries, and the most important reason for refuting transfer pricing activities is that the price of SABIC products is determined through the world market and they are not determined by the plants or by the foreign partnerships. (personal interview)

The foreign partnerships may prefer to use such a policy, but this can be denied. First, there is no need for minimising the tax paid to the government, since foreign investments have been exempted for ten years of commercial operation (with a minimum of 25 per cent Saudi participation in equity); there has also been exemption of foreign reinvestment from income tax. Secondly, there is no import quota which has to be avoided, as the foreign investment regulations only require that local raw materials are purchased if they are available. Thirdly, there are no restrictions on remittances. The Royal Commission for Jubail and Yanbu (1992) stated that 'there is no restriction on the repatriation of capital and profits from business investments' (p. 7). This agrees with SABIC officials, who stated that there are no controls or regulations which oblige the companies to invest part of their profits locally.

According to SABIC managers, 25 per cent of profits transferred by the foreign partnerships are either transferred to the home country or proportionally reinvested in expansion of existing plants to double capacity. It is important to note that there is no regulation obliging these firms to invest part of their profits locally, as they have full freedom to reinvest or repatriate the profits.

This does not accord with the argument in Chapter 4, which pointed to transfer pricing as the policy of foreign firms shifting profits clandestinely. In the case of

SABIC, the market prices of its products exists, and the price paid for the products cannot be reduced below its actual market price.

Foreign partnerships of SABIC could not affect the price of imported machinery or other raw materials because SABIC owns 50 per cent or more of the equity and has the power to negotiate the price of imported equipment, which usually comes from independent foreign companies which have no connection with SABIC's joint partners.

11.4 Transfer of technology

Significant benefits could be generated from capital intensive technology in Saudi Arabia to reduce the problem of the scarcity of skilled labour, and at the same time, and more importantly, make use of the local hydrocarbons in a productive and profitable way. Figure 11.1 explains how SABIC plants benefit from using natural gas; Ethane and Methane are used in all of the plants. Other plants such as KEMYA, IBN HAYYAN, SHARQ and IBN ZAHR are using output of the other plants as raw materials. The final products printed in Figure 11.2 show how valuable the products are. It is also clear from the figure that substantial linkages have been created between SABIC's output and the other sectors, such as building and construction, transportation, consumer goods, and manufacturing.

Figure 11.1 Overview of SABIC businesses

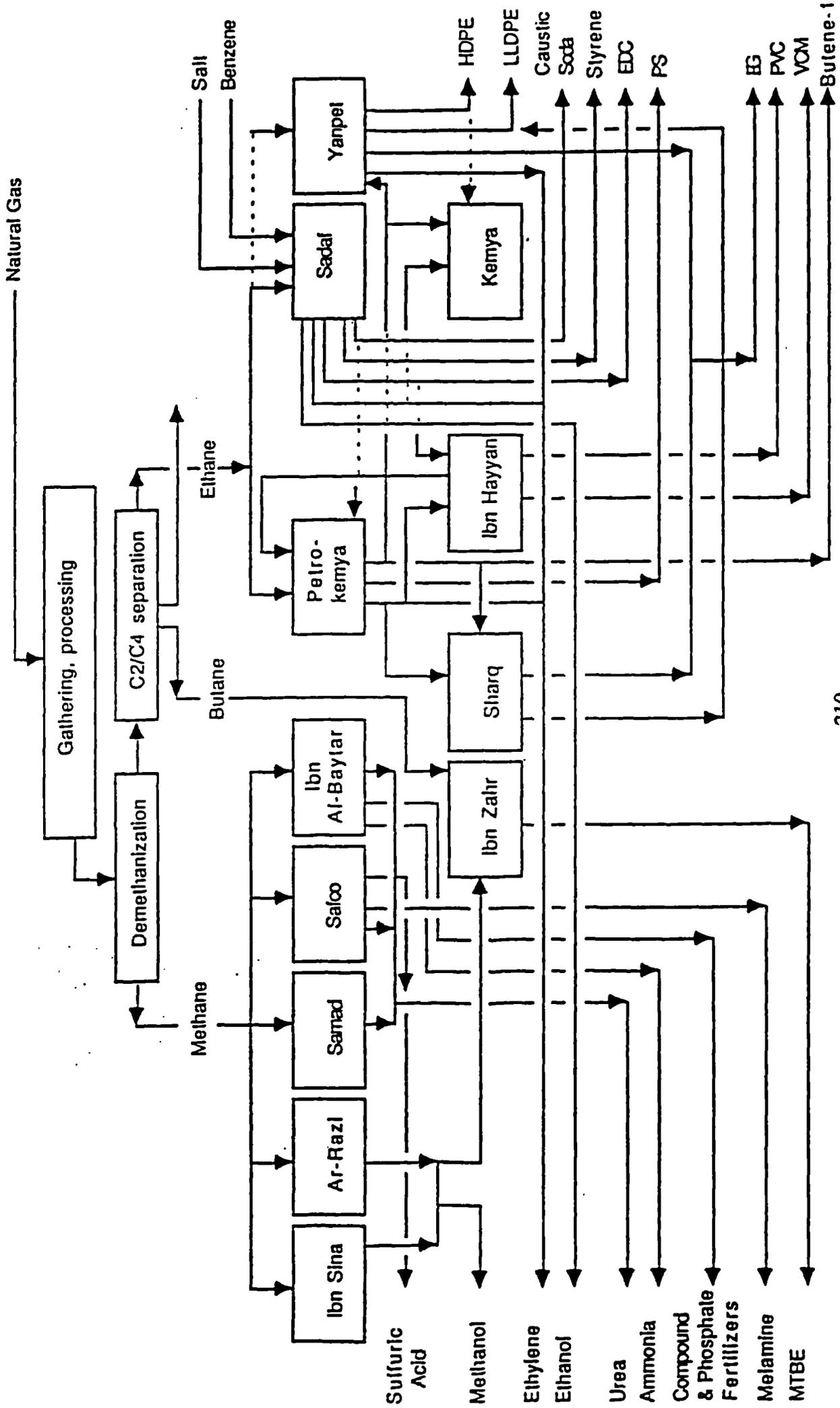
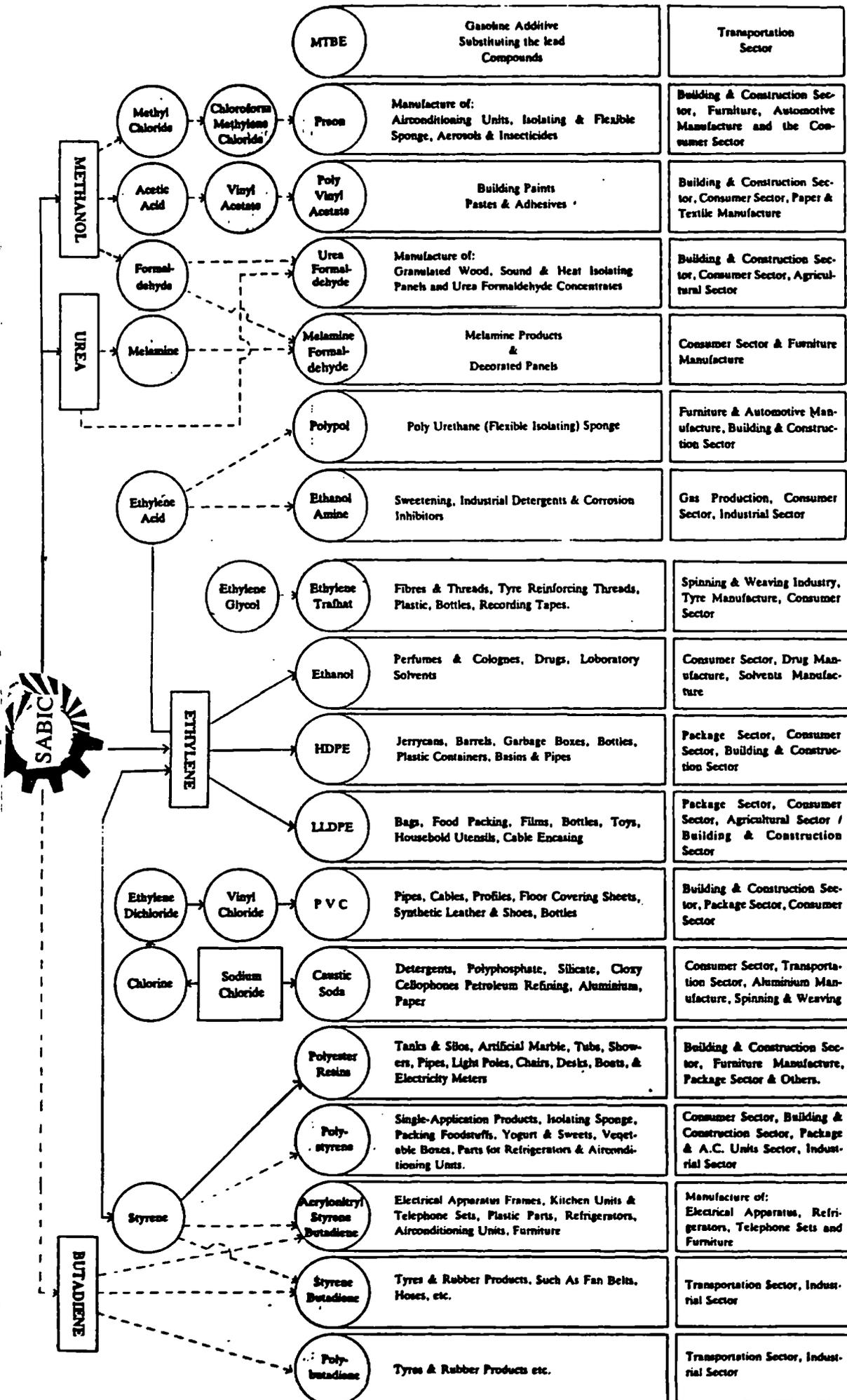


Figure 11.2 The Significance of SABIC industries to the development of various sectors of the Saudi Arabian economy



SABIC officials also see capital intensive technology as more appropriate in relation to the requirements of using gas gathered at the industrial cities. One SABIC manager stated:

SABIC plants must use the latest technology [updated technology] which is highly capital intensive in order to maintain the quality of products in the international market. In addition to that, the plants should be aware of the labour costs to be reduced in order to have more advantages amongst the other competitors.

The price of technology imported to Saudi Arabia (machinery and equipment) and the associated cost of technical services, intermediate parts and expensive machinery maintenance cost more than in developed countries, and it was found that this difference in cost could be as much as 35 per cent. According to one SABIC official, 'SABIC plants have a limited choice because the producers of the machinery are also limited, and their spare parts are only produced by these manufacturers, from whom we purchase our initial machines' (personal interview).

As was found in Chapter 3, the cost of labour involved in transferring the technology is much higher than in the west, often by as much as 200 per cent, due to the involvement of expatriates and secondees from developed countries, reflecting the requirements for highly skilled and experienced workers.

11.5 Research and development

SABIC joint ventures were attracted by oil entitlements, and are willing to support SABIC technically to operate the plants more economically. Establishing R & D facilities is more difficult. None of the MNCs in Saudi has built or helped to build R & D facilities. This is due to their right to control the 'know-how' which they have developed over many decades. The MNCs would not agree to let others have such information, especially the secrets of their innovations. Dicken (1988) points to the practice of the MNCs in this regard. There is very little incentive for MNCs engaged

in exported foreign investment to establish R & D facilities in Third World countries, since the dominant technologies for such activities have evolved in the developed country's markets.

It is not only in Third World countries that R & D activities of the MNCs tend to be under-represented. In Canada, for example, much concern has been expressed at the reluctance of American MNCs to establish higher level R & D facilities there: 'Most Canadian R & D laboratories of American companies are concerned mainly with adapting and modifying US-originated products and processes for the domestic Canadian market' (Dicken, 1988, p. 363).

There are various potential reasons for a company to move its operations to another country: the availability of natural resources, tax reasons, a search for new markets for the product, and skilled cheap labour. Only the first two apply in the case of Saudi Arabia.

