
بسم الله الرحمن الرحيم

In the name of Allah, Most Gracious, Most Merciful

UNIVERSITY OF STRATHCLYDE

THE ROLE OF FREE ZONES IN THE REGIONAL AND NATIONAL DEVELOPMENT OF IRAN

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submitted in fulfillment for the degree of
Doctor of Philosophy

University of Strathclyde
Centre for Planning

1996

ACKNOWLEDGEMENTS

First of all, thanks to Allah who, created and then guided me to choose what is the right path in this life.

I wish to express my sincere thanks, gratitude, and great appreciation for Professor Urlan Wannop, for his guidance and supervision, particularly his valuable and constructive comments which made a very positive effect in finalising this thesis. I am also grateful to him for his friendship, tolerance, and kindness.

I am very grateful to Prof. Keith Hayton for his meticulous and constructive comments for finalising the thesis and also for his help and cooperation in his capacity as the Head of Department.

I am equally grateful to Dr Morteza Gharebaghian for his invaluable guidance and comments on many parts of this thesis.

Special words of appreciation should also go to Iranian friend and colleagues Dr Akbar Komijani who provided me with valuable information.

Thanks also to many the staff and colleagues of the Centre for Planning for their cooperation during my research programme. Special thanks and due to Anne Lockhart secretary of department for her full co-operation and help.

My deepest thanks to my wife Dr Abousaber for her help and cooperation through the period. and particularly for managing the family during my absence.

Last, but by no means least, my special thanks go to the Islamic Republic of Iran, represented by Tehran University for sponsoring my studies.

ABSTRACT

In recent years the number of Free Trade Zones (FTZs) or Export Processing Zones (EPZs) has rapidly grown. Close to fifty countries have now established EPZs to stimulate and diversify their industrial growth.

The efectiveness and performance of EPZs is an important topic of interest and concern for political decision-makers and donor agencies.

The thesis lays out a theoretical and empirical framework for evaluating such zones, incorporating investigation of the Qesh Free Area(QFA), in the Persian Gulf, whose activities, employment and trading relations were studied to make a full evaluation of its performance.

Through interviews with Iranian political and economic leaders and careful interpretation and analysis of pertinent documents, significant achievements and trends in Iran are reviewed. It is concluded that political, economic and social conditions are of greater relevance in attracting investors than the content of specific package of incentives offered to foreign industries and investors.

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Introduction

1.01 Export Processing Zones (EPZ) or Free Trade Zones (FTZ) have now been widely recognised as key institutions in export-led growth strategies, after decades in which developing countries have commonly followed import substitution development programmes.

1.02 The concept of Free Trade Zones (FTZs) is not new. It originated as early as the days of the Roman Empire, when transshipment, storage and re-exporting of goods were facilitated by the equivalent of FTZs. During the Middle Ages, Mediterranean and Hanseatic League cities dependent upon trade relied upon special arrangements to favour their own interests. In the 18th and 19th centuries, trading facilities were established by colonial powers in places like Singapore (1819) and Hong Kong (1842). These ports were used mainly for storage and re-exporting. The next period of expansion of the free zone/port idea was at the end of the 19th century and in the early 20th century in Europe, but the post World War II growth in trade has resulted in FTZs being set up at key points on international trading routes having been widely adopted as a tool of national economic development.

1.03 The modern FTZ or export processing zone (EPZ) has emerged since the 1960's. Its aims are not focussed as often before on warehousing and re-exporting, but on employment generation and production of manufactured exports. The prototype was established in Shannon, Ireland, in 1959. Its purpose was to maintain employment at the Shannon Airport whose position as a refuelling centre was threatened by the development of long range jets.

1.04 The sucess of Shannon paved the way for similar FTZs to be set up in other countries. By the early 1970s there were seven FTZs in seven countries. In 1975 there were 31 in 18 countries, and in 1986 there were close to 500 in over 70 countries (UNIDO, 1980 and WEPZA Newslatter, 1986). The number of FTZs has increased dramatically over the last 30 years as they have gained international recognition as a successful medium for generating employment and stimulating industrial development. Papadopoulos (1985) points out that "the catalyst for the phenomenal growth of FTZs was a 1967 United Nations resolution that marked the switch from import substitution to export development as the preferred method of industrialisation".

1.05 After the cease-fire with Iraq in August 1988, the Iranian Government announced its reconstruction plan in response to the profound changes in the Iranian economy as a result of a combination of external and internal factors, particularly the revolution itself, the eight year war with Iraq and fluctuations in the output and price of

oil. To foster industrial development, the Government created Export Processing Zones (EPZs). Like nearly fifty other countries, Iran created EPZs in the hope that they would stimulate and rapidly diversify the country's industrial growth.

1.06 Based on empirical investigation, the central questions in this study are what are the major lessons from Iran's experiences with EPZs regarding the role of the state in development, and how might the EPZs play an evolutionary role in the process of economic development in Iran?

Definition of Free Trade Zone FTZ/EPZ

1.07 A FTZ is a geographically defined usually fenced area of land within a country. Imported goods can be brought into the zone free of customs duties and quotas. Once in the zone, goods can be packed, unpacked, mixed, blended, stored, assembled, manufactured or otherwise handled. They are then exported. Should the goods be consumed within the host country, they are subject to customs duties. Apart from customs laws, in most cases all laws of the host country apply within the zone. A major purpose of FTZs is to induce new capital to flow into the FTZ. Such an influx of capital should then yield benefits in the form of employment, foreign exchange earnings. technological transfers, and linkages of the FTZ with the rest of the economy. However, there are costs associated with establishing and operating a FTZ successfully. These costs should not be overlooked.

Significance of the Study

1.08 Nowadays, the role of the free trade zone has become an important issue in many countries, particularly these which are developing, as a prospective leading factor in supposedly changing the economy for the better; in other words, as an instrument of development. There are more than 170 free zones spread world wide in different countries which have spent millions of dollars to establish free zones, not all of which are successful by any criteria, while other 'successes' have been at the expense of other forms of regional and national growth.

1.09 Most of the research to date on EPZs has been descriptive in nature and focused solely on labour-related and economic dimensions. There are numerous works on EPZs which are essentially investment reports that provide descriptive information on business procedures and costs in particular EPZ countries (for example, Rabani's 1985 and Jean Currie's 1979 reports).

1.10 Much information which has been issued by the investment promotion agencies of countries which possess EPZs is often incorrect or misleading, as for example the reviews of Jordan's or Dubai's EPZs done by Business International, which otherwise would have been especially helpful in this study.

1.11 Aside from the studies of EPZs and labour-related issues which are available, there is a shortage of analyses of EPZs and the development or politico-economic aspects of the issue. UNCTAD's 1985 study was probably the first attempt to conduct a comprehensive study of the developmental effects of EPZs.

1.12 This study will accordingly offer a pioneering contribution to the growing interest and literature on EPZs by analysing strategies of development and policies, linkages between country structures and EPZ structures, factors for success, and connection between public policy and the State.

1.13 It is expected that the author's case study research will contribute to empirically-based theories on state-led industrial and export-led development and offer some general policy implications.

Aims of the research

1.14 The aim of the research is to employ a case study to illustrate the role of the Free Zone in the economic development of Iran, and to find out what specific factors are emerging as important to its success or limitations. The study intends to include discussion of the following points:

1. What were the reasons for establishing the Qeshm Free Area (QFA)?

2. What is the QFAs place in the country's development?

Motivations of the study

1.15 There were two motivations in carrying out this study. First was the lack of attention and effort given to investigate economic development and the open policy of Iran as represented through its EPZs. Secondly, no suitable framework had been developed for analysing the role of EPZ development strategy in Iran.

Structure of the thesis

1.16 The thesis has been divided into eight chapters. After setting the scene for the study in Chapter One which also describes the methodology of the study, Chapter Two will survey the literature on strategy of development. Chapter Three gives a general account of evolving spatial and economic planning in Iran, and Chapter Four is concerned with the aims behind the establishment of EPZs, their requirements in general and also the characteristics of EPZs. Chapter Five concentrates on the discussion of the case study zone i.e. the Qeshm Free Zone (QFZ); first, it introduces the geographical condition and the economic history of Qeshm Island and focuses on economic activities operating in the QFA, and secondly it reveals the characteristics of the QFZ in the Iranian economy. Chapter Six concentrates on the author's field work done in the QFA and evaluates the impact of the QFA on regional economic development, including a comparison between EPZs in Iran and Dubai. Chapter Seven is devoted to analyses of the context for future policy for EPZs and, particularly, the role of the state is examined.

Chapter Eight summarises the most important findings, gives proposals for policy adjustments and the conclusions of the study, and contains the author's main recommendations for the development of the QFA in the Iranian economy and offers suggestions for further research . Fig 1.1 outlines the structure of the thesis chapters.

FIG 1.1 STRUCTURE OF THE THESIS

1 INTRODUCTION

2 STRATEGY OF DEVELOPMENT

3 DEVELOPMENT AND SPATIAL PLANNING IN IRAN

4 ECONOMIC DEVELOPMENT AND EPZs

5 FREE ZONES IN IRAN

6 ECONOMIC EVALUATION OF THE EPZs

7 CONTEXT FOR FUTURE POLICY

8 FUTURE OF EPZs IN IRAN & CONCLUSION

SOURCE: Developed by the author

Limitations of the study

1.17 As a pioneering study for Iran and work in a relatively poorly researched field, the lack of associated literature was one of the major problems in this study. It is extremely difficult to offer a balanced appraisal of EPZs globally. There are two main reasons for this problem: first, data on EPZs are often not available and are not standardised; secondly, assessments of the developmental contributions of EPZs have been largely dependent on the normative foundations of the researcher. As the ILO/UNCTC writes(1988, 143):

"In the absence of standardised, comprehensive, and accurate data on EPZs internationally, in- depth country studies such as are offered here are probably the best avenue to expanding our knowledge of EPZs and their relationship to economic development. Even additional statistical information on EPZs would be unlikely to provide much insight on such critical issues as their relationship to political development, the role of the state in economic development, and the creation of an effective political climate and administrative structures for fostering economic growth."

1.18 Thus, this case study is a valuable, timely and appropriate method in increasing our understanding of EPZs in many developing countries.

Limitation of data:

1.19 First of all, there were many unsystematic and varied standpoints behind the data available to the author, with different orientations which made it scattered and of erratic value. Some data was incompatible: for instance, there were two figures about exported goods from Iran both coming from official bodies.

1.20 The second limitation was the lack of focus on EPZs in the Iranian national accounts where EPZs are quite new as an issue. In other words, EPZ activities are not a separate item in the national statistics on trade and investment, and data concerning them has usually to be reconstructed from often incomplete information.

1.21 The third limitation came from the quality of information supplied by EPZ authorities. Much of this was incomplete and some of it evidently unreliable.

1.22 Besides these matters, the study is supported by a number of interviews and questionnaires in which the responses must, on occasion, be liable to subjective attitudes and data.

Methodology and Rationale

Sources

1.23 This study is based on analysis of data obtained from a field-work survey carried out by the author in 1993/94 and updated in 1995, and from published statistics and writing. This is placed in the context of an evaluation of the relevant written material in Persian and English which deals with theories of the role of EPZs in economic development. Data collection was based on the following:

Written material

1.24 Materials, such as books and articles, related to this study were collected from various sources in Persian and English.

Official reports

1.25 These were studied from sources in the Plan and Budget Organisation, Iran Statistical Centre, Economic Affair Ministry, Iran customs department, Bank Markazi (the Central Bank), the Iran Chamber of Commerce and Industry, and the Qeshm Free Area (QFA) and Kish Free Zone Authorities.

1.26 Official reports and statistics published by International Organisations such as IMF, World Bank, UNCTAD, ILO, EIU as well as published by some EPZ authorities were also utilised, including from zones in Dubai, Taiwan and South Korea.

Field work

1.27 To achieve the main aims of the research, the author carried out two extensive periods of field work in 1993 and 1994, which were updated in 1995.

1.28 Field research was conducted for two periods each of over two months in the Qeshm free zone, and for about two months for the other zones of Kish and Dubai. The field research in Iran's EPZs began in March 1993. The principal research focus was the QFA. In addition, some interviews were undertaken in Kish Island, Chahbahar and Dubai. The author also had a short visit to EPZ/FTZs in Singapore, Malaysia and Pakistan, to conduct interviews and to get data and reports related to the research task, particularly from the Malaysia Chamber of Commerce and Industry, the headquarters of Dubai's Free Zone and the Customs Department and Chamber of Commerce Industry of Singapore. The author has also made short visits to some European Free Port areas, including Hamburg, Rotterdam and Southampton.

1.29 As in the preliminary study in Qeshm Island, interviews of government officials, firms, managers and other persons involved in EPZs were a primary source of

information. Many of the research questions required the subjective perceptions of people related to the zones, and their views could only be learned through interviews.

1.30 To answer the research questions about the policy background, the author interviewed selected officials dealing with the issue such as: Vice President and Head of the Iranian Government's Plan and Budget Organisation (Mr Masoud Zanjani), the Vice Minister of Economic Affairs (Dr Gharebaghian), and the General Directors of the QFA (Mr Boshehri) and the KFZ (Mr Yasdan-panah).

1.31 Co-operation of the Vice President made it possible to interview a large number of officials, as well as to interview other persons interested in the EPZ's development.

1.32 The author appreciates the co-operation of these officials, and he regrets the unwillingness of ten other officials to participate in discussions.

1.33 Government and other available documents from the ministries and the EPZs were used to collect statistical and other empirical data. Published survey data, particularly by the Plan and Budget Organisation (PBO) and the Economic Affairs Ministry (EAM) were reviewed and analysed.

1.34 A few of the initial interviews in Qheshm island were conducted with a tape recorder present. But when it was found that interviewees were uncomfortable with having their comments tape recorded, subsequent sessions were documented only with written notes.

1.35 As Bruce Berg suggests (1989, 15) in discussing qualitative research methodology, a semi-standardised interview format was used for this study. This involved asking a predetermined set of questions in systematic and consistent order, but allowing respondents the freedom to digress. As Floyd Fowler asserts (1984, 86), an open-ended question format allows respondents to offer their perceptions and their own understanding of the subject by answering in their own words, and provides the opportunity to get unanticipated answers.

1.36 There were a number of primary research questions in the study (see Chapter 4) covering a broad range of issues concerning EPZs. To ask all of the questions in the questionnaires would usually have taken more than two hours, which in most cases was not possible nor appropriate. Thus, in order to keep interviews to the less than an hour, not all of the questions were asked of all respondents. Instead, questions most relevant to the respondent's position were asked. A few key respondents who are highly involved in EPZ policymaking and who were willing to be interviewed more than once were administered the complete questionnaire.

1.37 Because of the small number of new firms in the QFA, the author tried to interview representatives of the entire 'population' of EPZ firms, rather than to sample them. Fortunately in most cases in both Iran's and Dubai's EPZs the author was able to interview the general manager. Of the twenty six of Iran's EPZ firms registered as of mid 1993, nineteen of them were interviewed. The others were just opening and not yet operating, or the manager was not available or not willing to be met for an interview.

1.38 With some revisions and modifications based on the preceding interviews in the QFA, the survey questionnaires used in Dubai's FTZ were very similar to that for the QFA.

1.39 The author faced some practical difficulties when visiting Dubai's EPZ companies because some have two names, and also some firms refused to answer some questions which related to financial affairs.

1.40 With nearly 400 firms in Dubai, it was possible to interview only a sample of companies. Thirty-five firm representatives were interviewed in depth; a few other EPZ firms were asked only a limited set of questions. The author wanted to ensure that the following types of firms were interviewed: small firms, large firms, wholly foreign-owned firms, joint venture firms, older firms, recently opened firms. Trade and distribution, manufacturing and service firms were also important types. To ensure that all of these

types were interviewed within the limited time available to the researcher, a stratified sampling approach was used in Dubai. Using the technique described by Seymour Sudman (1983, 182), the author roughly divided the total population of EPZ firms into the subgroups listed above, and then selected firms from these subgroups. A combination of random and non-random sampling from these subgroups was conducted; in addition to random sampling, a number of firms were chosen for interview which had most of their business with Iran.

1.41 The author participated in an international conference (XIV World Export Processing Zones), held in Dubai in December, 1994. This three day conference sponsored by the JAFZ in co-operation with the WEPZA, included delegates from a number of multilateral agencies, consulting firms and from 28 Asian, Latin American, European and African countries.

1.42 During visits to the countries mentioned above and particularly in Dubai, the author had also interviews with several selected officials dealing with EPZ issues such as: Mr Sultan Bin Sulayem, the Chairman and Managing director of JAFZ; Mr Wong, the General Manager of the Taiwan EPZ; Mr Ian Dunning, the Director, Far East office of the Dubai Commerce and Tourism Promotion Board (Hong Kong); and Mr Mohammed Abdul Razaq, the Deputy General Manager of Singapore Customs.

1.43 Numerous documents were collected and examined during the field research. Some of the data collected by the author particularly during the first field-work in Iran were incomplete or inaccurate, and had to be corrected or not used. Most of the general statistical data on EPZ issues came from published reports of the Government, but much EPZ statistical data is not directly available and had to be calculated by the author from the reported data. Numerous newspaper articles have been printed on EPZs over the years and were helpful.

1.44 Government and parliamentary proceedings since the establishment of the EPZ were also examined, to see to what extent there has been debate on the evolution of the EPZs. Parliamentary debates since 1989 were also examined to document the progress of policymakers' thoughts on the EPZ.

1.45 There were problems raised from those interviewed. Some interviewees were reluctant to answer some questions especially in political, economic and particularly in financial and future plans aspects. Personal reasons or competition between firms, might have made some tend to keep secret some information.

1.46 In sum, a thorough study of the available data, of commentary and of government debate on the EPZs was conducted by the author. A broad and representative sample of people and firms were willingly interviewed in-depth. Thus, it is believed that in spite of

some difficulties in getting access to officials in Iran and the somewhat limited number of new firms available interviewed in Iran, the research is reliable.

1.47 Since the research is a completely original effort, it is acknowledged that it may suffer from certain unavoidable shortcomings. It is hoped and expected that the case study research will contribute to empirically-based theories on state-led industrial and export-led development, and also offer some general policy implications.

Chapter Two

DEVELOPMENT STRATEGY

Industrialisation Strategies: Past and Present

Introduction

2.01 After World War II, there was a serious attempt by most of the newly free countries gaining independence from their colonisers, to develop their economy and begin to industrialise. They believed that rapid industrialisation would be the short-cut to economic development, real independence and prosperity. They also believed that industrialisation would make it possible to set up growth rates, alter the structure of the economy, integrate the various sectors of the economy and scale down geographical, social and economic disparities inherited from the past, and to catch up with industrially advanced countries in labour and capital productivity and per capita income within the shortest period.

2.02 In order to achieve these goals, the independent LDCs followed development strategies and built up complementary industrial structures based on a wide range of production facilities, that would produce not only consumer goods but also the means of production for producing intermediate and consumer goods. In other words, their approach

to import substitution industrialisation (ISI) was for self-reliant development of their economies.

2.03 It was generally believed that capital-intensive Import Substitution Industrialisation had the ability to raise national income per capita, create investment capital, and save foreign exchange much faster than any other method (Brookfield, 2975, 72).

2.04 Some might refer to ISI as an "inward looking" development strategy by contrast with an "outward looking" strategy of export led growth. Inward looking development needs mobilisation of internal resources, capital, labour and motivation as the basis for sustained growth. In this chapter we will describe the context of economic development theory within which newly industrialising countries (NICs) have tended to initially adopt policies of Import Substitution Industrialisation (ISI), but have later introduced Export Oriented Industrialisation (EOI) policies as liberal market philosophies have become stronger. EOI policies frequently incorporate Export Processing Zones (EPZs), whose origins in economic theory are accordingly explained.

INDUSTRIALISATION STRATEGIES: PAST AND PRESENT

Origin of Import Substitution Industrialisation (ISI)

2.05 On the eve of the Industrial Revolution in the West, some attempts were made by Great Britain to substitute imports of textiles, paper and some other items from the East. The process was accelerated by the invention of steam and electrical power. Later on, those countries which industrialised after Great Britain went through a stage of protectionism i.e. all passed through a stage where the larger part of investment in industries was undertaken to replace imports. The European countries (other than the UK) and the USA followed the strategy in the second half of the 19th century, and Japan followed the same course in the late 19th and early 20th century. In these cases, the classical views following Adam Smith were in contradiction with the process of industrialisation, so that these countries had to remain within the prevailing pattern of division of labour. It is well known that in contradiction with the classical view of a free and open economy, the government of the leading industrialised countries played an important role in the early process of ISI for protection and encouragement of infant industries. Another important characteristic of industrialisation in the 19th century was the national character of those strategies of growth.

2.06 After the formation of world monopoly powers, the process of industrialisation of the less developed countries (LDCs) could not be carried out on the same lines as in the time of free competition.

2.07 In the early 20th century in Russia, the newly emerged government of revolution adopted a new type of strategy aimed at separation from the system of division of labour, at self-reliance, and at a highly integrated economy and rapid economic development. The new Soviet economic development strategy qualitatively differed from the previous methods of development strategy. It stressed active and direct participation of an organised public sector in the import substitution strategy of industrialisation. In order to provide conditions for development, it was said that the new Economic Programme was the fundamental, decisive and overriding problem, to establish a link between the modern sector they had begun to create and the peasant economy by which millions of peasants obtained their livelihood. The Soviet model of development in the First Five Year Plan adopted unbalanced growth in favour of heavy industry. This was because the new Soviet government required rapid industrialisation and, for political reasons, a highly sophisticated defence system (Mehta, 1978, 100-117). Planned economic development as followed by many developing countries was in contrast with the pre-Russian revolution patterns of export led growth. In fact, the October revolution was a turning point for adopting an ISI strategy of inward looking development.

2.08 There are various reasons why the countries of Latin America, Africa and Asia did not undergo ISI at the time of, or right after the European industrialisation. Apart from the reason of socio-economic structure, other reasons were that attractive external markets for primary exports benefited the elites, there was lack of an entrepreneurial class and of a skilled labour force, there were infrastructural, managerial and market constraints, and low administrative

capacity forced the Latin American countries to follow free trade policies which blocked any possibility of ISI (Baer, 1972, 99-123).

2.09 The process of ISI accelerated after 1945, when the newly emerged independent countries demanded a more rational international economic order. Nationalism and patriotism combined with the desire for self-reliance and rapid economic development. Brazil, Mexico, Argentina, and India were leading countries adopting the strategy of ISI in the post-war era. The success of ISI in these countries depended on a degree of structural change in social and economic aspects.

2.10 To sum up, political factors in general and war in particular played an important role in adopting self-reliant development strategies. Distortion of international market competitiveness as monopoly powers emerged, domestic income generation, planning for an overall strategy of economic development, and shortage of foreign exchange were other incentives for industrialisation in the modern history of economic development.

Classical and Keynesian Views on Trade and Development

2.11 Regarding the relations between international trade and development in developing countries, the classicals believed in "trade as engine of growth"(Smith, 1952, 22-29). Alfred Marshall wrote in the early 20th century that the "causes which determine the economic progress of nations belong to the study of international trade" (Marshall, 1919, 47-49). The

classical economists advocated the theory of comparative cost advantage based on relative efficiency in specialised lines of production (Meier, 1976, 397-407). In the words of Nurkse, "the case for international specialisation is firmly based on considerations of economic efficiency". He says that the world is not rich enough to be able to ignore efficiency. The optimal pattern of specialisation is governed by the principle of comparative advantage. This principle of comparative advantage remains as valid today as in Ricardo's time (Nurkse, 1966, 20-24).

2.12 Adam Smith, founder of the classical school (1723-1790) outlined the overall process of economic development by suggesting a genuine capitalist path of development. He emphasised a laissez faire economy based on free competition and free trade which automatically harmonised the process of economic development in an open society. Smith, in his book "Wealth of Nations", suggested that the growth of a nation's wealth depends upon(a) productivity of labour used and technological determination of division of labour, and (b) capital accumulation.

2.13 According to Smith, development means provision of these two factors. He emphasised the availability of capital in the process of industrialisation. Smith expressed his view about industrialisation when a new industrial capitalist class was emerging following the industrial revolution in Britain. The new phase of development required an overall formulation. In those times, mechanisms of the world market were determined under free

competition. According to J.B. Say (1953), during the process of economic development "whatever is produced is consumed". Therefore, there is no problem of overproduction and unemployment. The growing economies of those times were capable of employing all means of production in the initial stages of development.

2.14 The traditional theory of trade and development was chiefly popular in the 18th and 19th centuries, when the world was enjoying more or less free competition in the international arena. The process of development according to the classical school would take place without government intervention, on the following assumptions: (a) Adjustability and mobility of supply and demand of labour at different real wage rates, by considering full employment equilibrium ; (b) taste, technology and aggregate demand remain constant;(c) income is assumed to be generated and automatically reinvested. Therefore, supply creates its own demand and there is no problem of over production and unemployment.

2.15 The above assumptions of the classicals were based on long term equilibrium in the economy. Although some of the classicals studied short term fluctuations in the labour market, they admitted that such fluctuations would be short-lived and full employment would be attained sooner or later. However, in spite of some modifications of classical theories of development, critics regard these to be an analysis of full static equilibrium with respect to unrealistic assumptions and so considered to be applicable in the age of Adam Smith but not in the late 20 th. century.

2.16 While foreign trade played a vital role in economic development in the 19th century it harmed the traditional industries, for it opened up expansion of demand for primary products but did not keep pace with the growth of demand for industrial products. Therefore due to low competitive gearing on the primary products (Nurkse, 1959, 27), the primary product exporting countries tended to industrialise and initially rely on their own home markets.

Critical Views of Classical Theories of Economic Development

2.17 In the 19th century a hot debate started regarding the validity of free trade between various parties, when international capital entered the world market and monopoly powers started to arise all over the world. The domination of monopolies gave rise to some nationalistic views among economists of developing states. As the result of the domination of monopolies, the idea of protectionism spread into economic thoughts. Friedrich List (1789-1846), a German economist, introduced industrialisation through protection. He was called a nationalist economist. His theories are still valid for most developing countries adopting a protected industrialisation of their economy. He introduced the oldest argument for protection of an infant industry.

2.18 The core of the infant-industry argument is the existence of some kind of internal economies. A small industry cannot prosper before it becomes competitive and harvests all the economies of scale. When the industry has become sufficiently developed, tariffs can be

dismantled and free trade can be allowed. The country List had in mind when he developed the infant industry argument was Germany of the 19th century. Great Britain was then the leading industrial state, and German industry had difficulty in competing with the older and more established British industry. Moreover, List saw industry as a prerequisite of progress. He said "Manufactures and manufactures are the mothers and children of municipal liberty, of intelligence, of the arts and sciences of internal and external commerce, of navigation and improvements in transport of civilisation and political power (List, 1988,51-59).

2.19 According to List, each nation passes through five phases of economic development: savagery; pastoral life; agriculture; agriculture and manufactures; manufacture and trade. In the last stage, which is also called the matured economic stage, the society enjoys significant trade activities with other nations. List marked that a free system of transaction can take place in the first three stages. When the economy enters the fourth stage of industrialisation, a protection policy is necessary. When the fourth stage is completed and the economy grows strong and competitive, protection would be relaxed. The infant-industry argument of List, in fact, was a limited and temporary policy for the industrial sector. It did not cover protection of agriculture.

2.20 In the nineteenth century, many leading economists in the USA, including Carey and Patten, favoured protectionism. They modified the nationalist ideas of List. Carey supported protectionism not only for industry but also for agriculture. Carey and Patten favoured a

"comprehensive economy" rather than a specialised agrarian economy, in which national resources could be maximally utilised. Patten said that a "dynamic economy" could develop only through protection and rational exploitation of economic potentiality in the United States (Asli, 1985, 118-119).

2.21 J.M. Keynes, founder of a new school (1883-1946), brought about a revolution in the theory of economic development. Keynes published his "general theory" at the time of the Great Depression. Due to the contemporary capitalist crisis, his thesis concentrated on short time measures and he is well-known by these words" in the long run we are all dead". For long term development, Keynes in his essays entitled "Economic Possibilities for our Grand Children" (1930), stated that economic progress depends on (a) our power to control population, (b) our determination to avoid wars and civil dissension,, (c) our willingness to entrust to science, and (d) the rate of accumulation as fixed by the margin between our production and our consumption (Keynes, 1970, 254). Regarding industrialisation based on import-substitution in some newly independent countries, Keynes stated that:

"a part of the educated class seem to desire, with patriotic fervour, the industrialisation of their country with the greatest possible development of manufacture...her future prosperity is to be sought almost entirely in the application of more skill and knowledge and specially of more capital in methods of agriculture. Every diversion of indigenous capital from agriculture, where her relative advantage is great to industries will be to the detriment of her economic prosperity". He like the classicals, believed that instead of diversion of resources from

agriculture to the industrial sector, the export sector should be encouraged within the existent primary sector. Keynes never suggested an active role for the public sector in the process of economic development in the long run. In fact, he argued for government intervention only for adjustment of the economy in the short-run (Keynes, 1970, 254).

2.22 Neo-Keynesians like Harrod and Domar tried to reformulate Keynesianism into a more comprehensive long period and dynamic theory. The theory of economic growth went through a number of stages, from Keyne's macro-economic theory to the emergence in the mid-1950s of the Keynesian version of the theory of economic growth, for which the Harrod-Domar model provided the initial basis.

2.23 Among the neo-classicals, Haberler, Nurkse and others put light on development theory within the framework of the classical trade and development concept. Haberler highlights four important roles of international trade in economic development. These are: (a) It provides material means, viz. capital goods, machinery and raw materials, which are indispensable for economic development, (b) it is an important source of technological knowledge, of managerial talents and of entre-preneurship, (c) it is a transmitter of capital, and (d) it brings an atmosphere of healthy competition by checking internal monopolies and restrictive trade practices (Haberler, 1989, 11-14). In supporting the idea of "trade as an engine of growth", the neo-classicals refer to the historical development of the present advanced countries. Their initial development was based on the linkage effects of the export

sector with the other sectors of the economy. The development of an ever expanding external sector (or leading sector) in the past had been the dominant process of economic development in the present advanced countries. The growth sector in some countries had been no more than a single sector. Cotton and wool textiles led in Britain's economic take-off which occurred during 1793 to 1803. Great Britain's economic development took place through the import of cheap raw materials from its colonies in Asia, Africa and America. After the industrial revolution, Britain could achieve a high level of efficiency and obtain low cost exportable goods. As a result, Britain expanded its exports and earned significant foreign exchange and so a gold inflow to the country, and hence other sectors expanded through backward and forward linkages. The process of industrialisation took place via international trade expansion which in turn gave rise to the idea of "trade as an engine of growth".

2.24 Foreign trade also played an important role in France during 1830 to 1860. In Japan, the silk industry was an engine of growth in the late 19th and early 20th century. Japan gained from this leading sector by introducing highly efficient management and low cost export goods. The United States received a large inflow of labour and foreign capital from Europe by which it attempted expansion by exporting food stuffs and raw materials.

2.25 The neo-classicals claim that so far as industrialisation needs foreign exchange to meet the needs for materials of the newly emerged industries, the traditional export sector must develop to support the import bill of equipment technologies, capital, raw materials and skilled

manpower. As a result, the condition for economic development would be the development of leading sectors to push other sectors.

Contemporary Economic Thoughts on Import

Substitution Industrialisation (ISI)

2.26 There are various modern economists from different schools with different definitions of ISI. Though the term ISI is used very widely in the literature on economic development and international trade, it is not a very clear-cut analytical concept. Various meanings are attached to the term depending on the purpose in hand. In general, the process of ISI refers to the attempt by economically less developed countries to break out of the world division of labour. In other words, ISI refers "simply to the take-over of an existing domestic market from the foreign producer by prohibiting his imports in one way or another" (Bruton, 1967, 123-143). ISI is defined clearly by the UN economists. It is "considered to exist in the case of a given commodity whenever its domestic production increases at a faster rate than importation, so that imports of that commodity constitute a decreasing proportion of total supply"(ESCAF, 1963, 28).

2.27 In support of ISI, Prebisch notes that a more rational policy would have given priority to ISI in respect of goods which would be produced under more favourable conditions than others, not only consumer goods as has been generally the case, but also raw materials, intermediate and capital goods. Prebisch suggests that higher industrial costs in developing

countries do not mean that an industry is not economic. He emphasises the income and linkage generating effect of industrialisation (Prebisch, 1959, 251-71).

2.28 One should also differentiate between direct and "technological" import substitution. In the usual sense, ISI may refer to the replacement of a given imported commodity by the domestic production of the same commodity. This is called "direct substitution". For example, domestic production of steel may be replaced by imports of the same goods. Moreover, ISI may also refer to the substitution of a given imported commodity by another type of commodity which is more or less a substitute for the former. In this case, import of a scarce commodity may be substituted by a commodity which can be produced by more available inputs. For example, imports of copper may be substituted by zinc, which can do the same job in the process of production. This is called "technological" or "functional substitution" of imports.

2.29 Nowadays, the latter form of substitution is quite significant from the point of view of scarce resources. Research and development helps in creating the opportunity to produce synthetic raw materials and other substitute products. This form of ISI is used for the domestic production of end products. In developing countries, functional substitution has a great importance in the direction of rational utilisation of available resources.

Process of Import Substitution Industrialisation

2.30 The process of ISI can be classified according to the change in import dependence of various sectors (Panchamukhi, 1989, 77,-79). It may involve changes in total demand for imports. In the first case, dependence of a commodity on imports may be falling while dependence on imports of the same sector may be falling, but the import of final commodity is rising. In the second case, ISI may be indicated by a change in the ratio of imported input per unit of output. The third case may be indicated by a change in the share of imports in final demand for a commodity. In the fourth case, imports of both finished goods and inputs may be rising. Finally, import substitution may take place at the expense of a fall in export of a staple good. In this case, an exportable traditional raw material or energy may be utilised as an input in domestic industry, to produce processed or semi-processed goods which earlier used to be imported. The structure of the development strategy and available resources would determine which type of ISI would be adopted at any one time. Therefore, the various processes of ISI have a great impact on the process of growth in different sectors. If priority is given to import substitution of main industries and export substitution, it may lead to radical structural changes. Such a strategy may prove successful within a long term development process. Import substitution of final products may lead to rapid short-term growth, with insignificant change in overall socio-economic structure and inter-industry linkages.

2.31 Many developing countries have faced structural constraints during the process of industrialisation. These countries adopt ISI policy through the development of consumer goods in the initial steps, and hence can not meet the essential conditions for advancement of their newly emerged industries due to defective backward and forward linkages.

The following options have been classified by Raj and Sen for countries which adopt ISI. These are:

(a) countries which prefer to import investment goods, raw materials and intermediate goods, fuel, etc. to manufacture consumer goods.

(b) Those countries which give preference to imports of capital goods to make investments which, in turn, produce consumer goods and intermediate goods and foster development of domestic raw material supplies.

(c) Countries opting to import capital goods to make capital goods which, in turn, are used to produce other capital investment, intermediate and consumer goods (Raj and Sen, 1961, 43-52).

2.32 The first two options for replacement of imports show that with investment in either sector, the absolute rate of growth of consumption will rise but as a decreasing proportion, ultimately tending to zero when all the available foreign exchange has been spent on imports of capital goods to produce additional intermediate and consumer goods. But the option of importing capital goods to produce capital goods will lead to more linkage effects, and a "larger flow" of capital goods that, in turn, will produce investment goods and ultimately

consumer goods. This process leads to "faster rate of growth over time". Raj and Sen supported the last option for the process of ISI despite the faster rate of growth of the two first options in the short-run, and capital constraints in most of the LDCs.

2.33 Due to shortage of capital and as a result of market constraints and lack of skilled labour, most of the developing countries are adopting the first option. Capital formation is the main constraint in developing via the third option in countries lacking sufficient foreign exchange earnings, and those suffering from fluctuation in export earnings. The question may be raised since the shortage of capital is the main constraint to industrialisation, what strategy will suit the oil producing countries (Iran, Algeria, etc.) which enjoy capital availability and vast mineral resources? Moreover, these countries face export instability due to fluctuation in the price of minerals and other raw materials in the international market. Therefore, a comprehensive industrialisation in oil producing countries is not only by substitution of imports but also by diversification of exports. Oil producing countries can utilise their foreign exchange surplus for domestic resource based industrialisation. These countries usually industrialise through capital intensive projects due to low population density and capital availability.

2.34 In countries with deficient capital formation or with highly unstable export earnings, ISI is initiated usually through the growth of consumer goods industries. Although heavy industries produce more linkages, consumer goods, according to Hirschman, produce

backward linkages so that the country is able to produce intermediate goods as a result of the further backward linkages, and capital goods will be produced indigenously. In other words, there is a sequential process during the industrialisation(Hirschman, 1968, 22-23). In reality this sequence has been found unrealistic and difficult to attain. In other words, backward linkage creation is quite difficult for four principal reasons:

(1) The Generation of Structural Imbalances:

There are four types of imbalances:

(a) Sectoral imbalances:

Sectoral imbalance between industry and agriculture, within the industrial sector itself, between capital and consumer goods, and between the leading export sector and lagging sectors in a dualistic economy. An inward looking industrialisation strategy intends to pursue inter-sectoral integration and diversification of the economy.

(b) Regional imbalances and disparities:

These lead to the concentration of economic activities in a particular region and under utilisation of resources in other parts. This has usually happened in newly independent countries which adopted semi-planned industrialisation by utilising the resource in the most profitable and suitable area from the point of view of human and physical capital, and of climatic condition. The largest cities were mostly preferred for capital investment by the private sector in these countries, which led to a dualistic development with least linkages to other areas.

(c) Social Imbalances and Income Disparities:

The majority of the population in developing countries suffer from illiteracy, traditionalism, backwardness and poverty. Most of the women are not involved in productive activities. Therefore, as a result of class conflict and social unrest the development programmes cannot be smoothly pursued. The urgent measures for effective functioning of backward linkages are eradication of poverty, income inequality, illiteracy and other structural bottlenecks.

(d) Financial imbalances and inflationary pressures due to defective monetary policies (Kirk and Nixon, 1983, 20-20).

(2) Technological Dependence:

According to Merhav, as a result of technology imported from advanced capitalist countries, monopoly centres are created in LDCs. Due to market restrictions and dependence upon imports of capital goods, the monopolistic industries turn sub-optimal and hence a sustained growth cannot be assured. Therefore, the initial wave of industrialisation through the establishment of light industries cannot be diversified (Merhav, 1969).

(3) Lack of Domestic Demand:

As a result of pursuing ISI in the absence of structural changes and interdependence of industries, domestic demand (including inter-industry and final demand) remains inadequate in

relation to the production capacity of the industrial sector. ISI is neither an income generator nor a wealth distributor(Santos, 1973, 47-80). Thus, in order to create sufficient demand there must be structural changes in the socio-economic environment. In most developing countries structural changes did not materialise, and hence the ISI strategy faced grave difficulties. There are various interpretations of structural changes by various schools of economists. Neo-classicals refer to structural changes by change in supply patterns and by making production processes more efficient and profitable, while structuralists express the same notion for overall socio-economic transformation and overcoming of scientific, technological and cultural backwardness. In the broadest terms, transformation covers removal of a dualistic society by transferring the centre of decision-making towards domestic interests, by redistribution of wealth and power, by democratisation of the political context, and by elimination of backwardness of infrastructure.

(4) Failure in Advancing New Industries to be Export Industries:

Since domestic markets in developing countries are small and the costs of indigenous production are high as compared to the world market, economics of scale cannot be attained. So long as advanced capitalist states are not willing to share their market with developing countries and a permanent system of tariff protection is imposed, hence diversification and efficient industrialisation cannot take place.

Impulses of ISI in LDCs

2.35 Hirschman has pointed out that four major impulses behind industrialisation strategy are (1) war, (2) income expansion, (3) balance of payment difficulties, and (4) adoption of development policy (Hirschman, 1968, 1-12). Many developing countries have attempted an ISI strategy during war periods. During war time, the industrialising countries face great difficulties in obtaining required manufactured materials. The Soviets attempted an ISI strategy in the post-revolution period following the blockade of the economy and surrounding of its territory by hostile countries. However, the concept of "the war effect" of ISI is wider than what can be simply referred to as "hot war". It also covers international tension i.e. cold war. Income expansion also greatly contributes to ISI as was the case with many oil countries; as a result of income expansion a new market emerges. Such a situation creates a double edged dilemma. The boost in income per capita creates demand but, at the same time, short run new domestic industrial supply cannot be provided. Therefore, while an increase in income per capita helps in capital formation, at the same time imports increase to fill the short-run gap of demand and supply. Therefore income expansion has both a positive and a negative effect on ISI.

2.36 Developing countries may adopt ISI strategies as a response to foreign exchange difficulties, as the prices of exportable raw materials do not increase proportional to imported manufactured goods. Moreover, in mono-exporting countries fluctuation of prices leads to

grave difficulty in foreign exchange earning, as is mostly the case in oil producing countries. Therefore, this is an important motive force behind ISI.