None of the foreign partnerships creates or participates in any facilities for R & D. There are only small laboratories owned by the plants themselves, which have nothing to do with the foreign partner. SABIC managers believe that the MNCs do not adapt their technology for local use, but offer only limited technical help. SABIC itself established its own Industrial Complex for Research and Development located at the new industrial city of Riyadh, with a capital cost of SR100 million. The Complex was designed to provide SABIC with multi-faceted technological capability, including great emphasis on the quality of products and services. (SABIC, 1991, p. 26)

The ICRD began its operations in 1992 with two pilot polyethylene (PE) reactors producing one ton per day to be used for experimental grades of PE end use applications. There are bench scale reactors to develop new products and support

other technical equipment for analytical instruments. The Complex also uses advanced computer hardware and specialised software for data processing.

During a personal interview with the head of the Institute of Petroleum Research and Petrochemical Industries in King Abdul Aziz City for Science and Technology it was stated that none of the SABIC joint ventures helped SABIC in R & D activities. He supported his argument as follows:

More than ten years have passed since the involvement of SABIC joint ventures. Yet is there any individual who could argue that SABIC by itself could have created and operated any factory for petrochemical products equivalent to the smallest plant that already exists in one hundred per cent Saudi hands?

11.6 The effects on sovereignty

It was argued in Chapter 4 that MNCs could create a loss of economic independence because of their influence in decision-making associated with technology choices. To what extent do foreign joint ventures control local investment and how far do they control the decision-making? The foreign investment in Saudi Arabia discussed earlier in this chapter resulted in a total investment of SR52.5 billions by the end of 1991. This is an important part of the national economy, especially in relation to current income. The total number of operating private industrial units was 1,886, and their capital investment stood at SR114.8 billion in 1991.

In establishing their plants, SABIC's foreign partners have all signed agreements which determine the regulations regarding operations. These seem to satisfy all SABIC top managers. When asked their opinion of the effect of their foreign partners on sovereignty, all stated that 'SABIC companies make the decision after agreement with the foreign partnerships'. Each company, including the six involved in this study, is a separate entity and has its own Board of Directors. SADAF, SHARQ, SAMAD, and IBN SINA are half owned by SABIC and half by the

foreign partners. When there is disagreement between any of the SABIC companies and its partners on any issue, such as employment, purchasing, marketing, or trade policy, the Board of Directors will solve this problem by voting and, if the votes are tied, the decision lies with the Director.

The possibility of conflict between the objectives of SABIC and those of its foreign partners seems to be limited, since SABIC's interest has been taken into account with the help of the regulation which gives the Board of Directors the opportunity to support or reject decisions which are made, for the most part, by Saudi nationals.

From the above point of view, it seems to be to the benefit of Saudi Arabia to have a joint venture no more than 50 per cent owned by the foreign partners. This explains the desire of the Saudi Government to go into joint ventures rather than allowing wholly owned foreign investment to control economic destiny.

11.7 Conclusion

It was clear from studying and analysing primary sources and from interviews with SABIC and government officials that the MNCs and SABIC increase the mobility of local money and have attracted greater local investment through providing better investment opportunities. Also, such involvement helped SABIC to operate more productively and efficiently, helping to generate profits and to develop a value for natural gas, which previously had no value. However, MNCs do not transfer large financial resources to the local economy. The capital investment came mostly from PIF, a government funding agency. Only 15 per cent is provided by SABIC's foreign partnerships. The first research hypothesis is therefore rejected.

The balance of payments was found to have been improved by the activities of SABIC and the joint ventures, through their producing various goods which would otherwise be imported if they were not produced locally, as well as via the exporting of goods and raw materials, to the value of over SR7,400 billion every year, using mostly local inputs as raw materials. The fifth research hypothesis, that the Saudi balance of payments may benefit from the greater profits accruing from Saudi investment in the activities of MNCs and from profits accruing from raw materials available in Saudi Arabia, is therefore accepted.

Transfer pricing may not be used by SABIC, for several reasons: first, the nature of the products, which are sold on the international market at highly visible prices; second, in Saudi Arabia there is a long period of tax exemption for foreign investment, and reinvestments are also tax free; third, there is no restriction on remittances or import quotas which have to be avoided or substituted by transfer pricing. Hence there is no reason why SABIC should use transfer pricing.

Use of advanced and sophisticated technology also benefits the Saudi economy significantly, enabling hydrocarbons to be used in a more productive and valuable way. This also reduces the labour requirement, which reduces the problems associated with the scarcity of skilled labour. However, the study found that the price of the technology and the cost of maintaining and servicing the machines was more than in developed countries, but this is still regarded as acceptable, since the rate of return from using the machines in the production process still exceeds the costs. The second research hypothesis, that advanced technology transferred by the MNCs to Saudi Arabia may increase economic growth, is therefore accepted.

In research and development it was found that none of the SABIC joint partnerships helps or creates R & D facilities, nor does any participate in these activities. There was no adaptation of the technology to make it more appropriate to

the Saudi environment, as it was produced to fulfil the latest technological requirements in the petrochemical and other basic industries, rather than for use in Saudi conditions and circumstances. SABIC takes responsibility for R & D through ICRD. The third research hypothesis, that MNCs may invest more in R & D to take account of local conditions in Saudi Arabia, is therefore rejected.

With regard to sovereignty, the possibility of damaging the economic independence of the Kingdom of Saudi Arabia did not exist, because the Saudi officials had taken this into account; they controlled the involvement of the MNCs by operating as a joint venture, with at least 50 per cent of the equity being owned by SABIC. When disagreements about policy occur, the Board of Directors vote, and if there are equal votes, then the Managing Director, who would usually be a Saudi national, will make the decision to support or reject the policy. The seventh research hypothesis, that MNCs may operate under co-operative agreements governed by Saudi Arabia's Joint-Venture regulations, is therefore accepted.

Chapter Twelve

Conclusion

12.1 Summary of the study

As indicated in the data presented in Chapter 2 government income in the earlier part of the current century was very limited, as it depended on income collected from the *Zakat* and on charges levied upon pilgrims who visited the two holy places, Mecca and Medina. This meant that government income remained small, as there was no solid tax base. This problem resulted from the fact that the population were in no position to pay taxes, because of their very difficult living conditions. However, from 1945, oil production began to have a significant impact on the Saudi economy, and from 1975 revenue from this source dominated the government's income, representing around 90 per cent of all government income. This led to questions about the future of the economy, and what would happen once the oil started to decline.

This situation forced the government seriously to consider using the available financial resources to alter the economy from being heavily dependent on a single depletable commodity. This process was started by creating the necessary physical and social infrastructure as a prerequisite to economic development in the shortest possible time. Among the primary targets have been the establishment and expansion of ports and airport facilities, construction of roads and telecommunications, provision of clean water, and improvements to the health service, the education system and vocational training.

Throughout the early stages of this development, the public sector dominated the economy. This situation began to change, since the role of the public sector began to diminish as most of the essential infrastructure construction was completed, and since there was a reduction in government income from oil. The private sector then began to increase its contribution to economic growth, especially in the second half of the 1980s and the early 1990s.

Despite the economic development that has taken place in Saudi Arabia over the last 24 years, the economy still has the following problems:

1. The economy is still heavily dependent on oil revenues, as the contribution of this sector to government income is still over 75 per cent.
2. The economic performance still depends on public sector spending; any increase in government spending would have an immediate impact on the performance of the private sector, which benefits from the scale of government spending.
3. Some private activities are dependent on government purchasing policy, which could be affected by the fluctuations taking place in public spending.
4. Despite the positive contribution of agriculture to non-oil GDP, the success in this sector could be at the cost of other depletable scarce resources, specifically water. This sector is also heavily dependent on government subsidies.
5. Many job opportunities have been taken up by foreign employees, because of the shortage of all types of employees, especially in the early years of development. This seems set to continue, however, both in the case of well-qualified personnel and at less skilled levels, where private companies prefer to employ foreign labour from other developing countries, who accept low wages.

6. There is a difficulty in using taxation to increase government revenue, owing to cultural and religious values. This could be seen as a constraining factor in reducing the budget deficit.
7. There is a new financial constraint, which is connected with the difficult situation in the world oil market. This seems likely to continue, and the budget deficit may grow in the future as a result; this deficit has been financed through borrowing, but it is not clear for how long this policy could continue.

Chapter 3 discussed industrial and petrochemical development, and showed that the government considers the industrial sector to be the best alternative for diversifying the economy, which is its goal. The government's support for the industrial sector is clear, and operates in two ways:

1. Government policy encourages the industrial sector in every possible way.
2. Two financial agencies were created which provided more than SR88.4 billion for local investment at little or no charge.

The government invested more than SR187 billion in developing the largest industrial city in the Middle East, as well as SR37.5 billion in building up the petrochemical and other basic industries.

This has helped the private sector to increase its contribution to total GDP, which also came mainly from the growth in the hydrocarbon-based industries. However, there are problems associated with this type of investment, owing to the following factors:

1. The strong relation between the oil and petrochemical industries. The declining price of oil will affect the profits of the Saudi petrochemical industry, as input costs do not reflect international oil price developments, but petrochemical prices do.
2. Marketing problems cannot be solved by using Saudi oil exports for retaliatory policies to force other countries who impose tariffs to accept Saudi petrochemicals. This is especially true when there is a glut on the world oil market, so such a weapon becomes ineffective.
3. Foreign partnerships with SABIC do not have enough motivation to market SABIC products abroad, since the oil entitlement has lost its importance at a time of world surplus in oil production.
4. The cyclical downturn in the petrochemical industry creates more difficulties in marketing the products, and creates a lower rate of return, which negatively motivates the foreign partners towards both increasing their investment significantly and taking the products into the international market.
5. Marketing the products with the help of the GCC may not be the best alternative, given that many countries in the Middle East have identical industries, especially petrochemical industries. These countries do not have a customs union to negotiate this problem or a single base of customers.

This does not mean that choosing such industry was a bad decision; on the contrary, it was one of the best alternatives available to Saudi Arabia, and this will be discussed later in this chapter.

The next important key issues concerning the impact of MNCs in developing countries were discussed in Chapter 4. These include effects on capital investment, effects on transfers of technology, effect on research and development, effect on management and managerial skills, effects on trade and on the balance of payments, effects on employment, and effect on sovereignty.

A review of the literature showed that every one of the above issues could have advantages and disadvantages for less developed countries where MNCs were actively involved. The net benefit or loss would depend on the economic circumstances of the host country. For example, the availability of particular raw materials may require the involvement of MNCs to explore and transform such raw materials into more valuable products, which may in turn require capital intensive technology.

Chapter 4 also included a section on the role of training strategy, which makes it clear that if the MNC is providing or participating in training, then this is beneficial to the host country, but it should precisely identify the needs of the trainees, finding sufficient time and appropriate places for the training courses, and qualified trainers to carry out the courses.

The review of the literature showed that the advantages and disadvantages of MNC involvement must be weighed as part of the total package, with all the above factors being taken into account.

Saudi Arabian culture and working practices were discussed in Chapter 5. Clearly it is important to understand all the contributory factors in the working

practices, starting with cultural values; various studies in this field suggest that one should not expect cultural behaviour to be similar and universal among employees gathered from different cultures, as is the case in SABIC. The variety of cultural bases could affect the individual manager's beliefs, values and attitudes, and this could play a role in job satisfaction and commitment to the organisation for employees of SABIC. This is one of the central issues of this study.

Work values and cultural values are found to be strongly related to each other. Cultural values were considered as having a negative impact in terms of acceptance of specific jobs because the local employees in Saudi Arabia regard some sorts of work as shameful.

Religion may affect the relation between managers and subordinates, especially in a religious society like Saudi Arabia. Islamic teaching and guidance play an important role in decision-making, and also have an impact on job satisfaction.

An effort was made to determine the problems connected with employing local people in the private sector via a review of the recent literature on this subject. The justification for including this subject in this study arises as a result of the similarity between job requirements, conditions and environment in this sector and in SABIC.

These problems are as follows:

1. The number of Saudi employees was less than the number of foreigners in the private sector.
2. The private sector seems to be less attractive to local employees than the government, for the following reasons:

- (a) the salary obtained by local employees is insufficient to meet their needs as against the salary obtainable working within the government;
 - (b) the job environment in the private companies is an unattractive factor owing to the nature of the job and its requirements, such as long hours or shift work;
 - (c) local employees do not like to work away from their families, whereas working for private companies may involve movement according to the job requirements.
3. There are problems also relating to the qualifications of the local employees:
- (a) the private companies complain about the weakness of general education and training programmes, that they are insufficient to meet the demands of the job requirements.
 - (b) the private sector does not participate in training activities, nor does it participate in designing the training to relate it to its needs.