2.37 Many developing countries adopt ISI for initiating structural changes and development. In this case, ISI is conceived primarily as a means of achieving economic independence and growth, putting the reform of economic and political structure before a sustained, broadly based and widely acceptable pattern of development. The impulse of development strategy aims at structural changes of a dualistic economy and diversification of domestic production in mono-producing countries. Hirschman's argument for diversification of domestic production is based on three types of linkage i.e. production linkages, consumption linkages and fiscal linkages. The original linkage concept (production linkage) mostly considers the procurement and elaboration of the "staple itself", while he adds to it other linkages from new income earned as a result of producing staple and export goods which will be spent on imports. Once these imports reach a point where they can be sustained by domestic industries, they have established what is described by Hirschman as "consumption linkage". Another effect is fiscal linkage, which enables the state to "tap the income streams from the staple to various parties" through taxation of mining and plantation outputs, which contrasts with more direct production linkages. Hirschman agrees that the most favourable condition is a combination of these three linkages, but that "situation is not likely to occur"(Hirschman, 1981, 65-66).

2.38 Away from physical linkages, there are various super-structural factors which influence the process of industrialisation. Such an effect is important in developing countries due to the existence of specified traditions and the psychology of the masses, and the political ambitions of the policy makers. Traditional factors are in the historical background of every society, but change as do modes of production. But these changes do not take place simultaneously, and the prevailing traditions and social constraints of the previous mode of production remain within the society for quite a long time, as change in physical factors takes place faster than in mental factors. However, due to inadequate data in these regards, most researchers neglect the impact of super-structural factors in development strategy.

Export-led Industrialisation

2.39 By the 1950s and 1960s, Import Substitution Industrialisation (ISI) dominated the industrialisation strategies of the large LDCs. The concept of export-oriented industrialisation in the mid-1960s appeared to many countries as the most appropriate development strategy.

2.40 Since the late 1960s, an increasing number of LDCs have adopted Export-Oriented Industrialisation (EOI) by the production of manufactured goods for external markets. The earliest adherents of this approach were the Republic of Korea, Taiwan, Singapore and Hong Kong, who were joined subsequently by a number of large semi-industrialised LDCs such as Brazil, Mexico and Argentina, which shifted from their earlier ISI strategy to policies aimed at encouraging an outward-looking strategy of EOI (Meier, 1983, 671). In fact, an inward-

looking strategy of import substitution shifted in these countries to an alternative outward-looking strategy, targeted directly at exporting manufactured goods through production for external markets. The market in the neo-classical view determines most allocations and prices. Hence private firms, governed by markets, determine what is produced for the home market and for export. According to this view, the outward-looking strategy is simply the outcome of market forces. Export-oriented policies require that firms compete with other international producers. These policies consist of liberating many aspects of their economy such as the tariff and quota regimes and the availability of foreign currency, in order to give exports a competitive advantage. Although outward-looking development has deep roots in neo-classical economics, the strategy is defined as much by its practice in East Asia as by market-oriented theories of development. The newly industrialising countries of Singapore, South Korea, Taiwan, Hong Kong, have been the exemplars of outward-looking development. These developing countries of Asia adopted export-oriented policies early-on, and have experienced very rapid economic growth and have been labelled as Newly Industrialising Countries (NICs). In the way of outward-oriented development policies, in the late 1960s many LDCs began to create Export Processing Zones as tools of Export Promotion Strategy, and as a means of launching their export-industrialisation. Lacking sufficient domestic capital, entrepreneurship, managerial skills and capacity to build an industrial infrastructure nation-wide, many LDC governments have chosen to establish EPZ enclaves. As Bail (1984, 20) suggests, governments see EPZs as a necessary transitional stage in their development that will rapidly promote industrial export manufacturing.

Types of Export-led Growth Strategy (E.L.G.S)

2.41 Originally there were three types of E.L.G.S:

1- Export promotion which mainly starts after ISI. Indeed, those groups of industries which passed through ISI could start (or enter in) this stage. That is why the nature of commodities does not differ from those which had been supplied to the home market.

2- Export-orientation is to produce for foreign customers, which is why foreign customers' income, taste, need,...etc, are important considerations.

3- Export-platform which is mainly concentrated in a corner of the national economy without any relations or linkages with it.

Export Substitution Industrial Strategy

2.42 By contrast with industrialisation via import substitution, there is an increasing interest in the potentialities of an industrialisation strategy that emphasises export substitution, through non-traditional exports such as processed primary products, semi-manufactures and manufactured commodities, in substitution for traditional primary product exports. The process of industrialisation through export substitution is not limited to the narrow domestic market as is the import substitution process. Meier (1978,673) pointed out that the growth performance of the countries oriented toward export promotion appears to have been more satisfactory than that of the import substitution oriented countries. Meier adds that from the

theoretical point of view, there are four reasons why export promotion is adopted and may be the superior strategy:

(1) Generally speaking, the costs of excess export promotion are more visible to policy makers than are those of import substitution.

(2) An export-oriented development strategy generally entails relatively greater use of indirect, rather than direct interventions.

(3) Exporting firms may be sheltered on the domestic market, and must face price and quality competition in international markets.

(4) If there are significant indivisibilities or economies of scale, an export-oriented strategy will enable firms of adequate size to realise them. If indivisibilities and/or economies of scale are important, an export-oriented strategy will provide better incentives for expansion of capacity in existing lines. As such, an export-oriented growth strategy is better suited to economies of scale than is an import-substitution strategy, where firms are generally limited in their horizons by the size of the domestic market.

Many of these reasons are still relevant as an examination of recent economic development theories that look at global economic change and rapid industrialisation show. These are considered in the next section.

Recent Developments in International Economics and the Theory of Industrialisation in Developing Countries

The Policy inheritance

2.43 Industrialisation in developing countries was given impetus by the breakdown in international trade during the Second World War which necessitated some industrialisation in the colonies, by the depression of the 1930s in developed countries, and by the fluctuating or deteriorating prices of agricultural commodities.

2.44 There are three main reasons why developing countries adopted an import-substitution strategy rather than producing for export. First, post-colonial societies were acutely conscious of depending too much on their previous masters; they wished to became self-sufficient. Second, export production was not feasible then because of the inability of developing countries to compete with established producers. Third, ISI allowed developing countries to achieve faster growth of industrial activities by national entrepreneurs; an export-oriented strategy would have necessarily involved extensive foreign ownership in manufacturing.

2.45 ISI led to a rapid increase in industrial production in most developing countries as both local and foreign entrepreneurs took advantage of government financial incentives

and market protection. However, ISI led to the creation of high-cost industries because small domestic markets meant full economies of scale could not be realised. In the first stage, this was not a major problem because basic food and consumer goods had large markets, but latterly it became a major problem as countries tried to proceed to the second round of import substitution, involving more specialised goods which needed large markets for efficient production. ISI could not generally reduce external dependence and in many instances raw materials were imported. More importantly, firms in developing countries had bought or licensed technology from developed countries. Finally, according to Chandra (1992), the heavy involvement of the state, particularly through state-owned enterprises in the form of public sector investment in manufacturing, was proving to be a major drain on resources. Thus, the need to earn foreign exchange and, in many cases, pressure from international agencies particularly the World Bank and the International Monetary Fund led to adoption of export-oriented industrial policies particularly since the 1960s, when most developing countries began to orientate their policies to produce for the world market. In fact, the use of export processing zones became a key element in the promotion of export-oriented industrialisation.

Import substitution or export orientation?

2.46 During the past three decades, import-substitution policies have been severely criticised generally by many developing country analysts and by the international financial community, particularly the World Bank and the International Monetary Fund. They have criticised ISI for having produced an inefficient structure that has been incapable of solving the unemployment problems of developing countries. As a result, these policies have been modified, their excesses eliminated, and a strong export orientation has been introduced.

2.47 On the other hand, world experience has indicated that excessive inward-looking policies inhibit in the long run, because domestic economies are deprived of a powerful source of information, technology and particularly of competition.

2.48 Some writers such as Chandra (1992) and Wallace (1990) argue that, although ISI has produced an inefficient industrial structure in developing countries, import substitution industrialisation has nonetheless often served an important purpose. Without it , industrial development would have been minimal or non-existent. Import-substitution industrialisation in many countries such as the Newly Industrialised Countries (NICs) has helped prepare an industrial base for successful forays into exporting (Chandra, 1992). It is argued that all countries characterised as NICs began their industrialisation with import

substitution, and it has not been shown by critics of ISI that these, or other countries, could have become successful exporters of manufactured goods without the assistance of ISI in the initial stage of their industrialisation programmes. The failure of import-substitution industrialisation lay not in the strategy itself, but rather in the inability of many countries to review their policies and to reduce their high levels of protection to domestic manufacturing industries, and to adjust their incentive systems to remove disincentives to exporting.

2.49 According to Chandra (1992), the developing countries need to formulate their industrial strategies with both the domestic and international situation and prospects in mind, and to allow as much exposure to international economic forces as can be accommodated by the domestic industry without it being swamped.

Privatisation as a policy for export-led industrialisation

2.50 International experience, particularly in the last two decades, shows that a major feature of export-led industrialisation has been the growing degree of privatisation. The external debt-servicing problems of state-owned enterprises and emphasis from international financial organisations have been amongst factors which have led almost to a privatisation movement in the world, both in developed and developing countries. The United Kingdom incorporated the Thatcherite belief in limited government in providing

the lead in privatisation, transferring a third of its nationalised work-force to the private sector. Even countries like the Soviet Union and China which were for so long flag ships of the socialist model of development , began to transform their social and economic systems to include more private production and distribution.

2.51 International experience, particularly in developed countries, shows that privatisation can be achieved in many ways, including the sale of public corporations to employees, to the public, or to other corporations; the use of private management in state-controlled enterprises; the conversion of state-owned enterprises into private-sector-type organisations with a commercial mandate; the contracting out of services previously provided by the state; and the introduction of user fees for services. During the last decade most developing countries' governments have tended to reduce protection for state-owned enterprises, forcing them to compete with private local and foreign corporations.

2.52 Chandra (1992, 103) has pointed out that for developing countries, privatisation is not a carefully thought -out philosophical change, but an urgent practical necessity; they no longer have the money to subsidise their enterprises and cannot obtain new loans until they agree to the reforms proposed by international financial institutions. Some developing countries are using privatisation as a policy to reduce their external debt through complex debt-for-equity swapping arrangements. However, even countries not

immediately under financial pressure are privatising to reduce their economic problems such as budget deficits, and generally to introduce dynamism in their economies.

2.53 According to Chandra (1992), privatisation can, however, create some problems for developing countries by significantly raising the level of foreign ownership of the economy, and by preventing governments from being able to redistribute incomes to disadvantaged groups and regions. He argues that there is no clear-cut evidence yet that less government necessarily means better or faster industrialisation. The experience of countries like Taiwan and South Korea, which have performed exceedingly well in industrialisation, show that a well-turned government interventionist policy is very important in industrialisation

Internationalisation and globalisation of economic activities.

2.54 The world economy can be described along two distinct, but interrelated dimensions: first, market exchanges and, second, production activities that link consumers, producers and suppliers within and across national economies. The extent to which these economic agents engage in cross-border relations varies with market size and location, technological and other domestic economic advantages. The openness of the policy framework and the links established through markets or production activities can involve many elements, in particular capital flows, goods, services, people, technology,

information and ideas. International integration describes the spread and deepening of these linkages across national boundaries.

2.55 As Dicken (1992) points out, 'the current geographical structure of the global economy is the outcome of a dynamic and complex interaction between TNCs competitive strategies on the one hand, and national government strategies on the other'. He argues that internationalisation, indeed globalisation of economic activities implied by the growth and spread of transnational corporations, is further increasing the degree of interdependence and integration between national economies (Dicken, 1992 ,135).

Foreign Investment and industrial development

2.56 Third World industrialisation has been based mainly on domestic resources, but the shortage of capital, technology and international marketing expertise, and the urgency of the development question has forced most developing countries to seek external financing and other assistance for their development. International experience has shown that foreign direct investment (FDI) has played a major role in many developing countries industrialisation, as well as their international integration.

2.57 Since the mid-1970s, many developing countries have changed their policies on foreign direct investment (FDI) and, in particular, are increasingly turning to FDI as a

source of capital, technology, management practices, know-how, access to markets and other resources that are vital for sustained economic development. The growth in FDI has been embedded in the internationalisation of production of goods and services. The internationalisation of production in manufacturing was particularly important in establishing FDI flows into developing countries. Many factors have fed the growth of FDI; several developed countries became major capital exporters, such as Japan, and the flow of services and transnational service corporations have emerged as major components in the world economy.

2.58 Another major transformation has been the sharp growth in the numbers and economic weight of transnational corporations (TNCs), firms that operate in more than one country through affiliates, subsidiaries or other arrangements.

2.59 UNCTAD's World Investment Report (1994) shows that the major channel of foreign direct investment is the transnational corporation (TNC). The term 'transnational corporation' implies operations in at least two countries, including the firm's home country. Between one-fifth and one-quarter of total world production in the world's market economies is performed by TNCs. UNCTC (1994) has identified a core of 600 transnational corporations in mining and manufacturing with annual sales of more than $1 billion in 1985.

2.60 According to UNCTC (1993), the transnational corporation is the single greatest force in the accelerated development of a global economic system.

The Role of Foreign Investment and Transnational Cooperation in Developing Countries Industrialisation

2.61 In recent decades, international capital flow has experienced a dramatic increase. The major channel of international capital flow has been foreign investment. Many international agencies and academic experts have tried to explain the flow's role. There are four main theories which aim to explain the role as follows:

1) Market power theory; 2) Internationalisation theory; 3) Competitive international industries approach; and 4)Macroeconomic developmental approach (Cantwell, 1991).

2.62 These theories have drawn on various separate branches of economic theory, such as: the theory of trade, international capital movements and globalisation of economic activities, location, industrial organisation, industrialisation and the firm.

2.63 Hymer's (1970) market power theory states that international production is a means by which multinational companies (MNCs) increase the extent of their market power to dominate their respective markets. It results from the limitation of domestic

markets and results in a repeat abroad of the market enlarging process which MNCs have experienced in their domestic market. By investing in foreign operations, MNCs reduce competition and increase barriers to entry in their industry.

2.64 Internationalisation theory which has been developed by Bulkley and Casson (1976) is based on criticism of neo-classical economics. It lays emphasis on the efficiency of transactions between units of productive activity, and states that the transaction costs of an administered exchange are lower than those of market exchange. So MNCs tend to internalise an externality into a centralised and hierarchical control empire.

2.65 The competitive international industry approach is based on Vernon's (1974) later version of the production cycle. It argues that innovation is location-specific as well as firm-specific.

2.66 The macroeconomic developmental approach comes in various forms, and can be particularly traced back to Vernon's (1966) earliest version of the production cycle model. The theory argues that import-substituting investment need not come from a sector in which the home country has a comparative advantage. It also adds that outward direct investment tends to follow a development course over time; beginning from resource-based activity with fairly limited technological requirements and then shifting towards gradually more sophisticated types of manufacturing.

Factors which affect foreign investment

2.67 According to Tsai (1991), factors affecting-foreign investment can be divided into two groups, demand-side and supply-side factors. The demand-side factors consist of political stability, market size, labour cost, regional economic integration and the incentive package offered by the host country. The supply-side factors include economies of scale, production life cycle, oligopoly reaction, intangible assests and internalisation.

2.68 An OECD study (1993) has ranked the factors as follows:

1) stability of investment climate; 2) the size and structure of the host country's market; 3) technological infrastructure; and 4) other conditions.

2.69 Stability of investment climate is the most important factor reflecting the stability of general political, social and economic conditions, and the prospect of earning a profit without relying on special government favours.

2.70 The size and structure of the host country's market is usually measured by the volume of GDP and the structure of the market as measured by the level of GNP per capita (Frank, 1980).

2.71 Labour quality, industrial relations, R&D capability, and proper transportation and communication in the host country are amongst the criteria used to evaluate the situation of technological infrastructure (OCED 1993).

2.72 Other conditions include the number of competitors, location of competitors, historical relations, cultural considerations and the international reputation of the host country.

2.73 UNCTAD's Report (1991) listed the following various factors which were important in attracting Japanese investment into the UK. Transport costs and trade barriers, production costs, environmental factors, and government policy amongst others.

2.74 Oman (1989) divided FDI into traditional direct investment and new forms of investment. The former refers to wholly owned or majority owned affiliates, whereas the latter includes joint ventures with foreign equity less than 50%; licensing agreements; franchising; turnkey and "project-in-hand" contracts; production-share and risk services contracts; and international subcontracting.

2.75 International agencies try to show the positive role of foreign investment on host countries. For example, OECD, (1993) through its examination of development in Southeast Asia points out that four contributions of FDI(TNC) can be observed. They

are: supply capital; stimulating economic diversification; transfer technology; and enhanced employment opportunity. The OECD's report (1993) states that the main role of FDI in the development of developing countries' economies is to help to make the transition from agricultural to industrial economies, because FDI and TNC are sources of additional capital, technology and management know-how, an incentive to local companies to increase efficiency.

2.76 Lall (1989) and the OECD (1993) discuss newly industrialising countries (NICs) and suggest some features of FDI by these countries: 1) the motivation is mainly in purchasing the opportunity for low costs. 2) they use FDI as a tool to access developed country markets; secure their critical material supply; serve regional local markets; and access foreign technology. 3) they undertake various changes for their affiliates. 4) they prefer entering into joint ventures with developed country firms.

2.77 Over the past two decades, the heavy competition between developing countries to attract FDI and the decrease in supply of FDI from developed countries, has forced developing countries to pay more attention to policy issues and to try to offer policy packages attracting more FDI into their territories. The experience of the Pacific rim of Asian countries, particularly newly industrialising countries like South Korea and Taiwan which have performed exceedingly well in attraction of foreign investment, show that a

good development strategy and adequate government development policies are very important in industrialisation.

2.78 Iran adopted a policy of import substitution of durable and intermediate goods in the 1960s, and then in mid-1970s began to shift towards export-led production and outward-oriented development policies. Generally after the 1980s, due to external and internal factors explained in the next chapter, Iranian industrialisation strategy has had a distinct character with crude oil exports being still the main financing source.

2.79 South Korea, as a highly successful country on the Pacific rim of Asia, has been important from the stand point of Iranian policymakers and national planners. Hence, it seems to be necessary to review some important aspects of South Korean experience.

Successful experience of the Pacific rim of Asia: Lessons for developing countries

2.80 The successful of experience of the Pacific rim of Asia, and particularly the most dynamic Asian economies with sustained trade liberalisation are valuable for other liberalising countries. In these Asian countries, priority was given to a long-term strategy of policy coherence and resource adaptability.

2.81 The experiences of the dynamic Asian economies like Korea, Taiwan and Malaysia in managing policy coherence and in promoting resource adaptability are extremely valuable for other countries.

2.82 The newly industrialising countries of Korea and Taiwan began to switch to a long-term strategy of export-led industrialisation around the start of 1960s. Their governments provided strong incentives and support for labour-intensive exports, while pursuing import substitution in a range of newer, more complex industries producing for the domestic market. Interventions to support exports and to protect import substitutes were highly selective; decisions about which industries and firms to target were for three important reasons, according to an OECD study (1994).

2.83 The OECD study (1994) stated: 'First, in being far from the technology frontier, choices could be made by reference to the technologies being successfully deployed in the US, Japan, and Europe Second, adjustment could take place according to market forces. Third, the decisions of government were made in close collaboration with firms'.

2.84 The transformation of incentives to stimulate manufactured exports affected all policy domains. Gradually offsetting the prevailing anti-export bias, bonuses to exporters included access to credit on concessional terms, reduced or zero duties on both imported and domestically produced inputs needed for export production. Around the mid-1960s,

some liberalisation of import restraints, notably quantitative restrictions, was carried out. But further trade liberalisation was virtually put off until the latter 1970s (OECD,1994).

2.85 Among macroeconomic policy instruments during the 1960s, emphasis was on exchange rate reform and fiscal policy adjustment, and the existing multiple exchange rate system was abolished and replaced with a unified rate system. Then a series of devaluations added pressure on exporters to adjust to international competition. Government spending was strictly controlled to stay in line with revenues that were held back by tax holidays for exporting industries (World Bank, 1991). By the end of the 1970s, under the combined effect of domestic and world-wide inflation, effective exchange rates became overvalued and more flexible rate mechanisms were introduced. From 1980 to 1985, important changes in exchange rate policy strengthened the export-promoting policy adjustments, particularly in Korea and Taiwan. Sizeable devaluations of the respective currencies were implemented and more flexible rate mechanisms were introduced (OECD, 1994).

2.86 During the 1990's, industrial policy and foreign direct investment policy were set to encourage the development of industrial competitiveness and stimulate factor productivity. The Koreans preferred foreign loans to foreign investment. In addition to providing financial incentives to light manufacturing sectors, industrial policy

encompassed the financing of large scale infrastructure development projects and subsidies to heavy infant industries such as steel and petrochemicals.

2.87 In Singapore, EPZ-type industries have been the dominant element in overall industrialisation and are part of the extreme reliance on direct foreign investment in its industrialisation strategy (Lee, 1984).

2.88 According to Ro (1991), in all newly industrialising countries by the mid-1970s total factor productivity grew very rapidly. For example, in Korea, it grew by 4 per cent each year, on average. The gains in the manufacturing sector were due, in particular, to the significant upgrading of education and to the important learning externalities, realised first in exporting firms then diffused to other businesses (OECD,1993).

2.89 The package of incentives applied in these countries in the 1960s to stimulate labour-intensive exports was directed to more capital and R&D intensive industries such as the automotive, steel and petrochemical industries, and over the period of the 1970s the shift from low-cost labour assembly line industry to more technology-intensive industry was associated in Korea with the growth of the large conglomerates (OECD, 1994).

2.90 From the mid 1980s to the 1990s, these countries augmented government spending on social welfare programmes and infrastructure development to boost domestic demand.

Conclusion

2.91 We have briefly discussed the various industrialisation strategies and the elaborations of schools of thought on the mechanism of industrialisation. And we have pointed out that the process of industrial development is now quite different from that of the age of "free competition". It has been focused on the concept of ISI, which is adopted by LDCs in their struggle for self-reliance and sustained growth, socio-economic transformation and dealing with the problem of balance of payments. Economic planning authorities in the LDCs may pay attention to any of the above objectives of ISI, dividing them into two categories, i.e. supply side and demand side objectives. Socio-economic transformation, poverty eradication and self-reliant development are regarded as demand side objectives, including growth oriented industrialisation and the efficiency approach.

2.92 In the next chapter we proceed from our foregoing theoretical account to describe how industrialisation strategy in Iran followed four distinctive stages:

(1) Mobilisation of natural resources (agricultural raw materials and minerals) for domestic industries and building of some infrastructures. These attempts were pursued mostly before the Third Plan.

(2) Import substitution of durable and intermediate goods in the 1960s, during the Third and Fourth plans.

(3) Oil-based industrialisation in the 1970s by huge investment in petro-chemicals and expansion of energy based industries. In the last Five year Plan, the Government began to shift towards export-led production and outward-oriented development policies, particularly through the establishment of free zones and export platforms.

(4) During the Fifth Development Plan, the Government adopted and chose a combination of ISI as the main strategy with export promotion, export substitution and an export platform as supporting policies. More importantly, the export substitution industries, i.e., chemicals, oil refineries, and petro chemical industries, were supposed to be set up in export platform zones. The choice was rather pre-planned. There was a broad plan to expand export values through oil by- products rather than crude oil. It was supposed to attract and invite foreign capital and create vertical integration between down and up stream operations in oil industries. Moreover, it was planned to create a set of petro-chemical as well chemical-based industries in export platform zones, which were supposed to have all the properties of the EPZ industries .

2.93 However, ISI and other development strategies are not limited to mere quantitative growth policy. In LDCs, strategies should cover overall development with emphasis on socio-economic transformation and return on capital. Hence, our study will proceed to consider the impact on Iranian's economy of ISI and alternative policies of growth and particularly the role of free zones as tools of ISI and export promotion industrialisation, by emphasising macro-concepts and regional development effects. In relatively densely populated oil producing countries such Iran and Algeria, industrialisation strategy has a distinct character. Since most of the labour force and raw materials are produced in these countries, and the agriculture sector and crude oil exports are the main financing sources, the industrialisation strategy aims at proper linking of these sectors. There are mutual relations between the political and economic structures of Iran and the performance of FZs. Hence, in this study we review the structure of the economy of Iran in its various aspects with an emphasis on the base of industrialisation.

Chapter Three

DEVELOPMENT AND PLANNING IN IRAN

Economic and Spatial Structure of Iran

Introduction

3.01 In the preceding chapter we outlined the broad trends in economic development policy adopted by the developing and newly industrialising countries. In this chapter, we shall describe the evolution of national economic development policy in Iran, as a background to showing why free zones have emerged as a special element in contemporary Iranian economic policy.

3.02 Iran started a new era of economic development after the Second War, and nowadays with a land surface of 1,648,195 square kilometres about 60 million inhabitants is the fourth largest oil exporting country and the third gas exporting state in the world.

3.03 The economic system of Iran for more than 2500 years up to modern times had been based on agriculture, which although also primitive, had been successful enough not only to cover domestic needs for agricultural products, but also to export them to a large extent. The first major change in the dominant agrarian structure of the Iranian economy was as a result of the exploitation of natural resources, namely minerals and mainly oil. Consequently, the general structure of the economic as well as of the social fabric of Iran has fundamentally changed in the last 75 years (1300-1374/1921-1996).

The instruments of these changes were mainly five so called "Development Plans" between 1948-1978, before the Islamic revolution in Iran; after the revolution, there were two further plans called "The First and Second Five Years Social and Economic Development Plans".

3.04 It is appropriate to survey the economic development of Iran in relation to these development plans.

Development Planning in Iran

3.05 The history of development planning in Iran dates back to 1937, when the need for systematic planning to achieve the economic, social and political goals of the government was discussed by the High Economic Council (Raseghi, 1988, 170). Prior to this, no planning or well-defined development policies existed in Iran. The High Economic Council was patterned on a decree used in 1937 to establish a body called the Trade Council, whose prime duty was to prepare a general economic plan for the country. But due to the Second World War, the Council came to nothing.

3.06 In April 1946, a "Commission for Drafting a Plan for the Development of the Country " was established within the Ministry of Finance to prepare a draft that would deal with general aspects of a development plan. The Commission produced a draft plan in the summer of 1946, which was presented to the Cabinet as a seven-year reconstruction and development plan. Upon the recommendation of the Commission for Drafting Plans, a "Supreme Planning Council" was formed by the Cabinet in August 1946, to prepare a "defined plan". To meet the program's financial requirements, the

Government was hopeful of acquiring a $250 million dollar loan from the International Bank for Reconstruction and Development (IBRD), "but the Bank's response to Iran`s formal application was that it would entertain no formal applications except for individual projects whose validity had first been established by competent technical studies" (Baldwin, 1967, 26). Consequently, to meet the International Bank`s requirements of a detailed plan of proposed projects with their justifications, in December 1946 a contract was signed with an American consulting firm, to conduct a survey of projects and programs for formulation of the nation's First Development Plan.

3.07 By July 1947, the American firm had submitted a report which offered the Iranian Government a choice of three plans of different sizes. These plans were reviewed by the Supreme Planning Board, and an overall plan was presented to the Parliament which was approved in 1949 (Bharier, 1971, 89).

3.08 The Government requested a loan from The World Bank for the implementation of the plan. At the request of the World Bank, the drafting of the plan was transferred to a second firm of American consultants, Overseas Consultants Incorporated (OCI).In August 1949, OCI submitted a five-volume report that included proposals for the organisation and functions of a planning administration, as well as of public investments and development programs in different sectors (Baldwin, Ibid:1967, 26). Using the OCI reports as a basis for the First National Development Plan, the Iranian Government requested the World Bank for a loan, but it was turned down (Farhang, 1975, 270). The final planning budget of the Plan was therefore fixed at 21 billion rials, down from the earlier 62 billion -rial version considered (Farhang, Ibid:269).

Plan Organisation

3.09 The law of the First Seven Year Plan (1949-55) established both the Plan and the Seven Year Plan Administration (later the Plan Organisation) as the country's first planning agency. Iran chose a legislative rather than an administrative approach to planning because of the feeling that the essential elements of the Plan had to be tied down in a law, so that no politicians or administrators could change them.

3.10 The main function of the Plan Organisation as outlined at the time the law was passed, were as follows:

1. The development agency should be independent, insulated from the Government's chronic instability and its politics.
2. To assure its independence the agency would be given legal status and financial autonomy. The latter was to be secured by giving the agency its own account in the Bank Melli Iran.
3. The agency should not be given executive powers and should not become a government within a government. It should study, advise, plan, guide, co-ordinate and supervise.
4. Execution of the plan should be a responsibility of the ministries or other regular government bodies, separate from the development agency.
5. In terms of internal organisation, in addition to a chief executive and supervisory boards, the organisation would have a technical bureau and subject divisions (e.g., industry, agriculture, transport.)(Baldwin, Ibid:27).

3.11 Although there is controversy on the role of the Plan Organisation, nevertheless the agency was responsible for both planning and implementation until 1973. The Plan and Budget Law of 1973, designed to resolve the long-standing charge that the Plan Organisation was too powerful and too centralised, made a clear distinction between planning and implementation, by "entrusting the former to the Plan Organisation and the latter to the executive agencies" (Amuzegar, 1977, 162). The law also renamed the Plan Organisation as the Plan and Budget Organisation (PBO).

3.12 Under its new form, the main functions of the Plan and Budget Organisation are outlined as follow:

1. Assess the country's resources and recommend on their development .To that end, develop, promote and operate (or supervise the operation of) all necessary information systems for the provision and collection of data and statistics.
2. Assess directly or indirectly citizens' expectations, or see to it that these are assessed from time to time .
3. Prepare and recommend short, middle and long term Government objectives and policies for economic and social planning in the light of citizens' expectations and of the Government's views.
4. Prepare and recommend short, middle, and long-term national plans and budgets in accordance with approved government objectives and policies, to translate the country's resources to the citizens' satisfaction within the framework of the national and international contexts and trends; also compile, co-ordinate and appraise (or contribute itself to develop) sectoral, provincial and local plans and budgets to be recommended.

5. Compile, co-ordinate and appraise the alternative detailed courses of action proposed by the Executive Agencies in the form of projects, programmes and related budgets, to meet the objectives and policies of the plans and recommend upon them; also develop proposals of its own, or alternative proposals, as it may think useful; also ensure that approved recommendations are actually developed and implemented.

6. Formulate and recommend policies, procedures, norms and standards to be used by the Executive Agencies in developing and implementing the approved projects, programmes and budgets, so as to ensure efficient and uniform views and actions and optimum costs throughout public affairs.

7. Provide advice and assistance to the Executive Agencies, particularly but not exclusively in the technical, managerial, financial and research fields; to that end, collect information on these and on reputable consultants and contractors.

8. Develop and operate with the Executive Agencies permanent reporting systems so as to be informed of and to appraise development actions, and to recommend timely corrections in objectives, policies, plans, budgets, projects and programmes; specifically, also to appraise achievements in relation to the particular and general objectives.

9. Ensure functional supervision over the Executive Agencies to co-ordinate their actions with the approved plans and budgets, and to control them in respect of approved objectives and policies, procedures, norms and standards.

10. Follow up technical, economic and social achievements by the Executive Agencies to ensure that they fully concur with human satisfaction, and when otherwise, make all necessary recommendations and arrangements.

11. Make planning a continuous activity so as to inform the Government at all times of the evolution of the economic and social situation, of the situation of national development and, in particular, of the degree of achievement of the plans and budgets. Formulate, as and when warranted, recommendations to correct the situations and trends.

12. Exceptionally, and by specific delegation from the High Planning Council and under its supervision, develop, implement and operate development projects and programmes, or directly supervise and control in detail the financial and technical execution of such projects and programmes.

13. Contribute to promote and develop the understanding of planning and of the planning conscience and discipline in the country, and technically assist the Government to promote and develop the collective national development effort.

14. Organise itself to discharge fully and efficiently its functions, and report to the Prime Minister on matters of importance.(Amuzegar, Ibid:4)

The First Development plan (September 1948 - September 1955)

3.13 The First Plan was initiated after the end of the Second World War in order to begin the reconstruction and development of Iran. It was a general plan for a total of 62 billion rials (100 Rials is equal to 1.5 USA dollar).

3.14 The First Plan was a collection of public sector projects without unity or comprehensiveness. There was a shortage of reliable statistical data so economists were inadequately informed about the state of the country. Despite all the difficulties, and meagre financial, institutional, and skilled manpower resources, attention was concentrated on investments aimed at resuscitating industries and creating new ones, and most projects were for agricultural development and road construction.

3.15 5.3 billion rials (25 per cent) of budget was set aside for agriculture development, 5 billion rials (23.8 per cent) for the construction of roads, railways and airports, 4.2 billion rials (20 per cent) for industrial and mining projects(including oil exploration outside the domain of the Anglo-Iranian Oil Company) and 6 billion rials for social welfare works Table 3.1.

Table 3.1
Projected Revenues and Expenditures of the First Plan,
1949-56 (in billion rials)

Revenue

Oil revenue	7.8	37.10
Sale of government property	1.0	4.80
Private participation	1.0	4.80
Borrowing - Bank Melli Iran	4.5	21.4
- World Bank	6.7	31.9
Total Revenue	21.0	100.00

Expenditure

Agriculture	5.25	25.00
Road, Railways, Airports	5.00	23.80
Mines and Industry	3.00	14.30
Oil Industry	1.00	4.80
Post, telegraphs, telephones	0.75	3.60
Social Welfare works	6.00	28.50
Total Expenditure	21.00	100.00

Sources: Farhang, M. (1975) The Economic life of Iran Teheran: Abou Reihan Pub. Co. (in Persian). p.270.

3.16 But following the nationalisation of the oil industries in 1951, the flow of exports of oil and consequently of oil revenue was cut by the West. Foreign financial arrangements, given the embargo situation, could not be concluded either. And since close to 70 percent of the plan revenue was to come from oil income and foreign loans (see table 3.1) the sudden vanishing of these two sources of funds made the main targets of the Plan an impossible task. The Plan, therefore, had to be terminated prematurely in September 1955 (Baher, 1981, 37).

3.17 On the regional development aspects, although these were not mentioned explicitly in the Plan, nevertheless the creation of the Moughan Plains Development Institution in 1953, aimed at utilising the water resources of the area for agricultural activities and for the settlement of the `Shahsavan` nomads, can be considered as an indirect attempt at regional development (op.cit, 163). In general, the First Plan did not consider the role of private sector investment, and was merely a collection of infrastructure projects to be executed by the newly established Plan Organisation.

3.18 The physical achievements of the Plan were confined to the establishment of six new industrial factories, some road and rail construction, and a few minor developments in irrigation and mechanisation in the agricultural sector (op.cit, 90)

The Second Development Plan (September 1955 - September 1962)

3.19 The reactivation of Iran's oil industry after the new oil agreement in 1954 provided a solid financial basis for the Second Plan, which emphasised construction and the development of main roads particularly between the capital and important ports, dams as a main source for producing electricity needed for industries, and water needed for agriculture and defence. The Second Plan projected a total outlay of about 70 billion rials ($939), of which about a quarter referred to expenditures committed under the First Plan, 33 percent was allocated to communications, 26 percent to agriculture, 26 percent to social services and public utilities, and 15 percent to industry and mining Table 3.2.

Table 3.2
Projected Revenues and Expenditures of the
Second Plan, mid 1955-mid 1962 (in billion rials)

Expenditure	First Plan Commitment	Second Plan Projects	Second Plan Others	Total	percent
Agriculture and irrigation	6.3	9.5	2.5	18.3	26
Communication and telecommunications	5.4	17.5	-	22.9	33
Industries & Mines	2.8	6.8	1.0	10.6	15
Public utilities and services	2.8	15.6	-	18.4	26
Total Expenditures	17.2	49.3	0.5	70.2	100

Revenue	Total Oil Revenue	Budget Rev.	Plan Organisation
Total Revenue	101.5	28.5	73

Source :Bharier, J. (1971) Economic Development in Iran 1900-1970 London: Oxford Univ. Press. p.91

3.20 Within eighteen months after starting the Second Plan, due to increase of oil revenue the total planned expenditure was increased by 20 percent to 84 billion rials. This was followed by a complete revision of the Plan in 1958. During the plan period, some special regional development organisations were established to develop the backward but promising regions, through concentrated and multipurpose investment projects. Major among them was a Khuzestan Water and Electricity Organisation, which was given special authority for budgeting, preparation and execution of development projects designed to exploit the natural resources of the area. Another organisation was the Southern Development Services (in Sistan), established to give relief to this backward

area through identification of natural resources and economic opportunities in the region (op.cit, 506).

3.21 The Second Plan, like its predecessor, was primarily a series of government projects subdivided under four main categories; agriculture and irrigation, industries and mines, communications and telecommunications, and public utilities and services. Large scale projects, in most sectors, soaked up many of the funds while there was shortfall for other activities. In the agriculture and irrigation sector, for example, substantial overspending occurred on large dam projects at the expense of crop improvements and animal husbandry. In the communications and telecommunications sector, heavy overspending on railways and roads between Tehran and the important ports was achieved at the expense of other facilities. "Similarly, a small number of textile factories soaked up many of the funds for a wide range of industries, while there was considerable shortfall in expenditure on public health rural development activities" (Bharier, 1971, 92).

3.22 On the eve of formulation of an industrialisation strategy in the early 1960s, the economy was in the grip of excess domestic demand over supply, and deficiency in the non-oil balance of trade. In this era, imports grew rapidly, non-oil exports declined and the balance of trade never regained its 1954 (before the coup d'etat) level. The non-oil balance of trade was mounting till the early 1960s, due to large importation of consumer durable and armaments. The manufactured goods had accounted for 73.9 per cent in 1955-56. Even the marginal decline in the balance of trade deficiency in the early 1960s was not due to any drastic change in export potentiality of non-oil goods, but as a result of the rise in oil revenues.

Table 3.3

Revised Second Plan Revenues and Expenditures (in billion rials)

	Actual 1955-58	Estimated 1959-62	Total	Percent
Expenditure				
Agriculture and irrigation	7.8	11.1	18.9	22
Communications and telecommunications	12.0	18.4	30.4	35
Industry and Mines	4.8	2.0	6.7	8
Social Affairs	4.5	7.1	11.7	14
Regional Development	3.3	8.9	12.2	14
New Programmes (a)	-	1.0	1.0	–
Unclassified	0.2	–	0.2	–
Non- Programmed expenditure	1.6	4.5	6.1	7
Total Expenditure	34.2	53.0	87.2	100
Revenue				
share of oil retinues	22.8	43.0	65.8	75
foreign loans	9.2 (b)	2	21.4	25
Total Revenue	32.0	55.2	87.2	100

(a). includes manpower planning, rural development and preparation for the Third Plan.
(b). foreign loans used for second half of the Plan.

Source: Bharier, j. 1971, p.93.

3.23 The planning authorities realised that in the long run, ISI would act as a complementary factor for an overall 1960s stabilisation policy. The main immediate objectives of the planners were: (a) to reduce or close the balance of non-oil trade gap, and (b) to maintain the balance of domestic supply and demand. The above two

objectives were valid till 1973 (i.e. before the oil boom). These two objectives are known to be notoriously contradictory as far as the development experience of newly industrialising countries is concerned. Iran, however, managed some success by allowing its oil revenues to bridge the trade gap, which indeed would have been otherwise wide, given the increase in domestic demand for goods following the Second World War.

3.24 After the 1973 oil boom, the self-imposed discipline of a classical ISI lost its vigour. Iran concentrated on oil as the only means of building up its exchange resources, while on the other hand it was importing highly capital intensive equipment and capital goods, for continuation of the industrialisation programme based on hydro-carbons.

3.25 The structure of the Iranian economy is different from a (typical) LDC with low per capita income (PCI), foreign exchange constraints and high population density. On the contrary, the Iranian economy bears significant potentiality for rapid growth due to high oil reserves (with their potential linkages i.e. fiscal, consumption and production linkages), geo-political location and availability of resources for industrialisation. On the other hand, Iran's economy is differentiated from the rich oil producing states of the Arab world.

3.26 The latter countries usually suffer from deficiency of domestic demand for manufactured goods as their populations are quite low (e.g. Kuwait, United Arab Emirate, etc.). These countries prefer to find external markets for their semi-manufactured goods. Therefore, the export-oriented industries are justified. In the case of Iran and of other relatively more populated oil producing countries (e.g. Algeria and Venezuela), the strategy of industrialisation with concentration on import substitution and

simultaneously maintaining consumption and production linkages of oil industries is considered effective (Lang,1981,43-75). The objective of planners in Iran has been to integrate the various sectors of the economy through linkage effects. However, the evidence in the last two decades shows that slipover effects of the dynamic sector (oil) to the traditional and manufacturing sectors have remained weak, and the oil sector has been always considered as an external financier of the industrialisation strategy.

3.27 In a phrase, the Second Plan was successful in parts and failed in other parts. The performance of the economy during the Second Plan made it possible to have an average annual growth rate of 4.3 percent (in current prices), when GNP rose from 229 billion rials in 1955 to 301.6 billion rials in 1962.

The Third Development plan (September 1962 - March 1968)& Process of Import Substitution Industrialisation Strategy

3.28 The Third Plan was controlled and supervised by a European and North American team of planners and economic advisors. It was Iran's first scientific comprehensive development plan. Broadening scope for eradication of economic dualism came about as a result of the main findings of the Second Plan's evaluation, which were. (1) lack of co-ordination between the activities of the various sectors of economy, and (2) lack of a comprehensive view regarding the availability and use of resources in the whole economy (Plan and Budget Organisation, 1960, 15).

3.29 The Third Plan was an investment programme for the public sector and some forecasts for the private sector. The Government was following a set of reforms which created a new mood of confidence in the private sector. The Plan was prepared during a recession period in Iran, and therefore, expenditure had to be limited to 140 billion rials in the early stages of the Plan. The size of the Plan was increased to 200 billion rials in 1964 and then to 230 billion rials a year later (Baldwin, 1967, 49). It was also projected that the private sector`s development expenditure during the plan period would reach 160 billion rials (Amuzegar, 1977, 163). The basic method of the Third Plan resembled Jan Tinbergen's "stage method", a trial and error process that could not be used in its entirety due to a paucity of statistical information (Tinbergen, 1967, 75).

2.30 The private sector was given various financial, commercial and institutional incentives to invest in light industries which were fed by public investment in infrastructure and heavy industries. The state's primary emphasis was placed on the growth target (6%), and the secondary objectives were enlarging employment opportunities, more equal income distribution and price stability. Accordingly, the Government's commercial policy and incentives were formulated in the Third Plan.

2.31 The reliance on the private sector to sustain industrialisation was reflected in relatively low allocation of funds to public industrial enterprises. The Third Plan budget allocation was revised twice in 1964 and 1965, following the increase in oil revenue in these years. It is obvious that oil revenues affect both domestic and external components of the underlying money base, and any change in oil revenue will change the foreign reserve holdings of the Central Bank of Iran and at the same time, given the level of government expenditure, they will also affect the claims of the Central Bank of Iran on

the Government. This dual feature of oil revenues in Iran is a key element in understanding the mechanism of the money base determination in the country.

3.32 The Government's financing policy in terms of development expenditure was mainly made through external sources (i.e. oil revenue), with the development of new projects largely determined by the oil revenues and fluctuation in value of the US dollar as well. Till 1973, there was no qualitative change in the structure of public financing, but after the 1973 oil boom the role of external sources increased radically.

3.33 Overall price level kept relatively stable during the Third Plan period. However, the early 1960s recessionary conditions which created a favourable balance of trade did not last long, in spite of import restriction placed on the private sector. The deficit in the current trade balance soon appeared following increase in oil revenues in 1964. Therefore, the Government actively pursued a price stabilisation policy during the last two years of the Plan by directly importing those products for which significant domestic shortages had occurred.

Table 3.4

Projected and Actual Expenditure and Revenues under the Third Plan, 1962-67 (in billion rials)

Expenditure	Original Plan	%	1964 revision	%	1965	%	Actual	%
Agriculture	30.3	22	45.0	23	49.0	21	47.3	23
Industry & mines	16.6	12	21.9	11	27.0	12	17.1	8
Electricity&Fuel	26.1	19	27.0	14	41.5	18	32.0	16
Communication	30.0	22	50.0	25	56.0	24	53.8	26
Education	13.5	10	17.9	8	17.4	8	17.5	9
Health	10.0	7	13.9	7	13.5	6	13.2	6
Labour & manpower	6.2	4	8.0	4	3.6	2	8.0	1
Urban Development	4.5	3	8.0	4	7.0	3	7.2	4
Other	2.8	2	8.3	4	15.0	6	13.7	6
Total	140.0	100	200.0	100	230.	100	204	10
Revenue from oil	-	-	134	61	154	62	153	67
Treasury Bonds	-	-	10	5	13	5	14	6
Foreign loans	-	-	17	8	61	24	21	9
Domestic loans	-	-	48	22	19	8	36	16
Others	-	-	11	5	4	2	5	2
Total Revenue	-	-	220	100	250	100	229	10

Note: Figures in the 1968 report for the 1965 revision differ slightly from those in the 1966 report.
Source: Bharier, J. (1971) Economic Development in Iran 1900-1970 London: Oxford Univ. Press p.97 Table 6 , p.98 Table 7.

3.34 To sum up, the Third Plan may be divided into two sub-periods, i. e. 1962-64 and 1964-67. In the earlier period, due to recessionary conditions prevailing in the economy and to the implementation of the stabilisation programme and import restrictions on the private sector, a favourable balance of payments was produced.

Following the 1964 recovery, especially after 1965, both investment and imports increased. Therefore, the balance of payments deficit increased from $58 million in 1964 to $212 million in 1967.

3.35 The Planning Organisation introduced an import-export regulation in 1964. The general regulation as approved by the Council of Ministers was as follows, whereby the Government had to fulfil the following principles (Plan Organisation, 1964, 64,)

1. Public requirement to safeguard the interest of consumers;
2. Balance of payment maintenance;
3. Expansion of local industries:
4. Diversification of exports.

3.36 According to the above general principles, import -export policy suggested:

1. To import only those goods which it was not possible to produce in the country except for harmful cases;
2. Restriction on imports of luxuries and non-essential items. Imports would be allowed for articles and parts in semi-manufactured condition where appropriate for gradual domestic production of parts to take place;
3. Special facilities and exemptions and all necessary protection would be granted for productive processing and employment generating industries.
4. Expansion and encouragement of export platform industries.
5. Imposing restrictions and limitations on those countries which impose restrictions and limitations on the country's exports;

6. Absorbing neighbouring countries' markets for exports, and importing from the cheapest market.

7. Protection to industries would not be permanent and would vanish gradually (Plan Organisation,1964, 10-22).

TABLE 3.5

GROSS NATIONAL PRODUCT OF IRAN DURING THE THIRD PLAN
(In billion rials at constant prices of 1959)

	1962	1963	1964	1965	1966	1967
1. Consumption expenditures	262.5	274.0	297.7	25.0	340.4	379.0
Private sector	230.7	240.2	256.4	272.8	287.6	313.8
Public sector	31.8	33.8	41.3	52.8	58.8	65.2
2. Gross domestic fixed capital	493	53.2	61.9	79.3	85.6	108.3
Private sector	33.6	35.4	42.0	46.1	51.7	56.1
Public sector	15.7	17.8	19.3	33.2	34.8	52.2
3. Gross domestic expenditures (1+2)	311.8	327.2	359.6	404.9	432.9	487.3
4. Net Exports of goods & Services*	10.3	12.0	5.0	3.7	0.3	-2.6
5. GNP=GNE (3+4)	322.1	339.2	364.6	408.6	433.2	484.7
6. Less capital consumption allowance	22.5	23.7	25.5	28.6	30.3	34.8
7. Indirect taxes	19.0	20.8	20.7	26.1	30.1	35.2
8. National income	280.6	294.7	318.4	353.9	372.8	415.5
9. National saving (5+1) or (2+4)	59.6	65.2	66.9	83.0	86.8	105.0
10. Ratio of investment to GNP (per cent)	15.8	15.7	17.0	19.6	20.0	22.3
11. Rate of Growth	-	5.3	7.5	12.1	6.0	11.8

Source: Bank Markazi Iran, National Income of Iran 1962-67), Teheran, September 1975

3.37 The above policies indicate the guidelines of the ISI strategy of Iran till 1973, as recommended by UNCTAD.

Regional Planning Approach in Third Plan

3.38 It was also during this period that a more comprehensive approach to regional planning was adopted. A special regional development chapter which aimed at institutionalising the regional system was introduced in the Plan. Establishment of regional planning units in the provinces was recommended, and the Third Plan law provided the legal base for the identification and execution of projects by the provincial authorities (Namazi, 1976, 246).

3.39 During the plan period, a number of regional development organisations, including the Ghazvin, Jiroft and Kohkiluyeh Development Authorities were established (Farhang, 1975, 18). But shortly after their establishment, "their comprehensive regional projects were broken up along sectoral lines" and transferred to the executive agencies. Since most of the projects were agricultural in nature, they were transferred to the Ministry of Agriculture for execution by the newly created Water and Electric Organisation. Thus, although the authorities were not dismantled at the time, "their existence became irrelevant" (Amirahmadi, op.cit: 501-530).

3.40 Then, in 1962, in another attempt at regionalisation of planning activities, technical offices were established by the Plan Organisation in the provincial capitals. Their function was to identify regional needs, plan projects and report them to the Plan Organisation for approval/disapproval. Because these offices did not have any decision making powers, they created more problems for regional development then solutions(Plan Organisation, 1983, 7).Therefore, in 1963 only a year after their creation,

when a new Ministry of Development and Housing was established, these offices were transferred to it as its provincial branches (Amirahmadi, op.cit: 507).

3.41 On the performance and achievements of the Third Plan, total investment during the plan period amounted to 433 billion rials, much higher than the projected figure, of which 246 billion rials were private and the remaining 187 billion rials were public investment. The Gross National Product (GNP) increased about 9 percent, with a rate of population growth of about 2.8 percent. Per capita income increased on average by over 6 percent. Per capita GNP in 1968 amounted to about Rial. 23,300 ($ 308). The fastest growing sector was public administration and defence which increased at a rate of about 15 percent.

3.42 The output of the petroleum industry and of manufacturing increased by 13.5 percent and 11.2 percent respectively, but the growth of agriculture was low at 4.2 percent per annum. The share of the petroleum sector in GNP increased from 12 percent in 1962 to 16 percent in 1967. By comparison, the share of industry in GNP during the plan period showed a small increase from 9.2 to 10.5 percent, whereas the share of agriculture declined from 27.4 to 22 percent. It was also during the Third Development Plan that social and economic reform with an emphasis on the Land Reform Program was promulgated, later called the White Revolution. Although the Third Plan was more comprehensive than its predecessors, it had one thing in common with them, which was that a "large proportion" of its "expenditure went on large scale long gestation projects such as dams and highways, many of which had been left over from the Second Plan owing to contractual or financial difficulties, and which tended to cost more than planned.

As the result many short gestation state projects, particularly in manufacturing and power industries were not carried out"(Bharier, op.cit:96).

3.43 According to Table 3.6, the fastest growing sector was public administration and defence, which increased at a rate of about 15 percent per annum. The petroleum industry and manufacturing increased by 13.5 percent and 11.2 percent respectively, but the growth of agriculture was low at 4.2 percent per annum. The share of the petroleum sector in GNP increased from 12 percent in 1962 to 16 percent in 1967. By comparison the share of industry in GNP in the plan period showed a small increase from 9.2 to 10.5 percent, whereas the share of agriculture declined from 27.4 to 22.5 percent.

TABLE 3.6

GROSS NATIONAL PRODUCT BY ECONOMIC SECTORS
DURING THE THIRD PLAN
(In billion rials in constant prices of 1959)

	1962	1963	1964	1965	1966	1967
1. Agriculture	88.3	89.9	92.2	99.0	102.8	110.9
2. Industry	29.5	32.1	36.2	39.2	44.6	50.3
3. Petroleum	65.5	73.8	75.0	87.0	98.7	123.0
4. Construction	13.4	15.0	16.2	19.6	20.2	25.0
5.Transportation & communication	23.6	24.5	25.4	26.3	27.3	28.2
6. Wholesale and retail trade	34.4	35.8	38.3	41.0	42.9	47.6
7.Public adminis-tration & defence	24.4	27.2	32.2	41.2	46.0	48.7
8.Private service	15.1	15.9	17.0	18.0	19.3	21.1
9. Others	29.1	32.1	30.1	40.5	46.3	50.0
10. Statistical discrepancies	10.7	0.3	5.6	7.7	-3.4	-5.0
11.Gross domestic product (GNP) at factor cost	334.0	353.6	374.8	420.1	444.7	499.2
12. Plus interest taxes	19.0	20.7	20.7	26.1	30.1	35.2
13.Less net factor payment to abroad	30.9	35.2	30.9	37.4	41.5	49.7
14. Gross National product at market price	322	339.2	364.6	408.6	433.3	484.7

Source: Central Bank of Iran, National Income of Iran (1962-67), Teheran, September 1969.

3.44 The Third Plan coincided with social and economic reforms including a land reform program, the nationalisation of forests and later of water, and the public sale of state-owned industrial enterprises. As a result of the failure of this reform, and

particularly of more attention to industry, this period was the starting point for accelerated immigration from rural areas to cities and industrial areas.

The Fourth Development Plan (March 1968-March 1973)

3.45 The general goal of this plan stressed industrialisation in the form of an import substitution strategy, and also aimed at raising public welfare. The Fourth Plan, similar to the First and the Third plans, began with a choice of three programs with respective target annual growth of GNP of 6,7 or 8 percent. Because of the higher growth rates of previous years, the target was finally set at 9 percent. To attain this growth rate, the required Gross Fixed Capital Formation was put at 810 billion rials ($10.8 billion), of which 443.5 billion rials (55 percent) was to come from the public sector and the remaining 366.5 billion rials from the private sector.

3.46 Oil revenues, as before, were to provide the main source of funds for development. 80 percent of the funds for development purposes were to come from oil revenues. Additionally, 150 billions rials were to be borrowed from foreign sources, which together with the oil revenues accounted for nearly 90 percent of the funds needed for the implementation of the plan(Amuzegar, op.cit: 164). The expenditure for industry and mining was increased from 17.1 billion rials (8 percent) under the Third Plan to 99.0 billion rials (20.6 percent) in the Fourth Plan, whereas agriculture and livestock's share of total expenditure was reduced from 23 percent under the Third Plan to 13.5 percent during the Fourth Plan (Tables 3.4 and 3.7). Projected revenues and expenditures under the Fourth Plan are given in Table 3.7. Industrial development was given high priority during the Fourth Plan because of its assumed greater labour absorptive capacity, and its contribution to increasing national income. Moreover, it was assumed that "industrialisation and advanced technology is undoubtedly a vital feature of a nation`s

economic growth, and it is only with a thriving industry that modern techniques can be adopted or developed" (Plan Organisation, 1977,117).

Table 3.7
Projected Revenues and Expenditures under the Fourth Plan, 1968-72 (in billion rials)

	Amount	Percent
Revenues		
Plan Organisation share of Oil revenues	385	63
Foreign loans	150	25
Gas and petrochemical revenue	21	3
Treasury bonds	50	8
Others	4	1
Total Revenues	610	100
Total Development Revenue	480	
Expenditures		
Agriculture and livestock	65.0	13.5
Industry and mining	99.0	20.6
Gas and oil	26.3	5.5
Water	48.5	10.0
Power	38.0	7.9
Transport and communications	80.0	16.7
Telecommunication & Broadcasting	20.3	4
Rural Development	9.1	2
Urban Development	7.0	1
Construction and housing	23.0	5
Education	35.0	7
Art and Culture	1.8	0.5
Tourism	3.8	1
Health	13.8	3
Social Welfare	4.6	1
Statistics and Research on Regional Development	5.1	
Total Expenditures	480.0	100

Source: Farhang, M. (1975) Zendegi-eh Eqhtesadi-eh Iran
Teheran: Abou Reihan Pub. Co. (in Persian). p.31

3.47 Industry and mining was to grow at an average rate of 13 percent per year, and was anticipated to provide approximately 417,000 jobs during the Fourth Plan. During the Fourth Plan period, the relative share of agriculture in GNP declined to 6.5 percentage units, while the relative share of services, industries and mines increased respectively to 3.6, 2.1, and 0.9 percent. As a result, agriculture which had in the last plan made the greatest contribution to GNP lost its position to industries and mines (Table 3.3). Therefore, migration of rural families to the cities speeded up during this plan period when GNP increased at an average growth rate of 11.6 percent, and per/capita GNP increased from $277 in 1967 to $513 in 1972.

TABLE 3.8
GROSS NATIONAL PRODUCT BY ECONOMIC SECTORS
DURING THE FOURTH PLAN
(in billion rials at constant prices of 1959)

	1967	1968	1969	1970	1971	1972
1. Agriculture	111.1	119.7	123.4	129.1	124.4	134.4
2. National oil	105.4	121.4	144.5	163.7	15.2	15.3
3. Industry & Mining	106.3	119.8	130.9	144.4	170.6	195.9
Industry & Mines	72.5	82.8	90.9	100.9	118.9	138.1
Construction	24.9	26.2	26.6	27.3	33.0	35.0
Water	1.0	1.0	1.2	1.4	1.6	1.7
Electricity	7.9	9.8	12.2	14.8	17.9	21.1
4 . Services	187.0	212.0	235.2	268.2	310.6	363.9
Transportation & Communication	35.6	37.5	40.0	44.7	46.7	53.8
Banking, Insurance, and Brokerage fees	13.7	18.3	23.5	30.3	35.4	46.3
Domestic trade	39.8	43.1	40.8	51.2	56.2	62.5
Rent	27.7	29.9	31.9	34.1	36.7	39.9
Public services	48.6	57.1	64.4	75.7	97.1	118.6
Private services	21.6	26.1	28.6	32.2	38.5	42.8
5. Net factor income	-5.8	- 12.0	-13.6	-16.8	-19.3	-20.1
from abroad (excluding oil)	21.6	26.1	28.6	32.2	38.5	42.8
6. GNP (1+2+3+4+5)	479.4	531.9	581.3	646.3	730.8	837.8
7. Indirect taxes (net)	34.4	37.5	40.3	43.4	47.6	51.2
8. GNP at market cost(6+7)	513.8	569.4	621.6	689.7	778.4	889.0

Source: Central Bank of Iran, Annual Report and Balance Sheet 1351 (1972), September 1973, p. 143.

3.48 During the Fourth Plan period, changes occurred in Iran's oil industry in October 1970, when the price of light (and heavy) crude oil increased from $1.79 to $2.17 per barrel. As a result, the national income and oil revenues was nearly doubled during the

period, and employment in industries and mines and services increased by 38 percent and 36 percent respectively.

"The Fourth Plan is the first stage of a long term programme to industrialise the country, the objective of which is to make the country independent of consumer goods and to manufacture capital and intermediate goods inside the country. This should maximise the volume of imports and diversify the export of locally manufactured goods to foreign countries, reducing the dependence of the economy on oil revenues"(Plan Organisation, 1967, 26).

Industrialisation Policy in the Fourth Plan

3.49 The Fourth Plan suggested that the regulation policy for the development strategy evolved in the Third Plan did not consider the efficiency of newly established industries, and the infant industries were not granted protection for a long time. Therefore, more emphasis was given to growth and productivity of efficient industries and on a decrease of dependence on foreign countries. The Fourth Plan in spite of more consideration to efficiency, essentially was a sophisticated repetition of the Third Plan. The general principles were for maintaining import substitution industrialisation in the country. In this period, the development strategy was pursued at the expense of all programmes (except defence) through investment in import substitute industries, and subsidisation of public credit for industrial projects(Plan Organisation, 1967, 39).

Exchange Rate Policy

3.50 The Iranian rial is not a freely convertible currency. The country had bilateral payment agreements with nine of its major trading partners (i.e.FRG, US, UK, GDR, Japan, Turkey, China, and PDR of Korea). Payments under the agreement with six of these countries were made in US dollars, but settlements with the other three trade partners (i.e. China, GDR and PDR of Korea) were made in rials (IMF, 1975, 220), through payments to non-residential accounts. In practice, deposits in non-residential accounts were mostly used to pay for exports from Iran (usually oil and natural gas).

3.51 Foreign exchange was priced in connection with the increases in oil revenue so as to reduce the cost of imported capital goods for industrial plants producing import substitute goods. The value of the Iranian rial in relation to the US dollar increased from 76.4 to 69.3 during 1969-75. It reduced the volume of non oil exports (because of elastic demand in the international market), but increased oil revenues which enjoy a relatively inelastic demand in the world market. On the other hand, while exchange policy reduced the cost of imported capital goods and intermediates, it also increased non-essential imports particularly after the early 1970's relaxation of protection on consumer goods.

Interest Rate Policy

3.52 Iran's high interest rate policy (8% in 1969, and 9% in 1973) was also designed to attract overseas capital, because the authorities wished to encourage foreign companies to undertake longer run investment. The Government hoped to attract foreign funds into joint venture projects in a bid to harness foreign expertise for local industry (IMF, 1976, 196).

Price Policy for Industrialisation

3.53 There is a correlation between the behaviour of price levels and industrial development. Prices affect the level of consumption, saving, investment and distribution of income. Price stabilisation policy encourages consumers to increase their demand for manufactured products, which leads to higher productive investment. Moreover, stabilisation of raw material prices grants a regular supply of inputs for manufacturing.

3.54 In an open economy such as that of Iran, market mechanisms rule over the economy. Therefore, prices fluctuate according to domestic and international markets. Prior to 1972, the Government's initial attempt was to strengthen the demand side for industrial growth, through price stabilisation. In the Fourth Plan, price stability was a major objective but was not fully realised over the period. Prices increased at 6 per cent per annum in the final two years of the Plan (1971-72). The general price level was positively correlated with the overall shortage of supply, particularly in the agriculture and construction sectors, due to bottlenecks in infrastructure and movement in world prices.

3.55 The high rate of inflation in the first half of the 1970s together with the government's seeming inability to stabilise the levels, dramatised the need for proper control over prices. Applying structuralist views, the inflation was inevitable when the economy was in transition from an outward-oriented, export based economy, to an inward oriented domestic market base economy. Such a transition required a massive change in the socio-economic structure of the country, but the price mechanism operating within very imperfect market structures and with limited resource mobility, was unable to achieve this. Shortages and disequilibrium on many fronts like rapidly rising demand for goods and services, following urbanisation and the rapid increase in incomes of the middle classes, could not be met by the available absorptive capacity of the current industrial and agricultural sectors. Due to the oil price boom of 1973, the huge expenditure on capital intensive infrastructure with long gestation periods like petro-chemical projects and the idle capacity of previous projects, led to a rapid growth of imports and prices.

3.56 To sum up, the industrialisation policy of the 1960s and early 1970s played a double edged role. On the one hand, it managed to achieve a high rate of growth in import substitution industries. At the same time, the policy makers were less concerned with the problem of income inequality and geographical disparity. The state contributed to the establishment and expansion of a modern industrial sector through various grants and exemptions to entrepreneurs. The credit policy of the Government lowered the real price of capital to those individuals investing in the industrial sectors. Over-valuation of the exchange rate lowered the relative price of imported capital goods, and a broad range of fiscal policies such as tax holidays or lower rates of taxation for companies that produced import substitute goods, all contributed to the establishment of a modern

industrial sector. On the other hand, the industrialisation policies of the 1960s and early 1970s led to a deepening maldistribution of income. Therefore, the lower income groups fell increasingly into debt and the higher income groups piled up their savings (Pesaran, 1975, 12-25).

Regional Development in the Fourth Plan

3.57 Several new developments in regional development took place during the Fourth Plan. The study and survey of regions for their economic potential was emphasised. Two more regional development authorities were created, one in the province of Saheli (Bushehr and Hormozgan) and the other in the Kordestan province. In order to promote decentralisation and to give the provinces a more effective voice in decision making, the Town and Provincial Councils law was passed in 1971. Simultaneous with the enactment of the Town and Provincial Councils Law, the Plan Organisation introduced the idea of provincial project complexes. They were linked up more effectively to the local councils for more detailed programs approved "specially with respect of approval of location of the projects" (Namazi, 1976, 246).

3.58 The organisation of the Regional Development Authorities also underwent major changes. Towards the end of the Fourth Plan, the original authority given to Regional Development Authorities for planning and execution "were broken up into separate sections: Planning was appended to the Plan Organisation, and execution was subsequently transferred to the Ministry of Agriculture and Natural Resources. Later on, during the Fifth Plan (1973-1978), they became the Provincial Planning and Budgeting Bureaus" (Amirahmadi, 1986, 510). To overcome the inadequacies of the 23 provinces as

planning units, regionalisation on the basis of socio-economic criteria was recommended by the central government planner. Subsequently, as a result of a study undertaken by the Plan Organisation and an American consulting firm, the Battelle Memorial Institute, the country was divided into 11 planning regions based on the following factors: the degree of economic development; type of economic activity; ethnic composition; development potential; existence of growth points, and contiguity. Each region was to be administered by a regional planner, except the Central Region. This proposal, however, was rejected by the Cabinet, because if it had happened, the regional planners would have wielded more practical power than the provincial governors or heads of high Sectoral Offices (Amirahmadi, Ibid:510).

3.59 Economic activities in both the private and public sectors, thanks to the increased oil revenues, were expanded during the Fourth Plan. The rate of growth in GNP in real terms reached an unprecedented 11.6 percent a year, exceeding the growth target by 2.2 percentage points. The annual rate of growth of industry and mining reached 13.8 percent, exceeding the projected target rate by 0.8 percentage points. About 737 thousand new jobs were created, far exceeding the projected goal. The relative share of agriculture in GNP during the Fourth Plan, however, declined by 6.5 percentage points. "As a result, agriculture, which in 1967 made the greatest contribution to GNP, lost its most important relative position to industries and mines" (Bahar, op.cit:54). Agricultural employment- in other words rural families- which was to be increased by 6.7 percent during the Fourth Plan, actually declined by 5 percent. Agricultural output also failed to meet the demand, and as a result the net import of agricultural products reached 8.5 billion rials in the last year of the Plan, "up from 1.3 billion rials in the First year" (Amuzegar, op.cit:165). Therefore, migration of rural families to cities speeded up during

this plan period. National Oil and Services, on the other hand, increased their relative shares in GNP by 2.1 and 3.6 percentage points, respectively.

The Fifth Development Plan (March 1973 - March 1978)

3.60 The Fifth Five-Year Development Plan is distinguishable from its predecessors not only by its size, but also by the inclusion of the private sector`s investment as well as military and defence expenditures for the first time. The plan initially called for total investment of $36.4 billion during its five- year period, and total oil revenue was anticipated as about $24.6 billion. But the decision taken by the organisation of Petroleum Exploring Countries (OPEC) in Winter 1973 had the effect of quadrupling Iran's oil revenues to $98.2 billion. As a result, the huge jump in oil income led to the Plan being revised and led to many changes, especially in defence infrastructure, public administration, urban development and housing. The total fixed capital investment under the revised Plan was put at 4,699 billion rials (about $70 billion), double the scope of the original version and about 6.5 times larger than in the Fourth Plan. Of total projected expenditures, 3,118.6 billion rials ($46 billion) was to come from the public sector and the remaining 1,580 billion rials ($24 billion) from the private sector. Manufacturing was given the highest priority with total projected expenditures of 780.1 billion rials, or 16.6 percent of the total expenditure.

TABLE 3.9
FIXED INVESTMENT IN THE FIFTH PLAN (in billion rials)

TITLE	PUBLIC SECTOR	PRIVATE SECTOR	Total
PUBLIC AFFAIRS	380		380.00
Imperial court	-	-	-
Legislative branch	-	-	
General administration	0.70	-	0.70
Judiciary	1.96	-	1.96
Implementation of domestic policy	0.40	-	0.40
Domestic security	0.60		0.60
International relations	-	-	-
Financial administration	1.00	-	1.00
Statistical & Technical services	30.00	-	30.00
Information and mass media	26.90	-	26.90
Government building	319.00	-	319.00
SOCIAL AFFAIRS			
Education	126.77	4.80	131.57
Arts and culture	9.10	1.00	10.10
Health, medical care and nutrition	42.5	3.65	45.70
Welfare	9.00	-	9.00
Physical education	15.00	40	15.40
Urban development	135.50	-	135.50
Housing	240.00	685.00	925.00
Environmental conservation	6.10		6.10
Multi-purpose regional development	10.00	-	10.00
ECONOMIC AFFAIRS	2,146.49	885.38	3,031.87
Agriculture and natural resources	176.85	132.40	309.25
Water	162.24	4.00	166.24
Electricity	310.50	-	310.50
Industry	277.14	503.00	780.14
Oil	535.90	87.80	623.70
Gas	120.00	47.50	167.50
Mines	61.80	4.50	66.30
Transport & communication	402.20	90.00	492.20
Post & telecommunication	91.30	-	91.30
Tourism	8.46	16.18	24.64
Commerce	0.10	-	0.10
Grand total	3,118.57	1,580.23	4,698.80

Source: Plan Organisation, Fifth Development Plan of Iran, Teheran, 1975.

3.61 The general aims of the Fifth Plan were to:

1. Improve living standards and incomes;

2. Achieve continuous, balanced growth with minimum inflation, and spread scientific knowledge and technology;

3. Increase domestic production and industrial imports;

4. Invest surplus foreign exchange abroad;

5. Preserve and promote national culture and heritage

3.62 "Industrial development is of particular importance in view of the fact that it provided protection and incentives for the progress of the other sectors of the economy, and it is a most important factor in raising the national income and providing opportunities for production employment. At this stage of the country's economic development, industrialisation is considered important as an element of sustained long term economic growth, not just because industrial unity established during the plan period will continue to operate in the years to come, but rather because the measures taken or postponed in this field will determine the country's future. Industrial development not only results in the supply of industrial goods required by the society, but also facilitates increased productivity and innovation in other sectors of the economy, and leads to the introduction of new and improved methods of management and higher levels of technical skill. In the Fifth Development Plan, the country's industrial development is regarded as a basic measure in laying the ground work of an advanced economy, which will pave the way for the Great Civilisation"(Plan Organisation, op.cit:224).

3.63 Agriculture, as in the Fourth Plan, was given only lip service. It was allotted 6.6 percent of the total expenditure, most of which was to be spent on large-scale projects. Thus the allocation of resources in the Fifth Plan was envisaged to ensure balanced growth between different sectors, and between particular regions of the country.

Regional Development in the Fifth Plan

3.64 On regional development aspects, "initially the plan was regionalised on the basis of 11 planning regions". Each region had its own investment programs. However, "as the Fifth Plan was launched, the contradiction of the regional plan with the centralised system began to show itself. In practice, the $2 million study by the consulting firm was not reconciled with sectoral plans, and the two evolved in isolation. The sectoral programs were adopted and the regional studies and projects identified were put aside. The division of the country into 11 regions was also rejected because the regions did not conform to political and administrative divisions. In practice, the government favoured the sectoral divisions in the provinces and the leading role of the governors" (Amirahmadi, op.cit: 510).

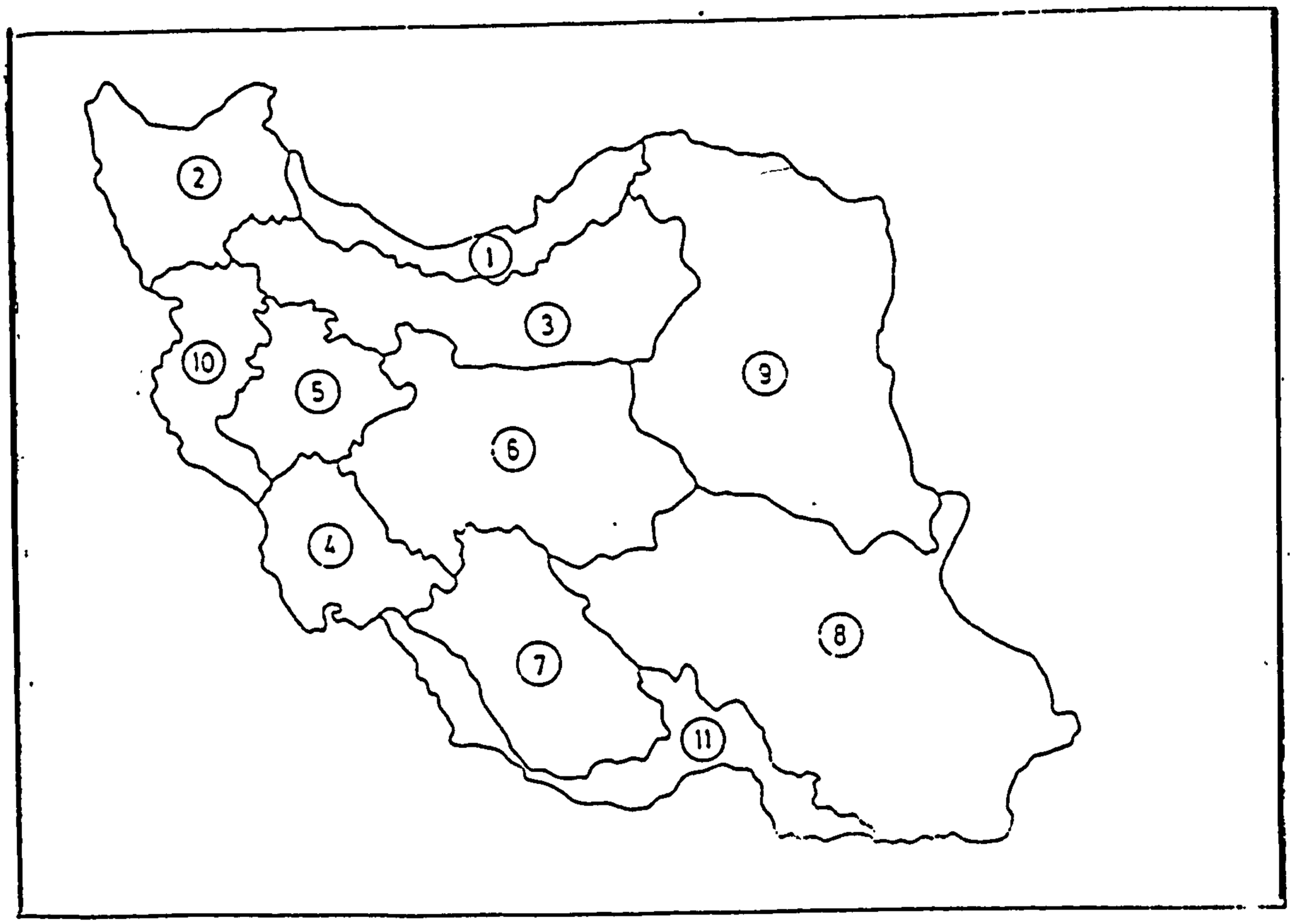
TABLE 3-10

URBAN AND RURAL POPULATION DURING 1972-1981

1000 inhabitants	1972	1977	1981
Total population	30,500	34,700	39,000
Urban population	13,000	16,000	20,600
Rural population	17,500	18,300	18,400

Source: Statistic Centre of Iran (1985, p.52)

Figure 3.1 Eleven Planning Region of Iran



Legend:
1. Gilan, Mazandaran, Gorgan
2. Azarbaijan
3. Tehran, Semnan, Zanjan
4. Khuzestan, Kohkiluueh
5. Hamedan, Lorestan
6. Esfahan, Yazd
7. Fars
8. Sistan/Baluchestan, Kerman
9. Khorasan
10. Kermanshahan,Kordestan, Ilam
11. Bandar Abbas, Bushehr

Source: Plan and Budjet Organisation (1973) Iran's Fifth Development Plan 1973-78. Revised. A Summary (Tehran:PBD). (in Persian).

3.65 After the rejection of the idea of the 11 planning regions, the Regionalisation Division of the Plan and Budget Organisation was given the task of organising Provincial Planning and Budgeting Bureaus (PPBBs) in each of the 23 provinces. The PPBBs were to prepare centrally funded and approved `Social Regional Projects (SRPs). The provincial authorities and local councils were given the authority to decide on the location of SRPs. However, "the execution of SRPs was hampered both by the low quality of the PPBB`s staffs and by other serious problems such as lack of co-ordination, co-operation, and control among various agencies" (Amirahmadi, Ibid: 65).

3.66 On the performance of the Fifth Plan, it is evident that the economy grew at a rate much faster than during the Fourth Plan. In fact, GNP grew at an average annual rate of 17.2 percent at constant prices, as compared with the 11.6 percent growth rate during the Fourth Plan. However, this rapid acceleration of economic development after 1973 soon led to an unprecedented rate of inflation, and material shortages slowed down implementation of many of the development projects. By mid-1975, on the anticipation of a deficit in the 1975-76 budget, it was predicted by government leaders that "the public sector and some semi-public banks would have to borrow short-term funds in the international capital markets. In less than two years after October 1973 and the Middle East war, Iran had spent, invested, or loaned most of its oil revenues. The major question was not whether the country could spend or absorb its new-found wealth, but how to do so efficiently. Some government members began to question the unrestrained growth goal, asking whether it was wise to continue to expand the economy in the light of widespread shortages, double digit inflation and port congestion-all of which were major problems in 1975".

3.67 Some negative impacts of the Fifth Plan on economic and regional development can be summarised:

1. Migration of rural families to cities;

2. Deep differences between rural and urban incomes and especially among different social groups, such low income and high income groups.

As a result of the Fourth and Fifth plans, the dominant trend was towards urbanisation and rapid growth of large towns and a decline in the number of villages.

3.68 The most important reason for rural emigration to large cities during the plan period, and even after it, was due to the huge disparity in incomes between rural and urban areas. The increasing disparity of incomes between urban and rural areas and between different regions of Iran and different social groups clearly showed that the Fifth Plan for social development was unsuccessful, at least from a social point of view; or in other words, its effect was not sufficient. A large number of new industries were located in areas where such living conditions as the climate of the region were unfavourable. Similarly, numerous inconstancies concerning the location of activities and population within the country and the inability to control migration were other factors in defeating the Fifth Plan. The revised Fifth Plan was no longer being followed by late 1976, and the Sixth Five Year Development Plan which was to begin in 1978 was never launched because of the February 1979 revolution.

3.69 Iran's rapid growth of oil revenues caused a considerable increase in foreign trade and a huge import of special goods, including even agricultural products in which Iran was self- sufficient only a few years earlier. Therefore, many activities particularly relating to agriculture became uneconomical.

Process of Import Substitution in Iran

3.70 The process of ISI in Iran during 1962-1977 and 1988-1992 can be classified into two sub-periods. First, the initial formulation of the strategy in the Third and Fourth Development plan, and secondly the revised strategy of industrialisation in the Fifth and next plans. Throughout the 1960s, the import of manufactured goods as a percentage of the domestic market reduced from 45.5 per cent to 29.5 per cent, while in the second stage of industrialisation which began in the Fifth Plan, the ratio of imports to domestic output increased fast. The manufacturing sector had rapid growth with real growth of 10, 13.2 and 15.4 per cent annum for the 1959-63, 1963-72 and 1973-77 sub-periods respectively.

TABLE 3.11

SHARE OF MAJOR ECONOMIC SECTORS IN GDP AT THE END OF THE FOURTH AND FIFTH PLANS
(fixed prices of 1972)

	1972	1977	Annual rate of change (%)
Agriculture	18.1	8.0	-2.2
Oil	19.5	48.7	+5.9
Industries & Mines	22.3	16.1	-1.2
Services	40.1	27.2	-2.5
Total	100.00	100.00	0

Source: Plan and Budget Organisation, Fifth Development Plan, Tehran 1975. (in Persian).

3.71 ISI in the 1960's created an environment necessary to stimulate investment needed to make up the ground lost over the years, because of the relative ease most individuals had in meeting their manufactured requirements through imports rather than domestic production. The adoption of the ISI strategy, together with the rising oil revenues and the country's political stability, produced high profit expectations and thus produced high and sustained growth of the industrial sector. In fact, the country's manufacturing sector grew about twice as fast as the average growth of this sector in other developing countries. The result was an average annual growth of gross domestic fixed capital formation (GFDCF) reaching 16 per cent, whereas that of fixed investment in machinery and equipment amounted to over 20 per cent during the Third and the Fourth Plans.

Table 3.12
Sectoral Import of Capital Goods, 1972

Industry and Mine	411.9 (12.3)
Service	168.9 (18.7)
Agriculture	62.3 (17.7)

Note: Figures inside brackets indicate annual growth rate.
Source: Ministry of Economy, Annual Surveys, various issues(1961-1973).

2.72 The character of the 1960's industrialisation of Iran can be classified as follows:

(A) Rapid Growth

According to the data published by World Bank, Iran had the highest rate of growth of GNP (i.e. 7.9% per annum) among industrialised and newly industrialised

countries (NICs) during 1960-1978 (Charle, 1983, 125). Manufacturing sector growth in Iran during 1962-72 was characterised as follows:

1. Rapid and wide variety of import substitution
2. Manufactured output rose by six times;
3. Employment in the manufacturing sector nearly doubled, in spite of major public investment in capital intensive industries;
4. Share of large units increased from 55 per cent of manufacturing value added to 67 per cent;
5. Total investment increased at 21 per cent per year as compared to 0.8 per cent during 1959-63;

(B) Exclusive Reliance on Oil (Fiscal Linkages)

Iran began to follow an ISI similar to that adopted at the time by a number of other developing countries. But the major differentiating characteristic of Iranian industrialisation was its heavy reliance on oil exports, instead of promoting manufacturing exports to pay for a proportion of imports of capital and intermediate goods. The rise of oil revenues helped to bring the current level of real national savings to more than 20 per cent of the gross national product between 1963 and 1972; as the result, there was an increase in current public expenditures and assistance to the private manufacturing sector.