There is no clear policy to require the substitution of local employees for expatriates, and private companies may exaggerate their demands for higher qualifications and greater experience in order to deprive local employees of job opportunities.

Chapter 6 presented the research methodology, including the objectives and the scope of the research, the research hypothesis, and the techniques used for collecting

the data. It was found appropriate to follow up unexpected results from the questionnaires directed to SABIC employees with interviews with SABIC officials; this tended to define the agreement and disagreement between the two sources of the information. Section 6.5 described the pilot study, which was carried out on a similar sample to that used for the official study, to ensure the validity of the questions used for both the questionnaire and the interviews.

The questionnaire was described and a justification offered for the procedures used in designing the questionnaire. Both the target and the sample population were described, and an explanation given for why the researcher selected the employees working in the six companies, SADAF, SHARQ, SAMAD, IBN SINA, HADEED and IBN HYAN. There was a large variety of nationalities working in these companies, with varying statistics in terms of both numbers of employees and value of the production.

Statistical techniques were used for analysing the data, and these were discussed from the point of view of their appropriateness to deal with the sort of data included in the questionnaire.

12.2 Research findings

The findings of the data interpretation may be summarised as follows.

The first section deals with the nationalities of SABIC employees. Where the research found that the majority of employees are Saudi Arabian (54.8%), which supported the sixth research hypothesis about the MNCs creating more job opportunities for local people directly through their activities in Saudi Arabia. In addition, SABIC creates employment in other indirect ways, as the foreign partners help independent local firms to benefit from using SABIC output as raw materials.

However, a large number of jobs have been given to foreign workers by contractors and subcontractors - jobs which could be given to local employees if SABIC undertook such work. By comparing data released by SABIC officials with the results of the questionnaire analysis, it was found that the data is not consistent, which implies there may be an exaggeration in the official data to show a more significant percentage of local employees. It was found that the largest SABIC company, SADAF, seemed to prefer to recruit from the United States. This could be taken as evidence that the international US companies tend to involve more American nationals in their activities abroad.

Employees from other developing countries have greater job opportunities in SABIC due to the cost advantages of employing such employees. It was found that Filipinos have the greatest opportunities among this group, which is explained by their skill levels, combined with the low wages they are prepared to accept. This shows that SABIC's operations in Saudi Arabia are affected by the economic environment, since any company will seek to employ people for lower wages; it is not fair to blame only the MNCs for giving a high percentage of their jobs to foreign employees.

It was found that a higher percentage of Saudi nationals do not have the appropriate higher education, and that many started their working life at an early age, after completing elementary or secondary education. Also, many employees who have completed their higher education have graduated from Arts and Social Science colleges, which creates a problem in substituting local employees for foreigners. This does not mean that the local employees are unwilling or unable to handle technical work. Comparing the nature of employees' job, it was found that more than 73 per cent of SABIC technicians are Saudi Arabians.

It was found that 58 per cent of engineers are from developing countries, a phenomenon caused by the difficulty of attracting qualified local employees since there seem to be insufficient numbers to meet this demand.

The study indicates that there are some types of job given to expatriates from developing countries for which it would not be difficult to substitute local employees, specifically secretarial and technical work. The training and experience for such jobs are not difficult to gain and the high level of expatriates in these jobs is related to cost minimisation rather than the unavailability of local people with such skills.

The majority of immigrants from developing countries have left their dependants behind and a large proportion of their salaries is sent abroad as remittances. In addition, those employees may find difficulty in obtaining permission to bring their dependants with them, because of the immigration regulations, which give this right only to those who earn over a certain salary or those who have professional jobs.

Western employees have more opportunities for bringing their dependants to Saudi Arabia than those from developing countries, because they have higher salaries and have professional jobs. In addition, they can save more and send higher remittances home due to their higher salaries. When comparing the salaries of SABIC employees in these grades it was reported by SABIC executives that these employees receive three times the salaries of Saudi employees, as well as being provided with free housing and other generous allowances.

The workers from the developing countries showed the highest level of satisfaction with regard to the family's acceptance of the employee's job (94.9%), and this was explained in terms of the hardship they could face in their home countries, and their families, concern for improving their lifestyle. Western employees exhibited a high level of satisfaction with their families' acceptance, due to the salary that they

received, and to their living together with other western neighbours in special camps. Saudi employees were satisfied with their family's acceptance of their job, despite living away from their home city or village. Nevertheless, 35.3 per cent did complain about having insufficient time to spend with their families, as they considered the time of starting work in the morning (7.30 a.m.) to be very early and the length of the working day (to 4.30 p.m.) excessive.

The MNCs included in this study do not actively participate in offering Saudi employees training courses in their home countries. This could be seen as a negative factor, as the local employees do not benefit from the training carried out by foreign companies. SABIC itself invests more in increasing the skills of its employees than in benefiting from its partners. SABIC trains its employees mostly inside Saudi Arabia, using in-house training or local institutes, but pays for only a few of its employees to be trained abroad.

The study found that Saudi nationals benefited more than other nationals from SABIC training courses. The reason for this is that SABIC companies are made up of Saudi nationals, who are implementing a Saudisation policy, which gives priority to the Saudi nationals, whereas the expatriates come for financial reasons. Of the western employees, 66.7 per cent were not attracted to working for SABIC by the training courses.

Data interpretation showed that 55 per cent of local employees were satisfied with the opportunities available for training. However, the remaining 45 per cent showed their dissatisfaction owing to the non-systematic training courses held by SABIC companies, where there were no guidelines for those who carried out the training to identify the skills needed and find sufficient and appropriate times for training. Training opportunities were not provided equally among the local employees, because the personal relationship between employees and their supervisor, as well as

those holding management power, determines whether a particular employee is sent for training. The requirements of the job seem to be a secondary consideration.

In terms of salaries and wages it was found that, over all the nationalities, the employees were attracted to work for SABIC by the high salaries on offer. In addition, 80.1 per cent of Saudi nationals were satisfied with their salaries. There seems to be no problem regarding the salaries employees receive from SABIC. It should be noted that SABIC companies pay more than other private companies in Saudi Arabia, which helps SABIC to employ more local workers.

Local employees have benefited from salary increases, but no more so than the other two groups (from western and developing countries). The reason for this may be the companies' policy of attracting other nationals to serve for a longer time, especially westerners, who seem to be more important to the organisation as handlers of sophisticated machinery. Employees from developing countries want to be included in pay increases, but in practice it is the western employees who get the highest percentage pay increases.

The majority of local employees are satisfied with their opportunities for promotion, but 39.8 per cent complained about the length of waiting time for advancement. This finding is supported by other data, which showed that 46.2 per cent of local employees stated their dissatisfaction with on-the-job progress, for the same reason.

Most local employees are satisfied with their ability to express their opinion, and to discuss work related issues. There are two reasons for this: first, the superior management practice of SABIC compared to other local private companies, where SABIC benefits from its dealings with its foreign partners in creating a highly organised management system when compared to other local firms'. This argument is

also supported by the satisfaction expressed by western employees and those from developing countries. The second reason relates to cultural values: the local employees are not used to the opportunity to speak out about their job, and they will see such a practice as a good opportunity.

An overwhelming majority (79.5 per cent) of local employees were satisfied with their management accepting suggestions, which may explain SABIC's management superiority over other private businesses. Saudi nationals come from a tribal society, and believe in the importance of the consultative style, which also reflects the teaching of the *Qur'an*. Consultation does not mean automatically accepting the employees' ideas, as managers and supervisors may rely only on their own ideas and beliefs.

Concerning relations with managers, the employees expressed their satisfaction with the way their managers deal with them as well as with their managers' appreciation of their work. This can be explained by the superior way in which managers deal with their subordinates in SABIC. This evidence is supported by the employees' satisfaction with the way that both Saudi and non-Saudi managers deal with them and solve problems. It was found, however, that some Saudi managers did not discuss issues with their subordinates, nor did they accept employees' suggestions; they are pushing decisions down from the top.

The majority of employees of all nationalities were satisfied with the management techniques of implementing regulations and with the methods of job termination and transfer. In general, the employees were more satisfied with the system of vacations and leave used by the companies. Those who stated their dissatisfaction complained about the shortness of vacations, especially those who have no opportunities to bring their dependants to live with them. It was also found that

only fifteen days per year of leave constituted paid holidays, guaranteed by labour and work law, which seems to be insufficient for foreign employees.

Local employees were satisfied with the method of job evaluation, as were other employees. Some western employees complained about taking too much notice of personality in the evaluation, rather than evaluating the employee on his professional strengths and weaknesses. This may be owing to the differences they found between job evaluation in their home countries and in SABIC.

Local employees and other nationals were satisfied with respect to working conditions and temperatures within the factories. This explains the ability and the willingness of the local employees to work in industrial companies despite the special skills and requirements of the job. This may provide evidence about the exaggeration of other private companies concerning the reluctance of local employees to work in private companies owing to the job requirements and conditions. The study found that 79 per cent of Saudi employees expressed their satisfaction with the job requirements, despite the nature of the industrial jobs. This evidence is supported by their satisfaction with the scheduling of their work-shifts.

It is important to underline financial reasons as the most important factor in the attraction of employees, especially those from developing countries, and to point out that they expressed general satisfaction concerning most of the issues about which they were asked. While cultural and religious values have affected management decision-making in SABIC, especially for local managers, training opportunities, increases in salaries, promotion and job evaluation are offered on the basis of personal relationships rather than the employees' performance. The majority of western employees stated their satisfaction with all the above job issues, but they are more sensitive to any problem where they find a difference from what they are used to at home.

On the basis of the above findings, it is not right to blame the local employees for not accepting work for other companies in the private sector, when they are relatively satisfied working for large companies such as SABIC and ARAMCO. These companies pay good salaries to local employees, significantly higher than the other private companies, and provide training, opportunities for promotion, superior management techniques and better working conditions, all factors which could not be found in other companies in the private sector.

Chapter 11 studied the effect of the MNCs on capital investment, balance of payments, transfers of technology, research and development, and sovereignty. It is clear that SABIC's foreign partnerships are of great benefit to the Saudi national economy in creating a better industrial climate by using the natural resource of hydrocarbons and converting it into a valuable economic resource. Saudi Arabian money is mobilised by the possibility of attractive investments in the national companies and other foreign investments. SABIC's MNC partners do not transfer large financial resources into the Saudi economy, as only 15 per cent of the capital investment is foreign based, but they operate at a lower cost, and more efficiently, than if they were solely owned by SABIC since these are leading international companies, and they use the latest and most advanced technology. They do not deprive the local investor of capital investment, since there are no local companies qualified to undertake the role of building and operating hydrocarbon industry units without the involvement of a foreign joint venture.

The balance of payments of Saudi Arabia benefits rather than loses since the products are primary products which are made from local raw materials and depend mainly on natural gas as energy for production and the transferring of methane and ethane to more valuable uses, which could be as raw materials for other consumer products. In 1991 more than SR9022 billion in total revenue was generated by SABIC

and its MNCs of which SR2050 is net, which shows that it is positively affecting the balance of payments.

Transfer pricing can have no place in SABIC due to the nature of the products and the world market price which is internationally determined and highly visible. There are no local taxes to be paid, or import quotas to be avoided.

Despite the fact that technology transfers cost more for Saudi Arabia, the benefit from using capital intensive and sophisticated technology is very clear in reducing the requirement for labour, which strengthens SABIC's competitive position.

SABIC's MNCs seem to have a negative attitude towards R & D, in that they do not create or help to create and facilities for this, nor do they participate or adapt the technology transfer to more appropriate SABIC activities. SABIC has to take responsibility for this.

SABIC has become more dependent on foreign technology over time, but sovereignty over the local economy has not been badly affected, because the power to take decisions is still in the hands of Saudi managers due to the nature of the joint venture agreement, which gives more power to SABIC officials.

From studying and analysing the impact of the MNCs and SABIC on Saudi Arabia, it can be argued that they benefit the local economy positively by creating work opportunities and familiarising the local employees with the latest technology, and by creating a superior management and managerial environment, as well as by having a positive impact on the balance of payments without harming economic sovereignty.

Finally, it must be acknowledged that there is no way to judge the impact of the MNCs on the host economy to a particular degree of accuracy, but it is hoped that this study could lead to a greater understanding of the issues involved. It is hoped that the study may make a valuable contribution to an understanding of the impact of MNCs, which seem to benefit the Saudi economy.