(C) Pure Process of Import Substitution in Non-Oil Manufacturing

The industrialisation strategy adopted prior to 1973, especially during 1960-69, was to a large extent considered to be pure classical ISI, because:

(1) Domestic production had risen most rapidly as a proportion of the domestic market in the field of consumer durable goods;

(2) Domestic market orientation played a primary role in Iranian industrialisation on the basis of an "inward looking" perspective;

(3) Rapid import substitution of intermediate and capital goods simultaneously with or immediately following domestic production of consumer goods;

(4) The new infant industries were protected by a heavy tariff wall and direct import controls;

(5) Domestic and foreign private capital participated in the process of ISI, but the domestic entrepreneurial class evolved out of import activities.

(6) The public sector played a vital role in ISI.

The pattern of substitution saw non-durable consumer goods grow first, then the expansion of durable goods manufacture, and of intermediate and capital goods industries in the 1960's and 1970's. The 1960's marked the start of the consumer durable era, as already indicated, and this was when the most rapid expansion of import-substitution really got under way. Later, in the early 1970's, the main development was the spread of import substitution into the intermediate and capital goods sectors, although at the same time some tariff protection for the older established consumer oriented industries was reduced.

(D) Weak Direct Linkages

Another important character of Iranian industrialisation has been its heavy reliance on imported inputs and a lack of interdependence in the manufacturing sector. The manufacturing sector remained an enclave of assembling intermediate goods with

marginal backward and forward linkages, and an increasing dependency on import of foreign technology, skilled manpower and capital goods.

3.73 The ambitious programme of the Shah protected modern industries on the journey to the world of "the great civilisation", but it neglected traditional sectors and low income groups which might have radically increased inter-sectoral demand and output, thanks to the oil induced income of the 1970's which led the urban middle class to demand higher quality of manufactured goods. At the same time, the lower classes had no possibility of choice of high quality goods, so this trend led the planners to search for a more "outward-oriented" growth of specified industries. To sum up, the import substitution industrialisation of 1962-1972, although contributing to a quantitative change in the growth of industries and composition of manufacturing, did not bring about a structural change in terms of creating effective income distribution, inter-industry linkages and diversification of the economy. As far as sectoral shift is concerned, Iranian import substitution led to bankruptcy of the agriculture sector, over growth of the service sector, and finally oil still was the dominant sector being merely a source of revenue without any radical movement in its direct linkages to the industrial sector.

3.74 Import substitution contributed to the engagement of more population in large scale projects in the industrial sector. However, due to rapid increase in the share of capital intensive projects, the growth of employment was lower than investment and output growth. Among other things, an important objective of import substitution policy in Iran was to save foreign exchange and help the country's balance of payments, but the converse was the case due to import of expensive new plants, machinery and intermediate components. But in spite of all these shortcomings the Iranian industrial sector grew at a

high rate, and despite further disintegration of the Iranian economy, there was a substantial gain by import substitution in consumer durable and some intermediate goods.

TABLE 3.13
INCREASE IN IMPORT OF GOODS BETWEEN 1972-1982

	1972	1977	1982
Estimate of Imports (million constant 1351 Rials)	240	1760	2670
Annual growth rate (%)	49	84	-

Source: Statistic Centre of Iran (1984, p37)

Oil Boom And Industrialisation Strategy: 1972-1977

3.76 Capital abundancy created in the 1970s in Iran and other oil producing countries reinforced the pledge of industrialisation, by introducing parallel development of non-traditional manufactured export industries to substitute oil revenue with new sources of income i.e. a strategy of export substituting industrialisation (Ochel, 1978, 19). The post-oil boom industrialisation strategy adopted by Iran led some to suggest that it could become the world's fifth industrial power by the end of the century (Nikki, 1981, 170), and because of the country's natural resource endowment, that Iran could develop heavy energy-based industries. By considering a longer run growth path, the planners pursued an industrialisation strategy based on "Big Push" and "comparative advantage", in spite of major infrastructural bottlenecks such as poor performance in transportation, ports, education, health, power, water supply and agriculture.

Revision of Industrial policy (1973-77) and Industrial Structure

3.77 In the early 1970s, following the extraordinary boom of oil prices, a number of capital intensive firms were established in Iran. Manufacturing output increased by 28.8 per cent per annum during 1973-77 at current prices, or 15.5per cent at constant prices. In this period Iran had the largest manufacturing sector in the Middle East.

3.78 Following a study pursued by the ILO on income inequality in Iran, the Fifth Plan pursued a policy of reducing income inequality and damaging impacts of rapid growth. The main outline of the Fifth Plan was as follows (Plan Organisation, 1972, 10):

1. Control of population growth.
2. More equal distribution via employment generation by labour intensive projects and price stabilisation;
3. Rapid growth with stable prices maintaining a good balance of payments;
4. Improving efficiency and productivity of industry.
5. Diversification of exports of modern manufacturing;
6. Attraction of foreign capital by establishing "export platform" technological intensive industries;
7. Encouraging technical investment;
8. The state sector planned to invest only in key industries like oil, copper, iron and steel, petro-chemicals and other strategic sectors like defence and infrastructure.

3.79 The industrial policy of the Fifth Plan emphasised the efficiency of industry rather than the earlier policy of "encouraging domestic production at any cost". It was suggested that similar small industrial units should be combined, to maximise efficiency. The Plan pursued a gradual denationalisation of the public sector and the establishment of capital and intermediate producing industries to reduce dependency on imported goods.

3.80 The commercial policy of the government for consumer goods industries intended the gradual withdrawal of protection, so as to increase their competitiveness and efficiency. In the case of capital and intermediate goods, the industries were given protection but for a limited period of time.

3.81 By pursuing a modernist strategy of manufacturing development, the composition of manufactured products changed, from traditional goods to modern luxury items. In 1971, the textile industry was the dominant manufacturing sector in Iran, followed by vehicles, sugar, basic metal and tobacco products. In 1977, the distribution of manufacturing output changed in favour of motor vehicles (21.6%), textiles (13.5%), basic metals (9.4%) and home appliances (8.3%) (Central Bank of Iran, 1978, 175). In spite of the modernist strategy of industrialisation, Iranian industry was dominated by traditional import-substituting light industries. During 1960-1977, the share of non-durable consumer goods manufacturing declined by 6 per cent, while the share of consumer durable, intermediate and capital goods increased by the same amount.

3.82 During the 1960s ISI strategy in Iran, electrical equipment and vehicle motor production had a remarkable expansion, but imports of machinery accounted for over 90 per cent of the domestic market and about one-fourth of the total import bill (Wilson,

1977, 61). The share of capital goods imports increased from 23.4 per cent in 1972 to 29.8 per cent of total imports in 1976. With the help of the Czechs and Soviets, two industrial complexes for producing machinery in Arak and Tabriz started in 1972. The machine tool industry of Arak produced steam power generators, pressure stores, goods carriers, lift trucks and other machinery for the chemical, cement and sugar industries. It was planned to produce 30,000 tons of machinery in the second round of activities in 1976.

3.83 With the beginning of the flow of oil revenue after 1973 and the change of fortune subsequently, the agreements were called off. The Romania-Iran tractor factory, for example, stopped functioning, and a new contract was signed with a British company for a tractor assembly plant, and with a West German company for producing industrial and water pumps. The machine tool industry of Tabriz was also established in 1967 for an annual production of 10,000 tons of machine tools, electro-motors, pressing machines and compressors. In the 1970s, the Government's tendency towards producing domestic manufactured intermediate goods was in favour of relying on the multinational corporations which could supply the required technology, skilled labour, managerial talent and market expertise. The high degree of dependence on multinationals undoubtedly reduced the spread effects and linkages from these activities to the rest of the economy, reducing their potential benefits (Looney, 1978 , 115).

3.84 The Government's policy for import substitution was protecting the consumer goods industry and a liberalisation of intermediate and capital goods imports in the 1960s. Therefore it discouraged the infant industries in the field of investment goods. Moreover,

the capital intensive projects pursued mostly in the 1970s allowed the import of duty free intermediate goods.

3.85 While total gross purchases of the manufacturing sector increased by nearly than 4 times during the 1970s, the domestic demand of industries for intermediate goods reduced in the 1970s. It shows that while the industrialisation had a positive impact on the growth of industries, the industries became more import oriented for intermediate goods. In 1972, about 36.6 per cent of intermediates produced for local manufacturing were supplied by domestic sources, but by 1978 the figure had reduced to 28.2 per cent.

Post Revolution Strategy and Planning

3.86 Since the 1979 revolution, profound changes have taken place in the Iranian economy as a result of a combination of external and internal factors. The revolution itself, the eight year war with Iraq, fluctuations in the output and price of oil, economic sanctions by the Western countries and the blocking of Iran's foreign assets were amongst the main factors which had detrimental effects on the development of the Iranian economy during the post revolutionary period.

3.87 The Islamic Republic's response to these unfolding economic conditions was to follow a policy of severe import compression, international economic isolation and reliance on external capabilities as principle allocative and distributive mechanisms in the economy. Pre-existing problems of the Iranian economy, particularly the inflexible industrial structure which had developed during the pre-revolutionary period, started to

manifest themselves in the 1980s, as the three post- World War II decades of rapid growth in oil export revenues finally came to an end. One of the important institutional changes which took place as a result of the revolution itself was the nationalisation of a considerable part of the large scale modern industry, as well as of the entire banking and insurance industries. These nationalisations were the natural outcome of revolution, because in many cases the owners and managers of some of these large scale factories had escaped the country and the enterprises were on the verge of collapse. In these situations the Government had to take direct controls over the economy, and latterly particularly because of the exigencies of a war economy. Foreign exchange shortages due to the decreased oil revenues which became specially acute from the mid-1980s led to a policy of strong 'import compression', with more emphasis on import substitution and strict foreign exchange controls and rationing.

3.88 To mitigate the impact of economic sanctions and inflation on the standard of living of the large masses of population and to alleviate the disruptive effects of severe shortages of major commodities, the Government introduced an intricate system of rationing and direct subsidies for a large number of commodities throughout the war period. Government controls in other economic aspects also increased significantly during the war period. The Iranian economy in this period can be characterised as a managed war economy. After the cessation of hostilities with Iraq in August 1988, the Government announced that the Iranian economy was badly in need of reconstruction. The Islamic Government's First Five Year Plan represented the government's manifesto for the reconstruction of the Iranian economy, and laid down a blueprint for Iran's future development. It was the first official document that clearly and comprehensively outlined the Government's medium and long-term socio-economic objectives and policies. This

Plan, formally approved by the Islamic parliament in January 1990, was the product of years of negotiations and compromise and was made possible only after the cessation of hostilities with Iraq in 1988. The Plan covered the period from 1989/90 to 1993/94 and anticipated an average annual rate of growth of GDP of 8.1 per cent.

General Objectives and Orientations in The First Five-Year Plan

3.89 The principal objective of the First post-revolutionary Five-Years Plan was set out as follows:

> 'The ultimate objective of the Islamic Society is Man's development and elevation and his movement towards 'Allah'. Economic and social development must constitute an effort to remove any obstacles impeding Man's and the Islamic nation's development and elevation.

3.90 General objectives and orientations of economic and social development in the Islamic Republic must be drawn up on the basis of Islamic Laws and Principles. Establishment of Islamic relations in society, which is the objective of Divine Instructions, must be considered as the principle and all objectives, policies and plans must be drawn up and accepted in its light' (First Five Year Plan, 1989-1993).

3.91 The General Objectives of the First Five Year Economic, Social and Cultural Development Plan (March 1989-March 1993) were as follows:

"1. Reconstructing and reinforcing national defense capabilities as well as satisfying its urgent needs on the basis of goals already set;

2. Reconstructing and renovating productive and infrastructural capacities as well as population centres damaged during the imposed war with Iraq within the framework of priorities envisaged in the Plan.

3. Quantitative expansion and qualitative promotion of mass culture, education, sciences and technology with special emphasis on the young generation;

4. Achieving economic growth with the aim of increasing per capita production and productive employment as well as reducing economic dependence, with special emphasis on attaining self-sufficiency in strategic agricultural products and bringing inflation under control;

5. Endeavouring to ensure Islamic social justice;

6. Providing minimum basic needs. of the population;

7. Setting and readjusting consumption patterns with a view to responding to the needs of individuals and society in the process of material and spiritual growth and development and, at the same time, ensuring human dignity and liberty;

8. Reforming the country's executive and judicial organisation and management at various levels;

9. Endeavouring to ensure judicial security, reinforce theoretical and practical bases of equality before the law, enforce justice and enhance legitimate individual and social freedom;

10. Spatial organisation and geographic distribution of population and activities commensurate with relative advantages of each region , except cases dictated by political and defense considerations.

3.92 Within the projected average annual growth rate in GDP of 8.1 per cent during the plan period, the main sectoral annual growth targets were 9.5 per cent for the oil sector, 15 per cent for industries and mines, 6.1 per cent for agriculture and 6.7 per cent for services. Non-oil GDP was planned to increase by 7.9 per cent on average per year. The shares of various sectors in GDP during the plan period are given in Table 3.14.

Table 3.14
GDP breakdown for the Five- Year Plan (1989-1993)(in billion Rials)

Sectors	1989	1990	1991	1992	1993	growth rate
Average Growth rate						
Agriculture	5430.2	5677.9	6026	6454	7000	6.1
Oil	2500	2741	2833	3155	3250	9.5
Industry&Mines	1864	2148	2461	2866	3262	15.0
Water&Gas	490	525	587	618	913	9.1
Construction	1593	1844	2072	2281	2428	14.5
Services	12757	13663	14650	15681	16793	6.7

Source: First Five-Year Plan

3.93 The strategy of development and industrialisation adopted by the Plan was based on import-substitution with emphasis on export-oriented production. It aimed to work towards 'economic independence' and self-sufficiency' with the domestic production of a wide range of goods. The areas of emphasis, as far as general investment policies for the industrial and mining sector were concerned, were basic (mother) industries, especially in the fields of metals, basic chemicals and petro-chemicals.

Appraisal and criticism of the First Five-year Plan.

3.94 The Plan projected an average annual rate of growth of 8.1 per cent in real GDP and an annual average rate of 11.6 per cent in real investment, with corresponding growth rates of 5.7 per cent and 3.8 per cent for private and public consumption respectively. Most of these targets were rather ambitious, and data released by the Central Bank of Iran which covered the three years of the Plan were indicative of the difficulties facing the economy in achieving such targets. For example, the growth of real GDP in 1989 amounted to 3.6 per cent, which was respectable for the first year of the Plan but fell well short of the 8.1 per cent target. Gross capital formation declined by more than 8 per cent as compared to the 11.6 per cent growth stipulated in the Plan.

3.95 There was a special emphasis of the Plan on agriculture as the "axis of development". The projected average annual growth rate of 6.1 per cent for the agriculture sector seemed to be very high by historical standards, but the agriculture sector has progressed very well with an average rate of about 6 percent, which was almost the same as the target rate and moreover the growth in this sector has been very continuous and stable. Of course the main reasons for such situation are related to the lower dependency of this sector on foreign resources and also drastic improvement in agricultural policy during the Plan. During the last two plans of the Shah's rule (1968/72-1973/77) the projected growth rate for this sector was 5.7 per cent, but the actual rate achieved was only 4.2 per cent. The projected growth rate of 15 per cent for industrial and mining sectors was slightly higher than what was achieved during the 1968 to 1972 period, and only about 1 per cent less than the actual growth rate obtained during the country's rapid industrialisation period (1973-77). But between 1977 and 1987, the

industry and mining sector grew by an average annual rate of only 2.9 per cent; the reasons for a such low growth included the impact of the revolution itself, economic restrictions by the West and the impact of the war.

Table 3.15
Development Funds During the First Development Plan (1989-1993)
(in billion rials)

General Affairs	519.6
Statistical & Technical General Services	55.4
Information and Mass Communication	45.0
Public Buildings and Installation	
Social Affairs	2466.4
General Education	800.0
Culture and Art	37.5
Health, Medical Care and Nutrition	456.0
social Security and Well-being	23.1
Physical Education and Youth Affairs	50.0
Urban Development	100.9
Rural Development and Modernisation	58.0
Housing	115.6
Environmental Protection	2.0
Regional Development Multi-purpose Operations	25.3
Technical and Vocational Education	200.0
Higher Education	213.7
Research	384.2
Economic Affairs	4002.8
Agriculture and Natural Resources	787.2
Water Resources	185.8
Electricity	171.2
Manufacturing	673.6
Mining	289.6
Commerce	25.7
Roads and Transportation	1197.3
Posts and Telecommunications	51.5
Tourism	19.5
Other Development Expenses	1200.2
(Reconstruction of War Stricken and Bombed Rural and Urban Zones)	(350.0)
Total	8189.0

Source: Plan and Budget Organisation, The First Economic, Social and Cultural Development Plan of Iran (1989)

3.96 The planned growth rate of 9.5 per cent for the oil sector was very high. The persistent world oil glut and the pressure on OPEC members to reduce their oil production, made it unrealistic. The projected oil price for the duration of the Plan was extremely optimistic. Fundamentally, the oil price rises of the 1970s had led to the development of energy-saving technologies, changes in product-mix towards low energy-intensive products, and these as well as the serious recession in industrialised economies were a clear signal and warning to the planners that the oil prices would not increase as much as they would like them to. Indeed, the drastic decline in oil prices particularly since 1991 clearly demonstrates how wrong and optimistic the planners were in oil revenues and oil exports. The decline in oil price and oil revenue particularly in the final year of the Plan caused some halt in economic growth and problems in debt service, and it showed that is very important for a country like Iran where oil was expected to provide around 60 per cent of government revenue for the plan period, that the planners should have given different scenarios with regard to oil prices; namely oil price decreases as well as oil price increases.

3.97 The accrual of the substantial revenues from the oil sector to the Government in a country like Iran inevitably confers an important role on the state in the process of development. For the economic development plans to be successful, the problem of planning needs to be approached in a much more general setting which addresses the uncertainties over the future. Plans of the government-particularly medium term plans-should help reduce behavioural uncertainties, help increase co-ordination of economic activities across sectors and improve the overall stability of the economy. This factor is of paramount importance in an oil economy where oil prices are extremely volatile, where

careful government planning can help to insulate the economy in the short-run from the instability of foreign exchange revenues from oil exports.

Structural adjustment policies

3.98 In the beginning of the First Five Years Plan (1989/1993) in order to create a new economic climate and in response to shortage of external resources, the Government adopted reform programs which were an integral part of the structural adjustment programs which have been adopted by several countries with the assistance of the IMF and World Bank. They were as follow:

-a revamping of the external trade sector (devaluation, import liberalisation);

-liberalisation of controls in the domestic economy (price controls, investment licensing);

-a move to economic pricing of inputs (e.g., removal of subsidies for utilities, energy , fertilisers); and

-a shift in the relative roles of the public and private sectors.

3.99 The structural adjustment policies taken by the government were in the form of devaluation, deregulation, liberalised import policies, relaxed price controls, and privatisation by selling public firms and giving a greater role to the private sector in investment in the productive sectors.

3.100 The real devaluation caused high inflation and affected the major economic sector, but it promoted exports and some previously smuggled products were being exported

through official channels. Trade liberalisation, however, tended to expose the domestic private sector to import competition and increasing import of manufactured goods had negative impact on domestic production. Two main ports for re-imports were Qeshm and Kish respectively. Deregulation, by giving a greater role to market forces caused improvement in the business climate, but by the relaxation of price controls many firms profited by selling their product at higher prices.

Industrial Strategy

3.101 The nature of structural change in an oil economy like Iran's is crucial for the long term sustainability of economic development. A crucial aspect of structural change is the extent to which the industrial sector can take over the foreign exchange provision role of the oil sector in the long run. And this to a large extent depends on the industrial strategies and policies adopted by the Government.

3.102 The strategy of development and industrialisation adopted in the First Five-Year Plan was similar to the previous plans and was based on 'import substitution', with major emphasis on heavy industries, petro-chemicals, and defence-related industries, and also a beginning to plan toward export-oriented production and outward-oriented development policies via free zones. The ultimate objective of import substitution was the achievement of "self-sufficiency" and "economic independence".

3.103 Experience shows that the import substitution industrialisation policies pursued by the Iranian government during the 1963-79 period had the paradoxical effect of increasing the economy's dependence on the oil sector. At the same time, the highly

protected manufacturing industries which grew rapidly behind tariff walls did not have the incentive to export, nor did they develop the efficiency required to compete in the international market. The experiences of the newly industrialising countries in Asia, particularly with their EPZs, shows that participation in export markets appears to be itself an important factor in learning, and efficiency gains result from contacts with foreign markets and customers(Pack, 1992). The availability of ample foreign exchange revenues from the oil sector which may lead to a reduction in the urgency of earning foreign exchange through manufactured and other non-oil exports, can preclude oil exporting countries from the benefits of this process of learning by exporting and from the discipline of the international market place. Industrial growth can thus lead to a growing gap between the productivity of resources in the industrial sector of the oil exporting country as compared to the rest of the world. The problems of industrial development in such economies are similar, not with low magnitude of investment in the industrial sectors, but with low productivity of such investment.

3.104 Of course, the argument here is not to remove all protection from domestic industry, but rather to move towards an industrial policy which provides neutral incentives between domestic and foreign sales, and one which is committed to the gradual relaxation of the protection of infant industries along their learning curve as they expand and grow. But particularly in the past, as it happened, the industrial policy in Iran did not fulfil most of these conditions.

Conclusion

3.105 Iran's industrialisation strategy has passed through various stages. Following the nationalisation of oil(1953) and agrarian reforms (1960s) creating favourable conditions for 'inward looking' industrialisation and the mobilisation of resources for domestic industries, the initial success in strengthening domestic markets in the 1960s gradually dimmed through the 1970s. Quantitative growth of industrial output failed to reform the dual character of economy. The industrial sector further detached from the agriculture sector.

3.106 The Fifth Plan (1972-1977) was keen to clear bottlenecks by allocation of more resources for domestic production of intermediate and capital intensive projects. Jumping to a higher stage of industrialisation following the 1973 oil boom was accompanied by a gradual shift from protectionism to import liberalisation, without considering the social costs of unemployed resources in the previously protected sectors.

3.107 Through the 1970s, none of the major industrialisation objectives were fulfilled. The export potential of manufacturing declined. During the Fifth Five Year Plan period, the share of import to total domestic manufactures increased by 12 per cent, and the industrial sector further disintegrated.

3.108 After the oil price hike in 1973, Iranian planners were keen to invest in capital intensive projects with a long gestation. During the lag period, domestic demand

increased proportionate to domestic production which intensified structural bottlenecks and delayed projects by foreign companies. This led to inflationary pressures and a rapid increase in imports. Although the oil boom led to the failure of import substituting industries, Iranian planners opened a new chapter of industrialisation by emphasising gas and oil-based industrialisation after 1973, particularly in the first five year plan after the Revolution (1989-93).

3.109 Since the Iranian Revolution of 1979, the political context for national economic planning has greatly altered. The war with Iraq preoccupied the country for most of the 1980's, and only late in that period was a new Five Year Plan prepared which reflected much grater social sensitivity than did plan before the revolution. But this plan was upset by the drastic fall in oil income in the early 1990's. And although import substitution remained as important part of industrial policy, the Plan looked also outwards through an export-oriented programme of development.

3.110 So, a basis of policy had been laid for the introduction of free zones as an element of Iran's economic policy for the 1990's. In the next chapter we will proceed to the examine the nature and experience of free zones in theory and practice.

Chapter Four

ECONOMIC DEVELOPMENT AND EPZs

Introduction

4.01 As explained in the previous chapter, during the Third and Fourth Plans the Government implemented a policy of Import Substituting Industries in Iran, to give momentum to the process of industrialisation. During the Fifth Development Plan, the Government paid more attention to outward-looking strategies for export promotion. For this purpose, two different paths were selected. On the one hand, the Government encouraged Import Substituting Industries (ISI) to diversify their efforts to capture foreign markets. And on the other hand, along with the private sector the Government started a mild export substitution policy, mostly in Iranian harbours. The choice was totally based on a development plan to set up export platforms in EPZ's. But with the people's uprising in 1978, the plan was set aside and only during the implementation of the First Five Year Plan after the revolution did the policy gather new life.

4.02 In this part of our study we begin to focus on EPZs. We first address our international literature review and will discuss different definitions of EPZs; the aim of establishing EPZs; the global dimension of EPZs and their characteristics; and the extent to

which EPZs have met the expectations of their host countries particularly regarding investment by foreign firms. At the end of this chapter we also identify the economic development theory from which the EPZs emerged.

EPZs As An Instrument of Development

4.03 Export Processing Zones (EPZs) have now been widely recognised as key institutions in export-led growth strategies. This is particularly true of developing countries which, after following import substitution development programmes, find their home markets saturated, their financial resources of local as well as of foreign exchange limited, technology almost non-existent, their products unwelcome in markets in the developed world, new job opportunities not commensurate with demand, and formidable economic, social and political pressures building up. All these pose a grave challenge to their governments.

4.04 EPZs represent a significant innovation in the long history of free trade zones. They were not to be merely areas where goods produced elsewhere are stored, repackaged, and re-exported. EPZs were to become areas where goods were manufactured, not simply stored or traded.

4.05 The first EPZ was established in Ireland when Ireland's industrialisation policy underwent a change from import substitution to export-led expansion. So, the modern EPZ is

considered as an Irish invention, when the country faced declining use of its Shannon airport due to developments allowing air craft a longer range between refuelling. To stimulate employment, the Irish government established in 1959 the Shannon airport area as a free trade zone and actively sought to attract manufacturers(ILO/UNCTAD, 1988,1-2).

4.06 Of course, the major interest of the EPZ/ FTZ concept invented in Ireland lies not so much in the invention itself, as in its world-wide diffusion in subsequent decades and, what is more, its diffusion to developing countries rather than to the more industrialised countries and North America. Undoubtedly, the growth of export processing zones in the developing countries is one of the most significant events among the many structural changes which took place in the 1970s and 1980s in the world economy. Ireland's initial success with this innovative structure encouraged many LDCs to create EPZs, and their number grew rapidly. As of 1986, forty-seven developing countries had established over 175 EPZs and some additional 110 zones were planned or under construction(Kreye et al, 1987). Ireland's experience was buttressed with a fundamental change in the theory of economic development. In the late 1960s and early 1970s, after at least a decade of pursuing import-substitution policies, the majority of LDCs were reaching the productive limits of these policies.

4.07 As Belassa (1980) has effectively argued, inward-oriented, import-substituting development strategies tend only to expand production to the point of domestic consumption

demand. Because these newly created industries are not usually competitive with external sources of goods in quality or cost, governments must protect these industries from external competition. These policies, including high import tariffs and licenses, quotas and inflated currency rates, have the negative and often unintended effect of also discouraging export production. Over time, these policies have tended to result in LDCs having large and negative trade balances, shortages of foreign exchange required to purchase needed imports for industrial and other productive activities, and generally poor economic performance as in Latin America.

4.08 As LDC governments have come to realise the problems of focusing almost exclusively on import-substitution, they have begun to shift toward export-oriented production and outward-oriented development policies. Export-oriented policies require that firms compete with, or are part of, other international producers. For this purpose governments have to liberate many aspects of their economy, such as the tariff and quota regimes and availability of foreign currency, in order to give exports a competitive advantage. However, increasing economic freedom has frequently resulted in economic advancement as these firms become producers for the world, not simply a small domestic market. Some of these countries which adopted export-oriented policies early-on have experienced very rapid economic growth and have been labelled Newly Industrising Countries(NICs). South Korea, Taiwan, Hong Kong, and Singapore are good examples of NICs(Meier, 1984, 538-42).

4.09 Many of the developing countries, especially in Asia, adopted the EPZ approach and began to create EPZs as a means of launching their export-industrialisation. Lacking sufficient domestic capital, entrepreneurship, managerial skills and the capacity to build an industrial infrastructure nation-wide, many LDC governments have chosen to establish an EPZ enclave. As Basile suggests(1984, 20), governments see EPZs as a necessary transitional stage in their development that will rapidly promote industrial export manufacturing. ILO/UNCTAD in their joint report(1988, 3) describe the allure of EPZs to both policymakers and investors:

"[EPZs can be called] a planner's dream. For people involved in technical assistance in the framework of international agencies and for national planners trying to promote their country's industrial development, building up an industrial estate from scratch in a virtually virgin territory, with a sophisticated modern infrastructure and without red tape or the social opposition, was something inherently more stimulating and more glamorous than trying to transform a slow-growing economy, push old enterprises to innovate or modernise a poorly functioning infrastructure. For the enterprises which eventually came to invest in EPZs, the attraction of such zones was not merely their low labour costs compared to the home country, but also the fact that in these modern enclaves, everything was ready for them to get down to work easily and without delay.

4.10 In 1970, there were some ten developing countries throughout the world with at least one EPZ; by 1986, their numbers had reached a total of 46 while seven other countries were

currently constructing an EPZ and five countries were planning an EPZ. This meant that by the mid 1990s, half all of the developing countries would be active in the EPZ business. Expansion is even more impressive if one considers not the number of the countries with one or more EPZs, but the total number of such zones. In 1970, there were some twenty operational or near operational EPZ's in developing countries. By 1986, the total number had shot up to 175, when 85 were under construction and over 25 were at the planning stage. These EPZs are widely spreaded and distributed in the different countries and continents (see Figure 4.). Comprehensive figures are not available for dates after 1986.

4.11 The essence of the EPZ lies in the idea of developing such a zone for manufacturing purposes, and not just for storage or trade. According to the ILO/UNCTAD study, it is implicit that EPZ's can be generalised in four ideas. First is the idea that an EPZ can be set up anywhere in the world; all that is needed is a port and/or an airport, and unlike the Free Trade Zones of the past, such a zone does not have to be established along a pre-existing trade route. Second is the deliberate use of the most modern transportation technology, namely the jet aircraft, which preconditions the success of an EPZ. Third is the idea that production structures will be determined to a large extent by transportation imperatives; EPZ's will tend to produce lightweight goods with relatively high value added (e.g. electronic products, textiles, instruments, etc.), rather than bulky products like heavy machinery or machine tools, or large mass-produced articles like automobiles or refrigerators. And fourth is

that the development of such a zone is intimately dependent upon, and perhaps indeed conditioned by, the presence of foreign firms.

What is meant by an "export processing zone"?

4.12 There are more than 170 free ports, free trade zones or similar customs-privileged facilities operating around the world, the preferred location being at the approach to seaports. The main aim of these customs-privileged facilities is to avoid the restrictions which are imposed by many nations, and to facilitate the transfer, exchange, and movement of goods and services, for the mutual benefit of the state in which they are located and the firms which operate from them. These facilities can be divided into the six following basic types:

- Free Trade Zone
- Free Ports
- Transit Zones
- Free Perimeters
- Export Processing Zones
- Special Custom-Privileged Facilities

All of these have demarcated specific, limited areas, usually within a tariff fence except the last type which is a more general classification, encompassing countries where liberal and

flexible custom procedures have been so systematised that they offer privileges comparable to the specific customs- exempt areas of the first five categories.

4.13 There are at least 19 different terms currently in use in the English language to describe what is basically the same reality (Fig 4.1), but the term "export processing zone" seems to be gaining the upper hand. It now has at least 12 important users ahead of the next most widely used term i.e. "Free Trade Zone", which suggests that EPZ is becoming the standard term. Though they may not be the most adequate and comprehensive description of economic realities, these two terms seem likely to prevail.

4.14 Definitions as to what constitutes an export processing zone are at least as numerous as the names used to describe the phenomenon, but the various definitions of EPZs show many similarities. According to the definition of UNCTC (1982):

> "an EPZ could be defined as a delineated industrial estate which constitutes a free trade enclave in the customs and trade regime of a country, where foreign manufacturing firms producing mainly for export benefit from a certain number of fiscal and financial incentives".

This definition is simple, but it is not comprehensive or adequate for dealing with borderline cases. There are a growing number of EPZs that in fact sell some part of their output on the local market, although of course with paying the relevant duties on such imports. The Manaus

Free Zone in Brazil is an extreme form which is known as an import processing zone, because most of its products are sold in Brazil. And there are other types of borderline case in countries or regions which have no tariffs or import restrictions, and thus whose entire territory is known as an EPZ. Hong Kong, Singapore or Macau are the best cases of these types. And also there is the special case of China, where entire cities and regions have been designated as "special economic zones".

4.15 Another definition of the EPZ has been suggested by the World Export Processing Zone Association (WEPZA). According to WEPZA (1981), EPZs are:

> "all government authorised areas such as free ports, free trade zones, custom free zones, industrial free zones or foreign trade zones, or other types of zone as the council may from time to time decide to include".

The definition employed by the United Nations Conference on Trade and Development (UNCTAD) and the International Labour Office and United Nation Centre on Transitional Corporations (ILO/UNCTAD, 1988, 4), is as follows:

> "EPZs are either geographically defined, economically extra-territorial areas, or they have functional status in which enterprises produce almost exclusively for export. Special fiscal incentives, publicly subsidised infrastructure provisions, duty-free imports of inputs, and

> unlimited repatriation of profits are usual features offered to attract foreign (and when possible domestic) entrepreneurs to operate in the industrial enclave."

4.16 The interest of the EPZ lies essentially in its physical, social, and economic segregation from the rest of the country. This segregation, coupled with the presence of good infrastructures and a favourable administrative environment, is one of the attractions of EPZs.

4.17 Many definitions agree that an EPZ/FTZ is like a country within a country. For this reason, goods from EPZs sold on the local market are effectively coming from abroad.

> "The free trade zone is like a country within a country. Cut off by barbed wire or concrete walls from the rest of the country and guarded in some cases by 'zone police' the zone is an enclave in terms of Customs-territorial aspect and possibly other aspects such as total or partial exemption from laws and decrees of the country concerned" (Takeo, 1977, 1).

> "An EPZ could be defined here as a clearly delincated industrial estate which constitutes a free trade enclave in the customs and trade region of a country, and where foreign manufacturing firms producing mainly for export benefit from a certain number of fiscal and financial incentives" (ILO, 1988, 4).

"EPZs are in effect, export enclaves within which special concessions apply, including an extensive package of incentives and, very often, exemption from certain kinds of legislation, which do not apply outside the zones (Dicken, 1992, 181).

"The word 'free' in a 'free trade zone' indicates freedom from customs duties and import taxes besides the import controls normally imposed by costumes laws. The word 'trade' indicates all types of commercial activities, including entrepot trade, transit trade, storage and distribution, beside the manufacturing activity allowed in the zone. The word 'zone' indicates an enclosed arca segregated from the customs territories and declared open for carrying out such 'free trade' activities" (Singh, 1974, 3).

4.18 Some commentators object to the use of the terms "free trade zone" and "foreign trade zones" because some countries impose neither tariffs, duties nor restrictions on imports, and the entire state territory might therefore be considered an EPZ. This is the case in Singapore, Hong Kong, Mauritius and Macau. However, the economic policies of these countries need not mean changing the term FTZ/EPZ, nor even impact on its meaning. What happens in these countries is in accordance with their economic beliefs, which is also the essence of FTZs. They exist to provide freedom from customs duties and tax. There is access to other commercial activities within the zone. The zone which encloses the area segregates

these businesses from the customs and duty-levying territories. The study will continue to use the various terms as used by individual countries.

Fig 4.1

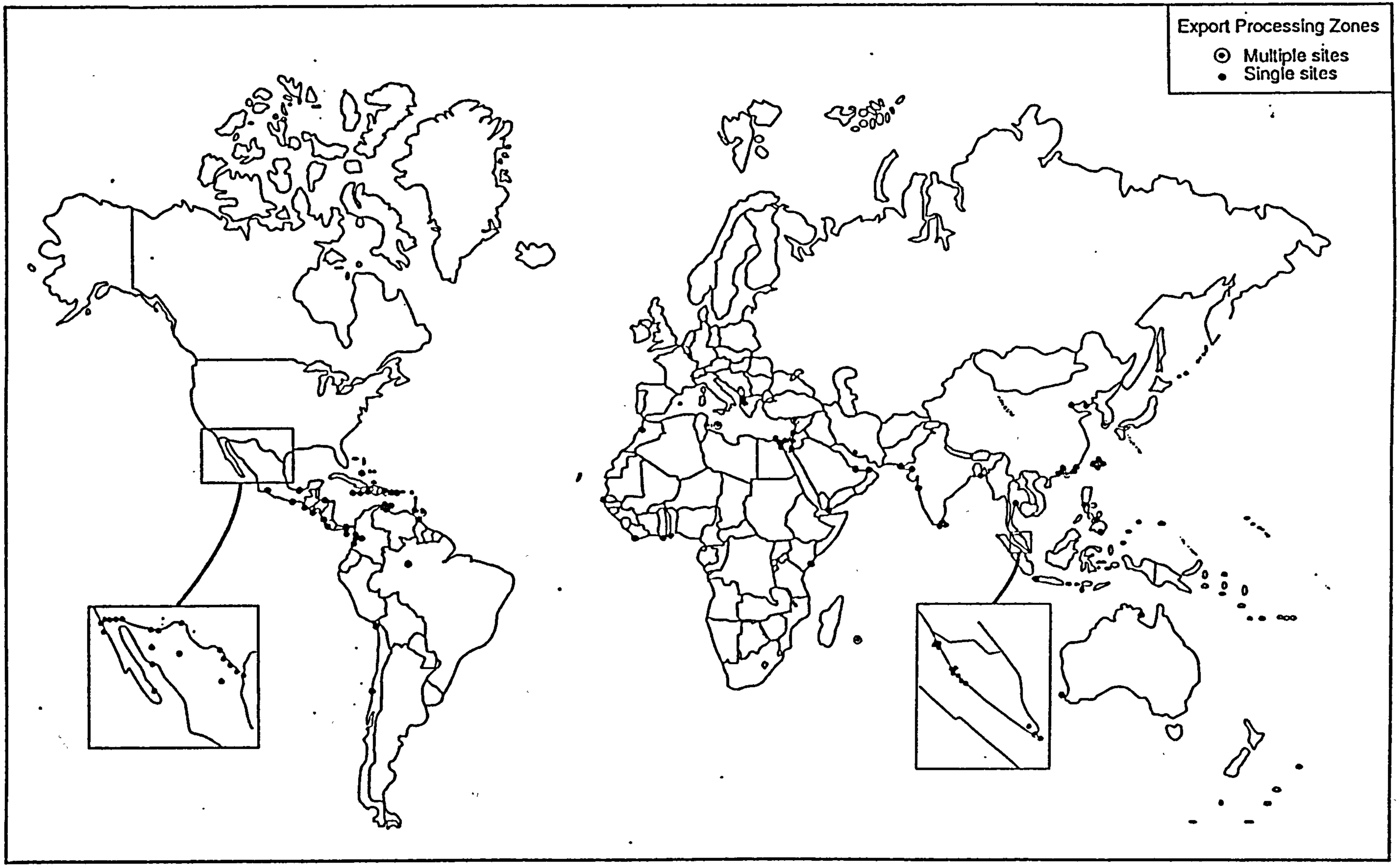
TERMS APPLIED TO FREE ZONES:

MAIN USER OF THE TERM AND DATE OF FIRST USE

1. FREE TRADE	Traditional term since the 19th century - ILO (1982)
2. FREE ZONE	UNCTAD (1973)
3. FOREIGN TRADE ZONE	India (1983)
4. INDUSTRIAL FREE ZONE	Ireland (197 2) & UNIDO (1971)
5. EXPORT FREE ZONE	Ireland (1975) & UNIDO (1970)
6. EXPORT PROCESSING FREE ZONE	UNIDO (1976) & UNCTAD (1983)
7. EXPORT FREE PROCESSING ZONE	Philippines and Harvard
8. SPECIAL ECONOMIC ZONE	China (1979)
9. FREE EXPORT PROCESSING ZONE	OECD
10. FREE EXPORT ZONE	Republic of Korea (1983)
11. DUTY FREE EXPORT PROCESSING ZONE	Republic of Korea (1975)
12. FREE PRODUCTION ZONE	Stamberg Institute (1977)
13. TAX FREE ZONE	Some authors
14. TAX FREE TRADE ZONE	Some authors
15. INVESTMENT PROMOTION ZONE	Srilanka (1981)
16. INDUSTRIAL EXPORT PROCESSING ZONE	Some authors
17. FREE ECONOMIC ZONE	Some authors
18. INVESTMENT PROMOTION ZONE	Some authors
19. FREE TRADE AREA	Iran (1990)

Source: ILO, (1988) Table 12, and developed by author.

Figure 4.1. FREE TRADE ZONES IN DEVELOPING COUNTRIES, 1986



Source : Dicken, P. (1992), Global Shift

EPZs Around the World

4.19 The ILO (1988) study shows (Figs. 4.2, 4.3) that 25 EPZs (14.2 per cent of total EPZs in developing countries) were in Africa , 23 EPZs were in Central America and the Caribbean, 10 in South America (5.7 per cent), 23 in Mexico (13.1 percent), and 95 in Asia (54.0 per cent). Asia's strength. could be particularly due to a greater availability of cheap labour (skilled, semi-skilled and unskilled) although it could be argued that elsewhere important factors are market access and suitable infrastructure, in addition to political stability.

Objectives of Creation of EPZs

4.20 One of the first attempts to conduct comprehensive research on the development effects of EPZs was in 1985 by UNCTAD. The report identified five main objectives which governments typically seek for their zones and which are usually used as criteria for evaluation of EPZ performance. These objectives are:

(a) generating foreign exchange earnings;

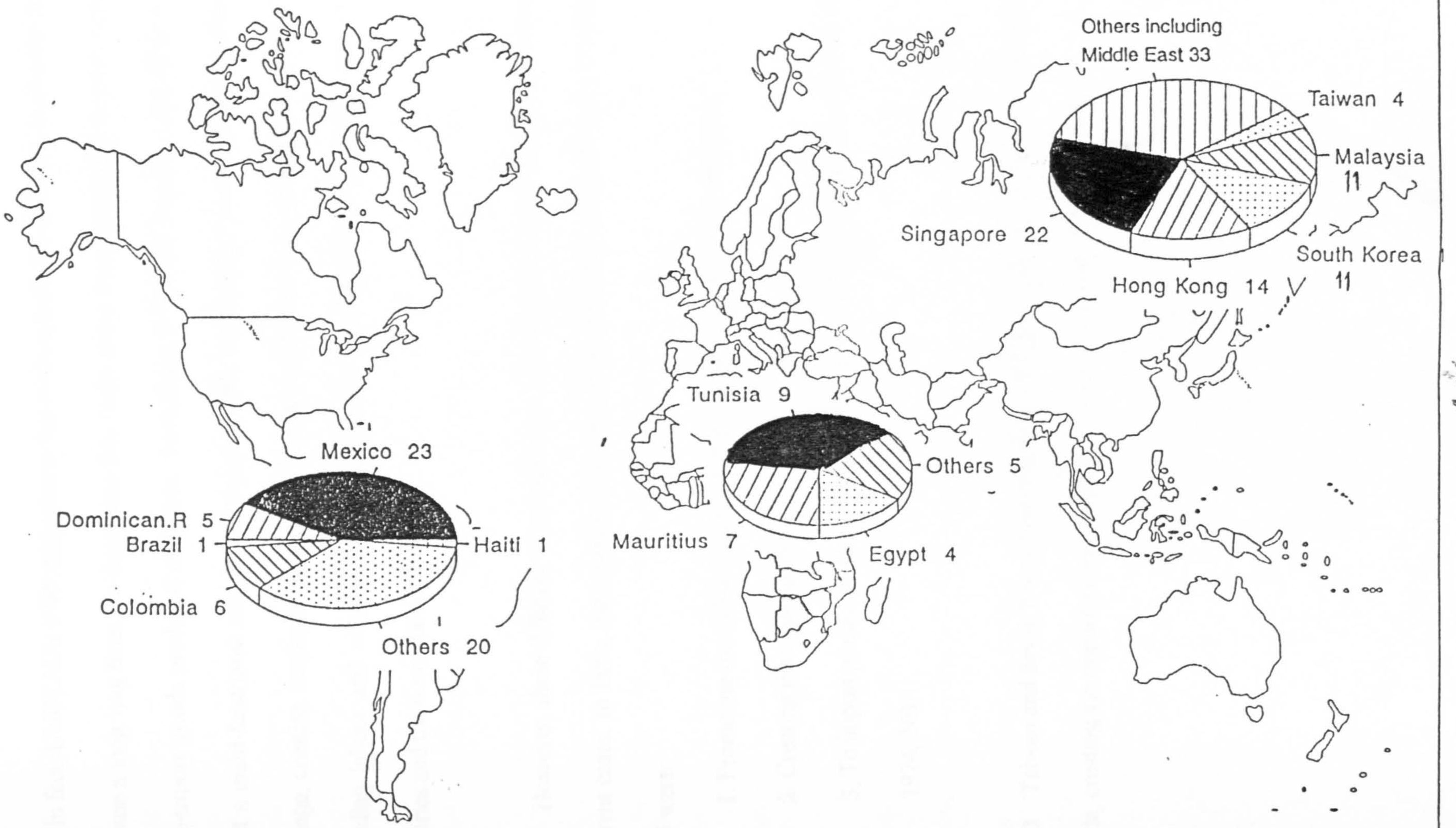
(b) creating employment;

(c) attracting foreign capital and advanced technology;

(d) acquiring and upgrading labour and management skills; and

(e) creating linkages between EPZ industries and the domestic economy (UNCTAD, 1985, 4).

Figure 4.2 FREE TRADE ZONES IN DEVELOPING COUNTRIES, 1986



Source : ILO (1988), Table 20.

PAGE NUMBERING AS ORIGINAL

4.21 In fact, UNCTAD's 1985 study shows that institutionally the economic processing zone had come a long way from the days when free trade zones were established to store, repack and re-export goods produced elsewhere. Particularly in the last decade, many EPZs have sought a multi-functional role by meeting preferably all the objectives of generating foreign exchange, creating employment, attracting foreign capital and new technology, acquiring and upgrading labour and management skills, and also creating linkages between zone-based industries and the domestic economy.

4.22 However, these different objectives occur with varying relative weight and success in different cases. In India, the objectives of creating the first EPZ at Kandla (near Bombay) in 1985 were:

1. Promoting the Indian export trade and earning more foreign exchange.

2. Creating job opportunities.

3. To import goods for the fuller utilisation of the facilities developed at Kandla (Singh, 1974, 36).

4.23 Taiwan and South Korea both follow similar objectives of increasing the size of export trade, creating job opportunities for domestic labour and enhancing technology.

INVESTMENT REQUIREMENTS FOR AN EPZ

4.24 State interference to set up social overhead investment is characteristic of EPZ initiatives. Most economists argue that implementation by a big push policy based on government efforts plays a key role in the success of EPZs, but this policy must be focused in its objective to effectively promote economic activities in these areas.

4.25 The requirements for an EPZ include a wide range of infrastructure facilities, including access to a seaport or airport, facilities for containerised transport, and standardised or efficient factory buildings. The support services include physical services of supply of electricity and water, telecommunication facilities, sewage and effluent disposal and so on, together with commercial services like banking, insurance, shipping and forwarding agents, and social services such as canteen facilities and medical care.

4.26 In addition, fiscal and financial incentives are two other common approaches to encouraging investment in EPZ's. Fiscal incentives typically take the form of income tax exemptions for periods of up to 20 years, and exemption from or reductions of other direct and indirect taxes, also for a prolonged period. Also, import of raw materials, intermediate products, equipment and machinery required for export production may be exempted from customs duty.

4.27 There are many factors which motivate foreign investors particularly Multi National Enterprises (MNE) to settle in a particular country. The ILO/UNCTAD study shows that one of the big attractions of EPZ's for foreign investors is commonly the low level of wages prevailing in such zones, or for that matter throughout the host country. But the low wages alone, or even total labour costs, are not the only issue for investment in EPZ's.

4.28 Significant other factors have been shown to be the quality of the labour force, their educational level, their willingness to work and their potential productivity, which may be critical to induce a foreign firm to invest in EPZ's. One of the most important factors is also that of location. The ILO/UNCTAD study shows that several EPZs were simply established in what proved to be the wrong place, too far away from good communication facilities, or in regions which were insufficiently developed.

4.29 At a deeper level, a decision for investing in a country is strongly influenced by the perception of the host country's political stability. As the ILO/ UNCTAD study shows, a combination of a stable host country with the organisational and technological advantage of the MNE can make EPZ industries extremely competitive internationally.

4.30 The world's experience of EPZs shows, however, that the rapid development of an EPZ is rarely the result of one positive factor alone, such as local wage levels, the political and

economic environment, the quality of the labour force, the locational element in particular or the institutional set-up.

LOCATIONAL ELEMENT

4.31 Among the important factors for the establishment of EPZs, suitable location requirements is one of the first, both to the host country and the firms which are setting up inside the zone. Many important requirements of EPZs directly depend on location, such as local input, the market, transport and so on. For example, EPZs which are close to an airport or a seaport, or a large city and particularly to the capital city, could be more rational to investors than others. Particularly for the purpose of decreasing transport costs, most economic planners try to choose sites which are near to an airport, seaport, big city, or main market, to facilitate exports and imports, in other words facilitating in-put and out-put. For instance, the Bayan EPZ in Malaysia is located near the Bayan Leaps international airport which is 25 Km from Kuala Lumpur. The Karachi EPZ is adjacent to the port and is also close to Karachi international airport. Most EPZs have been located in countries which have a coast and ready access to the open sea, such as Singapore, Mauritius, Hong Kong, Malaysia and Taiwan. Kelleher (1976, 11) points out that: "The cost of developing a zone in an area where some development has already taken place should be lower than the cost of developing a completely new area, and the time lag before the first factory starts production should be

shorter". The total expenditure or the cost of locating the EPZ in an area which already has development may be cheaper than developing a completely new area.

Foreign capital

4.32 Many EPZs in developing countries have been created with the hope of attraction foreign capital investment, particularly for increasing their country's export. There are different opinion about the use of foreign capital as a leading factor in the development of an economy.

4.33 Many policymakers particularly in developing countries believe that foreign capital has played a major role in stimulating the local economy, as in the newly industrialising countries (NICs). Even so, the developing countries may place restrictions on the attraction of foreign capital for investment. The Latin American developing countries Venezuela, Colombia and Peru, have been more restrictive towards foreign investment by comparison with Asian NICs. In these countries, foreign ownership cannot officially exceed 49 percent and complicated regulations control the remittance of profits.

OWNERSHIP STRUCTURES IN EPZ's

4.34 One of the significant issues about EPZ's concerns the ownership structure of industrial firms operating in these zones. It is not only a political or economic issue of who controls what, but it is related to industrial and technological development processes.

4.35 Many policymakers create EPZs in order to attract foreign capital investment with the hope of stimulating their country's overall manufacturing production. Often lacking sufficient local capital and entrepreneurs to undertake industrial expansion, foreign investment is expected to catalyse the development process. EPZ's contribution to development is different when investors are exclusively or very largely foreign owned enterprises. The ILO/UCTAD study shows that if investors in EPZs are exclusively or very largely foreign-owned enterprises, their contribution to development may be somewhat less marked than if this group of investors also includes domestically owned enterprises, or enterprises which are jointly owned and operated by foreign and domestic investors.

4.36 There are three simple distinctions of ownership, namely foreign owned, joint ventures, and domestically owned. According to the ILO/UNCTAD study, in the mid-1980s, there were around 2000 enterprises in EPZ's throughout the developing world, and about three quarters of those were either foreign owned or in a joint venture with a local partner.

TABLE 4.1

BREAK DOWN BETWEEN FOREIGN-OWNED ENTERPRISES, DOMESTICALLY OWNED ENTERPRISES AND JOINT VENTURES IN EPZ OF 13 COUNTRIES *

OWNERSHIP OF ENTERPRISES	ABSOLUTE	PERCENTAGES
Total number of enterprises	1269	100
Foreign owned	468	36.8
Joint venture	520	40.8
Domestically owned	281	22.4

*The Republic of Korea, Mexico, Malaysia, the Philippine, SriLanka, Mauritius, India, Jamaica, Ghana, El Salvador, Trinidad and Tobago, The Republic of Dominica and Liberia,

Source: "UNIDO: Handbook of Industrial Statistics, 1984, (New York 1985)"

Foreign Technology Transfer as the Key Objective of EPZ

4.37 Due to the particular emphasis on technological transfer by the local economists as well as by politicians, this objective of the EPZs in connection with the national economy should be treated comprehensively.

4.38 First of all, it is appropriate to make clear what is meant by the transfer of technology. Technology is a complex term with various definitions. For example, technology as a process (Methe, 1991); as knowledge (Jegathesan, 1990); and as the application of science (Goulet, 1989). The various definitions can be divided as follows:

1-Technology as knowledge. Most authors define technology in connection with knowledge (Schmmokler 1966, UNIDO 1973, OECD 1979, Jegathesan 1990). The differences between these authors are in two aspects. One is in the description of quality of knowledge and the other in range of knowledge.

2- Technology as a process. Methe (1991) points out that this process is characterised by (a) using knowledge; (b) reducing uncertainty; and (c) achieving a desired end.

3- Technology as the application of science. OECD (1978) emphasises and highlights the environment of the application. According to its definition, technology is the use of scientific knowledge by a given society at a given moment to resolve concrete problems facing its development, drawing on the means at its disposal in accordance with its culture and scale of values.

4- Technology as a structure. The definitions of some authors are connected with pattern or structure. Meissner (1988) defines technology as the configuration of processes, plan, techniques, knowledge and skills. According to his idea, the function of this structure is to effectively produce, process and market a product or service.

4.39 In addition to the above definitions, there are some other definitions that emphasise certain characteristics of technology. For example, the UN (1987) defines technology transfer as a process of acquiring technological capability from abroad. Meissner (1988) points out that the methods people use to acquire this capability are various. They can buy, borrow, imitate, copy, steal, adapt or beg.

The Role of Technology in Economic Development

4.40 The role of technology in an economy and the main contributions of technology to economic development can be divided into the following aspects. First, technology provides resources for creating new wealth and for increasing efficiency. At the macro level, according to Mcintyre (1986) modern technology has emerged as one of the primary sources of national power, prosperity and strategy. And one nation can take-off only when it masters certain technology (Rostow, 1960). At a micro level, Ryan (1984) asserts that the functions of technology as a resource are shown in the following aspects:

(1) it can be marketed as know-how;

(2) it can provide a product;

(3) it can facilitate a product.

4.42 Comparing the various reasons for technology transfer among the developing countries shows that there are two explanations about technology transfer. First, technology transfer is a

tool or a substitute for their entering other countries. Branson (1978) argues that developed countries use technology transfer or "technology sharing" to avoid the risks of investing in developing countries associated with economic and political issues. Secondly, technology transfer is a method to share the cost of developing technology. Carpentier (1990) argues that scientific resources are scarce and expensive, so the cost of technology production is dear. No nation- even a developed country- has unlimited resources and can afford the luxury of monopoly technology. Therefore, transfer is a way to share these costs.

4.43 Dicken (1992) believes that the Trans-National Corporation (TNCs) have played a major role in the transfer of technology world wide. For example, in the 1960s United States firms played a main role in transferring semiconductor and microelectronics technology to Europe (Dicken, 1980, 362)

4.44 One of the main reasons for the necessity of technology transfer in developing countries is that it is impossible or too dear for them to develop technology by themselves. Meissner (1988) points out that developing countries cannot afford to do basic research and development, so it takes more time and money for them to generate the same technology developed by advanced countries. Therefore, they must try to obtain technology by other means. The high cost of generating technology and the uneven development of technology in the world also forces less developed countries to adopt the mould of follower. They have to

take over production from the advanced countries when products become standardised, and the potential economies of large scale production and low wages usually offset inefficiency and poor skills (Smali, 1985, NEDC 1988).

4.45 The world technology transfer experience among different countries shows that it not only has benefits for host countries, but also the home country derives benefit from technology transfer. On the one hand the benefits which host countries achieve from technology transfer can be generalised as: (a) To obtain more knowledge. During technology transfer the technology supplier may provide more information and offer certain training; (b) Make better utilisation of resources; (c) Gain fast industrial progress. Since technology transfer helps to close the technological gap between developed and developing nations and stimulate local R & D activity, it accelerates the technology development process; (d) Eliminate economic underdevelopment (OECD 1981, 1989, SMAli 1985, TEP 1992).

4.46 Many host governments expect that their EPZ sector will attract foreign firms, and will bring in advanced equipment and contribute to the transfer of technology. Countering this expectation is the general reality of EPZs, which is that they emphasise simple, labour-intensive production using inexpensive low- technology equipment (UNCTAD, 1985, 4).

4.47 On the other hand the home country benefits can be generalised as: (a) To increase exports, no matter which form is used. Usually the importance of exports in the home country economy will be growing. (b) To strengthen the technological base. While technology supply is increasing, home countries concentrate more on high value-added products and advanced technology, which also leads to their being less dependent upon developing countries for raw materials. (c) To relocate economic resources. The shedding of standard technology and products changes the production division, which involves drastic sectoral relocation of labour forces and other resources. This offers an opportunity for the home country to increase the efficiency of locating production factors. (d) To obtain multiplier effects of income generated from transfer of technology (Dunning 1981, 1989; Rosenburg 1982, 1989).

Channels of Technology Transfer

4.48 There are several channels for conducting technology flow and technology transfer. Four significant forms are foreign ownership, joint ventures, licensing and Buy Back.

Foreign owned subsidiaries

4.49 A foreign owned subsidiary is an establishment of a company in a host country, over which the parent firm assumes effective control. Within this form, the technology provided by the parent firm is usually a complete package. This will probably include capital goods; industrial property rights in the form of patents, trade marks and brand names; secret

unpatented know-how; and accumulated experience and skills in organisation, management and marketing (UNCTCT 1987, Oman 1989).

Joint Ventures

4.50 Joint ventures are extremely diverse in form but are essentially a business association between foreign investors and local enterprises. Contractual joint ventures and equity joint ventures are two different types. Contractual ventures are formed for particular projects of limited duration or for a long-term co-operative effort, with the contractual relationship commonly terminating once the project is complete. Equity joint ventures involve sharing of assets, risks and profits, and participation in the ownership of a particular enterprise. The relative equity stakes can vary under different situations (UNCTC 1987. YOUNG 1988). This channel is usually used in standard technology sectors. Non-ferrous metals, plastics, textiles and clothing, industrial chemicals, agricultural machinery and equipment, fertilisers, and food and beverage processing are common fields in which this channel is employed (UNCTC 1985. 1987).

4.51 Among different forms of foreign investment, joint ventures transfer is more popular and involves more technology than other forms. The technology transfer mechanism of technology sharing offers more opportunities than other channels(UN, 1987).

4.52 The NICs experience shows that joint ventures are usually a very effective channel of technology transfer between two partners, with the technology, managerial skills, organisational knowledge and marketing experience transferred to the joint venture by one of the two parent companies (ILO/UNCTAD 1988).

4.53 · As the ILO/NCTAD study shows, the first and most conspicuous technology transfer is the transfer of basic production technology from the parent company to its subsidiary established in an EPZ. A very large number of firms in EPZs are joint ventures between MNEs and domestically owned enterprises. Experience shows that the contribution of foreign firms in transfer of technology to most EPZs is usually low.

4.54 Frobel et al (1980) assert that the training of skilled workers and transfer of modern technology through foreign firms to the EPZs is very limited in scale. The point which proves this issue is the data on skill structure, which shows that the labour force is predominately unskilled and has been trained only to carry out specific operations. The training of workers is restricted to a few relatively limited tasks (Frobel et al, 1980, 362).

4.55 Maex (1983) states that the transfers of skills and technology to EPZs are usually thought to be limited. Because the EPZ workers are thus engaged in simple routine

operations, staff can learn them in a few weeks, in spite of the fact that the greater number of those workers, particularly young women workers, have had no experience in industrial work.

4.56 Theoretically, the way skills and technology may be learned through the foreign firms may be very important and may serve different objectives such as technology acquisition, industrial management, design and product development.

Creating Employment

4.57 The employment merits of an EPZ from the perspective of the host country as could include the creation of jobs for the local labour force to reduce unemployment and underemployment, and to achieve skills enhancement and technical know how. For many Less Development Countries (LDCs) that have adopted EPZs, employment creation is the principal goal for the sector.

4.58 In most developing countries policymakers are not only interested in expanding employment with EPZs, but they also wish to increase the quality of employment opportunities in term of wages, skills and labour conditions. UNCTAD has found that by contrast with these desires, EPZs have attracted international vertically integrated industries, seeking low-cost pools of labour to complete non-complex, labour intensive stages of their

production. Thus, "Employment opportunities in EPZs are primarily for low-skilled labour performing simple, manual, quickly learned activities." (UNCTAD, 1985, 4).

4.59 However, many studies particularly by the ILO, indicate that EPZs do not significantly contribute to either total employment in a country or to skill enhancement.

Structure of Employment in EPZs

4.60 The general characteristic of employment in most EPZs are as follows:

1- Most employment in EPZs is unskilled or semi-skilled;

2- Most workers in EPZs are female (particularly young women);

3- Wage averages are relatively low (in comparison with mainland/hinterland);

4- Average workers'ages in EPZs is between (21-50) years (Frobel et al, 1980, 344).

4.61 Cheap labour has played a major role in attracting foreign investment to EPZs in developing countries, particularly female workers who accept very poorly paid work in developing countries. Frobel et al (1980) point out that cheap labour has played a major role in the structure of production in EPZs, in the context of transnational organisation of capitalist production and relations of production for markets of developed countries from these countries to the EPZs (Frobel et al, 1980, 322-3).

4.62 The number of jobs created through EPZs to 1986 was approximately 1.3 million, some 95 zones being created after 1970. 500,000 jobs were created between 1970 and 1975, and around 750,000 between 1975 and 1986. Employment figures in EPZs differ from country to country in relation to total employment in the whole country. Although absolute employment figures may look substantial, they represent only a fraction of total employment in most countries. Nor does this under state the general importance of EPZs in developing countries such as Mexico, Hong Kong, Singapore and Mauritius. Even in these countries the employment impact of EPZs is small in relation to other total employment, except for Mauritius where EPZ policy has created a significant proportion of jobs for its population of around 25.9 percent. Equivalent figures for other countries include: Singapore, 18.9 percent; Mexico, 3.6 percent; Hong Kong, 3.4 percent.

4.63 In other countries, employment creation in EPZs by comparison with total employment is poor: their contribution does not exceed 1.5 percent. The reason for the varying contributions to total employment may be due to varying economic systems which have played a major role on the growth in numbers of employees in EPZs. Mexico, Hong Kong, Mauritius and Singapore, it is argued, now have faith in the free economic system and it may follow that the number of EPZs in these four countries is high comparison with the other countries located in their continents.

Table 4.2

Employment in EPZs compared with total employment

in selected developing countries in 1986

Country	Total employment in EPZs in 1986	Total employment in country in 1986
Hong Kong	89 000	2 625 400
Singapore	217 000	1 149 000
Taiwan	80 469	5 760 100
Malaysia	81 688	15 505 000
South Korea	140 000	20 926 000
Philippines	39 000	55 436 000
Brazil	63 000	6 884 000
Mexico	250 000	3 247 600
Colombia	6 700	-
Macau	62 000	238 285
Mauritius	61 690	-
Dominica	36 000	-

Source: ILO (1988), Table 19

4.64 One of the significant reasons for creating EPZs in Malaysia was to reduce the rate of unemployment, and the government was particularly anxious to find more urban, non agricultural jobs for its workers (Gill et al, 1992, 4). But the ILO study (1988) shows that even if the EPZs were able to provide more employment, the unemployment problem would not be solved directly. A point of note is that most unemployed people seeking jobs are male, not female, whereas the world experience with EPZs is that most EPZs employ female workers. For example, in 1985 in the Jamaica and Barbados EPZs, female workers were estimated to make up 95 and 94 percent respectively of the total EPZ work force (Long, 1986, 41-54).

4.65 According to the ILO study (1988), EPZs have contributed primarily to increasing the participation rate of women in the industrial sector, and have provided relatively few jobs for unemployed male workers. The higher proportion of female workers in most EPZs is particularly due to the demands or nature of industries in EPZs, most of which are appropriate to the nature of women such as electronics, electrical goods and textiles; (ILO, 1988, 62):

" Women's wages are frequently half of the male wage. Women have to sell their labour-power at the lowest possible price because under the conditions of underdevelopment women have even less possibility than men to change their living conditions: or to put it more bluntly, they have fewer possibilities of guaranteeing their day to day physical survival. In addition, another major reason for the employment of women is the higher intensity at which they will work in manufacturing" (Frobel et al, 1980, 341).

4.66 On a comparative basis in the late 1970's, average hourly wage costs for unskilled female labour in the UK were $3.97, in Germany $7.39, in Australia $6.5 and in the USA $9.00. Wages costs in the UK were then 8 to 28 times higher than in most of the countries reviewed here, and in the USA they were 16 to 57 times greater (Currie, 1979, 25).

Table 4. 3

Average of hourly rates of labour costs ($, including fringe benefits)

Countries	Unskilled	semi-skilled	skilled
Pakistan (1984)	0.31	0.38	0.47
El Salvador	0.31-0.58	-	0.41-0.86
Guatemala	0.35	-	-
Nicaragua	0.65-0.72	-	0.96-1.4
Brazil	0.40-0.56	-	1.25-1.56
Hong Kong	0.60-1.32	0.80-1.54	0.92-2.03

Source: Currie, J. (1980) Export Processing Zone in the 1980s

The Economic Intelligence Unit Ltd, No. 190, London.

A Theoretical Context of EPZ's

4.67 In this part of the study we identify the economic development theory from which EPZs emerged.

4.68 EPZs may represent a pragmatic response to the criticisms levelled against Rostow's stage-theory of development, Rosenstein-Roden's theory of an industrial 'big-push', and the structuralist approach to development. Rostow posited that developing economies must pass through a series of stages on the way to becoming economically advanced. He argued that several conditions must be met for an economy to make rapid economic advancement. There must be a rise in productive investment, the development of one or more manufacturing sectors with high growth rates, and the existence- or creation of-a political, social, and institutional framework that will stimulate and maintain modern economic growth (Rostow in Meier, 1984, 90).

4.69 Rosenstein-Rodan followed in the Rostow tradition but considered industrial development specifically. For Rosenstein-Rodan, a 'big-push' is required to stimulate manufacturing in developing countries. That is, a certain minimum level of social overhead capital(e.g. infrastructure, inputs) is required to catalyse private industrial operations. Because of the indivisibility and economies of scale involved, the public sector must ensure that this

capital is provided (Rosenstein-Rodan in Meier, 1984, 358,364). Critics of these two interrelated approaches have argued that developing countries lack the capital, knowledge, and leverage in the international market to launch a 'take-off' or make a 'big-push'. Structuralists argue that there are internal structural rigidities and distortions in developing economies that would not allow producers to respond positively to market forces, even if foreign assistance, capital, and know-how could be provided. Rigidities or distortions typically include fixed and overvalued exchange rates, tariff and quota structures that make foreign inputs for export manufacturing prohibitively expensive or unavailable, and monetary and fiscal policies that make investment capital scarce and discourage investment in long-term ventures.

4.70 EPZs in theory, however, overcome some of these obstacles. They are intended to attract external capital for investment that is not domestically available and to quickly raise industrial production, meeting two of Rostow's conditions. The unique role of the public sector and the structure of an EPZ is meant to achieve Rostow's third condition and Rosenstein-Rodan's call for social overhead capital, and overcome structural rigidities. An EPZ allows the state to focus its limited resources and managerial capacities on a bounded, distinct manufacturing centre.

4.71 Theoretically, the special institutional framework of this enclave meets Rostow's third criterion, efficiently providing the needed level of social overhead capital, and is immune from

whatever structural rigidities exist in the rest of the country. In fact, EPZs are not immune entirely from a country's structural rigidities. First, investors include their perceptions of the political and economic climates of a host country in selecting an EPZ location. Second, as most respondents to the author surveys testified, they must pay wages and buy other domestic inputs that are affected by structural distortions and the health of the overall economy.

EPZs in a Historical Perspective

4.72 The concept of the free trade zone goes back in history for several centuries, and was originally limited to transhipment, storage and re-export of goods. This was practised by some trading cities in the Mediterranean which used free zones in the Middle Ages. This idea was extended, such that a number of smaller European states established free cities and ports during the trade between the colonial powers and the colonies, in order to attract trade for themselves. After this idea became successful, it was extended later in history to that of the Industrial Free Zone, in which the government dedicates land to allow the storage and manufacture of foreign commodities without imposing duty or tax, providing the commodity is re-exported.

4.73 The 1930s observed the beginning of the modern history of free trade zones. After the Depression of 1929-32 which overtook the world, the theory of national self-sufficiency gained ground. That implied that a country should rely on its own commodities and not an

commodities produced by other countries, and was associated in independent countries in Latin America with the import substitution approach to economic development. In fact, this principle would have many negative effects on the economy such as constriction of market size and increased cost of some commodities, particularly for countries unable to provide suitable facilities for industrialisation and production.

4.74 By contrast, associated with the growing importance of the promotion approach, the idea of the free trade zone allowed customs-free access to and from international markets. One main reason for establishing free trade zones has been to allow small countries to establish an economic size of international production unit. The first free trade zone established according to this notion was the Shannon Free Trade Zone in Ireland in 1959 (ILO, 1988).

4.75 The contribution of EPZs in economic growth and other aspects of the host country is treated and compared in the following part of the chapter. Taiwan and South Korea are taken as two examples of old and successful EPZs among the Asian EPZs, and also Dubai is discussed as a main competitor in the Persian Gulf area.

EPZs in Taiwan

4.76 For the first decade of the 1950's, Taiwan concentrated on stabilising its economy, balancing the budget, and improving the country's productivity through reform programs. At the same time they government developed import substitution industries for people's basic necessities, such as food, fertiliser, clothing, housing and transportation. After a few years most of these industries reached saturation because their market was very small (WAEPZ, 1989, 25). So, in the second decade of the 1960's, Taiwan tried to switch from import substitution to export promotion industries, and hence began to attract overseas Chinese.

4.77 Although, indirect taxes are very important for every developing country and there is a heavy reliance on such as customs duty, excise tax, and local sales tax, Taiwan went on to seek a larger solution to financing growth and economic advance via Export Processing Zone policy, which waived taxes but allowed access to world markets utilising local semi-skilled and trainable low cost labour to process for export. Taiwan's policymakers adopted the export processing zones as a policy for industrialisation, and that idea was created and finalised in 1963-64 (WAEPZ, 1991).

4.78 Taiwan's EPZ project was preceded by an import substitution stage as a part of the evolving national economic strategy. Industries established in that stage were typically small size, labour-intensive, and supported by a high tariff policy. The export trade has grown since

the mid 1960's with consumer goods such as garments, footwear, plastic products, leisure and sports goods, and electronic products amongst the EPZ favourites.

4.79 Three Export Processing Zones were established:

1. Kaohsiung Export Processing Zone (KEPZ).
2. Nantze Export Processing Zone (NEPZ).
3. Tachung Export Processing Zone (TEPZ).

4.80 The first EPZ set up in Taiwan was the Kaohsiung Export Processing Zone (KEPZ) in Kaohsiung harbour. Planning and developing the zone started in March 1965 and it was ready in 1966.

Facilities/Package Incentives of Taiwan's EPZs

4.81 There are no customs duties on the import of raw materials, parts and machinery, nor on the export of finished products from the zone, and no sales or commodity tax. There is also a five year tax holiday or accelerated depreciation on fixed assets, together with loans towards the purchase of factory buildings or raw materials, granted against letters of credit(LC). The reason behind these financing facilities is to help the enterprises upgrade their plants and enhance their product competitiveness, the banks offering convenient financing and favourable loan interest rates on the purchase of automated production machinery and equipment

(WAEPZ, 1989). According to Taiwan's EPZ regulations, all production must be intended for export except where special permission has been obtained to sell in Taiwan.

4.82 Public services to the EPZ in Taiwan include the following: Transportation Service Centre, Health & Sanitation Station, Warehousing, Supplies & Service Station, Fire Brigade, Police Squadron and Employee Service Centre. A sufficient supply of electricity is also one of the benefits in the EPZs. The Taiwan power company has constructed three power stations in the NEPZ and at Central Islet (KEPZ) and Tantze (TEPZ). The Taiwan Provincial Water Company provides water to the three EPZs.

Functions of EPZs in Taiwan

4.83 There are three functions in relation to the EPZs in Taiwan:

1. A Show Window to Attract Investment.

The first function of the Kaohsiung EPZ was as a show window to attract investment in export-oriented industries (see WAEPZ, 1991). After the establishment of the KEPZ, foreign and overseas Chinese investors poured into Taiwan, some investing directly in the zone, some settling at locations outside the zone. Many factories were established outside the zone because many of them needed a large quantity of labour and therefore had to be in a location where labour was available.

2. A Guide for Simplification of Procedures Outside the EPZ.

The second function of the KEPZ was to serve as a guide for simplification of procedures outside the zone.

3. Basis for a Science Industrial Park.

The third function of the zones was as a base for the establishment of a science-based industrial park to attract high tech industries, following the government policy for changing the industrial structure from labour-intensive to capital-intensive, and then to technology-intensive industries. In fact, due to the energy crisis, technology-intensive industry was to be preferred to capital-intensive industry.

Contributions of EPZs Taiwan

4.84 From 1966-1988, the cumulative value of exports from the three zones was US$27.8 billion. In 1988, the EPZs exported $3.76 billion and provided jobs for 84,000 people, and there were 257 companies operating with a net total investment of $417 million in 1984. By the end of 1988, the total number of companies was reduced to 244, but their net total investment increased to US$625 million. Many companies are shifting more towards capital-intensive and technology-intensive production, with more automation.

4.85 In 1967, Taiwan had a trade deficit of US$5.5 million and a deficit of 3.2 million in 1968, but since 1969 the EPZ has had a trade surplus. The aggregated trade surplus of the

EPZs was US$13.453 billion by the end of 1991; also by the end of 1991, the total aggregate income of the EPZs customs amounted to US$115 million and the total tax revenue of the EPZs amounted to US$491 million.

4.86 The total number of firms established in Taiwan's EPZs was 238 in 1991, with an investment value which amounted to US$ 868.80 million for the three zones (see Table 4.4). Foreign investment represents about 71.1 percent of the total investment value and the domestic investment represents about 27.8 percent, leaving the overseas Chinese investment at about US$ 3.65 million, or more than 17 times the original average investment amount of each firm. Clearly the zones have more than met their goal of attracting investment.

Table 4. 4

Firm's investment in Taiwan's EPZs (in 1991)

Zone	Value of Investment (US$ million)	Number of firms
NEPZ	496.09	45
KEPZ	216.78	103
TEPZ	155.93	90
Total	868.80	238
Average investment per enterprise.	3.650	

Source: Export Processing Zone, (1991) Export Processing Zone on its 25th Anniversary, Taiwan

Table 4.5

Export and Import of Taiwan's EPZs

(period 1966-1991)

Total gross	Amount US$ billion
Exports	35.34
Imports	17.91
Trade balance	17.43

Source: Export Processing Zone, (1991) Export Processing Zone on its 25 Th. anniversary, Taiwan

4.87 Table 4.5 shows that the balance of payment is positive, in other words the value of exports is greater than that of imports. This indicator usually shows the success of an EPZ, particularly in terms of investment return. However, for determination of success of an EPZ other factors should also be taken into account, such as whether these exports were locally manufactured or re-exported, as we see in the case of the Dubai's Free Zone. Also where are the raw materials from? Are they from local markets and domestic sources or from imports?

4.88 In terms of export products in 1991, electronic exports from Taiwan's EPZs represented about 67 percent of total exports. This emphasis was generally due to the Government which attempted to encourage technological and technically advanced industries such as computers, television, semiconductor and so on, in the hope of importing technology through foreign firms and by the experience of its local workers operating in the zone (EPZ Administration, 1991, 42).

EPZs in Republic of Korea

4.89 Korean policymakers in the mid-1960s adopted an export-oriented growth policy in which EPZs were to play a role. This policy came in 1964 with a 50 percent devaluation of the Won.

4.90 The shift towards an export-oriented policy in Korea took place before the establishment of the Masan EPZ (1970), and according to Anne Krueger (1980, 164) Korea was able to make a smooth transition to the new policy because import-substitution had not proceeded too far. On Krueger's view, "Korea's Export Processing Zones would never have survived if they had been obliged to use as inputs the intermediate products of high-cost domestic industry, protected under a policy of import substitution" (Mason,et al., 1980, 164). This point is emphasised by analysing the successes of Newly Industrialising Countries, where

particularly in the cases of Korea and Taiwan it was essential to import the major part of their inputs for manufacturing production because of the lack of indigenous resources.

4.91 Masan Free Export Zone (MAFEZ) was established by the Government of Korea in 1970, as a necessity for developing economic policies linking their cheap, idle labour force and social infrastructures such as land, electricity, water and harbour facilities, and so as to contribute to the improvement of the national economy, promote exports, and increase employment and technological promotion by attracting foreign capital and technologies (see WAEPZ, 1991). Table 4.6 shows the performance of the MAFEZ from 1971 to 1988 with a 20% annual increase in exports.

Table 4.6

Economic Performance of MAFEZ (1971-1988)

Year	Total exports US$000	Net Foreign Exchange US$000	%of Total	Employee No.
1971	85	238	28	1248
1975	174803	71982	41	22586
1980	628100	33302	53	28532
1985	809318	412647	51	28983
1988	1769203	904939	51	33080

Source: WAEPZ, 1991, p 21

4.92 Korean EPZs have been a success amongst EPZs particularly in terms of linkage effects. As a UNIDO study shows "Significant linkages have been created by EPZ enterprises in terms of purchases of domestic material inputs, reliance on domestic services (transportation, finance, insurance, packing, etc.) as well as subcontracting arrangements. While services, due to their non-domestic purchases on the one hand and subcontracting on the other hand, have developed in the case of the Korean EPZs to an exceptionally high degree as compared to EPZs in other developing countries" (UNIDO, 1988, 52).

4.93 Some features of the incentive packages which are offered by the Masan Free Export Zone are as follows:

1- Permanent exemption is given from import duties, such as commodity taxes, and tax on capital goods, raw materials, and semi-finished goods.

2- Permanent exemption is granted from business tax on export earnings.

3- Most product ranges are permitted but with some restriction on textile products.

4- No tax is imposed on income, corporate profits, dividends or property acquisition during the first five years, and is reduced by 50 percent for the next three years.

5- The zone provides ready-made factory buildings and apartments for foreigners outside the zone.

6- The zone provides power and ample water.

7- The zone provides facilities in shipping, forwarding, maintenance and warehousing.

8- The zone provides banking and insurance, custom office, employment and labour office, transport, packing, trade services, etc.

Dubai's FTZ (Jebel Ali)

4.94 This Free Trade Zone is important in many aspects for our study. Firstly, Iran's EPZ nearby in the Persian Gulf could be a serious competitor in the near future. Secondly, its past several years of experience and performance could offer considerable guidelines for Iran's EPZ. In particular, Dubai is already known as a regional distribution centre. Thirdly, it has huge investment on infrastructure and also heavy investment in the service sector as attractions for foreign investors.

4.95 The United Arab Emirates (UAE) are considered among the oil-rich countries. The UAE economy was characterised up to the end of the 1950s by the limited exploitation of economic and human resources. The economy was dependent on the fish catch, pearling and simple manual crafts in addition to trading and very limited agricultural activities. Early in the 1960s, prospecting for oil began in the UAE, and in the same decade commercial exploitation began in the Emirate of Dubai.

4.96 The Emirate of Dubai has spent more than $2.7 billion in establishing two huge projects. The first project which Dubai established was the Jebel Ali port, and the second was the Jebel Ali Free Zone (JAFZ). The Jebel Ali Seaport is claimed as the largest man-made

port in the world and was created in 1979. The port has a total of 67 berths, with depths varying between 11.5 meters and 15 metres. The State of Dubai decided to created the Free Trade Zone in 1985 at Jebel Ali to create diversification away from oil, and spent heavily on infrastructure and in establishing component projects (Al Badri, 1989, 25). This huge project is located about 193 Km from the entrance of the Persian Gulf. The zone allows 100 percent foreign ownership which eliminates the difficulties encountered by foreign companies in having to operate with local partners, as well as 100 percent repatriation of capital and profits, remission of currency restrictions, remission of corporate taxes for 15 years from the date that a company arrives, and remission of personal income taxes.

4.97 In competition with other Persian Gulf states and particularly with the Gulf Co-operation Council States (GCCS), the Dubai government has made efforts that its FTZ becomes the main trade centre in the Persian Gulf area.

4.98 There are 441 companies operating in Dubai's EPZ coming from 35 different countries, including 190 firms from the UAE, 104 from India and Pakistan, 99 from developing countries and 48 from the GCCS. 58 firms are in manufacturing and assembly; 192 are trading firms; 54 firms are in services; and 137 are in other activities (Al Khaleej, September 1993).