12.3 General recommendations

Given the objective of increasing the number of employment opportunities for Saudi Arabian citizens, it is necessary for the government to take measures which relate to both the supply and the demand factors. This will involve both penalising those employers who hire foreign nationals, hence increasing the demand for Saudi Arabian substitute labour, and also at the same time increasing the quality and employability of the Saudi Arabian nationals, both inside and outside the workforce.

1. Local employees should be protected from the highly competitive labour market which is a result of importing unlimited numbers of workers who will work for low wages and in poor working conditions. This could be done by issuing clearer regulations, which could be implemented by the Ministry of the Interior, imposing a high charge for the obtaining of permission to recruit from abroad, as well as imposing minimum wages for both Saudis and non-Saudis working in private companies.
2. A levy could be imposed on employers with respect to each foreign employee, using one of the following methods:
 - (a) a flat rate for every foreign employee;
 - (b) a proportional rate dependent upon salary received;
 - (c) a proportional rate dependent on the number of foreign employees out of the total employed.

This extra income could be used to subsidise training costs for Saudi nationals. However, one should be aware of the rising cost for SABIC and other companies since foreign employees represent a high proportion of the total labour force. Hence, detailed study of the appropriate rate of levy is required.

3. Companies should be subsidised for the purposes of training, and for replacing foreign employees with local employees.
4. Both general education and vocational training policies should be reviewed, with the objective of serving the needs of the private companies better by offering more and better opportunities for science students, as well as extending and investing more in the quality of vocational training, rather than just the quantity.
5. A Training and Enterprise Council should be created to promote the increased need for local skills updating. This Council should include members from relevant Government ministries, such as Education, Labour and Social Affairs, Planning, Electricity and Industry and the General Organisation for Technical Education and Vocational Training. It is most important that the Council should also include members representing the industrial body, and this should involve SABIC managers in order to give them the opportunity to design the training courses to fulfil their skills needs.

12.4 Recommendations to SABIC

A number of specific recommendations to SABIC may be made on the basis of the study. These are as follows:

1. Foreign partners should be encouraged to invest more out of their net profits, and SABIC could require a minimum percentage to be reinvested. Taxation of repatriated profits might never encourage further inward investment. A preferable option may be subsidies from the Government, to increase the relative return on investments in Saudi Arabia, and hence encourage the multinationals who are already operating in Saudi Arabia to undertake further investment. If training programmes were subsidised to a greater extent, this could have a positive effect on reinvestment.
2. Foreign partners should be encouraged to participate in R &D activities. This should be done with the intention of ensuring that the existing sophisticated technology is appropriate to the Saudi economic environment and constantly modernised, and to maintain the quality of the products. This can be done through insisting that the foreign partners participate actively in the existing SABIC Industrial Complex for Research and Development.
3. The foreign partners should be asked to participate in the training activities by seconding local employees to their advanced training centres in their home countries.
4. The problems of training courses should be studied, in order to improve the relationship between training and the job requirements; the training

should take place at the proper time and location and the effectiveness of the training course should be tested after its completion. In addition, SABIC should take advantage of its foreign partners in creating appropriate training courses to fulfil the needs of each employee.

5. Training opportunities should be provided according to job requirements, but courses should be designed with the skills and aptitudes of Saudi employees in mind, rather than those of foreign employees.
6. SABIC should establish a general training centre for all its operations, which should be staffed by highly qualified trainers and which should be able to provide the local employees with superior skills.
7. Despite the positive view generally taken towards employing and training local employees, there are many more jobs which could be transferred to local employees, especially in areas such as secretarial and technical work.
8. Since SABIC is facing problems in attracting local employment in technical areas such as engineering, outstanding high-school graduates from the east coast should be selected, and provided with internal scholarships at KFUP. This would decrease the rate of turnover, as these employees will be working close to their family homes, and the companies would gain highly skilled employees from the highest rated Saudi University.
9. Promotion should be made according to clear and consistent criteria. SABIC should be seen to be fair, with the emphasis on transparency.

Employees should be aware of the objective criteria for promotion, which should be less a result of subjective judgements by managers.

10. Job evaluation should depend upon the strengths and weaknesses of the employees in their job, rather than involve personal relationships.
11. SABIC managers and supervisors, especially those who are Saudi nationals, should encourage and support their employees in openly discussing issues relating to their work, and take the ideas of subordinates into account when decisions are made.
12. If SABIC contracts work to private companies, there should be some minimum requirement regarding the number of Saudis employed by the contractor. The present situation enables too many foreign workers to be brought to Saudi Arabia to work with SABIC companies. If SABIC tried to reduce the number of contractors, and sought to do some of this work itself, the number of local people employed would increase.
13. SABIC employees should invest in their own health, education and retirement schemes with no difference on the basis of nationality, salaries and wages being the base for this contribution. This would obviate the need for the Royal Commission to support these sectors. The money saved in this way could be used to subsidise training courses instead, as this is the key for greater Saudisation.

12.5 Suggestion for further study

This research has constituted an initial study of the impact of MNC's on the Saudi economy, with particular reference to employee perceptions of work environment and

job satisfaction and has attempted to discuss some of the problems associated with them. However, the scope to deal with such an important area has necessarily been limited, and the task is complicated by the involved nature of the work. There are several subjects raised that should be examined further in future research. First, a study of the problems of training is necessary because training is the main factor in the transforming of expatriate into local labour. This would include further evaluation of the training courses. Further research should take into account the individual economic variables as discussed in Chapter 4, and analyse these variables more fully. Secondly, further research should assess the comparative advantages of companies of differing countries of origin (American, European, Japanese and Korean) in order to determine which are more beneficial to the Saudi economy.

Bibliography

- Aba-Alkhail, N. A. S. (1988) 'An Analytical Study of Job Satisfaction and Motivation among Middle Managers in Saudi Basic Industries Corporation (SABIC)'. Unpublished Ph.D. thesis. . United Kingdom: University of Liverpool.
- Abdel-Halim, A. A. and Al-Tuhaih, S. M. (1989) 'In Search of a New Form of Management: The Case of the Joint Sector in Kuwait'. In Ali (1989b), *op. cit.*, pp. 38-57.
- Aburdene, O. (1978) 'The Impact of Inflation and Currency Fluctuations on OPEC's Dollar Assets During the Period 1974-78'. Supplement to Middle East Economic Survey, no. 6, 27 November, vol. xxii.
- Addleton, J. (1991) 'The Impact of the Gulf War on Migration and Remittances in Asia and the Middle East'. *International Migration*, vol. 29, pp. 509-26.
- Akhdar, F.M. (ed. El Mallakh, R.) (1982) *Industrialisation Policy*. Lexington, Mass.: Heath & Co.
- Al-Awaji, I, M. (1971) 'Bureaucracy and Society in Saudi Arabia'. Unpublished Ph.D. dissertation. Ann Arbor: University of Michigan.
- Al-Babtein, A. (1986) 'Saudi Arabia and United States Multinationals: A Partnership in Economic Development. Unpublished MA thesis. Denton, Texas: Texas State University.
- Al-Dakhail, N. and Al-Omi, A. (1993) 'The Role and the View of General Organisation of General Organisations for Technical Education and Vocational Training'. Institute of Public Administration [in Arabic].
- Al-Farsy, F. A. (1982) Saudi Arabian Industrial Development: Aspirations and Realities. In El Mallakh and El Mallakh (1982), *op. cit.*, pp. 21-6.
- Al-Gaith and Al-Mashouk (1993) 'National Labour Force in the Saudi Private Sector: Concept, Objectives, Reality, Obstacles and Proposed Solutions'. Institute of Public Administration [in Arabic].
- Al-Jafary, A. and Hollingsworth, A. 'An Exploratory Study of Managerial Practices in the Arabian Gulf Region'. *Journal of International Business Studies*, Autumn 1983, pp. 143-52.
- Al-Kathiri, S. (1989) 'Workforce Transition in Saudi Arabia: From Expatriates to Saudization and Privatisation'. Unpublished MA thesis. Springfield, Illinois: Sangmon State University.

- Al-Mady, M. H. (1986) 'Economic Factors in the Manufacture of Petrochemicals'. In El Mallakh, R. (ed.), *The Middle East, Pacific Basin, and the United States: Refinery and Petrochemicals* (Proceedings of the Sixth International Area Conference), pp. 71-8.
- Al-Meer, A. R. A. (1989) 'Organizational Commitment: A Comparison of Westerners, Asians, and Saudis'. In Ali, A. (1989b), *op. cit.*, pp. 74-84.
- Al-Nofaie, A. S. (1993) 'Replacement of Foreign Employment by National Employment in the Private Sector: the Role and Perspective of the Council of Labour Power "The General Secretary"'. Institute of Public Administration [in Arabic].
- Al-Odaily, N. M. (1981) 'Job Satisfaction: An Empirical Study of Ways and Statues of the Government's Departments' Employees in Riyadh City. Unpublished MA thesis. Arkita, California: State University of California.
- Al-Rajhi Banking and Investment Corporation (1993) 'The Growth and Development of National Employment in Al-Rajhi Banking and Investment Corporation'. Institute of Public Administration [in Arabic].
- Alreck, P. L. and Settle, R. B. (1985) *The Survey Research Handbook*. Homewood, Illinois: Irwin.
- Al-Riyadh House (1993) 'The Attempt of Al-Riyadh House to hire National Employment'. Institute of Public Administration [in Arabic].
- Al-Salem, A. M. (1987) 'Economic Viability of Saudi Arabian Petrochemical Industry: Methanol as a Case Study'. Unpublished Ph.D. dissertation. California: University of Riverside.
- Al-Taib, A. A. (1993) 'The Role of Public Administration in Preparing the National Employment for the Private Sector'. Institute of Public Administration [in Arabic].
- Ali, A. (1987) 'Value Systems as Predictors of Work Satisfactions of Arab Executives'. *International Journal of Manpower*, vol. 8, part 2, pp. 3-6.
- Ali, A. (1989a) 'Decision Style and Work Satisfaction of Arab Gulf Executives: a Cross-national Study'. In Ali (1989b), *op. cit.*, pp. 22-37.
- Ali, A. (ed.) (1989b) *Management and its Environment in the Arab Gulf States (International Studies of Management and Organisation*, vol. 19/2, Summer).
- Ali, A. (1992) 'Value Systems as Predictors of Managerial Decision Styles of Arab Executives'. *International Journal of Manpower*, vol. 13, pp. 19-26.

- Ali, A. and Al-Shakis, M. (1985) 'Management Value Systems for Working in Saudi Arabia: An Empirical Investigation'. *Group and Organisation Studies*, vol. 10, pp. 135-51.
- Ali, A. and Paul, S. (1985) 'Managerial Decision Styles and Work Satisfaction in Saudi Arabia'. *Management Decision*, vol. 23, pp. 33-42.
- ARAMCO (1993) 'The Attempt of the Arab American Oil Corporation (ARAMCO) to Hire National Employment in the Private Sector. Institute of Public Administration [in Arabic].
- Armstrong, M. (1992) *Human Resource Management: Strategy and Action*. London: Kogan.
- At-Twajjri, M. (1989) 'A Cross-cultural Comparison of American-Saudi Managerial Values in US-Related Firms in Saudi Arabia: An Empirical Investigation'. In Ali, A. (1989b), *op. cit.*, pp. 58-73.
- Atiyyah, H. S. (1989) 'Determinants of Computer System Effectiveness in Saudi Arabian Public Organizations'. In Ali, A. (1989b), *op. cit.*, pp. 85-103.
- Bailey, K. D. (1987) *Methods of Social Research*. London: Collier Macmillan.
- Bartels, R. (1982) 'National Culture - Business Relations: United States and Japan Contrasted'. *Management International Review*, vol. 22, pp. 6-8.
- Bentley, T. (1991) *The Business of Training: Achieving Success in Changing World Markets*. Berkshire: McGraw-Hill.
- Birks, J. and Sinclair, A. (1980) *Arab Manpower*. London: Croom Helm.
- Block, P. M. (1987) 'Saudi Petrochemicals: Trying for a Smooth Entry'. *Chemical Week*. vol. 141, part 24, pp. 30-6.
- Brean, D. J. (1979) 'Multinational Firms: Transfer Pricing and the Tax Policy of Less Developed Countries'. *Malayan Economic Review*, vol. 24, part 2, pp. 34-45.
- Brewster, C. and Tyson, S. (ed.) (1992) *International Comparisons in Human Resource Management*. London: Pitman.
- Britton, J. N. H. and Gilmour, J. N. (1978) *The Weakest Link*. Ottawa: Science Council of Canada.
- Bryman, A. and Cramer, D. (1990) *Quantitative Data Analysis for Social Scientists*. London: Routledge.
- Buller, P. P., Cragun, J. R. and McEvoy, G. M. (1991) 'Getting the Most out of Outdoor Training'. *Training and Development Journal (USA)* vol. 45, part 3, pp. 58-61.
- Cantwell, R. (1986) 'Training Expatriate and Local Nationals in the Middle East'. *Workforce Management in the Arabian Peninsula*. In Roukis and Montana (1986b), *op. cit.*, pp. 89-93.