Structure of Employees in JAFZ

4.99 The employees working in the JAFZ amounted to almost 23,000 who were distributed through the 405 establishments operating in the Free Zone in 1993. These employees belonged to many different nationalities; India and Pakistan with about 52.6 percent of total employees operating in the JAFZ represented the largest nationality group of workers(JAFZ Authority, 1994). This high percentage was due to the following points:

1. Indian and Pakistani firms represent about 23.6 percent of total firms operating in the Free Zone.

2. Both countries have a large surplus of workers and their labour is particularly low priced ($1.20 per hour).

4.100 The third largest nationality of workers is Sri Lankan, representing about 33.9 percent of the total workers in the zone. Their labour is low priced ($1.20 per hour) with most of them engaged in the clothing and textile industry, two activities which they are familiar with in their home country. And it is notable that more than 86 percent of them are female. Bangladeshis represent about 3 percent of the total engaged in the JAFZ and form the fourth largest group, generally of unskilled workers.

4.101 The fifth largest group are from the Philippines, representing about 2.6 percent of the total workers in JAFZ (op cit). This nationality is also cheap labour. Smaller numbers of

workers come from various Middle East countries, excluding the UAE, providing about 2.2 percent of total workers in the zone. The main reason for this low contribution is because they are not considered to be among the nationalities which provide cheap workers; moreover, the immigration department probably for political reasons does not give visas very easily to some nationalities included in this group.

4.102 Finally, the UAE's own employees are actually the smallest nationality group in the JAFZ, representing only about 1.9 percent of the total workforce. According to Al Mahari (1993) the main reasons for this extremely small percentage is as follows:

1. The UAE workers think that they do not need to work.

2. The UAE workers demand high wages

3. Most firms do not think the UAE's employees are qualified.

4.103 The fact that the low number of UAE workers in JAFZ is because they expect high wages which firms in the Zone are either unable or unwilling to pay, indicates that it would be difficult for companies to remain in the JAFZ if they had to pay the same rates as in the Government sector outside the Zone. According to data published by the JAFZ Authority (1992), a UAE office worker in the Government sector earns US$ 2700 per month, whereas the wage in the Free Zone for someone doing the same job is only US$ 900.

4.104 The contribution of workers in the manufacturing sector in Dubai's EPZ represents only about 8.6 percent of total employment. Dubaian cultural tradition does not allow females to travel alone or work in a factory, thus it is difficult for potential female workers to work in the activity of the JAFZ.

4.105 Although the electronic and electrical sector is the most significant activity in many EPZs, even if not having a large number of employees involved, the sector is poorly represented in the JAFZ by comparison with some other EPZs in the world. It represents only 3.2 percent of total employees of (Al mahari, 1993). Moreover, most firms involved in this activity in the Dubai deal with the trade sector. By contrast, in Taiwan's EPZs the total of employees involved in this sector in 1991 was 43,062, which represented about 64.7 percent of the total (EPZ administration, 1991, Taipeh). In Hong Kong, the percentage in the same year was less but still around 21.3 of total employees.

4.106 The rate of customs duty imposed on goods imported into Dubai is one percent. Some commodities are tax exempt, such as raw materials for construction, medical equipment and medicines, and foodstuffs. Goods exported beyond the UAE are not subject to customs duty. Additionally, 100 percent repatriation of capital and profit is permitted, and there is no income tax on foreign personnel. The tax facilities which the JAFZ offers to its customers include the following remarkable range:

1. Income tax: the salaries and wages of foreigners engaged in on-site enterprises are all exempt.

2- there no import duties or commodity taxes on capital goods, raw material components and semi-finished goods; this exemption initially lasts for 15 years, and is automatically extendable for another similar period on request.

3- Commodities produced in the JAFZ and intended for export to the local UAE market are liable to a one percent duty.

4.107 Production from local and Gulf Co-operation Council (GCC) firms is excluded from the duty, as are commodities in which the added value of local production is equal to or greater than 40 percent. Some types of goods (food, medical tools, building materials) are tax exempted, this being a regulation applied to some, but not all GCC countries.

Table 4.7

Dubai Customs duty revenue (period 1991 and 1992)

	1991 ($)	1992 ($)
Total duty (excluding JAFZ)	163 125 187	208 788 325
Total duty from JAFZ to UAE	4 586 217	7 197 376
Total	167 711 404	215 985 701

Source: Dubai custom, 1992.

4.108 Table 4.7 represents the customs duty into GCC countries. Among these countries the UAE has the lowest rate of import duty, for reason of attraction of foreign investment. Low rates apply to some Emirates with the financial wherewithal to profit from investment, particularly regarding the operation of a distribution infrastructure for neighbouring countries. It is interesting to note that these Emirates did not start off by reducing import duty to one percent immediately, for the rate began at four percent but was later reduced to one percent in response to internal competition within the different member states of the UEA. As the senior/consul chairman of the JAFZ noted during an interview it was due to non co-ordination between Emirates, whereby every Emirate tried to reduce its duty rate in order to attract as much as it could of foreign investment, and use of its port. Thus as a result of tax competition they arrived finally at one percent, in a short time. Table 4.8 also illustrates that some GCC countries have two tax bands. One band is a general tax levied on the import of commodities also produced locally. The second band is usually set at a higher rate in order to offer limited protection to local manufactures from foreign competition.

Table 4.8

Percentage customs duties in the GCC countries

Country	Tax Percentage
U.A.E	1
Kuwait	4 and 15
Qatar	4 and 20
Saudi Arabia	12 and 20
Bahrain	20
Oman	5 and 100

Source: The commercial department of GCC in UK.

Wages and working condition and other facilities for workers in the Dubai EPZ

4.109 According to the Investors Guide Handbook issued by the JAFZ Authority in 1991, the average monthly basic wage for skilled workers in all types of activity ranged from US $270 to $540, the rates for unskilled workers being from US $140 to $220. There are various wages in relation to the particular industry and sex of worker in the JAFZ. The average

monthly basic wages for skilled male and female workers are about $282 and $205 respectively. Accommodation and transport are normally provided where the average monthly salary is less than $540. Accommodation is normally provided by the employer for men whose salary is between $490 and $820.

4.110 Other facilities provided by firms include annual travel tickets home for each worker, together with free medical attention and hospitalisation. This is provided for employees sponsored by the Free Zone Authority by the Department of Health and Medical Service. Initial registration is US$ 82.00, renewable after one or two years; compensation is paid to workers according to Free Zone regulations, for example US$ 10,000 for death or total disability (JAFZ Authority, 1992).

4.111 Wage levels in the Dubaian EPZ are different between various economic sectors. The average monthly for workers in the manufacturing sector is about US$ 385, whereas the average basic monthly wage for workers in the trading sector is higher at about US$ 652. by contrast, the average basic monthly wage for workers in the service sector is about US$1,200. In fact, this sector has the highest wages in the JAFZ, where around 90 percent of employees work in offices.

Attraction Factors and Investment in JAFZ

4.112 JAFZ has a heavy investment in the service sector. By huge investment, particularly on infrastructure, Dubai has comparatively well succeeded in attracting foreign investment. By June 1993, total investment reached 1,095 billion US dollars (Al Khaleej, 1993, 14).

4.113 Work done on the role of transportation networks in the development of the UAE by Al Mehairi (1993) shows that seven advantages which encouraged investment in the JAFZ were particularly significant, and can be summarised as follows:

1. The availability of 15 ports and five airports in the UAE.

2. A highly developed road infrastructure, involving the construction of an international road network and highways linking Dubai with other Emirates and GCC countries.

3. An advanced, world-wide telecommunication system.

4. The availability of an electricity power station in Jebel Ali, helping provide the water supplies for the JAFZ by sea-water desalination.

5. The non-imposition of taxes or duties on raw materials imported to the Free Zone.

6. The availability of capital, with no restriction on transferring foreign currency abroad, and no personal income taxes.

7. 100 percent foreign ownership is allowed.

4.114 As a disadvantage, it is notable that the work permits and restrictions on the engagement of expatriate staff, introduced by UAE in recent years has created considerable problems for potential investors. In responding to the questionnaire, it was evident that firms were facing difficulties in applying for visas for some workers.

Total investments by nationality group in JAFZ

4.115 Figure 4.9 shows the size of overall investment by nationality in the JAFZ. Investments by GCC and Middle Eastern firms are at medium levels, with no firms investing more than ten million dollars. A majority of investments by developed countries' firms are under one million dollars. Indian and Pakistani firms have the highest investment at US$ 122 million, with developed countries next at US$ 61.6 million (Japan 38.5%, USA 33.5%). The GCC with Middle East and "other" firms, invested 16.7 and 1.6 million dollars respectively. By early 1993, the total size of investment in JAFZ had exceeded one billion dollars.

Table 4. 9

Size of investment in the JAFZ (by mid 1993, US$'000)

Countries	UAE	GCC& Middle East	India& Pakistan	Developed countries	Others	Total
Investments	461 600	136 600	229 200	192 400	33200	1,053000

Source: (Official report from JAFZ authority)

Table 4. 10

Investment in JAFZ in different sectors (by mid 1993, US$000)

Investment	Manufacture	Trade	Services	Total
Total investment in JAFZ	647 500	369 700	35 800	1 053 000

Source: JAFZ Report

Impact of Persian Gulf Crisis on Dubai

4.116 The official reports from the Statistics Office of the Central Accounts Section, Dubai and other available evidence suggest that the Persian Gulf crisis in the early 1990's had a negative effect on activities in the JAFZ, and on the economic activity of Dubai as a whole. It clearly indicates that the political climate of region has strong effects on EPZs in the region.

4.117 Table 4.11 shows economic activity in the external commerce of Dubai during the Gulf Crisis.

Table 4. 11

Export, Re-export and Import to Dubai during the Gulf Crisis, 1990-91

Activity	From Jan. 1990 to July 1990,before the Gulf crisis	From Aug. 1990 to Feb. 1991, during the Crisis	From March 1991 to Sep. 1991, after the Gulf Crisis
Export	356 817 901	382 923 860	44 192 714
Re-export	1 190 966 656	1 132 305 444	1 220 011 521
Import	5 160 220 207	4 345 594 927	6 092 177 827

Source: Statistics Office of Central Accounts Section Dubai,(1992).

4.118 Effects of the crisis were seen on the export process, on shipments and delayed raw material. Many activities were stopped and business was lost, while banks were squeezing and refused to advance facilities. There was heavy damage to shipping because of attacks by air forces. Many companies had reduced demand for their products, were affected in their shipments, and there was delayed arrival of raw materials. Freight companies were afraid of war conditions, particularly following experience of the war between Iraq and Iran. Insurance charges were increased; large numbers of workers returned or wanted to return to their own

country; marine insurance was cancelled; building projects and development of warehousing facilities were delayed considerably.

4.119 To sum up, the free zone in Jebel Ali has played a major role in attracting more than one billion dollars of foreign investment. But a large portion of the benefits of this foreign investment was transferred abroad, because raw materials and machines used for production are imported from abroad, in addition to a large portion of wages paid to workers being exported as well as profits. More than 98 percent of workers in the JAFZ are foreigners, which means the JAFZ has not played a role in creating jobs for local workers; therefore Dubai citizens do not benefit directly from those wages, although the local economy does benefit from the part of these wages spent locally.

4.120 In relation to exports, re-export represents a big proportion of the total, most exports are not manufactured locally and the very small amount which are manufactured in the JAFZ are made from raw materials which are generally imported. This also means, as Al Mahairi asserts, that advanced technology has not been transferred on an acceptable scale to the JAFZ, which has not yet had a positive impact on the industrial sector in Dubai (Al Mahairi, 1993, 264). Revenue from the JAFZ is very low in relation to the US$ 2.7 billion investment made by the state of Dubai, and Dubai still depends to a great extent on oil as its leading economic feature.

4.121 Having looked at the impact of EPZs the study will now consider the key cost benefit factors that should be evaluated when attempting to see if this type of economic intervention is justified.

The Costs and Benefits of Free Trade Zones: Criteria in Evaluation

4.122 Studies relating to EPZs/FTZs can be divided into three main categories:

1) theoretical approaches based on the Heckscher-Ohlin model, such as: Hamada (1974), Rodriguez (1976),Van Wijnbergen (1983), Grubel (1983), and Donaldson (1985);

2) empirical approaches which use various techniques to evaluate the performance of FTZs in operation, such as Choe (1975), Andic and Cao (1980), Warr (1983 and 1985), ESCAP/UNCTC (1985) and UNCTAD/ILO (1987);

3) descriptive studies which provide general information on various aspects of FTZs around the world, such as: Currie (1979), Spinanger (1985) and Papadopoulos (1985).

4.123 The theoretical approaches provide insights into the likely impact of FTZs on the host country. Depending on the assumptions made, the conclusions reached are sometimes in favour of FTZs but at other times not. The empirical studies also provide mixed results; some FTZs are found to have costs less than benefits, while the converse is true for others. The empirical results complement the theoretical conclusions by showing that each FTZ has different characteristics affecting its performance. The descriptive studies provide general information but are not necessarily comprehensive of data permitting a satisfactory cost - benefit examination.

4.124 Warr (1985) in his studies of the Indonesian and Philippines EPZs set up a theoretical model and then carried out a cost-benefit analysis. The benefits that Warr estimated consisted of:

a) foreign exchange earnings; b) the gains from employment creation; c) technological transfer; d) property tax and other taxes; and e) unofficial levies.

The costs estimated consisted of:

a) schemes to encourage investment in the EPZ or the use of domestic raw materials; b) losses in terms of rental; c) administration costs; and d) infrastructure costs.

A mentionable weakness in Warr's work is his failure to account for the fact that some proportion of the investment in the EPZs might have entered the countries even if the EPZs were not established. Should this be the case, then the net benefits are overestimated.

4.125 The ESCAP/UNCTC study evaluated export processing zones (EPZs) in China, Malaysia, Korea, India, the Philippines, Sri Lanka and Indonesia. The study outlined the relative success of various zones in the countries, and the results of cost-benefit analyses on several zones are reported. The study concluded that success is a function of timing (i.e. choosing the best time to set up the EPZ), location, local infrastructure, incentives, administration (i.e. the amount of red tape) and the general investment climate of the host country.

Costs and Benefits of a Project

4.126 The costs of a project, such as establishing and operating an EPZ, are the maximum alternative benefits sacrificed by carrying out this particular project. A project's cost consists of goods and services withdrawn from other parts of the economy for use in the project, and which in the absence of the project would not have been withdrawn.

4.127 Should the use of inputs for a project cause a reduction in total availability of those inputs elsewhere in the country corresponding exactly to their use by the project - then the cost consists of actual physical inputs measured in value terms by the willingness to pay of other purchasers. In a situation where there is a corresponding increase in supply of inputs in response to demand created by the project, there may be no change in total availability of inputs to other users. In this case, the project's cost is measured by the value of those goods and services whose availability to the rest of the economy declines because they are used up in producing inputs for the project. Apart from producer goods, foreign exchange, labour and land are other inputs to be considered in the cost calculation. It is quite apparent that the nature and composition of costs will differ from project to project depending on the objectives and production processes used. For example, a project aimed at generating employment is likely to use a labour-intensive

production process, and therefore a large proportion of social opportunity costs may be related to the labour input.

4.128 Benefits of a project consist of goods, services, and /or foreign exchange that would not have been available in its absence. These benefits may be estimated by the value to consumers or producers of goods which add to the existing supply in the economy. If a project's output merely substitutes for an alternative source of supply, leaving total supply unaltered, then benefits of the project are reflected by the value of resources set free from the alternative source of supply. For example, the benefit of an import-substitution project is net foreign exchange saved. Similarly, if a project produces output solely for the purpose of exports, then benefits are the value of foreign exchange earned. An EPZ is a good example of this type of project.

Cost-Benefit Analysis of an EPZ

4.129 Cost-Benefit analysis is aimed at outlining and quantifying the economic and social costs and benefits of a policy or project in terms of a common unit of currency. It provides the decision-maker with a way of looking at the likely or actual impacts of a policy, and the results can be used as a basis for policy making. The scope of the criteria employed in an analysis is , of course, open to debate. It has been common for social costs in particular to be under-represented in analyses designed to justify economic initiatives.

4.130 When a cost-benefit study of a project is conducted, the starting position of evaluation should be to ask the question: If the project was not selected, what difference would it make to the consumption opportunities (measured in monetary terms) of the host country? The results of a cost-benefit analysis should provide insights into the answer, since it is aimed at determining whether the net benefits of the projects in monetary terms are positive or not.

The Costs Associated with an EPZ

4.131 Major costs related to EPZs are the following:

a) the social opportunity cost of labour (SOCL) used in the EPZ; b) development costs, or in some cases the opportunity cost of land used by the EPZ; c) the opportunity cost of inputs employed in maintaining and operating the EPZ; d) the cost of subsidies, concessions and incentives; and e) externalities such as pollution, congestion and any other negative effects on local producers or consumers.

Social Opportunity Costs

4.132 The SOCL is the cost that a society incurs when a unit of labour leaves its current activities to work on a project.

4.133 The shadow wage rate (SWR) measures private opportunity cost of labour, that is the marginal product of labour foregone in other activities as a result of its employment in a particular project. In a condition of high unemployment, the SWR would be zero and not the market wage that is being paid. Several methods exist for estimating the SWR (see Appendix 4).

Development Costs

4.134 The ease with which these direct costs can be measured is a function of availability and quality of data. Development costs include the financial outlay required to finance the buildings and the infrastructure that supports the EPZ. The main development costs for an EPZ usually include: a) costs of providing infrastructure such as roads, water, power, and telephone lines; and b) cost of constructing standard factory buildings.

Operating Costs

4.135 These direct costs are also relatively simple to evaluate if data are available. Included are wages paid in maintaining and operating the EPZ, as well as any other input costs associated with these activities. Operating costs including administration costs, selling and promotional costs, and also costs associated with finance and development.

Labour Opportunity Costs

4.136 Opportunity cost of a worker involved in a project is the social value of foregone marginal product. This might be as low as zero in situations of unemployment, but is represented usually by the wage in the traditional sector.

Factory space opportunity costs

4.137 These costs are readily assessed by market rental rates of factory space in the vicinity of the EPZ. The assumption being that if the factory space were not used for the EPZ it could be rented out to other users at the market rate. However, if factory space (including land) was developed specifically for the project and was unusable before, the opportunity cost of factory space is reflected in development costs.

Subsidies, Concessions and Incentives

4.138 These costs arise because EPZ authorities wish to persuade firms to stay in or enter the EPZ; if financial outlays are made, these can be measured subject to data availability and reliability.

Externalities

4.139 These costs are sometimes impossible to measure objectively despite being detectable. For example, pollution and congestion can be easily observed but their costs are open to argument. In the final net benefit estimations, these costs should certainly be mentioned, however.

Benefits Resulting From an EPZ

4.140 The major benefits that result from an EPZ are:

a) foreign exchange earnings; b) wages paid to local employees; c) housing payments; d) technological transfers e) tax revenue; f) profit of local firms in the EPZ; g) rental and utility revenues; h) the use of domestic raw materials; i) shipping revenues; j) unofficial levies; k) externalities; k) salvage value.

Foreign Exchange Earnings

4.141 The foreign exchange benefits from an EPZ can be measured as the product of net foreign exchange earnings attributed to the EPZ and the shadow exchange rate (SER). According to Choe (1975), foreign exchange may be earned from the following sources:

1. Wage payments to domestic workers.

2. Sale of raw materials and intermediate inputs.

3. Supply of utilities.

4. Taxes and rentals.

5. Foreign capital investments in cash.

Warr (1983 and 1985) explains that foreign exchange is earned from exports of finished goods and expended on imports of raw material and capital goods.

4.142 In cost-benefit analyses of EPZs, a major uncertainty to contend with is that of determining whether foreign capital in the EPZ would have been attracted to the host country in the absence of the EPZ.

Wages

4.143 These benefits are often the most significant benefits induced by establishing an EPZ. A major motivating force behind establishing an EPZ is the reaping of this type of benefit.

Housing Payments

4.144 Housing payments are a clear source of benefit through rentals which are paid by EPZ firms for their worker's accommodations.

Technological Transfers and Training

4.145 Technology transfer is generally cited as a source of benefit conferred upon the host by an EPZ. The training of workers and supervisory personnel is a more likely source of benefit. If workers receive training in the EPZ and subsequently shift to non-EPZ employment, there is a benefit from the EPZ which is not reflected in the wages actually paid there.

Tax Revenue

4.146 Taxes collected from EPZ firms represent a clear source of benefit. In practice, however, most zones offer generous tax holidays which offset the potential gain.

Profits of Local Firms

4.147 Profits (losses) accruing to any domestically owned EPZ firms are a benefit (cost) accruing to the host country. If domestically owned firms are identified, these net benefits are estimable using financial statements and/or questionnaires given to firms.

Rental and Utility Revenues

4.148 If rental and utility rates paid by EPZ firms exceed market rates faced by non-EPZ users in the same district, the difference represents a clear gain to the host because EPZ rates exceed the opportunity cost. On the other hand, if EPZ firms pay lower than market rates they are being effectively subsidized resulting in a negative net benefit to the host.

The Use of Domestic Raw Materials

4.149 The use of domestic raw materials by EPZ firms may result in a benefit if the domestic price exceeds the social opportunity cost of raw materials. The cif (factory gate-price) import price is a good proxy of the social opportunity cost. Therefore the following calculation can be made:

Benefit = (domestic price - import (cif) price) VDM

where VDM = value of domestic raw materials purchased by EPZ firms.

Shipping Revenues

4.150 Shipping revenues are a source of benefit which are paid by EPZ firms to local shipping agents for arranging the shipping of goods.

Unofficial Levies

4.151 Unofficial levies are "under the table" payment made to customs officers and other officials to ensure smooth customs clearance. The influence of these were strong in some EPZs; for example, when Warr (1987) omitted them from his calculations concerning Jakarta's EPZ, the results changed from positive to negative.

Externalities

4.152 The benefits are sometimes impossible to measure. Increase in employment and profits of non-EPZ firms which supply inputs to the EPZ or have any other dealings with the zone is the principal spillover (i.e. externality) that can be considered.

Salvage Value

4.153 These benefits are generally earned from selling the scrap material, and are values accounting for depreciation and functional use.

Other Risks and Uncertainties

4.154 It is inevitable that real world projects are undertaken in risky and uncertain environments. For example, when an EPZ is established, the host country cannot be sure

of: how many investors will be attracted; the origins of such investors; how many workers will be employed; what economic and political changes may occur domestically or internationally; etc.

The Method of Costs and Benefits Analysis

4.155 The cost-benefit analysis aims at identifying and evaluating net benefits to a country as a result of establishing an EPZ. The following equations could be used in the analysis of an EPZ. The net benefits (NB) of an EPZ could be represented as follows:

NB = (R+SV+W+LP+U+T+FE+TT+P+SH+E+UL) - (D+SCI+EC+OP+OCLP+OCU+OTT)

The terms in the first set of parentheses are benefits and those in the second are costs.

BENEFITS

R = rental revenue.

W = wages to EPZ workers.

FE = net gain due to exchange rate.

SV = salvage value.

SH = shipping revenues.

LP = purchases of goods and services locally by EPZ firms.

U = utility payments by EPZ firms.

T = taxes and housing payments by EPZ firms.

E = externalities in benefits.

TT = technology and training.

P = profits (or losses) to firms.

UL = unofficial levies.

COSTS

D = development costs.

OP = operating costs of EPZ

OCL = opportunity costs of EPZ labour.

OCLP = opportunity cost of providing local goods and services.

OCU = opportunity cost utilities.

OTT = opportunity cost of training and technology.

SCI = subsidies, concessions and incentives

EC = externalities in costs

4.156 A matrix in which these Benefits and Costs are summarised is set out in Figure 4.

EPZ Costs/Benefits ($)

	Rental revenue
	Wages
	Foreign exchange gain
	Salvage value
	Shipping revenues
	Local purchases
	Utility revenues
	Taxes
	Housing Payments
	Externalities
	Technology and training
	Profits(or loss) to firms
	Unofficial levies
	Development costs
	Operating costs
	Labour opportunity costs
	Local goods and services opportunity costs
	Utility opportunity costs
	Training and technology opportunity costs
	Subsidies, concessions and incentives
	Externalities, including pollution
	NET BENEFIT (±)

BENEFITS

COSTS

Figure 4.6 Costs and Benefits Matrix

Conclusion

4.157 In this chapter we have explained that the EPZ idea is part of a much wider debate on industrialisation strategies which led to a gradual transition in many developing countries in the early 1970s from import substitution to export-led industrialisation. We have addressed in fact that the most dynamic and successful EPZs can be found in the newly industrialising countries, and we have seen that exports have underlain the most successful zones.

4.158 We have reviewed different definition of EPZs; the aims of creation; the global dimension and their characteristics. We have also discussed the factors which are significant for EPZs. Among the different objectives for EPZs, export promotion and employment are particularly significant factors.

4.159 We have discussed the role of EPZs in economic development of developing countries, but we have explained that the economic importance of EPZs varies considerably from country to country.

4.160 The most important factors contributing to financial success are that EPZs should be well located and well equipped. Transport facilities which link the zone-whether locally or internationally-with the market and suppliers are a significant aspect of location.

4.161 EPZs are characterised by a high degree of industrial monoculture, the two most important EPZ industries are electronics, and textiles and garments, these industries are highly labour-intensive and employ a very high proportion of women which are generally unskill.

4.162 In addition to discussion of the general characteristics of EPZs our look at the detail of three specific EPZs and comparison between these zones has shown Taiwan and South Korea to be notable successes and the Dubai FTZ to be the main regional competitor to Iran's EPZs.

4.163 Derived from our discussion of the evaluations which have been made of the Benefits and Costs of EPZs, we have set out criteria for the analysis of the impacts of EPZs by which we will late assess the performance of Iran's EPZs. So in the next chapter we will look at Iran's EPZs and their current state of development.

Chapter Five

FREE ZONEs IN IRAN

Introduction

5.01 After the cease-fire between Iran and Iraq in August 1988, Iran had to seek ways of regenerating the Iranian economy which would allow efficient and equitable use of her abundant natural and human resources within a significant program of economic reconstruction and development. EPZs were introduced as an element in the program, and this chapter will outline their history and present state.

Inovations of Economic Reconstruction

5.02 The Islamic government's First Five Year Plan was the Government's manifesto for the reconstruction of the Iranian economy and for its future development. The problem of reconstruction of the Iranian economy was wider than the physical reconstruction of war damaged cities and of their economic infrastructure. The Iranian economy had experienced profound changes due to the revolution itself, to the eight year war with Iraq, by economic sanctions by the western countries, by the blocking of Iran's foreign assets, and by fluctuation in the output and price of oil. All had detrimental effects on the development of the Iranian economy during the post revolutionary period.

5.03 The bill for the First Five Year Economic and Social Development Plan (FFYESDP), was ratified by Parliament in January 1989.

5.04 The FFYESDP emphasised an 'open-door' policy, price decontrol, export promotion, and attraction of foreign investors via the free zones. Also, increasing regional and international co-operation was one of the major goals of the Government's policy. Particularly, Iran's strategic geographical position provides it with a comparative advantage with respect to co-operation in manufacturing and trade with states of the former USSR in the north, and to a lesser degree with countries around the Persian Gulf.

5.05 According to Article 19 of the January 1990 law enacting Iran's first five- year development plan after the revolution, the Government authorised the setting-up of three free trade zones. According to Article 1 of The Law on the Administration of the Free Trade and Industrial Zones of the Islamic Republic of Iran:

'The Government is hereby authorised to administer the following Areas as free trade and industrial zones in accordance with (general) legal provisions and this law for the purpose of accelerating implementation of infrastructural and development projects, economic growth and development , investment and increase in the revenues of the public, the creation of sound and productive employment , the arrangement of labour and goods market, active presence in regional and international markets, the production and export of industrial goods, and the provision of public services:

(a) Kish Island Free Area

(b) Qeshm Island Free Area

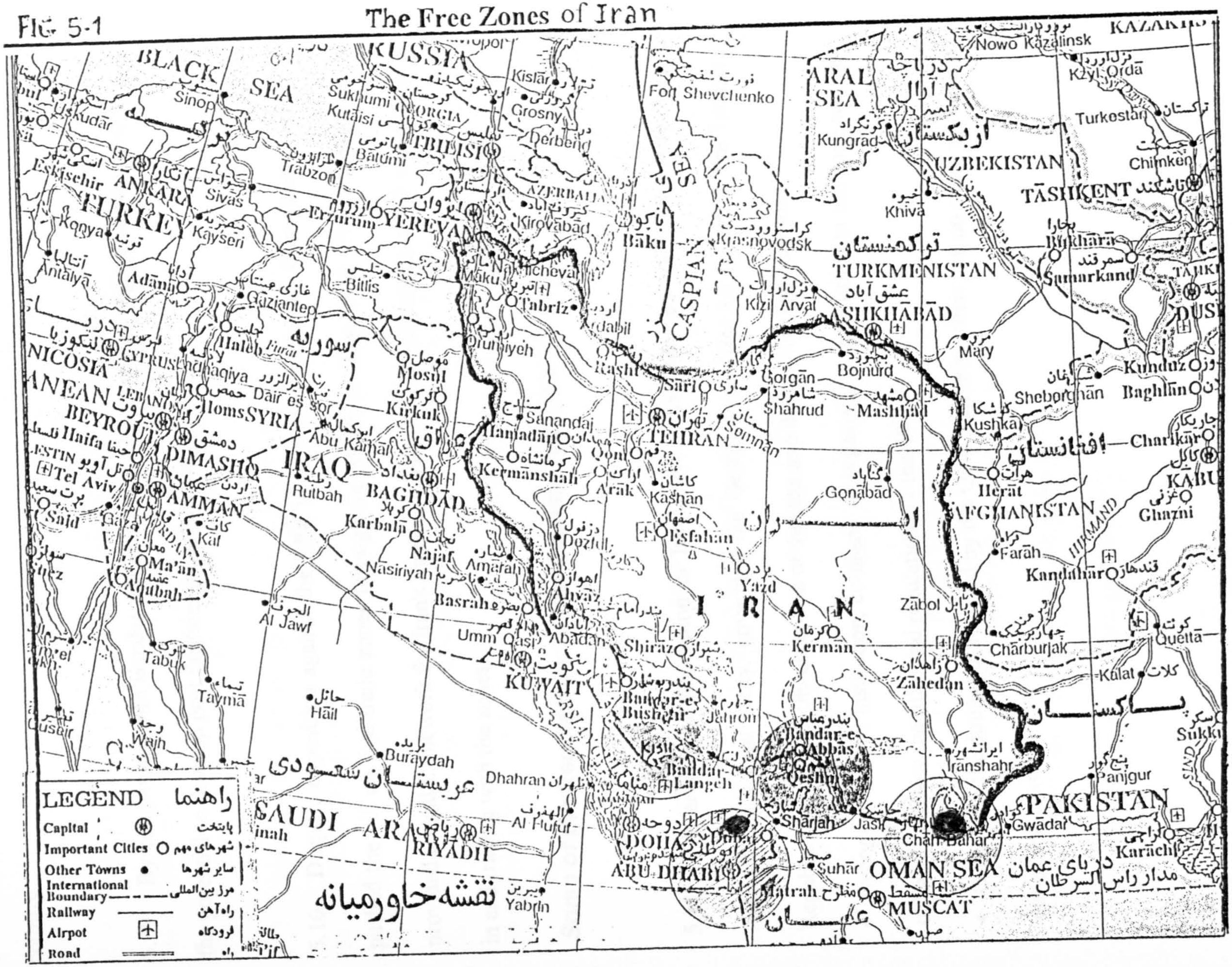
(c) Chahbahar Free Area."

5.06 The Cabinet at their meeting of July 11, 1989, declared Qeshm Island as the "Qeshm Free Area" (QFA), and since 1989 the early zones are in stages of construction and still many projects are under consideration. In fact, the QFA is planned as one of the first steps in opening the country to direct foreign investment and increased international co-operation.

5.07 Qeshm Island, with a population of around 50000, and 110 Kms. in length lying just off the major Persian Gulf port city of Bandar Abbas near the Strait of Hormuz, was chosen as the first free zone in December 1989. Its superiority vis-à-vis locations in the north and west lies in its strategic location with regard to sea transport and international trade.

5.08 Qeshm Island is very close to Bandar Abbas which is the largest city and centre of the province and a trade and industrial port (See Fig 5.1). The international airport and national railways and particularly the national highway link it effectively with the interior of the country. By finishing the Bandar Abbas and Qeshm bridge project which connects

FIG. 5-1 The Free Zones of Iran



Qeshm Island to the mainland, the QFA will be continuously linked to the interior of the country.

5.09 By comparison with Bandar Abbas, Qeshm Island has a competitive advantage in the potential to develop port facilities for larger ships.

5.10 Despite, opposition against the EPZ idea in parliament, the Government finally pushed the bill on free-trade zones through the Majlis on June 1992. The new law has provided a legal framework for Iran's three zones and has allowed unrestricted investment in and trading with the zones.

Some of the Regulations of the Qeshm Free Area

5.11 The articles of association of Iran's free zones describe the Qeshm Free Area Authority as a legal entity, governing the Qeshm Free Zone on behalf of the Islamic Republic of Iran, with the exception of defense and defense related questions.

- Every commercial institution, company or organisation established in the zone will be obliged to follow the rules and regulations of the QFA.
- Other than the duties put forward by the QFA Authority, there are no other applicable duties and laws.

- Import and export of capital, currency and stock transactions must be according to the QFA.
- Purchasing manufactured products, raw materials, machinery, parts and tools from the international market and their importation into the QFA and exporting any kind of goods from this free area to the international market is free.
- Production of fuel and energy for the QFA is at the top of the priority list for Iran's energy distribution plan.

5.12 In order to achieve the intended goals, all facilities, infrastructures and investment on Qeshm Island is to be exempt from any kind of nationalisation, confiscation, freezing or interference by any government authority, expect for pre-announced regulations.

5.13 The final ownership of Qeshm Island including all parcels of land and natural resources belongs to the Islamic Republic of Iran.

Intended role for the QFA

5.14 As already mentioned, EPZs were planned as a part of government reform programme which was intended to give importance to foreign investment and also was trying to encourage non-oil exports, in addition to closing uping the technological gap which occurred during the eight years war with Iraq.

5.15 As its main activity, the EPZ planners intended the Qeshm Island Free Area (QFA) to attract energy-intensive industries and export refineries. Moreover, the QFA was expected to be a free area for production, business, financial, transportation, communication and service activities, and also a distribution centre for the Persian Gulf region and a gateway for landlocked countries north of Iran.

5.16 There have been many ideas related to possible future industrial activities at Qeshm Island, particularly large scale activities; for example, a petroleum refinery has been proposed at Qeshm Island, but assuming that most of the products would be exported to Europe, the volume involved would still be quite moderate as compared to exports from other countries in the Persian Gulf.

5.17 Energy-intensive industries such as metal reduction, smelting and casting are still expected to be among the first drawn to the QFA, because the main comparative advantage is in the natural gas which is available at attractive prices. Kobe steel, for example, had entered into a joint venture with Iran to build and operate a $1 billion direct reduction manufacturing complex in the QFA.

518 Ideas have also been launched to supply natural gas to India from countries around the Persian Gulf, notably Iran and Qatar.

5.19 Among the major industrial goals for the QFA, refineries is a significant one. The Iranian government is planning refineries to be located in the QFA, since crude oil from numerous regional sources can be brought in for refining with considerable saving in transportation costs alone. Furthermore, any refinery located in the QFA could gain a competitive advantage by producing petroleum coke and other petroleum products, which are needed throughout the Persian Gulf region, especially to supply aluminium and copper plants.

Qeshm in a General Overview

Territorial Characteristics

5.20 Qeshm is the largest island in the Persian Gulf and Arabian Sea, with an area three times larger than Singapore and Bahrain. Qeshm Island is located at the entrance of the Strait of Hormuz directly overlooking Oman, Umm al Quwain, Ras al Khaimah, Sharjeh and Dubai (see Figure 5.2). It measures 112 x 14 kilometres, covering an area of 1,570 square kilometres and runs parallel with southern Iran, located opposite the ports of Bandar Abbas, Bandar Khamir and Bandar Lengeh. Qeshm Island and its three satellite islands of Hormuz, Hengam and Larak, have a special position in that every cargo ship bound for Iran, the United Arab Emirates, Saudi Arabia, Qatar, Bahrain, Kuwait and Iraq, and every oil tanker entering the Persian Gulf has to pass close to its shores. The

distances between Qeshm Island and Dubai (United Arab Emirates) and Kuwait are 100 and 400 miles respectively, see Table 5.1 .

Table 5.1

Distance between QFA and other countries (Miles)

United Arab Emirates	(Dubai)	100
Bahrain		350
Qatar		100
Kuwait		400
Korea		8000
Japan		8500
China		7500
Hong Kong		6500
Singapore		5000
India		800
Pakistan		750
UK		7000
Mid-Europe		7500

5.21 Qeshm due to its geographic location has an average temperature of 34 degrees Celsius in summer and 19 degrees in winter.Its average humidity is 93% in summer and 71% in winter. It has a mild and suitable climate during eight months of the year.

5.22 Qeshm Township (Shahrestan), or Qeshm in short, consists of the two towns of Qeshm and of Hormuz and two regions (bakhashe), viz. Bakhashe Shahab and Bakhashe Markazi. The Bakhashe Shahab consists of five districts (Dehestan), viz. Dulab, Salakh, Suza, Larak and Hengam. The Bakhashe Markazi consists of two districts (Dehestan), viz. Ramakan and Homeh. Fig 5.2 shows the geographical boundaries of the above administrative units.

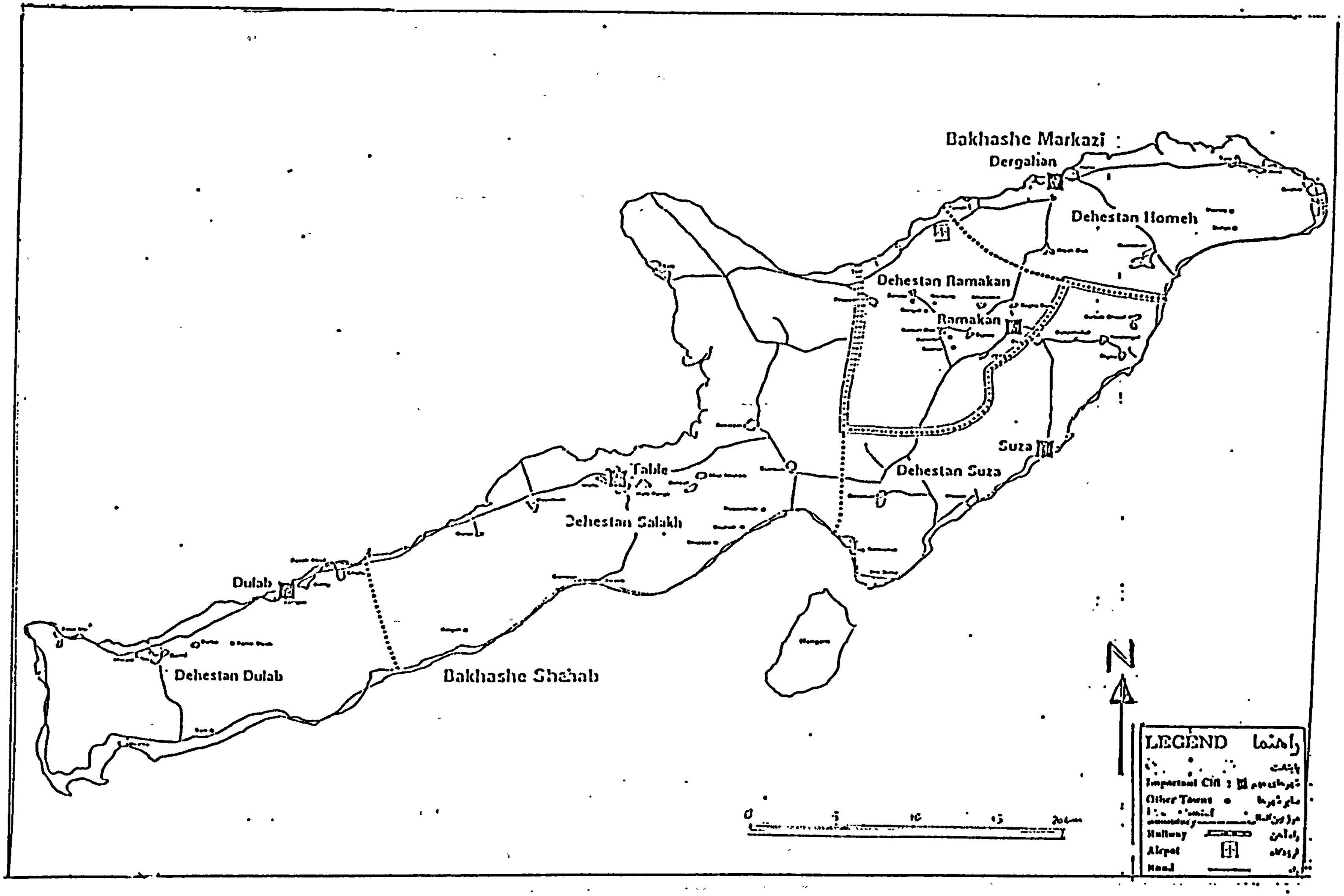
Population

5.23 It should be noted that the description of the present circumstances of Qeshm in this part of study is based primarily on the Population Census 1986, and on the partial Population Census 1991. Additional data was collected during the field work in 1993.