- Caves, R. E. (1982) *Multinational Enterprise and Economic Analysis*. Cambridge: University of Cambridge.
- Caves, R. E. (ed. Frieden, J. A. and Lake, D. A.) (1991) *The Multinational Enterprise as an Economic Organisation*. London: St. Martin's Press.
- Chackerian, R. and Shadukhi, S. M. (1983) 'Public Bureaucracy in Saudi Arabia: An Empirical Assessment of Work Group Behaviour'. *International Review of Administrative Science*, vol. 49, pp. 319-22.
- Chaudhry, K. A. (1989) 'The Price of Wealth: Business and State in Labor Remittance and Oil Economies'. *International Organizations*, vol. 43, pp. 101-45.
- Child, J. M. (1982) 'Theoretical Perspectives in Cross-national Organisation Research'. *International Studies of Management and Organisation*, Winter.
- Choudhry, N. K. and Datta, A. K. (1986) 'Changing Perspectives from India'. *Canadian Journal of Development Studies*, vol. 6, part 1, pp. 77-85.
- Cohen, L. and Manion, L. (1980) *Research Methods in Education*. Kent: Croom Helm.
- Colman, D. and Nixon, F. (1978) *Economics of Change in Less Developed Countries*. Oxford: Philip Allan.
- Council of Chamber of Commerce (1993) 'Orientation and Capabilities of Private Sector in Training and Preparing National Labour Force'. Institute of Public Administration [in Arabic].
- Dicken, P. (1988) *Global Shift*. London: Chapman.
- Easterby, M. (1991) *Management Research*. London: SAGA.
- The Economist* (1984) 'Saudi Petrochemicals: Beach-head', vol. 293, October 13, pp. 73-4.
- The Economist* (1985a) 'World Business : "Saudi Arabia's Wish List for 1410 Anno Hegira"', vol. 297, November 23, pp. 75-6.
- The Economist* (1985b) 'World Business : "Serve up the Saudi Oil and Gas, but Hold the Petrochemicals"', vol. 294, March 9, pp. 63-4.
- The Economist* (1985c) 'The Importance of Gunk', vol. 294, March 9, p. 16.
- The Economist* (1986) 'World Business: "Europe Calls the Saudis Bluff"', vol. 298, January 18, p. 55.
- The Economist* (1987) 'World Business: "Cracking Start from Saudi Chemicals"', vol. 304, August 22, pp. 57-8.
- El-Ayouty, Y. and Flint, D. (1982) 'Move Over'. *Forbes*, part 12, pp. 81-90.

- El Mallakh, R. and El Mallakh, D. H. (eds.) (1982) *Saudi Arabia: Energy, Developmental Planning, and Industrialisation*. Lexington, Mass.: Heath & Co.
- Elmuti, D. (1989) 'Quality Control Circles in Saudi Arabia: A Case Study'. *Production and Inventory Management Journal*, vol. 3, pp. 52-5.
- Evans, K. M. (1978) *Planning Small Scale Research*. Berks: NFER Publishing.
- Feldman, D. C. and Thomas, D. C. (1992) 'Career Management Issues Facing Expatriates'. *Journal of International Business Studies*, vol. 23, pp. 271-93.
- Ferber, R. and Verdoorn, P. (1962) *Research Methods in Economics and Business*. New York: Macmillan.
- Field, P. (1979) 'Saudi Industry: They Have the Gas But What Else?' *Euromoney*, April, pp. 93-9.
- Fombrun, C. and Tichy, N. (1984) *Strategic Human Resource Management*. New York: Wiley.
- Galor, O. and Stark, O. (1990) 'Migrants' Saving: the Probability of Return Migration and Migrants' Performance'. *International Economic Review*. vol. 31, pp. 463-7.
- General Organisation for Social Insurance (1993) 'The Role of General Organisation for Social Insurance in Finding a Stability for National Employment in the Private Sector and its View on Improving This'. Institute of Public Administration [in Arabic].
- General Organisation for Technical Education and Vocational Training (1993) 'The Role and the View of General Organisation in Raising the Percentage of Hiring Local Employment'. Institute of Public Administration [in Arabic].
- Ghoshal, A. (1982) 'Multinational Corporations Technology Transfer and Economic Development'. *International Journal of Economics*, vol. 35, part 1, pp. 27-37.
- Hafiz, T. K. (1982) 'Technology Transfer to Developing Nations: The Case of Saudi Arabia'. In El Mallakh and El Mallakh (1982), *op. cit.*, pp. 77-86.
- Hambleton, H. G. (1982) 'The Saudi Petrochemical Industry in the 1980s'. In El Mallakh and El Mallakh (1982), *op. cit.*, pp. 51-76.
- Harris, P. R. and Moran, R. T. (1970) 'Managing Cultural Differences'. Houston: Gulf.
- Helal, A. M. (1981) 'The Problem of Extractive Technology Transfer from the Multinational Corporation to the Host Countries: The Case of the Rich, Underdeveloped Countries'. Unpublished Ph.D. dissertation. USA: Claremont Graduate School.

- Helal, A. M (1984) 'The Role of MNCs on Transfer of Technology to the Host Country'. Conference of Technology and Development, Vol. 2, Riyadh: Ministry of Planning.
- The Holy Qur'an* (1992) Almadina: King Fahad Printing Plant.
- Hood, N. and Young, S. (1979) *The Economics of Multinational Enterprise*. New York: Longman.
- Hovanessian, A. (1986) 'Economic Forces Affecting the Middle East'. In Roukis and Montana (1986b), *op. cit.*, pp. 47-64.
- Ibrahim Al Juffali and brothers (1993) 'Attempt of Ibrahim Al Juffali and Bros. in Hiring National Employment. Institute of Public Administration [in Arabic].
- Institute of Personal Management (1993) *Training and Development*. London: IPM.
- Johany, A. D. (1982) 'The Saudi Economy: Yesterday's Performance and Tomorrow's Prospects'. In El Mallakh and El Mallakh (1982), *op. cit.*, pp. 1-14.
- Johany, A. D., Berne, M. and Mixon, W. (Jr) (1986) *The Saudi Arabian Economy*. London: Croom Helm.
- Joint Saudi Company for Electricity in the Central Region (1993) 'The Attempt of the Joint Saudi Company for Electricity in the Central Region in the Field of Training and Employing Local Hires'. Institute of Public Administration [in Arabic].
- Jones, R. And Goss, D. (1991) 'The Role of Training Strategy in Reducing Skills Shortages'. *Personal Review*, vol. 20, part 2, pp. 24-30.
- Kenney, J. P. J. and Donnelly, E. L. (1972) *Manpower Training and Development*. London: Harrap.
- Kerlinger, N. (1986) *Foundations of Behavioral Research*. New York: CBS College Publishing.
- Khuwaileh, A. A (1992) 'English Language Teaching in Higher Education in Jordan: Needs Analysis and Syllabus Design for 'English for Science and Technology''. Unpublished Ph.D. thesis. United Kingdom: University of Durham.
- Kochhar, R. (1991) 'International Labor Mitigation and Domestic Labor Supply'. *Journal of Population Economics*, pp. 113-34.
- Koontz, H. (1969) 'A Model for Analysing the Universality and Transferability of Management'. *Academy Management Journal*, vol. 12.
- Koutsoyiannis, A. (1981) 'The Impact of Multinational Firms on Prices and Costs'. *International Journal of Economics*, vol. 34, parts 2-4, May-November, pp. 356-7.

- Krasner, D. (1991) 'Multinational Corporation'. *International Political Economy*, ed. Frieden, J. A. and Lake, D. A. London: St. Martin's Press.
- Kun, S. (1986) 'Saudi Economy Pumps with the Punches'. *Beijing Review*. vol. 32, no. 18, pp. 11-13.
- Lall, S. (1980) *The Multinational Corporation*. London: Macmillan.
- Lall, S. (1984) 'Transnationals and the Third World: Changing Perceptions'. *National Westminster Bank Quarterly Review*, May, pp. 1-16.
- Lall, S. and Streeten, P. (1977) *Foreign Investment: Transnationals and Developing Countries*. London: Macmillan.
- Lansing, J. and Morgan, J. (1971) *Economic Survey Methods*. Ann Arbor: University of Michigan.
- Lawler, E. Kerr. and Hamner, W. (1987) In 'Motivation and Work Behavior', by Steers, M. and Porter, L. New York: McGraw-Hill., *op. cit.*, pp. 210-252.
- Looney, R. E. (1982) *Saudi Arabia's Development Potential: Application of an Islamic growth model*. Lexington, Mass.: Heath & Co.
- Looney, R. E. (1991) 'The Viability of Saudi Arabian Industrial Diversification'. *Rivista Internazionale Scienze Economiche Commerciali*, vol. 38, part 1, pp. 17-43.
- Louis, G. K. (1963) 'Service in Saudi Arabia'. A report. Riyadh: Ford Foundation.
- Merkle, L. and Zimmerman, K. F. (1992) 'Savings, Remittances and Return Migration'. *Economics Letters*, vol. 38, pp. 77-9.
- The Middle East* (1992a) 'A Hint of Concern', no. 216, pp. 33-5.
- The Middle East* (1992b) 'Back on Course for Growth', no. 208, pp. vi-viii.
- The Middle East* (1992c) 'Confidence Begins to Show', no. 214, pp. 32-3.
- The Middle East* (1992d) 'From Cash to Credit', no. 208, p. xviii.
- The Middle East* (1992e) 'Give Us Room To Trade'. no. 218, pp. 33-4.
- The Middle East* (1992f) 'Why the Kingdom Has To Borrow', no. 207, p. 35.
- The Middle East* (1993a) 'As If There Was No Tomorrow', no. 220, pp. 7-8.
- The Middle East* (1993b) 'Just Settling for Minibooms', no. 219, pp. 14-16.

- The Middle East* (1993c) 'Oil: Bigger Share of a Smaller Market', no. 223, pp. 33-5.
- The Middle East* (1993d) 'Special Report: Saudi Arabia Preserves Tradition in a Changing Society', no. 221, pp. 21-35.
- Ministry of Electricity and Industry (1990) 'Guide for Industrial Investment. Riyadh: Al-Ibaikan Printing and Publication Co. [In Arabic].
- Ministry of Labour and Social Affairs (1993) 'The Role and the Point of View of the Ministry of Labour and Social Affairs in increasing the Percentage of National Employment in the Private Sector'. Institute of Public Administration [in Arabic].
- Ministry of Planning (1993) 'The Orientation of the Fifth Development Plan: Towards Employment in the Private Sector. Institute of Public Administration' [in Arabic].
- Moore, R. M. and Delener, N. (1986) 'Islam and Work'. *Workforce Management in the Arabian Peninsula*, In Roukis and Montana (1986b), *op. cit.*, pp. 71-85.
- Muna, F. (1980) *The Arab Executive*. New York: St Martin's Press.
- Negandhi, A. R. and Baliga, B. R. (1981) *Tables Are Turning: German and Japanese Multinational Companies in the United States*. Cambridge, Mass.: Oeleschlager, Gunn and Hain/Anton Hain.
- Neil M. K. (1991) 'Multinational Enterprises as Strategic Choice'. In Pitelis, C. and Sugden, R. (eds), *The Nature of the Transnational Firm*. London: Routledge.
- Nichols, S. (1991) *Social Survey Methods*. Oxford: Oxfam.
- Norusis, M. J. (1990) *The SPSS Guide to Data Analysis*. Chicago: SPSS.
- Nowack, K. M. (1991) 'A True Training Needs Analysis'. *Training and Development Journal (USA)*, vol. 45, part 4, pp. 69-73.
- Oil and the Gulf Survey (1984) 'Petrochemicals aplenty'. *The Economist*, July, pp. 44-5.
- Ounallah, S. (1982) 'Oil and Gas: Industrial Implementation'. In El Mallakh and El Mallakh (1982), *op. cit.*, pp. 47-56.
- Owen, R. (1986) 'Migrant Workers in the Gulf'. *Middle East Review*, vol. 18, pp. 24-7.
- Palmer, M., Alghofaily, I. and Alnimir, S. (1984) 'The Arabian Peninsula Zone of Ferment', ed. Stookey, R. W. Stanford University: Hoover Press.
- Presley, J. R. and Wilson, R. (1991) *Banking in the Arab Gulf*. London: Macmillan.

- Quarterly Economic Review (1968-1993). London: The Economist Intelligence Unit.
- Quarterly Economic Review*, no. 3, (1975) 'Saudi Arabia and Jordan'. London: The Economist Intelligence Unit.
- Richard, M. A. (1988) 'The Economic Stimulus from Resource-Based Industry in Developing Countries: Saudi Arabia and Bahrain'. *Economic Geography*, vol. 64, part 3, pp. 210-18.
- Riyadh Chamber of Commerce (1991a) 'Methods of Increasing Saudi Employment in the Private Sector'. Riyadh: RCC [in Arabic].
- Riyadh Chamber of Commerce (1991b) 'The Role of the Saudi Workforce in Industry'. Riyadh: RCC [in Arabic].
- Riyadh Chamber of Commerce (1992) 'The Practical Methods of Using the Workforce'. Riyadh : RCC [in Arabic].
- Riyadh Chamber of Commerce (1993) 'Methods of Increasing the National Employment Contribution in the Private Sector'. Institute of Public Administration [in Arabic].
- Rothwell, W. J. and Kazanas, H. C. (1990) 'Planned On-the-job Training'. *Training and Development Journal (USA)*, vol. 44, part 10, pp. 53-6.
- Roukis, G. S. and Montana, P. J. (1986a) 'Development and Human Resources Management in the Arab Oil Rich Gulf States'. In Roukis and Montana (1986b), *op. cit.*, pp. 169-87.
- Roukis, G. S. and Montana, P. J. (eds.) (1986b) *Workforce Management in the Arabian Peninsula*. New York: Greenwood Press.
- Royal Commission for Jubail and Yanbu (1992) 'Jubail and Yanbu Industrial Cities'. Jubail: RCDY.
- Rugman, A. M. (1981) *Inside the Multinationals: The Economics of the Internal Market*. London: Croom Helm.
- Russell, M. and Nejdet, D. (1986) 'Islam and Work', in Roukis and Montana (1986b), *op. cit.*, pp. 71-88.
- SABIC (1993) 'The Growth of Trained National Employment Labour Force in SABIC and its Respective Companies. Institute of Public Administration [in Arabic].
- Saleh, S. D. (1984) 'Saudi Arabia Work Needs at Different Job Levels'. *Engineering Management International*, vol. 3, pp. 29-36.
- Sami Kassem, M. (1989) 'Strategy Formulation: Arabian Gulf Style'. *Management and its Environment in the Arab Gulf States*, vol. 19, pp. 6-21.
- Saudi Arabia Monetary Agency (1973-91) *Annual Reports*. Riyadh: SAMA [in Arabic].

- Saudi Arabia Monetary Agency (1980-90) *Statistical Summaries*. Riyadh: SAMA [in Arabic].
- Saudi Ministry of Labour and Social Affairs (1969) 'Saudi Labour Law'. Riyadh: MLSA [in Arabic].
- Saudi Arabia Petrochemicals: The Kingdom a Continued Growth Area. *Middle East Executive Reports* (1988), vol. 11, part 3, pp. 15-17.
- Saudi Basic Industries Corporation (1983-91) *Annual Reports*. Riyadh: SABIC [in Arabic].
- Saudi Corporation for Medical Equipment Products (1993) 'National Employment in the Saudi Corporation for Medical Equipment Products'. Institute of Public Administration [in Arabic].
- Saudi Council of Chambers of Commerce (1993) 'Orientations and Capabilities of the Private Sector in Training and Preparing the National Labour Force'. Institute of Public Administration [in Arabic].
- Saudi National Company for Sea Transport (1993) 'Obstacles Facing the Saudi National Company for Sea Transport Regarding Employing Saudi Nationals. Institute of Public Administration [in Arabic].
- Schatz, S. P. (1991) 'Assertive Pragmatism and Multination Enterprise'. In *International Political Economy*, ed. Frieden, J. A. and Lake, D. A. London: Unwin Hyman.
- Sek-Hong, N. G. (1987) 'Training Problems and Challenges in a Newly Industrialising Economy: The Case of Hong Kong'. *International Labour Review*, vol. 126, no. 4, pp. 467-78.
- Selltiz, W. and Cook, S. (1981) *Research Methods in Social Relations*. New York: Holt, Rinehart & Winston.
- Shaw, P. F. (1986) 'Saudi Arabian Manpower Requirements'. In Roukis and Montana (1986b), *op. cit.*, pp. 95-105.
- Siegel, S. (1956) 'Nonparametric Statistics for the Behavioural Sciences'. New York: McGraw-Hill.
- Stevens, P. J. (1982) 'The Interaction Between Oil Policy and Industrial Policy in Saudi Arabia'. In El Mallakh and El Mallakh (1982), *op. cit.*, pp. 27-46.
- Sweat, S. (1984) 'Feeling the Heat: Saudi Arabia's Petrochemical Projects Make Competitor'. *Chemical Week*, vol. 135, part 21, pp. 56-63.
- Tandy, H. (1985) 'Products of the Desert Going for a Song'. *Far Eastern Economic Review*, vol. 128, part 24, pp. 105-6.
- Wagner, R. J., Baldwin, T. T. and Roland, C. C. (1991) 'Outdoor Training'. *Training and Development Journal* (USA), vol. 45, part 3, pp. 51-6.

- Walker, J. (1992) *Human Resource Strategy*. New York: McGraw-Hill.
- Weber, D. T. (1990) 'Joint Venture Regulation in Saudi Arabia: A Legal Labyrinth'. *Journal of International Business*, vol. 11, part 4, pp. 811-40.
- Weiss, D. J., Davis, R. V., England, G. W. and Lofquist, L. H. (1967) *Manual for the Minnesota Satisfaction Questionnaire*. Minnesota Studies in Vocational Rehabilitation.
- Wells, D. A. (1986) 'The Effects of Saudi Industrialization on Employment'. *Journal of Energy and Development*, vol. 9, no. 2, Spring, pp. 273-84.
- Whetton, D A and Cameron, K S (1984) *Developing Management Skills*. New York: Scott, Foresman and Company
- Wilson, R. (1988) *Europe-Arab Trade: Prospects For The 1990s*. London: The Economist Intelligence Unit.
- Wilson, R. (1979) *The Economics of The Middle East*. London: Macmillan.
- Yavas, U., Luqmani, M. and Quraeslin, Z. (1990) 'Organisational Commitment, Job Satisfaction, Work Values: Saudi and Expatriate Managers'. *Leadership and Organization Development Journal*, vol. 11, pp. 3-10.
- Young, I. (1991) 'Petrochemicals: Calm after the Storm'. *Chemical Week*, vol. 148, part 11, pp. 34-40.
- Youngman, M. (1978) *Designing and Analysing Questionnaires*. Nottingham: University of Nottingham.

Appendices

Appendix A
Employees Questionnaire

Dear sir

You are kindly requested to fill in this questionnaire which is part of research to be submitted to the University of Durham, UK for the degree of Ph.D. Your responses will be highly confidential and they will not be seen by your directors/supervisors, etc. They will only be used for research purposes. Consequently, it is very important to answer all the questions and be as realistic as possible.

The questionnaire deals with your job and vocational satisfaction and the policy of training followed in your company. The research result could be used to improve your job conditions.

Thank you for your co-operation.

Yours sincerely

Abdullah H. Al-Salamah

Department of Economics

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- 7 PLEASE SPECIFY THE SABIC COMPANY YOU ARE INVOLVED WITH
- SADAF
- SHARQ
- SAMAD
- IBN SINA
- HADEED
- IBN HYYAN
- 8 WHAT IS THE HIGHEST QUALIFICATION YOU OBTAINED?
- Preparatory
- Secondary or equivalent
- Community College
- University Bachelor of Science
- University Bachelor of Arts
- Higher Degree (e.g. postgraduate)
- 9 NATURE OF WORK
- Technician
- Engineer
- Administrator
- Financial Officer
- Security
- Other Please specify
- 10 DOES YOUR COMPANY HOLD TRAINING COURSES?
- Yes
- No
- 11 IF YES, WHERE ARE THESE COURSES HELD?
- | | Yes | No |
|---|---|--------------------------|
| In the company | <input type="checkbox"/> | <input type="checkbox"/> |
| Elsewhere in the Kingdom | <input type="checkbox"/> | <input type="checkbox"/> |
| Outside the Kingdom (e.g
mother company, etc.) | <input type="checkbox"/> | <input type="checkbox"/> |
| Other | <input type="checkbox"/> Please specify | |
- 12 TRAINING COURSES YOU HAVE BEEN INVOLVED IN
- None
- 1-3 course(s)
- 4-6 courses
- 7 courses and over
- 13 WHERE HAVE YOU BEEN TRAINED?
Specify the country.....

14 DO YOU HAVE ANY COMMENTS YOU WOULD LIKE TO ADD ON THE TRAINING POLICY?

Yes ()

No ()

IF YES, PLEASE SPECIFY.....

15 RANK THE FOLLOWING STATEMENTS IN ACCORDANCE WITH THEIR IMPORTANCE CONCERNING YOUR INVOLVEMENT IN SABIC, WHERE (5) MEANS MOST IMPORTANT AND (1) MEANS LEAST IMPORTANT

A Financial reason(s) (e.g. salaries financial additions, rewards) ()

B Housing reason (e.g. provided accommodation) ()

C Future reason (e.g. in-house training, external training) ()

D Health reason (e.g. provision of health service) ()

E Social reason(s) (e.g. friendship, personal relations, etc.) ()

16 HAS YOUR PAY INCREASED?

	Yes	No
A In 1992?	()	()
B In 1991?	()	()
C In 1990?	()	()
D Prior to 1990?	()	()

17 IF YES, PLEASE SPECIFY THE LAST PERCENTAGE INCREASE

	Yes	No
1-5%	()	()
6-10%	()	()
Over 11%	()	()

18 IN YOUR OPINION, SHOULD SAUDIS WORKING IN SABIC COMPANIES BE PAID:

(Please tick one answer)

A less than Non-Saudis? ()

B the same as Non-Saudi? ()

C more than Non-Saudis? ()

19 IF THERE WERE INTERNATIONAL MARKETING DIFFICULTIES, WOULD YOU ACCEPT A SALARY REDUCTION TO MAINTAIN YOUR JOB?

Yes ()
No ()

20 WOULD YOU ACCEPT A PAY FREEZE IF THIS MEANT MORE SAUDIS COULD BE EMPLOYED?

Yes ()
No ()

21 WHAT, IN YOUR OPINION, SHOULD BE TAKEN INTO ACCOUNT WHEN SALARIES ARE REVISED? RANK THE FOLLOWING STATEMENTS IN ACCORDANCE TO THEIR IMPORTANCE TO YOU, WHERE (5) MEANS VERY IMPORTANT AND (1) MEANS LEAST IMPORTANT

A The cost of living (i.e to match rate of inflation) ()

B The current pay scales in government departments ()

C The current pay scales in private companies ()

D The profitability of SABIC (i.e. the more the profit, the more the pay) ()

E Change in your own work load or responsibility ()

QUESTIONNAIRE REGARDING JOB SATISFACTION

The following 37 questions are in connection with your satisfaction about various aspects of the job. The questions aim at knowing the nature of jobs in the company.

Instructions for filling in the questionnaire

Please cross the value which matches your degree of satisfaction concerning each of the following questions:

For example: What is the degree of your satisfaction with respect to:

The regulations and procedures of your job:

absolutely dissatisfied (1) (2) (3) (4) (5) very satisfied

Therefore, if you are absolutely dissatisfied with your job, put a cross on value (1) (as shown above). If your satisfaction is other than that, put a cross on the appropriate value, and so on.