5.24 The total population of Qeshm amounts to 52,047, of which 47,257 persons are on Qeshm island and 4,790 persons on the other islands. Of the total population, 26% live in urban areas and 74% in rural areas. Table 5.2 contains information about the population according to age groups and sex.

Figure 5.2

Qeshm Island



5.25 The economically active population in Qeshm according to economic sectors is shown in Table 5.2, with the corresponding distribution for Iran as a whole included for comparative purposes.

Table 5.2

Economically Active Population in Qeshm and Iran

	Qeshm	% of Total Economic Activities	
Economic Sector	Number	Qeshm %	Iran %
Agriculture	2,395	26.9	29.0
Mining	0	0.0	0.3
Manufacturing	659	7.3	13.2
Water, Gas, Electricity	147	1.6	0.8
Construction	1,958	22.0	11.0
Wholesale&retail	798	8.9	8.0
Transportation	1,287	14.4	5.7
Finance, Insurance	45	0.5	1.0
Public service	1,318	14.9	27.7
Unclassified	311	3.5	3.3
Total	8,918	100.0	100.0

Source: Iran Centre For Statistics 1986

5.26 At present, the economic activity of Qeshm island is mainly concentrated in agriculture, fishery, manufacturing and transit trade. Historically Qeshm island has long roots in international transit trade, primarily with Dubai, but a substantial part of the imported goods originates from South East Asia. The durable and consumable goods are generally, electric and electronic home appliances, sports gear, toys, construction materials, foodstuffs, garments, automotive spare parts, sewing machines, medical items, engines and tyres. The final destination for the goods is the mainland of Iran.

5.27 In March 1991, the QFA partly legalised this trade by the introduction of a trade authorisation system. By February 1993, in the trade activities there were seven commercial firms as well as two trade services firms established, and there were 282 traders officially registered with the QFA. During the period of 1989-1994, nearly 140 investment letter permission has been issued by the QFA authorities. The import of goods to Qeshm island is in principle duty free to facilitate durable goods transactions, but a port fee is levied by the QFA.

5.28 From March 1991 to February 1993, it has been estimated that some 400,000 tons of goods at a value of US$ 700 million were handled in Qeshm's transit trade, which by comparison with the volume of goods loaded and unloaded in Iran is insignificant. The border between regular wholesale and retail sale trade and international transit trade is diffuse, but a considerable 52,000 people, including importers, launch crews, dockers

and drivers and particularly unskilled local labourers were involved to some extent in the transit trade. The average income of most importers was 300 million Rials per annum.

5.29 In fact, the transit trade is highly sensitive to changes in import duties applied by Iran, as well as to the degree of control by customs authorities of unrecorded imports to mainland Iran from Qeshm. The past several years of experience shows that export and particularly import policies have had vital effects, particularly on incomes of the majority of people in Qeshm ,Kish and Chabahar.

5.30 Agriculture and husbandry are other activities in Qeshm Island which some 1,000 households are involved in. Agriculture in the form of farming and horticulture takes place primarily in five areas; at Qeshm Island, the Turiyan plain, the Tula-Ramchah-Holor region, the north western strip, the south western strip and the region around Laft. According to the available data, about 3,000 hectares are under cultivation. The main agricultural products are vegetables, barley and dates. The whole production of dates after packing in Qeshm is exported by a newly established firm. According to the population Census 1991 the average annual household income generated by these activities has been estimated at 7.5 million Rials.

5.31 Fishery is another activity of Qeshm Island. The total annual catch of fish in the waters around Qeshm island amounts to about 18,000 tons, of which 50% is caught by Qeshm fishermen. About 2,000 Qeshm fishermen are involved in the fishery sector. Almost 600 vessels of various kinds are used, based at 23 fishing centres. The value of catches was estimated at 9.5 billion Rials in 1992. The average annual income for a fisherman is estimated at about 6.5 million Rials. Tuna canneries have been newly established in the QFA with a capacity of 18 million cans per year.

Comparative Advantage of the Mainland

5.32 The comparative advantage of Qeshm Island is partly a function of Iran's comparative advantage in an international perspective, and partly a function of Qeshm Island's comparative advantage vis-à-vis other geographical locations in Iran, in particular locations in the north and west close to the major domestic markets and Bandar Abbas, respectively.

5.33 The concept of "comparative advantage" is used in a strict economic sense, considering fundamental aspects such as geographical location, availability of natural resources (location, quantity, quality and extraction costs), cost of labour and labour productivity, skills and technological know-how, but it does not include administrative arrangements such as the application of the free trade area concept, taxes, various

subsidies and so forth, which from the country's point of view merely constitute transfer transactions.

5.34 Thus, for better understanding of the issue, it is necessary that Iran's comparative advantage be discussed first. Secondly, with this background, the comparative advantage of Qeshm Island in connection to the whole country will be analysed.

5.35 Availability of various kinds of natural resources in a country may constitute comparative advantage, but aspects regarding quality, quantities available, cost of extraction and geographical location also determine whether the country or the region has a comparative advantage in extracting a particular resource. However, the fact that a country or a region has a comparative advantage in the extraction of a particular resource does not necessarily mean that it also has a comparative advantage in the further midstream and downstream processing of that resource.

5.36 Iran is the second largest producer in OPEC, and particularly after the cease-fire of 1988 it has been working hard to increase its production capacity to 4.5m b/d, in order to take advantage of the possibility of taking a greater market share (see Figure 5.1).

5.37 It is has been well established that Iran has a strong comparative advantage in the extraction of oil and natural gas, with well-head costs that compare favourably with those

of many other countries. This implies that Iran should also be in a good position to have a competitive edge in first stage processing activities based on oil and natural gas as feedstock. The relative importance of cheap oil and natural gas diminishes gradually in further midstream and downstream operations, which means that the original comparative advantage gradually erodes. Cheap natural gas and the potential of cheap hydropower has created a good position for Iran to become internationally competitive in energy intensive industries.

5.38 In Iran, the marginal supply cost per kwh has been estimated at about US$ 0.05 (World Bank estimate), which is about half or less of the marginal supply cost in most other countries. According to a Ministry of Oil estimate (1988), this provides Iranian energy intensive industries with a cost advantage in the size order of 10-15 percent by comparison with many other countries.

5.39 The second area of comparative advantage is in availability of other mineral resources, primarily iron, copper, zinc and lead (Plan and Budget Organisation, 1988). Iran, furthermore, has a comparative advantage in its large domestic market consisting of a population of about 60 million people and GDP of US$ 126 billion in 1992.

5.40 Whether a country has or has not a comparative advantage in labour intensive industries is a function of the cost of labour and the productivity of the labour force.

Many countries in South East Asia have demonstrated a strong comparative advantage in labour intensive industries such as mid-and downstream textiles and the electronics industry. Iran's strategic geographical position and closeness to countries in the Persian Gulf and some states of the former USSR in the north provides Iran with a certain comparative advantage in the manufacture of goods that are expensive to transport, in the processing of certain raw materials from these countries, and in trade with these countries.

Comparative Advantage of Qeshm Island

5.41 Qeshm Island by comparison with mainland Iran has certain advantages and disadvantages, somewhat different whether the comparison is made with locations in the north and west of Iran or with Bandar Abbas. Studies by the Ministry of Mines and Metals on locations of FTZs in Iran show that, by comparison with locations in the north and west of Iran, Qeshm Island has the following advantages:

- Better location with regard to closeness to natural gas;
- Better location with regard to environmental pollution.
- Better location for manufacturing suitable for seaside location and international trade.

5.42 By comparison with Bandar Abbas, Qeshm Island has a competitive advantage in the potential to develop port facilities for larger ships. In other words, sufficient water

depth for port facilities requiring more than 15 metres depth; there are also certain advantages from an environmental point of view.

5.43 The limitations of Qeshm as an island, particularly at present, are that it lacks requisite infrastructure. Huge investment in a bridge, providing road and railway connections with Bandar Abbas and as a result with the mainland of Iran, as well as certain other infrastructure investment, is required at a large cost.

5.44 We can also add the following disadvantages by comparison with these locations:

- Remoteness from the main domestic markets;
- Less developed infrastructure;
- Less service and support industries.
- By comparison with Bandar Abbas, one or two rounds of unloading/loading for goods transported and from factory sites on the Island;
- less developed infrastructure;
- less service and support industries.

5.45 Of course, it is notable that if a bridge to connect Bandar Abbas to Qeshm Island with appropriate road and railway facilities were built, many of these disadvantages by comparison with Bandar Abbas would be removed. The costs for these arrangements and other incremental costs associated with telecommunications, power, water and so forth,

would be considerable. The cost of the bridge only has been estimated at some US$4200 million, and the road and railway connection at some US$500 million..

Current Industrial and Trade activities at Qeshm Island

5.45 Up to 1989, industrial activities at Qeshm were limited in scope and operated on a small scale and a few on medium scale. Manufacturing operation included: production of wooden dhows, plastic boats, asphalt, bricks, concrete, cement batching, mechanical and electrical workshops; over one thousand people were employed in these activities.

5.46 During the period 1989-1995, over 37 firms have been established in the zone and about 40 investment letter permissions were issued.

5.47 Table 5.3 demonstrates the economic activities in the QFA. Activities are distributed among 21 establishments; the number of reported activities is more than the establishments, because some of the establishments in the QFA list more than one type of activity in the official directory on which the table is based. One reason for that may be that the firms operating in trade sectors, particularly imports, are engaged in other activities such as warehousing or packing, and also some came to the QFA for the purpose of distribution.

Table 5.3

Types of activity in the QFA

Activity	Number	Percent
Manufacture	9	18.28
Assembly	4	8.33
Warehouse	4	8 .33
Distribution	6	12.34
Trading	15	30.39
Service	11	22.18
Total	49	100

Source: Official Report, July (1994) Future of the QFA.

5.48 Trade and distribution together represent about 43 percent of total activities in the QFA, as defined by Table 5.3. Service and warehousing represent about thirty and tow percent, this proportion indicating particularly the firms involved in import, export and distribution activities.

5.48 From this explanation it is concluded that the activities in the QFA are grouped in three principal sections; trading, manufacture and services.

5.49 Types of activities in the other zones namely the Kish free zone and Chah-Bahar, are confined to trade and few firms are involved in the manufacturing and service sectors Table 5.5. The sole equipment and machinery activity is by the Azarab company which belongs to the Heavy Industry Ministry, newly put it into operation. Establishing factories in the Zone-particularly producing equipment and machinery-takes time, and requires massive investment ,

Food and beverages

5.51 There are eight firms in QFA involved in this activity, due to the following points:

- There is a large demand for this sort of commodity, either locally or externally.
- Despite a considerable increase in food production since the revolution, Iran is still a major importer of food items, with imports amounting to US$ 2.7 billion in 1990.
- The industry does not need high technology as do electronic or equipment commodities.

For example, there are tuna cannery firms in the QFA with a capacity of 18 million cans per year generally produced for domestic markets.

Electronic and electrical commodities

5.52 There are 12 firms in these activities of which ten are involved in the trade and distribution sector. Therefore the largest proportion of these activities is trade, followed in turn by distribution and warehousing. Manufacturing firms comprise only two firms including assembly which have been recently established. The reason for the low number of firms in manufacture and assembly within the electronic and in the electrical industries in the QFA and also in other free zones in the Persian Gulf may be due to the following points:

1. This type of activity needs a large investment to establish manufacture and also needs advanced technology, which means it is monopolised by a few developed and newly industrialising countries.

2. There are some free zones particularly in Asia which specialise in this type of activity such as Taiwan, Singapore, South Korea, Hong Kong, and recently Malaysia. For example, in inward investment in Malaysia in 1984, 31 of a total of 71 firms established were operating in the electronic industry, which was about 44 percent of the total in all industries (Currie, 1985, 19). Also, Taiwan in 1991 exported electronic goods from its EPZs to the extent of about 74 percent of the total of products (EPZ Administration, 1991). And finally, the other significant reason for the lack of electronics and electrical firms in the Persian Gulf states is related to air quality conditions. A Japanese company in its study of whether the Persian Gulf region weather was suitable

for establishing electronics factories, particularly in Dubai's Free Zone, found the proportion of dust in the air to be too high at more than 14 percent.

Clothing, textiles and shoes

5.53 There are three firms are involved in this manufacturing. This type of activity may not however recommend itself for development in the QFA for reason of the high competition in the region in this field, particularly between Pakistan, India, Bangladesh and Sri Lanka. For example, in Sri Lanka's free zone the clothing and textile firms represented about 53 percent of total firms operating in the zone in 1983 (Currie, 1985).

5.54 This type of activity is usually labour-intensive and needs a large number of workers, particularly women workers, who in the QFA and regions around Qeshm Island are in shortage for cultural reason.

5.55 One reason in relation to Hong Kong's concentration on textiles and clothing industries particularly during the first stage of its EPZ operations, may be due to the local availability of women workers.

5.56 In relation to handicrafts, it is notable that the manufacture of textile fabrics has been widely practised in the Island. This kind of producing activity can be regarded as ancillary to agricultural economic activity.

Metal related industries

5.57 This activity includes steel products, structural steel and ship repairs, aluminium and household utensils. Five firms are involved in this activity, of which three are trade firms.

Service activity

5.58 This activity includes the establishments which serve the firms operating in the QFA, such as banks, insurance, restaurants, packing and shipment/transport firms. But the availability of services is as yet insufficient; there are other services required in the QFA ranging from internal transport to technical clinics and suitable restaurants. This kind of shortage of services is due to the newness of the EPZ.

Building materials

5.59 Activity in building materials includes most types of building material such as concrete, brick, cement, blocks and wood related items. This type of activity is important for the QFA because construction activities in the Zone are the basis for its future.

Table 5.4

Dry Cargo Goods Loaded and Unloaded

in International Maritime Transport

in the Persian Gulf Region in 1991

(in thousands of metric tons)

Country	Goods Loaded	Goods Unloaded	Total
Bahrain	1,138	3,259	4,397
Iran	1,215	12,815	14,030
Oman	130	2,252	2,382
Qatar	352	2,240	2,592
Saudi Arabia	1,010	42,250	43,260
UAE	4,632	8,655	13,287
Yemen	148	3,271	3,419
Total	10,895	71,722	92,617

Source: UN International Trade Statistics Yearbook 1992

General finding

5.60 In this study we have tried to discuss some important objectives of EPZs in Iran. Moreover, we have tried to highlight the importance and impact of the EPZs on the Iranian economy.

5.61 To sum up, we can make eight points in conclusion:

1- Import substitution strategy has always played a dominant role in the development of the Iranian economy. The selection was due to lack of investment in the infrastructure of the economy as well as to ownership of oil revenue by the state. Implementation of this strategy in Iran, in different periods of time, has been with different tempo and vigor. Although during the Third and Fourth Plans it was implemented thoroughly, during the Fifth Plan the strategy lost its tempo and, more or less, foreign goods were substituted for local products. During this Plan, central government chose a combination of ISI as a main strategy with export promotion as a supporting policy. More importantly, the export substitution industries, i.e. chemicals, oil refineries and petrochemical industries, were supposed to be established in export platform zones. That is why most of these industries were set up on the edge of the Persian Gulf for export purposes. The choice was rather pre-planned and the Government had planned to substitute the export of crude oil by petrochemical and oil by-products.

2- During the Fifth Plan, Kish Island which at the first had been the pleasure area for the royal family and for high income tourist groups, was established. As a custom free zone to facilitate the trade of produced goods. Therefore, by no means could it significantly support the Government's objectives. More importantly, most of the refineries and petrochemical units were planned to be set up on the edge of the Persian Gulf, i.e. Bandar Abbas, Bandar Taheri and Bandar Imam Khomeini.

3- After the oil price hike in 1973, local demand shot up and the effort to expand exports to earn more hard currency was substituted by efforts to import more durable and non-durable commodities, as well as capital goods to tackle the upward shift in local demand and prices. As a result, the Plan to expand EPZs was set aside for some time.

4- After the down fall of the Shah's regime and the start of the war between Iraq and Iran in 1980, up to the cease-fire in 1988, there was a long lapse of time, during which plans were set aside. On the eve of the First Development Plan the establishment of EPZs got new momentum and the Government gave more importance to these zones. The choice was both due to the to new economic thinking as well as new economic beliefs.

5- With the start of the First Development Plan a key importance was given to the EPZs. The reasons, for this were that: firstly, the Government intended to give importance to foreign investment; secondly that the Government started a new plan to bring about structural changes from a close economy to a more open economy; thirdly, the Government was trying to encourage non-oil exports; fourthly, the Government intended to cover up the technological gap which occurred during the eight years war, fifthly, by the breakdown of the U.S.S.R and emergence of new countries north of Iran, namely Azerbijan, Turkmenistan, Uzbekistan and Armenia, new markets were generated which were ready to absorb Iranian commodities, sixthly, the Government was trying its best to

normalise the current economic condition. Due to these reasons the Government adopted export promotion strategy side by side with the ISI strategy.

6- Moreover, for the first time in the history of the Iranian economy the Government through its development plans tried to create more comprehensive connection between the export and import enclaves of the economy on one hand, and the structure of the economy with the export enclave of the economy on the other hand (Figure 5.1).

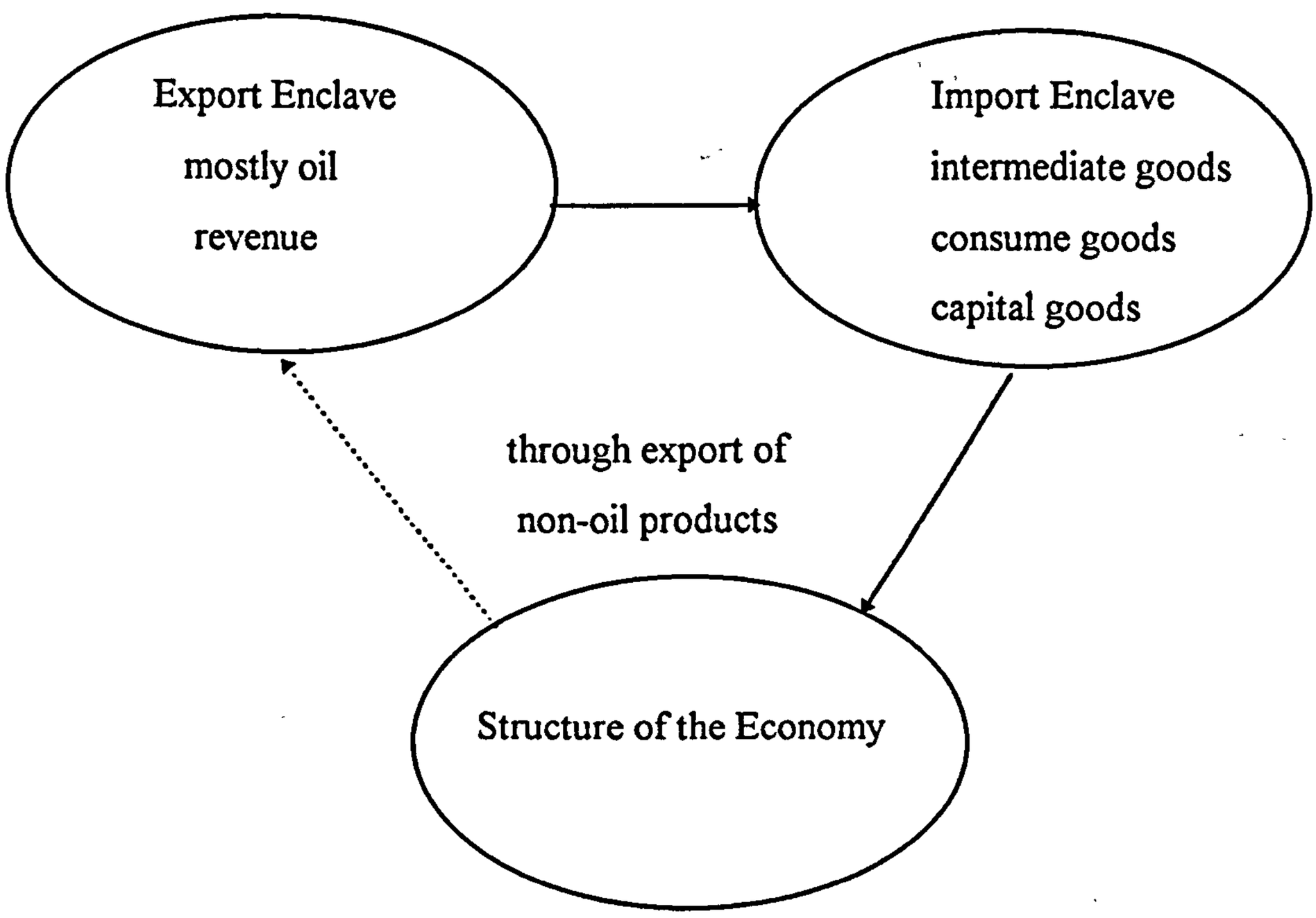


Fig. 5.1

7- At the micro level, Kish Free Zone was established in the year 1989. After the Kish Free Zone, the Qeshm and Chahbahar free zones came into existence. Geographically, there was a sequence in the selection. Although the Kish Free Zone was primarily a custom duty free area to facilitate durable goods transactions, the Qeshm Free Area was mainly established as an industrial area, especially to facilitate the export of manufactured goods. The Government intended to boost the share of non-oil products in total exports. Therefore it was assumed that the new area could increase the flow of foreign capital as well as of technology. Accordingly, the Government started to invest huge amounts in the zones on infrastructure and it considered different concessions i.e. tax exemption to encourage investment in these areas. That is why, from the beginning of the First Five Years Plan (1989), these areas with new plans, priorities and objectives came into existence. They were established with the priority to become export platform zones with a main objective to earn hard currency, to create jobs and to pump local resources into these areas. Importantly, there were severe restrictions on the outflow of commodities from the areas to the main land, expecting commodities of which more than 60 percent of the value was made in those areas. Therefore, one can come to the conclusion that the main purpose of these areas was not import substitution but export promotion.

8- Unfortunately, although many industrial joint ventures were supposed to be established, the Qeshm and Chabahar free zones are playing the same role as the Kish zone was playing during the past, namely as custom duty free areas which facilitated trade

of produced goods and transactions to the main land. These two areas are more or less following the same path.

Conclusion

5.60 The new economic activities in the QFA are distributed among the three principal sectors of trade, manufacturing and services, resting on a large local base of agricultural and traditional activities.

5.61 The data indicates that most firms in the QFA involved in new activities do not require advanced technology, particularly taking into account that firms are involved in activities which deal primarily with trade and not manufacturing.

5.62 Although the availability of low cost power generated from natural gas constitutes an obvious favourable condition for the establishment of energy intensive industries such as an alumina refinery, steel and other metallurgic industries, the early development of the EPZ has been based on firms engaged in the trade sector particularly in the import of goods.

5.63 A main comparative advantage of Qeshm Island will continue to be in its huge reserves of gas, which are on offer to energy-intensive industries at 10% of international gas prices.

5.64 Before going on in later chapters to consider the context and scope for future policy for Iran's EPZ, we will turn in the next chapter to consider the problems in evaluating their performance to date.

Chapter Six

AN ECONOMIC EVALUATION OF THE EPZs

Introduction

6.01 *After describing the current state of the EPZs in Iran in the previous chapter, it is necessary to reach tentative conclusions about their performance so far. Accordingly, this chapter examines the relations between EPZs and economic development. Some important objectives of the EPZs in Iran will be evaluated. We focus on the role of the QFA in the economic development of Iran, and on whether the different aspects of this role are positive or negative. In examining the potential contribution of the EPZs, special reference is made to Dubai's EPZ, which lies opposite to Qeshm Island across the Straits of Hormuz. Dubai is both the closest example of an EPZ geographically and a major competitor for future foreign investment in the Gulf region.*

Persian

6.02 The evaluation is made against the established objectives for the EPZs although the early stage of EPZ development in Iran requires that our conclusions be tentative. That an attempt will now be made to evaluate the cost and benefits associated with the development of the QFA zone. We employ the criteria identified following para.4.122 in Chapter Four.

What role can EPZs play in the Iranian economy?

Evaluation difficulties

6.03 As Warr's study (1983) shows, the difficulties of evaluating the performance of any EPZ in Iran are, in many aspects, very considerable. The first difficulty is an acceptable framework for analysis, although for this purpose UNCTAD proposed such a framework in 1985 which provides methodological guide-lines for this kind of analysis. But another difficulty is that of access to data, particularly up-date and authoritative data for the EPZ or the EPZ industries, as EPZ activities are not a separate item in the national statistics on trade, investment and employment. Therefore, data concerning them has to be reconstructed from the often incomplete or unreliable information supplied by EPZ authorities or individual sources. These data, furthermore, do not cover a significant or acceptable period of time to be entirely meaningful. The Qeshm and Kish EPZs are both in the very early years of their development, which inevitably must make their evaluation tentative at this stage. Nonetheless, it is valid to establish a base-line evaluation against which progressive evaluations and refinement of policy can proceed in future years.

Alternative situation

6.04 Assessing the performance of EPZs in terms of employment, exports, economic growth or technological development is one thing and, generally, far from simple. Assessing what might have happened in the absence of EPZs is quite another matter. This is the familiar research problem of the "Alternative Situation" hypothesis which is a fertile ground for speculation, but not always a very useful policy guide. It nevertheless

touches upon an important question of industrial policy within the country. Very heavy investments are made in the development of EPZs, coupled with the fiscal and customs advantages provided for attracting foreign investors, and for generating new employment opportunities as well as faster increases in export of manufactured goods or other aims. But if these facilities and privileges had been distributed more widely within the domestic economy, might they have achieved the same or similar result? In other words, if all local firms in Iran had the same benefits and freedom to import whatever they need for their output, or equal freedom from bureaucratic regulations, might they not have equal or better performance than the firms within the EPZs?

6.05 For reasons of equity, moreover, would it not seem preferable that the beneficiaries of a scarcity allocation system should be domestic firms rather than foreign investors who are shopping around the world for better conditions?

6.06 The main objectives in setting up EPZs in Iran are generally as following:

1- To attract foreign investment

2- To transfer technology

3- To create jobs and fresh demand

4- To produce exportable goods

5- To encourage national economic development through linkages

6.07 Also from the viewpoint of national planners, EPZs have been created in order to set up industries producing exportable goods and to attract investment in these industries

in the hope that they will stimulate and rapidly diversify the country's industrial growth. The First Five Years Plan has emphasised the importance of non-oil exports to future development. On the other hand, the intended role of the zones from the standpoint of local economists was to better utilize Iran's production capacity.

6.08 According to the secretary of the High Ministerial Council (1989,12,7),"EPZs are principally devised in order to create, expand and increase economic activities in production, commerce, shipping, communications, services and financial activities, with an active presence in regional and international markets."

6.09 Zanjani, the Vice-President and Head of the Plan and Budget Organisation (PBO) has stated that "... the industrial sector will emerge as the engine of growth" and that "transfer of technology is a key objective of the EPZs" (PBO, 1989). With such high expectations placed in the EPZs, it is critical to assess whether EPZs are likely to be able to play the positive development role assigned to them.

6.10 In assessing the development contribution of EPZs, there must be two levels of analysis. First, it is important to consider whether the EPZs fit with the overall national development strategy and contribute to its achievement. Rostow's advocacy of a leading sector, Rosenstein-Rodan's similar notion of a 'big-push' in industrialisation, and the high export orientation associated with EPZs opposes those policymakers who advocate a balanced and self-reliant development path. Secondly, what are the direct economic development goals associated with EPZ production generally, and do Iran's EPZs help achieve them? Whereas the first question focuses on connections within the broad

developmental strategy of the country as defined by policymakers, the second question focuses on the narrower and internally set goals for EPZs.

The Impact of EPZs on the Supply Side

6.11 Before turning to analyse the direct economic development objectives of Iran and its strategy for its EPZs, let us first glance at the Iranian economy.

6.12 For many local economists, the 1979 revolution reflected the failure of the Shah's economic model which was heavily dependent on oil and the capitalist world, particularly for industrial inputs, management, technology, and food. The economy was unevenly developed across social classes, regions and economic sectors, and it was largely directed toward production and imports for consumption by a tiny minority of the rich and the upper-high and middle classes. The economy's 'growth first, redistribution later' strategy caused Iran to be dependent for its survival on the West, and encouraged non-productive speculation internally widening the gap between the rich and the poor, the urbanites and the folk (Jamali, 1981).

6.13 With the victory of the revolution in February 1979 and the referendum of March 1979 that officially changed the monarchy to an Islamic republic, the first steps were taken toward the Islamicisation of Iranian society and of its economy. No such integral Islamic economic system existed anywhere on the globe. The basic principles of an Islamic economy were announced as a 'third path' between laissez-faire capitalism and outright Marxism. The emphasis was on the uniqueness of the Islamic approach

compared to East-West alternatives, as described in the Appendix on the Islamic Economy.

6.14 In the Islamic culture, the economy is not an end in itself but only a means 'to contribute to the attainment of the ultimate goal': i.e. a 'movement toward God'. Article 3 of Chapter One of the Constitution sets out the economic objectives of the Islamic government as: firstly, the planning of a correct and just economic system in order to create prosperity, remove poverty, and abolish all forms of deprivation with respect to food, housing, work, health care and the provision of universal insurance; and secondly, the attainment of self-sufficiency in industrial, agricultural and military science, technology, and all related matters.

6.15 An Islamic economic order gradually evolved in Iran during the 1980s. The official policy was to re-orient Iranian society toward Islamic social justice, and to restructure the Iranian economy to attain self-reliance and self-sufficiency.

6.16 Iran's experience, particularly during the 1980s, shows how difficult it is for a contemporary nation with a dependent structural economy to adopt a type of economy vastly different from that of its trading partners in the current interdependent world.

6.17 In the years following the establishment of the Islamic Republic in February 1979, the Iranian economy has experienced periods of decline in real output, matched by years of growth. There was a four year recession in 1978-1982; a four year recovery between 1982-1986; another economic slowdown between 1986 and 1989; and finally, a new cycle of renewed growth after 1989.

6.18 Since Mr Rafsanjani became President in 1989, the Government attempted to open a new line in its economic, political and cultural outlook, in order to achieve more co-operation within the Gulf region and with the Western countries. Hence, Iranian policymakers became increasingly pragmatic over the period 1989-1995 in their development strategies and accepted the important role of the market and an export-orientation in fostering economic growth. As part of their economic growth strategies they have chosen to promote industrial development via EPZs. However, the question remains whether EPZs are perceived to be inherently compatible with the country's social progress.

6.19 During subsequent economic reconstruction the Government adopted a reform plan and policies of economic adjustment. The main adjustment policies were related to the allocation of more foreign reserves to production processes, utilisation of idle capacity, growing optimisation and improving expectations among businesses and, finally, decreasing uncertainty on the economic and political fronts to give more confidence to decision making processes.

6.20 The structural difficulties and particularly the decline in oil prices and oil revenues caused a halt in economic growth and problems in debt servicing, particularly in the final years of the First Plan (1989-1994). Despite the economic adjustment and deregulation policies, the actual size of investment was far from its target level.

6.21 From the macro level point of view, the Government could not fulfil its tasks in bringing about sustained economic growth, price stabilisation, and the full employment of

means of production. It is clear that these aims were not in the same direction. For example, if according to the plans the Government intended to increase investments, both by the public and private sectors, so as to create new job opportunities and bring about sustained economic growth, most probably the rate of inflation would increase drastically. Therefore the goals were in contradiction with each other.

6.22 Nonetheless, the Iranian economy grew 7.3 percent annually between 1989-1993 when the world economy grew on average only 3.1 percent annually, and the Asian Newly Industrialising Countries (ANICs) of South Korea, Hong Kong and Singapore together averaged 7.6 percent annually during the same period. But the rate of Iranian inflation increase from 17.4% in 1998 to 21.6% in 1992. As a result, the social welfare level decreased significantly.

6.23 Despite difficulties the Government remained committed to reform and to the attraction of external investment to Iran. One outcome of these objectives was expansion of the country's Free Zones.

6.24 As already mentioned, the goals of Iran for its Free Zones are consistent with the generic objectives set for EPZs internationally. UNCTAD (1985,4) has identified the following:

"More specific, target-oriented objectives stated by many host governments are: (a) generating foreign exchange earnings;(b) creating employment; (c) attracting foreign capital and advanced technology; (d) acquiring and upgrading labour and management skills; and (e) creating linkages between EPZ industries and the domestic economy."

With some modifications and revisions, this list is reflective of the goals of Iran.

6.25 About the objective of attracting foreign capital and technology, which has been identified by UNCTAD as one of the generic objectives of EPZs, UNCTAD fails to adequately distinguish between these somewhat different objectives. One cannot assume that technology and capital inputs are highly correlated, because the nature of the inputs does not of itself indicate the source. As the EPZ experience shows, some EPZ investments of both a low and high technology nature are financed domestically, and some are new capital inputs brought into the country by foreign investors. Therefore, we will distinguish between foreign capital investments and foreign technology transfers. This distinguishing between two describes an additional objective which was not part of the UNCTAD list.

6.26 Accordingly, we now examine the following direct economic objectives for the EPZs.

a) Generating foreign exchange

b) Attracting foreign capital investment

c) Attracting advanced foreign technology

d) Creating employment

e) Linkage effects

Generating Foreign Exchange

6.27 According to UNCTAD (1985) "The EPZ is considered primarily as a means of increasing foreign exchange earnings and offering additional employment opportunities. Other contributions which EPZs might make could be regarded as desirable externalities" (UNCTAD, 1985, 6).

6.28 In fact, increasing foreign exchange earnings is one of the major goals of countries establishing EPZs. Sources of foreign exchange from EPZ activities may include profits to firm shareholders, taxes on corporate earnings, wages paid to workers, rents, utility payments, and payments to local firms for a variety of goods and services.

6.29 As UNCTAD 's study shows, one of the main benefits which the countries establishing EPZs derive is foreign exchange earning inflow, particularly in the form of export proceeds and investment capital. Also, one of the prime motivations for establishing EPZs and for attracting foreign enterprises to invest in the zones was to promote exports, and in particular the export of manufactured goods.

6.30 Unfortunately, in all three Iranian zones (Qeshm, Kish and Chahbahar) virtually no foreign exchange is earned as operating costs such as rents, wages paid to workers, water, electricity, telephones and the like are paid in local money, because there is no stock of foreign firms. As a result, earnings are confined primarily to amounts spent by foreign visitors as well as for some local raw materials that would otherwise be exported, and other limited export goods.

6.31 Data on exports and imports are significant indicator of the effective economic contribution of EPZs/FTZs to their host country, but the UNCTAD study shows that gross export earnings do not tell the whole story in the case of EPZs. Unfortunately, because of the typically high import content in EPZ manufacturing (average seventy-five percent) and the low or exempt tax status of firms and government subsidies of infrastructure, net foreign exchange earnings for EPZ countries are often low (UNCTAD, 1985, 5).

6.32 A cursory glance at the gross export earnings from the Kish and Qeshm zones in the five years 1989-1994. Table 6.1 indicates that they did not make an important contribution to foreign exchange earnings, and their net export performance during the First Plan was actually negative to a substantial degree.

Table 6.1

Export and Import of Iran and EPZs

(excluding oil),(In millions of US dollar)

	Iran		QFA		KFTZ	
Years	Exports	Imports	Exports	Imports	Exports	Imports
1989	10709	10608	11	640	10	760
1990	13081	13448	14	678	17	883
1991	19035	18330	20	1086	23	1358
1992	18415	24975	19	1041	24	1646
1993	17352	19769	18	875	19	893

Source: Bank Markazi; Customs Administration and official report from QFA and KFTZ Authority.

Table 6. 2

Exports and Imports of Dubai and JAFZ

(excluding oil),(In 1000 US dollar)

Years	Dubai		JAFZ	
	Exports	Imports	Exports	Imports
1989	2342271	7355481	654845	684870
1990	2697244	8442914	735839	764214
1991	2809452	10347979	879957	975575
1992	3351783	12897872	1495422	1332911

Source: 1. Dubai external trade statistics, 1990-1993 annual review,

2. Official report from Jebel Ali Authority.

6.33 According to the official Customs report and data collected during the field research in 1994, the average annual import between 1989 to 1993 to the Kish Free Zone was US$1.2 billion and to the QFA was US$ 0.9 billion, when there were no appreciable export earnings during this period. Therefore despite the willingness expressed by Shams, the former chairman of the QFA and by Yasdanpanah, head authority of the Kish free zone, that" foreign exchange earning is a key goal for the EPZs", the zones did not make a positive contribution to foreign exchange earnings during the period 1989-1994. However, it may be said that this may be possibly only a short-term phenomenon. And also the period under consideration was and in fact is the construction stage of the QFA,

which inevitably required a great many imports such as machines, raw materials and building materials. But the composition and detail of imports these zones also represents a very high volume of consumer goods, including luxury goods, instead of intermediate and capital goods.

6.34 As mentioned earlier, one of the aims of Iran's economic planning is to develop an economy independent of oil revenue, but for the moment that is unfeasible and the economy is far from being independent.

6.35 Table 6.1 shows that the total imported through the QFA in 1989/90 represented about 2.0 percent of the total of Iran's imports; a percentage which increased to 6.0 percent of the total by 1992. Averaged over the four year period, imports through the QFA represented 4.0 percent of Iran's imports with a year on year average growth of 38 percent. So there is a trading deficit in the QFA of considerable magnitude.

6.36 Although the period under consideration was and is the structural stage of the QFA, requiring a great many imports such as machines, raw materials and building materials, the composition of imported goods shows that all three zones and particularly the QFA have been main gates for entry of consumer goods to the country. And as Table 6.2 shows, a deficit on trading remains a feature even of the maturing free zone of Dubai, although the Jebel Ali zone had achieved a net export level in 1992.

6.37 Moreover, the QFA has had a negative effect on the tax income of the state, because before establishing the free zones in Kish and Qeshm, the Iranian traders there who imported ready-made goods from abroad and distributed them to the domestic

market had to pay customs duty and other related taxes. But after the QFA and Kish Free zones were established, many firms associated with this group of traders established warehouses in the zones and distributed goods to the domestic market with the advantage of freedom from customs duties. In addition, a Customs law allowed Iranian visitors to carry 50,000 Rial (US$800) to the mainland without paying Customs duty. Recently, due to opposition to the Government in the Parliament (Majlis), this amount was decreased to US$50.

Foreign Capital Investment

6.38 The goal of attracting foreign capital investment can be discussed at two levels, first for Iran as a whole and then for the EPZs as the bounded area which has made it possible for the Government to test its new policies.

6.39 At the national level, the First and Second Five Year Plans clearly anticipate foreign participation in financing development projects to the sum of $27 billion and $16 billion respectively, under different arrangements.

6.40 In mid-1992, the High Council on Investment, a cabinet-level group, announced its readiness to consider applications for foreign private investment in Iran with no limitation on ownership or management control. Such investment was to be guaranteed a free return on capital and profit to investors' home countries, and of compensation in hard currencies in case of future nationalisation or confiscation (EIU, 1992).

6.41 While the government seems as before to have prevailed in its decision, no application for notable long-time private foreign investment was reportedly in hand by September 1993 (MEED, 1993). The main reason for this lack of interest may be the uncertainly over the future political climate; other reasons cited by prospective investors range from bureaucratic hurdles and frequently changing regulations to the volatile exchange rate and high-cost labour.

6.42 At the second level of the zones themselves, EPZs experience shows that many policymakers propose EPZs in order to attract foreign capital investment with the hope of stimulating their country's overall manufacturing production. Often lacking sufficient local capital and entrepreneurs to undertake industrial expansion, foreign investment is expected to catalyse the process.

6.43 While the Government as a part of its economic reform programme for Iran has been trying to encourage foreign investment, particularly via EPZs, the author's field research shows-and also official reports suggest-that all firms in the EPZs are domestically owned and no foreign investors have invested as yet.