Please give the degree of your satisfaction with respect to:

- | | | | | | | | | | |
|----|---|---|---|---|---|---|---|---|---|
| 22 | Regulations and procedures of your job | (|) | (|) | (|) | (|) |
| 23 | The way your boss/director deals with you | (|) | (|) | (|) | (|) |
| 24 | Working condition of your job | (|) | (|) | (|) | (|) |
| 25 | Working hours of your job | (|) | (|) | (|) | (|) |
| 26 | Scheduling of shifts | (|) | (|) | (|) | (|) |
| 27 | Temperature inside the factory | (|) | (|) | (|) | (|) |
| 28 | Promotional chances available | (|) | (|) | (|) | (|) |
| 29 | The salary you obtain | (|) | (|) | (|) | (|) |
| 30 | Job stability | (|) | (|) | (|) | (|) |
| 31 | Going over the difficulty you face in your job. | (|) | (|) | (|) | (|) |
| 32 | Opportunities available for training and experience acquisition | (|) | (|) | (|) | (|) |
| 33 | The appreciation your boss/director has of you | (|) | (|) | (|) | (|) |
| 34 | The feeling of the importance of your job | (|) | (|) | (|) | (|) |
| 35 | The way of evaluating your job | (|) | (|) | (|) | (|) |

36	The way your non-Saudi boss/director(s) deal(s) with you	()	()	()
37	The way your Saudi boss/director(s) deal(s) with you	()	()	()
38	The responsibility you have	()	()	()
39	Your salary compared with the responsibilities you have	()	()	()
40	Meeting your personal needs (e.g. instant and continual worship, refreshments, etc.)	()	()	()
41	Nature and kind of your job	()	()	()
42	Democracy of self-expression with regard to your job	()	()	()
43	The company techniques of training	()	()	()
44	The management techniques to implement its regulation and procedures	()	()	()
45	Condition of job progress and promotion	()	()	()
46	Your family's acceptance of your job	()	()	()
47	The comparison of job hours with the hours of those who practise jobs similar to yours in other companies	()	()	()
48	The available time to spend with your family	()	()	()
49	Methods of job termination and transfer	()	()	()
50	Methods of safety and prevention of job accidents	()	()	()
51	Methods of preparing job reports	()	()	()
52	The degree to which your boss/director and advisers accept your suggestions	()	()	()
53	Vacation or leave system	()	()	()

54 The development of taking responsibilities of decision-making () () () () ()

55 The application of the skills which you acquired from training courses in your job () () () () ()

56 Extending your experience through practising your job () () () () ()

57 The methods that supervisors/advisers follow to solve the problems you face () () () () ()

58 Could you please add any other points you would like to state concerning your job satisfaction, whether positive or negative, apart from the points addressed in this questionnaire.

.....
.....
.....

Appendix B
Interviews Conducted with Selected Officials from Government
Departments
and
SABIC Officials

TRANSFER OF TECHNOLOGY
Interviews Conducted with Selected Strata of Officials
from the Ministry of Industry and Electricity

- | | | | |
|---|--|---|--|
| 1 | Do you agree that the creation of some SABIC affiliates, such as SADAF, SHARQ, SAMAD, IBN SINA, IBN HAYYAN, HADEED, is significant for the development of the industries of the Kingdom? | Yes
No
Don't know | (
)
(
)
(
) |
| 2 | Please explain your answer above by determining the link between plants for these industries, and explaining their activities. | | |
| 3 | Which is the most valuable of the affiliates to Saudi industrial development (e.g. the use of the plants output in other industries)? | SADAF
SHARQ
SAMAD
IBN SINA
HADEED
IBN HAYYAN | (
)
(
)
(
)
(
)
(
)
(
) |
| | most valuable 5 4 3 2 1 least valuable | | |
| 4 | Relating to question 3, what is your opinion? | | |
| 5 | Do you believe that choosing highly capital intensive technology to serve SABIC industries is the right way to solve Saudi's economic labour shortage problems, especially that of skilled labour? | Yes
No
Don't know | (
)
(
)
(
) |
| 6 | If your answer to question 5 is yes, how do you see the appropriateness of the use of capital intensive technology in relation to the need to employ more local labour when Saudi Arabia has to face the problem of unemployment? | | |
| 7 | If you would like to explain the reasons for your answer, please do so here. | | |
| 8 | Can the plants listed in question 3 create indirect job opportunities? (Indirect job opportunities are those created in firms serving the plants or firms providing services or goods not hitherto required before the advent of the plants or the wealth they bring or which use the output of the plants as inputs in their production.) | Yes
No
Don't know | (
)
(
)
(
) |
| 9 | Do you believe that the above firms could play a more significant role in the Saudi economy by creating more downstream industries? | Yes
No
Don't know | (
)
(
)
(
) |

- | | | | |
|----|---|-------------------------|----------------------------|
| 10 | Do you believe that the output of the same firms could be used more significantly in the creation of other Saudi downstream industries? | Yes
No
Don't know | (
)
(
)
(
) |
| 11 | If the answers to questions 9 and 10 are yes, please explain further. | | |

TRANSFER OF TECHNOLOGY

Interviews Conducted with SABIC Executives

- | | | | |
|---|--|---|--|
| 1 | Do you believe that creating the above plants contributes significantly to the development of SABIC activities? | Yes
No
Don't know | (
)
(
)
(
) |
| 2 | What are the most appropriate plants for SABIC activities? Number in order of preference. | SADAF
SHARQ
SAMAD
IBN SINA
HADEED
IBN HAYYAN | (
)
(
)
(
)
(
)
(
)
(
) |
| 3 | Give reasons for your answer to question 2. | | |
| 4 | What are the most significant firms using local resources (natural or other resources)? | SADAF
SHARQ
SAMAD
IBN SINA
HADEED
IBN HAYYAN | (
)
(
)
(
)
(
)
(
)
(
) |
| 5 | Do you believe that the choice of techniques used in capital-intensive conditions are also appropriate to solve/ameliorate labour shortage problems in the Saudi economy, especially the scarcity of skilled labour? (If the answer is yes explain why.) | Yes
No
Don't know | (
)
(
)
(
) |
| 6 | When the Saudi economy has to face problems of unemployment, do you believe that such plants are appropriate to the country's economic needs? (Please explain your answer.) | Yes
No
Don't know | (
)
(
)
(
) |
| 7 | Does the transformation effected by such technology create any problems for SABIC? For instance, increasing demand for skilled labour? (If the answer is yes explain why.) | Yes
No
Don't know | (
)
(
)
(
) |

- | | | | |
|----|---|-------------------------|----------------------------|
| 8 | Can these plants create more employment in the local labour force in the future? | Yes
No
Don't know | (
)
(
)
(
) |
| 9 | If your answer to question 8 is yes, from where will the new jobs be created - through direct job opportunities or indirectly, such as through related companies? | Direct
Indirect | (
)
(
) |
| 10 | Do you believe that the cost of establishing such plants is higher than in other developed countries? | Yes
No
Don't know | (
)
(
)
(
) |
| 11 | If your answer to question 10 is yes, please choose reasons for this from the following: | | |
| | Labour costs | | (
) |
| | Engineering costs | | (
) |
| | Cost of the shipment | | (
) |
| | Cost of purchase (purchase of machines and equipment) | | (
) |
| | All of the above | | (
) |
| 12 | If your answer to question 10 is yes, and your reason is not given in question 11, please explain here. | | |
| 13 | Do you believe that associated costs, such as technical services, expensive machinery, the cost of intermediate parts, etc., are higher than they should be? | Yes
No
Don't know | (
)
(
)
(
) |
| 14 | Please explain your answer further. | | |

RESEARCH AND DEVELOPMENT
Interviews Conducted with SABIC Executives

- | | | | |
|---|--|-----------|------------------|
| 1 | Do these above partnerships create any facilities for R & D? | Yes
No | (
)
(
) |
| 2 | Do the above foreign affiliates participate in SABIC's industrial R & D? | Yes
No | (
)
(
) |
| 3 | Do foreign partnerships make available any local laboratories for R & D activities? | Yes
No | (
)
(
) |
| 4 | If you have answered yes to any of the above questions, please explain what kind of participation you believe foreign firms engage in. | | |

- | | | | |
|----|---|------------------------------|-------------------|
| 5 | Have any affiliates opened laboratories relating to their specialist expertise? | | () |
| 6 | Do you believe foreign firms participate sufficiently in R & D? | Yes
No | ()
() |
| 7 | Relating to questions 1, 2, 3 and 5, if any answer is yes, approximately how much have such firms spent on R & D (in SRthousands) during the 7 years 1985-91? | 100-500
501-1000
1001+ | ()
()
() |
| 8 | Through the findings of R & D, do such firms aim to find out whether the transferred technology they offer is appropriate to the needs of the Saudi economy? | Yes
No | ()
() |
| 9 | How do affiliates adapt their technology to SABIC circumstances? Please explain the activities involved in the adaptation of transferred technology. | | |
| 10 | Do you believe these partnerships have increased the use of any local resources through R & D? (For instance, labour, natural resources, etc.) | Yes
No
Don't know | ()
()
() |
| 11 | If the answer to question 10 is Yes, please define the resource(s). | | |
| 12 | Do the partnerships use R & D to increase the skill levels by training the local labour force? | Yes
No | ()
() |

Interviews Conducted with Officials from Institutes for Technical and Vocational Training

Sophisticated and specialised technology is involved in the MNCs' partnership structure in SABIC and a prerequisite of MNCs was an undertaking by the government of Saudi Arabia to create institutes of technology, intermediate technical colleges and other technical education.

- | | | | |
|---|--|-----------|------------|
| 1 | Does your institute provide sufficient technical education to provide the skilled labour force needed by SABIC and other industrial sectors? | Yes
No | ()
() |
| 2 | Please explain your answer further. | | |
| 3 | Do you participate in any co-operative schemes or programmes to train the SABIC labour force? | Yes
No | ()
() |

- | | | | |
|---|--|-----------------------|-------------------|
| 4 | If your answer to question 3 is yes, please give details? | | |
| 5 | Do you think technical schools can satisfy the local market with skilled labour requirements, especially those of SABIC? | Yes
No | ()
() |
| 6 | How relevant to SABIC activities and technology is the technical education provided? | High
Medium
Low | ()
()
() |
| 7 | What should be the duration of courses in the higher technical institutes (years)? | 1-2
2-3
3-4 | ()
()
() |
| 8 | Do you believe that the duration of training in the technical institutes is sufficient for the labour requirements? | Yes
No | ()
() |

**Interviews Conducted with Officials from King Abdul Aziz
City for Science and Technology**

- | | | | |
|---|--|---------------------------------------|-------------------|
| 1 | Are you involved in any activities relating to SABIC technology? | Yes
No | ()
() |
| 2 | Tick which of the following activities you are involved in. | Technical
Marketing
Engineering | ()
()
() |
| 3 | Expand further on your answer to question 2. | | |
| 4 | Is there any involvement of ... by your institute to adapt the technology of SABIC to make it more appropriate to Saudi's economic circumstances? | Yes
No | ()
() |
| 5 | If the answer to question 4 is yes, please explain. | | |
| 6 | Do you believe that transferring intensive technology by co-operation between SABIC and foreign firms is appropriate to the circumstances of Saudi's technology? | Yes
No | ()
() |
| 7 | If the answer to question 6 is yes, please explain. | | |
| 8 | Do you receive any co-operation regarding your laboratory activities from foreign firms operating in SABIC joint venture partnerships? | Yes
No | ()
() |
| 9 | If the answer to question 8 is yes, please explain. | | |

MANAGEMENT AND MANAGERIAL SKILLS
Interviews Conducted with Selected SABIC Managers

- | | | | |
|---|---|---|--|
| 1 | Do you believe that the foreign partnerships of SADAF, SHARQ, SAMAD, IBN SINA, HADEED, and IBN HYYAN, have had a positive effect on SABIC managerial performance and efficiency? | Yes
No | (
)
(
) |
| 2 | If the answer to question 1 is yes, please choose one or more from the following resources which you believe affects SABIC management performance. | | |
| | Better training | | (
) |
| | More dynamic performance | | (
) |
| | Faster communications with affiliates globally | | (
) |
| | All of the above | | (
) |
| 3 | Do partnerships help SABIC management through the entrepreneurial ability of foreign firms in organising SABIC activities such as supplies, demand, markets, etc? | Yes
No | (
)
(
) |
| 4 | If the answer to question 3 is yes, please explain how. | | |
| 5 | Which of the following partnerships has created any training programmes, locally or abroad, to train employees in management? | SADAF
SHARQ
SAMAD
IBN SINA
HADEED
IBN HAYYAN | (
)
(
)
(
)
(
)
(
) |
| 6 | Please explain their participation in such activities. | | |
| 7 | Do you believe the partnerships of foreign firms and SABIC have benefited other local firms through the 'spin-off' of improved management performance and efficiency (especially with local firms linked with such partnerships)? | Yes
No | (
)
(
) |
| 8 | If your answer to question 7 is yes, please give details of firms which gain in managerial performance created via these linkages in the industrial sector. | | |
| 9 | In your opinion, what are the 'spin-off' effects gained by local firms. Please explain as fully as possible. | | |

- | | | | |
|----|---|-----------|------------|
| 10 | Do you believe that management 'spin-off' can be effectively transferred from partnerships to local firms by employees who have been trained and work in foreign firms? | Yes
No | ()
() |
| 11 | Do the local firms which are linked with partnerships operate with the same management techniques and style as the large and complex foreign firms in the partnerships? | Yes
No | ()
() |
| 12 | If the answer to question 11 is yes, give an example for these local firms. | | |
| 13 | Do any of the partnerships prefer to recruit management from their home country? | Yes
No | ()
() |
| 14 | If the answer to question 13 is yes, explain why and explain which partnerships prefer this policy. | | |

**SABIC POLICES TOWARDS MANAGEMENT
AND MANAGERIAL SKILLS**

- | | | | |
|---|--|-----------------------|-------------------|
| 1 | Does SABIC invest in training its management personnel? | Yes
No | ()
() |
| 2 | If your answer is yes, how do you see SABIC activities regarding management training? | High
Medium
Low | ()
()
() |
| 3 | In what kind of skills do the training programmes focus? | | |
| 4 | How much did SABIC spend on management training during 1985-92 (SRmillions) | 10-20
20-30
30+ | ()
()
() |
| 5 | Are the training programmes created after, and as a response to, in-depth study of the nature of SABIC technology and performance? | Yes
No | ()
() |

- | | | | |
|----|---|---------|-----|
| 6 | How many employees take advantage of such training programmes (thousands of workers)? | 1-2 | () |
| | | 2-3 | () |
| | | 3-4 | () |
| | | 4+ | () |
| 7 | Did the training programmes originate abroad or locally? | Abroad | () |
| | | Locally | () |
| | | Both | () |
| 8 | Do you think that SABIC still faces problems relating to the level of labour skills? | Yes | () |
| | | No | () |
| 9 | If your answer to question 8 is yes, please state what problems still exist. | | |
| 10 | If your answer to question 8 is yes, please give suggestions to resolve these problems. | | |

**Interviews Conducted with Selected Officials from the
Ministry of Finance and National Economy**

SABIC's total revenues and profits increased over the five years 1985-89. Over the past two years (1990-1) there was a slight reduction in SABIC's total revenues and profit. SABIC sales revenues in 1985 were SR 829 million and for the year 1991 are more than SR 7,100 million.

- 1 Please give the value of the profits used locally from 1985 to 1991.
- 2 How much did SABIC exports amount to in these years?
- 3 How much did SABIC save Saudi Arabia by way of import substitution?
- 4 What figure can be attached to the value of SABIC imports?
- 5 How would you define the above SABIC plant's imports?

Industries	Company	Feedstock	Source of feedstock
Petrochemical Industries	SADAF	Ethane	
		Salt	
		Benzene	
	SHARQ	Ethylene	
	IBN SINA	Methane	
Fertilizer Industries	SAMAD	Methane	
Mineral Industries	HADEED	Natural gas	
		Scrap iron	
		Iron ore	
		Limestone	
Intermediate Industry	IBN HAYYAN	Ethylene Ethylene Dichloride	

- 6 Could any SABIC imports be substituted for local resources or products? Yes ()
No ()
- 7 Are all SABIC imports essential? Yes ()
No ()
- 8 Economists argue that foreign partnerships may use transfer prices to shift their profits clandestinely to their other affiliates to avoid Saudi restrictions on profits going abroad, or to minimise taxation by making the price higher for imports to their subsidiaries and lowering the export price paid by their subsidiaries. Do you believe this happens in Saudi Arabia? Yes ()
No ()
- 9 Please explain why you agree or disagree with the above assertion regarding transfer pricing.
- 11 Forty per cent of SABIC employees are immigrants, amounting to 3,400 employees from 40 nations, most of them from developing countries. These employees save a high proportion of their salaries and send them back to their own country.

Please comment on the above.

- 4 Choose one or more of the following activities by which import firms use transfer price policies. Import ()
Export ()
Both ()
- 5 What is the best solution for SABIC to adopt to reduce or prevent adverse transfer pricing policies?
- 6 What was the highest percentage of repatriation profits from the following partnerships?
- Shell Oil Co. ()
Hoecht-Celanes and Texas Eastern ()
Mitsubishi ()
Luck Goldstar Group ()
Taiwan Fertiliser Co. ()
Deutsche Entwicklung Gesellschaft ()
- 7 Would you please define their net profits during the period of the study (1985-91).
- 8 Please define their repatriation percentages in relation to their profits during the period of the study (1985-91).
- 9 Do you think that the above affiliates have invested part of their profits locally or have such profits been shifted clandestinely? (Please explain your answer with more details.)
- 10 Are there any controls or regulations obliging these firms to invest part of their profits locally? Yes ()
No ()
- 11 If the answer to question 10 is yes, what is the percentage requirement?

EFFECTS ON EMPLOYMENT

Interviews Conducted with Managers of the Personnel Department of SABIC (Foreign affiliates: direct effects)

SABIC Saudisation was increased during the period 1985-91, starting with 3,814 employees in 1985 and ending with more than 5,300 Saudi employees in 1991.

This mirrors SABIC achievement for Saudisation, especially as the percentage of local labour increased from 48 to 62 per cent of the total workforce.

- | | | | |
|---|---|------------|-----|
| 1 | Are you satisfied with this rate of increase? | Yes | () |
| | | No | () |
| | | Don't know | () |
| 2 | Is there any pressure from your foreign partnership in the following plants to employ their own (i.e. foreign) nationals? | Yes | () |
| | | No | () |
| | | Don't know | () |
| 3 | If your answer to question 2 is yes, please indicate the firms which exert pressure by marking a cross against their name(s). | SADAF | () |
| | | SHARQ | () |
| | | SAMAD | () |
| | | IBN SINA | () |
| | | HADEED | () |
| | | IBN HAYYAN | () |
| 4 | Did any of the firms marked in question 3 succeed in exerting pressure to employ their own nationals rather than Saudis? | Yes | () |
| | | No | () |
| | | Don't know | () |
| 5 | There is agreement between (among) the company (companies) to establish the joint venture in the guide lines. Will it include a minimum percentage for the foreign nationals? | Yes | () |
| | | No | () |
| | | Don't know | () |
| 6 | If the answer is yes, explain further how such an agreement affects the achievement of Saudisation. | | |

- 7 A review of the Annual Reports of SABIC gives clear indications that the numbers of Saudis employed by SABIC's affiliates was increasing, except for SHARQ, where the numbers of Saudis decreased in relation to foreign employees, especially during the years 1986-8, where the percentage of Saudis employed declined from 80% to 73%.
- Commenting on the above statement, explain what you think happened to cause the increases and decreases in local labour during the study period.
- 8 HADEED's employment review indicates a high immigrant ratio of employees in SABIC plants. Why?
- 9 Are all the foreign workers of HADEED necessary? Yes ()
No ()
Don't know ()
- 10 If your answer to question 7 is yes, please explain why.
- 11 Regarding the intensive technology of SABIC plants, do you believe that choosing such a highly technical form of industry has created problems and increased the demand for highly specialised and/or skilled labour? Yes ()
No ()
Don't know ()
- 12 Do you believe that jobs requiring such technological expertise now held by immigrant workers could be held by workers from the local labour force? Yes ()
No ()
Don't know ()
- 13 Please explain your answer to question 2 further.
- 14 What sort of jobs do the immigrant workers hold?
- 15 Has the size of any of the following plants limited the job opportunities available to the local labour force? (Mark with a cross.) SADAF ()
SHARQ ()
SAMAD ()
IBN SINA ()
HADEED ()
IBN HAYYAN ()
- 16 Is there any possibility of increasing the number of local employees directly by increasing the size of firms, by increasing the output capacity, or through product differentiation? Yes ()
No ()
Don't know ()
- 17 If the answer to question 14 is yes, please explain how.

- | | | | |
|----|---|------------|-----|
| 18 | Could such increases in the activities of the above firms significantly increase the number of job opportunities? | Yes | () |
| | | No | () |
| | | Don't know | () |

EFFECTS ON EMPLOYMENT

Interviews Conducted with Managers of the Personnel Department of SABIC (Foreign affiliates: indirect effects)

- | | | | |
|---|---|------------|-----|
| 1 | Do the above firms have strong links with other SABIC firms or with other local firms? What is the significance of this to the industrial sector of Saudi Arabia? | SABIC | () |
| | | Local | () |
| | | None | () |
| 2 | Please define the activities of linked firms (SABIC and other local firms). | | |
| 3 | Please specify the local firms who have strong links with SABIC firms. | | |
| 4 | Do the linked firms use intensive technology and machinery? | Yes | () |
| | | No | () |
| | | Don't know | () |

EFFECTS ON EMPLOYMENT

Interviews Conducted with Managers of the Personnel Department of SABIC (Training Activities)

- | | | | |
|---|--|------------|-----|
| 1 | Do any of the above joint venture partnerships create, or help SABIC to create, any centre to train local labour? | Yes | () |
| | | No | () |
| | | Don't know | () |
| 2 | If your answer to question 1 is yes, please name the firms and define/describe their participation. | | |
| 3 | Do any of the foreign joint venture partnerships participate in training local people in their homeland or in other countries? | Yes | () |
| | | No | () |
| | | Don't know | () |
| 4 | Give numbers for local labour force trained by partnerships. | | |
| 5 | Do you think the participation of joint venture partnerships has a positive impact upon increasing the skills level of the local labour force and the increasing Saudisation of SABIC firms? | Yes | () |
| | | No | () |
| | | Don't know | () |

THE EFFECTS UPON SOVEREIGNTY OF MNC INVOLVEMENT

Interviews Conducted with Senior Directors of SABIC and Senior Officials of the Ministry of Industry and Electricity

The following SABIC plants are joint ventures with leading international corporations. These partnerships have much experience in operating abroad. The main corporate objective of these partnerships is to make a profit, therefore they may compromise Saudi sovereignty.

SADAF, SHARQ, SAMAD, IBN SINA, IBN HAYYAN.

- 1 How do you make decisions with your partners (e.g. technology transfer, employment and trade policies, purchasing)?
- Choose one of the following ways of decision-making:
- 1 SABIC makes the decision independently. ()
- 2 SABIC makes the decision after consulting with foreign partnership. ()
- 3 SABIC makes the decision after agreement with foreign partnership. ()
- 4 SABIC delegates the decision to the foreign partnership. ()
- 2 Since your partners have more experience than SABIC, do you take their ideas strongly into consideration when making decisions? Yes ()
No ()
Don't know ()
- 3 Have you found that SABIC representatives in the Board of Directors take the partners' ideas as a guide in decision-making during the period of study? Yes ()
No ()
Don't know ()
- 4 When there is disagreement between SABIC management and the partners on any issue, for example, employment, purchasing, marketing, trade policy, how do you resolve such problems?
- 5 Do you use the respective percentages in the joint venture partnership as a guide to the resolution of such problems? Yes ()
No ()
Don't know ()

6 How are the co-operative agreements used to solve the above problems from the following list?

SADAF
SHARQ
SAMAD
IBN SINA
HADEED
IBN HAYYAN

- 7 Does the way in which the co-operative agreements function affect the sovereignty of Saudi Arabia? Yes ()
No ()
Don't know ()
- 8 Do you believe there are any discrepancies or omissions in the co-operative agreements relating to decision-making which cause problems to SABIC management? Yes ()
No ()
Don't know ()
- 9 If your answer to question 8 is yes, please define and explain the issues involved in any partnership agreement which causes problems.
- 10 During your employment with SABIC, do you believe the complexity between SABIC objectives and those of the partnerships cause problems? Yes ()
No ()
Don't know ()
- 11 If there are any complexities please explain what they are.