6.44 Therefore the Government and also the Free Zone authorities efforts have still not begun to succeed. From some commentators' point of view one obstacle for foreign investment in EPZs has been the lack of adequate legal guarantees from the Government for foreign companies. Hence, potential investors who suffered from wholesale nationalisation after the 1979 revolution consider Iranian legal provisions and verbal guarantees as insufficient. Although the Government in mid 1993 pushed a bill on free-trade zones through the Majlis, and the new law provided a legal framework for Iran's

three free-trade zones which allows unrestricted investment in and trading with the zones, still from the viewpoint of some commentators there are a number of questions apparently important to potential investors in the QFA which need to be resolved. For example: Until 1993, all installations in the QFA belonged to Iran, but if a foreign company constructs the installation in future, how will it be reimbursed for its investment? Will ownership be freely transferable? What system of law will be enforced by the QFA tribunal? May parties designate other tribunals for dispute resolution? Will the present Iranian policy with America and restrictions on trade with certain countries such as Israel persist in the QFA?

6.45 It is notable that Iran during the period of its First and Second Plans signed many agreements for economic projects and national industrial projects-mostly in the form of economic protocol-particularly with China, India, Central Asian and Far East countries including South Korea and Malaysia, but none were interested to invest in the EPZs.

6.46 By contrast, according to data published by the Jebel Ali Free Zone Authority, by early 1993 the total size of investment in Dubai's EPZ had been about one billion US dollars (Al Khaleej, 1993). Table 6.3 shows total foreign investment in Dubai's EPZ.

Table 6.3

Size of Foreign Investment in JAFZ

(April 1993) (In million of US dollars)

Type of	Local	Foreign	Total
Investment	461	592	1053

Source: Official report from JAFZ authority

6.47 Comparison of the total lack of foreign investment in the QFA with the large foreign investment in Dubai's EPZ and in other EPZs around the world is instructive. The total investment in Taiwan's EPZ in 1991 was about US$ 868.8 million for its three zones, and foreign investment had became the largest capital source making up 71.07 per cent of the total investment value (EPZA Taipeh, 1991). In Egypt's EPZs, the total investment in 1982 was US$ 65.5 million, with foreign investment being the largest source of investment, making up about US$ 65.1 million or 99.4%, (Currie, 1985, 171).

6.48 The principal reason for the size of foreign investment in Dubai's EPZ could be that by investing there foreigners escape the law in the Dubai Emirate and the rest of the UAE that foreign firms are not allowed to operate individually without sharing 51 per cent sponsorship of the company property with a local partner. Therefore, waiving this requirement only within Dubai's EPZ has been a very large and attractive concession to encourage foreign firms to locate in the zone.

6.49 The experience of these countries in relation to foreign investment shows that the EPZ framework has been a key to attracting foreign investors, and it is unlikely that all would have come to these countries without the legal guarantees and economic incentives provided under the EPZ legislation.

Transfer of technology/Attracting advanced foreign technology

6.50 As discussed previously, there are different stages to technology transfer, which can be divided into activities resulting in : imitation, modification, redesign and major innovation. These different activities require different levels of labour. For example, imitation requires manufacturing, assembly and organizational skills. To approach innovation, the skills should increase automatically as a result of previous experience with imitation, with more and more concentration on design capability such as the ability of how to make effective use of technology (Hewitt, 1992, 208).

6.51 Many host governments expect that their EPZ sector will attract foreign firms that will bring in advanced equipment and contribute to the transfer of technology. Countering this expectation is the general reality of EPZs which is that they emphasise simple, labour-intensive production using inexpensive, low-technology equipment (UNCTAD, 1985, 5).

6.52 Many studies have been undertaken by the United Nations to examine the transfer of technology through foreign firms operating in EPZs (UN, 1985). Most of the studies have proved that foreign investors do not transfer technology-particularly advanced technology-to developing countries through EPZs. One of the main reason for this fact

could be that most foreign firms operating in EPZs usually depend on intensive labour, not on advanced technology. Other EPZ studies show that most technology transfer happens through training.

6.53 Despite a lack of information on present and future investment plans for the QFA and other zones, the interview results of the field work show that technology transfer is very limited in the QFA. Of the firms interviewed, only three had or are planning advanced-technology investments. All of those firms which are planning such investments are in the electronic category.

6.54 Iran has continually had difficulty attracting high-technology and suffers restrictions on what is called dual technology goods (dual-use equipment), because under pressure from the US government most industrialised countries including the EC countries as well as Japan, have an export policy on dual-use equipment to Iran which does not differ from the USA's policy. These countries follow that policy to keep a tight watch on Iran's defence programme.

Table 6.4

Number of firms stating 'Yes' and 'No'

to transfer of advanced technology.

Yes	No	Not applicable	Not answer	Total
4	7	3	3	17

Source: author's field work, 1994.

6.55 Table 6.4 illustrates that only four out of seventeen firms interviewed in the author's field work were associated with advanced technology transfer. A main reason for this low proportion was that many of them are trading firms, not manufacturing, so that their responses were not relevant. The industrial activities of firms which were said to have no import or transfer of advanced technology were as follows: two were involved with steel products, three in food, and the remainder with various activities. No firms making machinery and equipment claimed to have imported advanced technology. The three electronics firms among the total were trading firms, not manufacturing, and they imported advanced technology only as ready-made products which contained advanced components, although these firms are actually involved in assembly which requires advanced technology.

6.56 Therefore, it can be said that there has been no significant technology transfer in the QFA. However, the EPZ's experience shows that technological know-how takes a long time to learn. It cannot just be bought as a blueprint.

6.57 In relation to Dubai's EPZ, Al Maharie's study shows that there has not been transfer of technology up to now (Al Maharie 1993, 86).

6.58 By contrast, in some Asian countries technology transfer has been strong. However, some commentators believe that the flow of technology transfer to some East Asian countries, particularly in the newly industrialised countries (NICs) such as Taiwan and South Korea, is not merely a matter of economics but in many aspects is a political issue, and the industrialisation process in these countries owes much to their geo-political role. During the post-war period after 1945 which was characterised by political

instability, American policy benefited several developing countries in Asia. In particular, America sought to bolster the South Korean economy in order to prevent economic problems from undermining the South's capitalist system.

6.59 Some commentators (Rabbani, 1982; Jamali, 1989) partly attribute Korea's rapid economic growth to this external economic assistance. For example, the flow of technology transfer from the US companies, greatly benefited economic development within Korea, Taiwan, Singapore and other countries in Asia. But it is helpful to look at how technology has been transferred to these countries, particularly South Korea, which has established a reputation for rapid industrial advance. The principal reason was the interventionist role of government in obtaining and developing technology (Hewitt, 1992, 116). Throughout the 1960s and 1970s, the government promoted and increased the foreign training of Korean managers and engineers, while the State placed emphasis on human resources via such schemes as targeted training. Meanwhile, the State also committed itself to the education of young people, especially in the field of technology.

Linkage Effects

6.60 One of the significant contributions aimed at in many EPZs are their linkages, particularly linkages to domestic industrial products and to domestic firms which provid, services such as insurance, banking and transport enterprises.

6.61 Purcharse of materials from the local market and subcontracting to domestic firms adds to the local content of exports, or added value. The added value is calculated by

taking the F.O.B. price of export, subtracting the C.I.F. price of imports, and dividing by the F.O.B. price of export times 100 to get the percentage.

6.62 There are several types of input(commodities)by the local market to firms operating in the QFA, partly local but most imported from abroad. Those manufactured locally or available as a raw material are: oil, some packing materials, various types of carton, some metal-related goods, some types of foods, and animal skins. Goods imported from abroad and available on the Iranian market to manufacturing firms in the QFA include: spare parts, some metal-related goods, electronics and office equipment.

6.63 Some local firms in the area such as packaging, printing, plastic, paper and carton firms are doing some subcontracting with the QFA firms, but through the author's interviews some EPZ managers mentioned problems in quality, pricing and delays in receiving goods.

6.64 Trade firms which import from outside the QFA import ready-made goods, particularly from abroad, which do not need value added to their activities and do not therefore involve purchases from the mainland. However, the relationship between the QFA and the local market is still weak, due to the large transaction of ready-made goods from the QFA to the local market.

6.65 Linkages to other aspect of local economy are in relation to electric power, water and infrastructure services (Table 6.5). The price of electricity and water in the zones are the same as outside it. Electricity costs are about US$0.023 per KWh. In India, the average price of electricity in the 1980's was between US$0.074and US$0.927 per KWh. In Hong Kong, the cost of electricity was about US$0.07 per KWh (Currie, J. 1980). In JAFZ, the cost of electricity in 1993 was US$0.02.

6.66 Land rents in the QFA cost from US$ 1.1 per sqm per year. Some average costs of land in the 1980s in overseas EPZs were as follows: In Hong Kong the annual cost was US$102.5 per square metre. In South Korea the cost of land in the 1980's was about US$ 4.7 per square metre (Currie, J. 1980). In the JAFZ in 1993, the annual cost was 1.47 US$1.47 per square metre.

Table 6.5

QFA water & electricity and other services incomes

Year	Value US$
1991	31215
1992	33862
1993	39639

Source: Author's field work

6.67 The author's field work and evidence from the QFA indicates that linkage between the QFA and the local economy is not very significant, particularly from the point of view of purchasing local raw materials. Futhermore, transaction of ready-made goods from abroad into the local market from the Zones undoubtedly has a negative effect, particularly regarding types of goods which have been manufactured locally.

6.68 The main reason for the weak linkage effect as other EPZs' experience shows is that in the absence of joint ventures, linkage effects are minimal.

6.69 Dubai's FTZ and evidence from the JAFZ shows, particularly, a high proportion of Dubai's FTZ re-exports are not manufactured locally, and the small amount which are manufactured in the Free Zone are made from raw materials which are generally imported.

EPZs Employment Effects

6.70 For many developing countries that have adopted EPZs, employment creation is a principal goal for the sector. In addition, these countries often seek skill enhancement from manufacturing job offered by EPZs.

6.71 In most developing countries, policymakers are not only interested in expanding employment with EPZs, they also wish to increase the quality of employment opportunities in terms of wages, skills, and labour conditions. UNCTAD has found that in contrast to these desires, EPZs have attracted vertically integrated international industries seeking low-cost pools of labour to complete non-complex, labour intensive stages of their production. Thus, "Employment opportunities in EPZs are primarily for low-skilled labour performing simple, manual, quickly learned activities." (UNCTAD, 1985; 4).

6.72 As we mentioned previously, the creation of new employment opportunities is one of the major economic and social objectives of the First and Second Five Year Plans. Between 1977/78 and 1990/91, Iran's population grew about 62 per cent, and the economically active labour force increased by nearly 43 per cent (or 4.3 million workers). However, during this period only about 3.2 million paying jobs were created in the economy. The EPZ's contribution was slight (Table 6.6).

6.73 Data available on the distribution of the labour force by economic sectors and activities supplied by Bank Markazi and the Plan and Budget Organisation puts total Iranian employment at over 12.2 million, of whom about 28 per cent were engaged in agriculture, 25 per cent in industry and oil, and nearly 47 per cent in services.

Table 6.6

EPZ Performance- Number of Firms and Employees

	Qeshm		Kish	
	Number of Firms	Number of Workers	Number of Firms	Number of workers
Year:				
1989	6	136	11	190
1990	8	191	14	233
1991	11	283	17	256
1992	14	411	21	298
1993	20	504	23	321
1994	24	613	20	309

Source: 1-Field work 2- Official report Authority QFA and KFZ

6.74 According to the last data published by the Iranian Statistical Centre, in 1987 nearly 560,000 people were employed in large industrial workshops with ten or more employees. In 1990/91, 4.7 million people or one-third of the total labour force were employed in the public sector.

6.75 Information on the breakdown of total unemployment by age or occupation indicates that nearly two-thirds of the workforce has been between 15 and 39 years of age, and unemployment was highest among youths (15-24 year olds).

6.76 As for policymakers the creation of new employment opportunities is one of the major economic and social objectives and potential benefits for the EPZs, these benefits must be taken into account when making an evaluation of the performance of EPZs. However, the meaningful assessment of this kind of benefit to the country, particularly at the macro-economic level, is very difficult. There is no clear-cut relationship between the number of new EPZ jobs on the one hand, and the increase in total employment or changes in unemployment rate. However, if the people who are to be employed by the EPZ were previously unemployed the opportunity cost of this labour is zero, and from an economic and social point of view the EPZ project will therefore appear to be very attractive and probably profitable. In other words, the shadow wage rate should be below the market rate. But, by contrast, if the main effect of the project is to draw into the labour force young women who would not normally have sought a job in industry as the many EPZs around the world aim to do, the effective employment benefit to the country will be minimal, and possibly even negative if these young women are occupying jobs that

might have gone to other job-seekers. In this case it even could be said that EPZ projects probably cannot be justified economically on this ground alone.

6.77 As the field work and available data show, women have had little share in employment in the period 1989-95 in the Iranian zones.

6.78 To sum up, in most LDCs the hope is commonly that the low wages prevailing, infrastructure facilities and financial favours will motivate foreign investors. Although UNCTAD(1985) emphasises the low level of wages prevailing in EPZs as one of their big attractions to foreign investors, other studies clearly suggest that low wages alone, or even total labour costs, are seldom the only determinant in the decision to invest in an EPZ. It is clear to every enterprise that is active at the international level that production costs in any country can fluctuate enormously over a five-to ten year period, as a result of exchange rate variations and inflation differentials. Therefore, although very low wages may be attractive to a foreign firm, a decision will also be motivated by other factors such as the quality of the labour force, its educational level, its willingness to work and, more generally, its potential productivity. And in many cases the foreign investment decisions of MNEs tend to be governed by their global market strategy, rather than simply by the labour cost advantages that can be offered by an EPZ. But at a deeper level, as the field research in Iran and Dubai confirmed and as the available evidence suggests, the final decision of foreign investors to invest is strongly influenced by the firms' perception of the host country's political stability, and by its overall social and political climate. Add to this what are called regional dimensions, because in the investor's eye the image of any country is directly affected by the political climate prevailing in countries in the surrounding region.

Table 6.7

Total employees by sector among the QFA firms

Sector	Office		Skilled and Semi-skilled		Unskilled		
	M	F	M	F	M	F	Total
Manufact.	18	4	85	11	62	6	186
Trade	48	3	57	6	97	2	213
Service	33	5	108	5	59	4	214
Total	99	12	150	22	218	12	613

Source: Official Report Authority QFA

6.79 As Table 6.7 indicates, most QFA workers were employed in the trade and service sectors which do not usually use skills. 'Skilled and Semiskilled' workers represent about 27 percent of the total employees, and office workers at about 17 per cent of total employees are the smallest group of employees. Most firms in the QFA deal with physical aspects of trade and manufacturing, which means most workers are involved in trade activities-including some factory production-for carrying goods from port to the warehouse and then to port again, in order to import goods to Iran.

Table 6.8

Female workers in export processing zones

Country	% of women in EPZ industries
Malaysia	85
Mexico	77
Korea	74
Hong Kong	60
JAFZ	33
QFA	6

Source. 1. Based on ILO (1988), Table 8.

2. Filed Work, 1994

6.80 As Table 6.8 shows, the proportion of female employees in the QFA is only about 6 per cent, whereas in most of the EPZs in the world the number of female workers is much more than of males. This is generally because the main activities in these zones are on the base of electronics, and textiles and clothing, and these industries are known to require a very high contribution of women workers. The textile and clothing industries normally rely on low wages rather than skills, and it is argued that the electronics industry requires a level of manual dexterity which most men reportedly find difficult to achieve. Both industries need a high level of attention to tedious and very repetitive types of work.

6.81 In contrast to other EPZs, the number of women workers in the QFA and also in Dubai's EPZ are very low. The low proportion of women workers in these zones is due to the following reasons: firstly, the almost non-availability of female workers locally and a low demand for them; and the fact of little suitable activity for them in the QFA which involves manufacture, in contrast to the situation in Malaysia, Hong Kong and the South Korea EPZs.

6.82 In Dubai's EPZ, as described in Chapter Five, most employees in the Free Zone are foreign workers, and as a result UAE employees represented less than two per cent of total employees working in the Free Zone (Al Maharie, 1993, 64). So, although Dubai's FTZ and the QFA have grown, neither are making an important contribution to local employment, and most employees were in employment before their coming to the zones. QFA employment has not begun to have a noticeable impact on unemployment in the country which stands at over three million; about 700 jobs created is not a considerable figure, which confirms the UNCTAD suggestion that "Many studies indicate that EPZs do not significantly contribute to either total employment in a country or to skill enhancement" (UNCTAD, 1985).

The Impact of EPZs on demand:
EPZs and the Social Welfare Argument

6.83 Iran aspires to achieve more equality among the population, providing minimum basic needs and better living conditions, which are some of the qualitative aspects of

economic growth which the First and Second Economic and Social Development Plans seek to emphasise.

6.84 The Iranian government has clearly expressed its welfare aspirations: "The view is that economic development must be a means to social development. In short, the welfare of people is indicated (seen) in the development process." (Zanjani, M, 1989).

6.85 The primary social and economic qualities of a welfare state are a high quality of life (e.g. in terms of health, education, housing) and relatively equitable distribution of wealth and resources. State involvement is required where the natural, or market distribution of endowments and earnings is not equitable. State intervention may include efforts to stimulate the productive capacities and outputs of the less well-off, and/or to redistribute resources. The question here is whether EPZs are, or will be, inherently compatible with the country's social welfare aspirations, or are simply a means of earning capital?

6.86 As we discussed in Chapter Three, the economy of Iran has experienced continuing difficulties due to external and internal factors, particularly the long and costly war with Iraq allied to major turbulence in the world oil market resulting in: reduced oil income and oil-financed imports; freezing of Iranian foreign exchange assets abroad; sanctions on credit, trade and technology imposed on Iran by Western industrial powers; three million Afghani and Iraqi refugees into the country; and virtual politico-economic isolation from the community of nations for much of the period 1981 to 1989. Following the cease-fire of 1988, economic reconstruction achieved a remarkable growth rate during the years 1989-91, when the average annual rate of growth was about 7.3%

against the 8.1% goal set by the Plan. But the economic difficulties of the country had placed a great strain on the public sector, forcing it to both raise its rate of international transaction and curtail spending.

6.87 As a result, the Tanzi effect has been dominating the economy, as the total current budget of Iran declined between 1986 and 1993 by 19.3 percent in real terms from Rls 27165.5 billion to Rls 21776.5 billion, and the total capital budget declined 19.8 percent in real terms. As part of this public sector retrenchment, educational current expenditure which had formed approximately 20 percent of the total current budget declined in real terms by 17 percent. The health budget which had formed 8 percent of the total current budget declined in real terms by 22 percent.

6.88 The economic problems and resultant budgetary problems also had an effect on the quality of life as an indicator of the social welfare of the country. David Morris (1979) has developed what he calls a Physical Quality of Life Index (PQLI) intended to reflect, and help make comparable, the level of social development of a country. The PQLI is calculated by averaging the indexed rates of life expectancy, infant mortality and literacy rate of each country. The life expectancy and infant mortality show direct quality of life improvements, while the literacy rate serves as a surrogate indicator of other social welfare potentialities within a country.

6.89 The experience of the past 15 years and particularly of the period during the First and Second Plans, indicates that as a result of a combination of external and internal factors the Government could not fulfil its vital macro economic role; especially, it could not fulfil its tasks of bringing about sustained economic growth, price stabilisation, full

employment of means of production and, finally, more equal distribution of income. As a result, economic adversities such as extensive poverty and income and regional inequalities and other social hardships spread in the national economy.

6.90 According to a 1982 -1992 household survey conducted by the Statistics Centre (1993), the Gini coefficient (reflecting income distribution) increased from 0.432 in 1982 to 0.485 in 1992, reflecting greater inequality at the end of the period. Unfortunately, income distribution data is not available for the EPZs, particularly for Qeshm Island; even if it were available, however, the economic impact of the free zones and the level of employment they provide are probably not yet sufficient to have a significant distributive effect.

6.91 Therefore, statistical data indicates a fall in social welfare indicators in the country between the 1980's and the 1990's. This fall was not accidental, but was due to the adverse performance of the key macro economic variables which were in action in the period.

Costs and Benefits of EPZs

6.92 "In view of the existing competition among EPZs, it seems particularly important that developing countries should assess carefully the costs and benefits of the operation of free zones for their economies" (UNCTAD, 1985, 29). According to this UNCTAD view, it might be assumed that the EPZ projects had been prepared and appraised by the Iranian government just as seriously as any other type of development project, and it might also be presumed that the benefits projected for the projects had exceeded their

anticipated costs by a sufficient margin to allow for an acceptable return on the relatively large investments to be undertaken. But, available evidence and particularly the interview with the Head of the Plan and Budget Organisation (PBO) during the field work shows there have been no useful evaluations of the EPZs.

6.93 The difficulties of evaluating the performance of EPZ in Iran are, in many aspects, considerable. For instance, the lack of a locally designed, comprehensive and acceptable framework for analysis. But in this relation, in 1985 UNCTAD proposed such a framework offering methodological guide-lines for this kind of analysis. It might be said that the main difficulty is that of access to data, particularly in that EPZ activities are not separate items in the national statistics on trade, investment and employment, and data concerning them has usually to be reconstructed from the often incomplete or unreliable information supplied by EPZ authorities or individual sources. And generally, these data do not cover a sufficient period of time to be entirely meaningful. Nevertheless, a conventional cost-benefit analysis of EPZs, even despite its probably obvious shortcomings, would be a fairly useful guide for policy-makers and authorities of the EPZs.

Macro-economic benefits of EPZs

6.94 The macro-economic benefits could be measured on the basis of an EPZ's export performance, and more specifically its net export performance (i.e. total exports minus imports); the higher the net export ratio, the more profitable the project is presumed to be from an economic and social point of view. This is probably a fairly good basis of

evaluation for the EPZ projects, particularly in the current economic situation of Iran and for comparison between unfinished projects.

6.95 The most appropriate yardstick of the macro-economic contribution of EPZs to the country might be their contribution to economic growth or the growth of industrial output. If this kind of data were not fully available, another particular indicator which is cruder but simpler could be used, namely total value added in the manufacturing sector via employment i.e. wages.

6.96 The creation of new employment opportunities is one of the major potential economic and social objectives and benefits of EPZs, which must be taken into account when making an evaluation of the performance of EPZs.

Social Effects

6.97 Social effects are an aspect of macro-economic effects on the region or on the country. The benefits of an EPZ are difficult to measure in regard to overall macro-economic effects on the home country, or employment effects. But in contrast, direct costs or expenditure are usually easier to evaluate, and could be in the form of measurable expenditure such as infrastructural costs for land preparation, public services and utilities, water supply, buildings, or access roads. In fact, these infrastructural costs have social effects and benefits for the general public living in the region. For example, water supply or access roads and new telephone exchanges, which are normally created by the EPZ authorities, allow the local people also to benefit from them. Thus a part of

these infrastructural costs could be said to be in fact public expenditure, not merely EPZ costs.

Incentive Packages as Indirect Costs

6.98 Packages of incentives which are offered by governments for attraction of investors is a complex issue in cost benefit analysis in the measurement of indirect costs. As ILO/UNCTC studies (1988) show, these subsidies or indirect costs are extraordinarily diverse, and the economic profitability of an EPZ project can be affected very negatively by these indirect costs. For example, financial incentives from tax holidays to rental subsidies, and from indirect subsidies for the purchase of domestic raw materials and cheap energy particularly gas, have been offered by the QFA authorities to energy-intensive industries at 10% of international gas prices. These various incentives generally have a cost for a country, and should be taken into account in a costs-benefit analysis. However, these subsidies or indirect costs are in fact important factors in attracting foreign firms in international competition.

6.99 As the ILO/UNCTC study shows, if one leaves aside the general incentives which can be found in all EPZs such as duty free imports of machinery, raw materials and semi-finished goods, and the right to repatriate profits, this means that the great majority of the special incentives offered by a host country tend to be treated by the enterprise as a sort of free bonus, but not as a basic precondition for their setting up in the EPZ.

6.100 To sum up, evaluation indicators can be divided into:

1- Direct costs (Direct investment) and 2- Indirect costs (Operating costs). Direct investment costs in EPZs are the basic investment items, particularly infrastructures, but what are as important are indirect costs.

6.101 A few rough indicators could be used in evaluation such as the cost of generating a job in a zone, as a figure obtained by dividing the total investment cost by the number of jobs effectively generated in the EPZ firms; a rental fee charge to foreign investors is another rough indicator, for rental for floor space in EPZs is based on the effective infrastructural investment cost to the EPZ authority, and must be at an international level.

6.102 The work done on Dubai by Al Mahari(1993) shows that one of the main reasons why Jebel Ali Free Zone (JAFZ) in Dubai is still not an economic project, and that revenue from the JAFZ is very low, could be due to the US$ 2.7 billion investment made by the Dubai government in overambitious infrastructural facilities, inflated construction costs and overly luxurious buildings and services which made expenditure so high. The JAFZ authorities have to provide very large subsidies to keep firms' costs at the international level, and in fact what they do means subsidising the subsidiaries of foreign firms. We shall now return to the QFA and attempt to evaluate the zone in regard to the data available on its costs and benefits to date.

Costs and Benefits Associated with the QFA

6.103 There is virtually no up-to-date information for many of the costs and benefits involved with the QFA. Despite this absence of data and information, a number of results/indicators can be drawn from the evidence of our individual case study and other sources as indicated in Tables 6.9 and 6.10. We comment on some of this data below in regard to the criteria we identified following para.4.122 in Chapter Four.

Costs

Development Costs

6.104 Development costs for the QFA include:

a) costs of preparation of the site (including levelling, and landscaping);

b) costs of providing infrastructure such as roads, bridge (connection bridge between Qeshm Island and Bandar Abbas), rail ways, water, power, and telephone lines; c) cost of constructing standard factory buildings.

6.105 Total cost of development of the QFA in 1990 was US$ 20,109,000. In 1991, 1992, 1993 and 1994, the totals were US$21,317,000 US$24.194, US$25,115,000 and US$ 26,028,000 respectively. For the five year period 1990-1994, the data collected in

Table 6.9 show increases in development costs over the period. It should be noted that QFA is excepted to be fully developed by end 1997. Therefore, forecasts should be made up to 2017 for a period of 20 years by time QFA assets should be predicted to have a salvage value. For example, it should be assumed that due to depreciation the salvage value of 20 year old buildings will be zero in 2017. However, the land is expected to retain its value measured in terms of costs of developing.

Operating Costs

6.106 The following two subsections discussion administration and of selling and promotional costs, which are all included under operating costs.

Administration and General Costs

6.107 These costs have to be taken into account and included in the costs and benefits analysis because they occur as a consequence of the QFA's existence. These costs represent basic costs of running the QFA, included are directors' fees, salaries, redundancy payments, medical and other staff benefits, security, utilities, printing and stationery, management and other fees. Table 6.9 presents data on these costs.

Selling and Promotion Costs

6.108 Included in this category are costs of advertising, travelling and subsistence. Table 6.9 shows these costs since 1990.

Labour Opportunity Costs

6.109 Measuring the labour opportunity cost is relatively difficult due to lack of data and particularly since the productivity of workers varies. Nevertheless, due to the high proportion of QFA employees which were previously unemployed, there is a temptation to conclude that their opportunities cost is close to zero.

Local Goods and Services Opportunity Costs

6.110 Data available on purchases of local goods by QFA firms are limited to only a few local products. Table 6.9 presents data on domestic purchases.

Utility Opportunity Costs

6.111 Data on utility opportunities costs are not available.

Training and Technology Opportunity Costs

6.112 Measuring the training and technology opportunity costs are impossible. If the QFA had been in existence longer and data were available then it might be possible to be calculated these costs. Therefore, these costs cannot be included in an costs and benefits analysis.

Subsidies, Concessions and Incentives

6.113 Data on subsidies, concessions and incentive for whole period under consideration usually to be counted in financial outlays were not available.

Externalities, including Pollution

6.114 To the extent that pollution occurs, its impact represents a cost to QFA. In practice, determining these costs is too difficult. In the QFA pollution is minimal because activities of manufacturers are clean and relatively quiet, and there is no evidence available which suggests that workers develop illnesses from the workplace.

Aspects of Costs

Rental Forgone on the Administration Building

6.115 These rental have to be taken into account. Because the administration building occupies about 1,500 sq.m. If this space were not utilised for the purpose of admistration, it could be rented.

Occupancy Rate

6.116 Although the total amount of direct investment costs and the annual operating costs are from a cost-benefit standpoint important issues, the rate of occupancy of the EPZ's is other important issue. Occupancy rate is crucial to the profitability of an EPZ project. As Warr's study shows, what distinguishes a successful EPZ from an unsuccessful one is not so much the total number of new jobs or the volume of exports- and on both of these counts the QFA scores poorly-but is rather the occupancy rate and the speed with which the maximum occupancy rate is achieved.

Cost of Generating a Job

6.117 The cost of generating a job is obtained by dividing the total investment cost by the number of jobs effectively generated in the EPZ firms. In the QFA, the total

infrastructural costs amounted to approximately US$ 90 million by 1994, while total employment in the zone stood at 613. This amounts to a cost per job of roughly US$14,000. The QFA development costs by comparison to the US$2.7 billion investment made by the Dubai government in overambitious infrastructural facilities and inflated construction costs are very low.

Benefits

Rental Revenue

6.118 Rental revenue is a direct function of the rental rate and the number of square feet of factory space rented. Land rents in the QFA cost from US$1.1 per sqm per year. By comparison, in the Jakarta EPZ average rent was some US$2.75 per square metre of factory space per month in the 1980s. In Dubai 's EPZ in 1993, the annual cost was US$1.47 per square metre. Table 6.10 presents data on these benefits.

Benefits from Employment in the QFA

Wages

6.119 The main economic benefits from employment created by the QFA can be measured in terms of wages paid to workers. There may also be benefits in terms of social and psychological improvements such as a reduced emigration rate of Qeshm island

people; and people who were previously unemployed feeling better about themselves. However, these latter benefits are not readily quantifiable so will not be considered explicitly in the economic evaluation.

6.120 Data on wages paid by QFA firms are extracted from statistics compiled by the QFA authority . From 1993, firms were required to submit their wage bill for each month. Although employment figures are available for the QFA from 1989, data on wages are not available until 1993.

Foreign Exchange Gain

6.121 These EPZ revenues are generally earned from foreign firms in the forms of: 1) wage payments to domestic workers; 2) sale of raw materials; 3) taxes and rentals; and 4) foreign capital investments in cash. In the QFA these benefits are negligible, because there is no stock of foreign firms.

Salvage Value

6.122 Data on the salvage value shows that these benefits were earned from selling the scrap material. As we mentioned earlier, in a period of 20 years QFA assets will have a salvage value. Table 6.9 presents data on these benefits.

Utilities Revenue

6.123 QFA firms are users of utilities such as electricity, water, telephone and telex. Payment for utilities is a benefit to the QFA; however, to derive net benefits the opportunity cost of supplying these utilities must be subtracted. If marginal revenue from supplying these utilities exceeds marginal cost, then net benefits are positive. Similarly, if marginal revenue is less than marginal cost, net benefits are negative.

Purchases of local Goods

6.124 QFA firms' expenditure on local goods and services can be divided into three categories: a) goods; b) other expenditures; and c) shipping.

6.125 Data on purchases of domestic goods by QFA firms are not available. However, a principal aim of the QFA is to encourage backward linkages with the local economy, and this has not yet been achieved. QFA firms actually purchased only a few domestic products such as fuel, and packaging and cleaning materials.

Purchases of Local Services

6.126 Included in the category of other expenditures are payments made by QFA firms for a) sub-contracting; b) local insurance premiums; c) legal and other services; and e) travel expenses. Payments for these goods and services are certainly a benefit to the domestic economy.

Shipping Revenues

6.127 Data on shipping revenues are found in annual reports of the QFA authority. Revenues are payments to local shipping agents who arrange the shipping of QFA firms' goods with national or international shipping companies.

Taxes

6.128 Data on tax revenues are found in annual reports of the QFA authority. Table 6.9 presents data on these benefits.

Housing Payment

6.129 These benefits are negligible. Therefore, they can be exclude from a costs and benefits analysis.

Technological and Training Gains

6.130 The main source of potential technical gains are those occurring via on the job training of workers who might then take their skills outside the QFA, but as it is unlikely that such a benefit is of significant magnitude it can be excluded from the cost-benefit calculation at this early stage of the QFA.

Unofficial Levies

6.131 There is no evidence to support a conclusion that QFA derives a benefit from unofficial levies at this stage.

Table 6.9

Value of Costs Associated with the QFA

from 1990 to 1994 US000

Year	1990	1991	1992	1993	1994
Dev. Cost	20.109	21.317	24.194	25.115	26.028
Dom. Purch	_	0.457	0.472	0.447	0.431
Shipping	1.724	2.326	2.715	1.438	1.171
Electricity	1.213	1.346	1.317	1.315	1.781
Water	0.337	0.523	0.676	0.683	0.672
Telephon & Telex	0.436	0.623	0.682	0.684	0.678
Admin.& Gen.	1.317	1.238	1.823	1.876	1.891
Other Exp	2.758	2.449	2.657	2.796	2.826
Externalities	0	0	0	0	0

Source: 1- Field work 2- Official reports authority QFA

Table 6.10

Benefits Associated with the QFA

from 1990 to 1994 US000

Year	1990	1991	1992	1993	1994
Rental	0.423	0.876	0.915	0.953	0.972
Tax	2. 771	2.934	2.958	2.381	1.562
Shipping	2.217	2.325	2.944	2.864	2.136
other Expen.	1.328	1.715	1.365	1.873	1.778
Electricity	0.315	0.478	0.489	0.493	0.495
Water	0.107	0.118	0.176	0.213	0.216
Telephone & Telex	0.323	0.476	0.457	0.376	0.384
Technology	0	0	0	0	0
Salvage value	0.113	0.216	0.197	0.357	0.327
Externalities	0	0	0	0	0

Source: 1-Field work 2- Official reports authority QFA

Social Impact of QFA

6.132 Having identified in the preceding sections these costs and benefits which can be represented in financial values, we now turn to the QFAs social impacts.The impact of an EPZ is difficult to identify where close to a large urban economy, but is more easily discerned where the EPZ is in a rural area.

6.133 With the growth of the economy of Qeshm and Kish Islands as a whole, according to official reports, the QFA and KFZ in Sharestan and Bazar Mahaleh have exerted considerable pressure on land and housing availability and prices, particularly in Kish Island, and a comprehensive plan for addressing this problem has not yet been developed.

6.134 Accordingly, an immediate reaction to the creation of the EPZ on Qeshm Island was visible on the cost of land, particularly in Sharestan. With it, the cost of houses, and rents also rose. These phenomena have appeared more or less in Kish Free zone and Chahbahar Free zone.

6.135 Other social impacts concern the future of the QFA. When occupant firms decide to close down or move to another location, the inevitable result is unemployment and consequent social problems.

Conclusions

6.136 *Still in their very early years, the EPZs of Iran are still not an economic project yielding appreciable developmental benefits. They have not made any contribution in attracting foreign investment. And not only has the QFA not yet had a positive effect on Iran's overall position, but it has contributed to an increase in Iran's imports. Moreover, the QFA has had a negative effect on the state's tax income because trading previously liable to tax has been freed from the obligation. Consistent with social welfare, however, income level and the PQLI of the EPZs have improved.*

6.137 With a high level of imported goods and particularly of imported consumer goods, the EPZs have not been a source of foreign exchange and have not made a national contribution to foreign exchange earnings. In the early stages of construction when imported equipment is necessary, this is perhaps an inevitable feature, but the experience of Dubai' suggests that it may endure for a considerable time.

6.138 Nor have the EPZs been important sources of employment for workers, particularly for local workers. This also has been characteristic of the UAE zones, where cultural traditions have left the new firms dependent upon labour imported from foreign countries and where firms are unable to attract female workers to occupations best suited to them.

6.139 Finally, there has not been foreign technology transfer of any significance to the early firms established in the QFA and KFZ.

6.140 The EPZs have almost gained sufficient experience by now to suggest that they may face difficulties not experienced in the most successful EPZs in other countries. Thus, it is hoped that the Government will take appropriate policy measures in these directions. So, in the next chapter we will proceed to consider the context for future policies before outlining possibilities for policy adjustments in the concluding chapter.

Chapter Seven

THE CONTEXT FOR FUTURE POLICY:

the roles of the State and the policy environment

Introduction

7.01 This chapter is devoted to analyses of the context for future policy for the EPZs, and particularly on the role of the State. As will be shown, the State plays an important role in creating, maintaining and altering conditions that affect the performance and growth of the EPZs. The State's international relations are very significant, but we will analyse the State's roles in general, and then the structural context of the zones will be considered. It will be suggested which factors are extremely important for the success of Iran's EPZs. Also, because of the relationship of Iran's economy to Dubai and because of Dubai's competition with Iran's EPZs in many respects, as well as their similarity particularly in geographical and economic factors, a comparative study between the QFA and Dubai is contained in this chapter. The chapter incorporates results of the author's fieldwork conducted during the periods in March 1993 and October 1994, which were updated in 1995.

Approach of government

7.02 As we have already mentioned, governments play a critical role not only in creating the EPZ framework of a country, but also in shaping the internal economic, political and social conditions, and in keeping and overseeing relations with the regional and international community and marketplace.

7.03 As the success of EPZs in Korea, Taiwan, Mauritius and the like shows, it was government that provided opportunities for public and private sector policy collaboration in these countries. Also, it was government policies that encouraged backward linkages between the EPZs and domestic producers in these countries, or which were discouraging in most unsuccessful EPZs (West, 1990).

7.04 The Iranian Government's macro-economic and political policies have been responsible for the past several years for impacts on the EPZs import performance, particularly on the form of trade activities and of consumer goods transactions, and also for the lack of suitable and appropriate EPZ administrative and policy environments which might make possible beneficial domestic and foreign investments in the QFA.

7.05 As Larry Diamond et al. (1990,10) in their multi-country case studies show, for an EPZ to succeed in less developed country states (LDC), there will necessarily have to be greater integration into the world economy. Import-substitution and isolationist policies that make a country's exports uncompetitive internationally will have to be abandoned in favour of outward- oriented policies and market-set prices.

7.06 One of the major lessons which could be learned from the success of the Korean and Taiwan EPZ experience and the failures of other EPZ experiences, is that it is impossible to expect EPZs to operate successfully in an environment which is not conducive to economic rationality.

7.07 The countries of East Asia which have been most successful in the international development stakes (i.e. Singapore, Republic of Korea, Hong Kong, Taiwan, and even Malaysia) ranked in order of income and GNP growth have consciously set out to attract foreign capital and other factors such as entrepreneurial know-how. The first four of the countries listed lacked natural resources for export and this fact they turned to their advantage. The "four tigers" adopted a policy of basing their development on low labour cost and high labour productivity, or in theoretical terms. a development based on the principles of Heckscher-Ohlin comparative advantage.

7.08 The policymakers will have to assess realistically what EPZ-related climate and policies they are willing to actively create and support. Some EPZ consultants have suggested that the Persian Gulf EPZs are of the attitude that they only need to create the EPZ legislation, and that it is then up to investors to take all of the risks and responsibilities for procuring, setting up operations, and the like. What must be realized is that for the EPZs to take off, there will need to be created a new political climate which could actively encourage it.

7.09 One of the significant aspects of creating EPZs is that while many of the investments and policy reforms must come early on, the trend of most zones' development is usually slow. As the experience of the successful EPZs shows, many of the goals of EPZs are fulfilled only over a long period. Transfer of technology, raising the skills of workers, increasing the use of local inputs and of domestic value added, diversifying the product base, moving to sophisticated manufacturing and finding export markets for the EPZ all take considerable time. Policymakers have to determine whether they want to make this commitment to a long-term industrial strategy, or merely to look at EPZs as a passing fashion.

The Role of the State

7.10 In their theoretical work and empirical research concerning the economic role of the state, Rueschemeyer and Evans suggest (Evans et al, 1985, 43-7) that the state:

1) Influences the form and rate of capital accumulation in the process of industrialisation;

2) Mitigates negative distributional effects of capitalist accumulation;

3) Institutionalises guarantees in order to reduce risks and costs so that the market can allocate resources efficiently;

4) Provides collective goods and controls negative externalities;

5) May have to promote a more optimal strategy of industrialisation where, because of small markets or heavy reliance on imported technology, there is an oligopolistic rather than a market situation;

6) Is the guardian of the universal interests of society.

7.11 Consistent with these state roles, Sandbrook (1986, 320) argues that the state must:

(1) create a general socio-political and legal framework conducive to market relationships;

(2) create economic conditions such as infrastructure, complementary industries and services, that are essential to attracting private investors but which the private market alone will not provide;

(3) regulate foreign economic relations in a way that is attractive to foreign investors but maximizes domestic benefits.

7.12 We can accordingly list state roles as follows:

a) Create economic conditions, such as infrastructure, complementary industries and services;

b) Create a general socio-political and legal framework conducive to market relationships, according to a well-established plan;

c) regulate foreign economic relations in a way that is attractive to foreign investors.

7.13 The International Labour Organisation and the United Nations Centre on Transnational Corporations (ILO/UNCTC)(1988, 20) and other authors have found that perceptions of investors regarding the political stability and overall social and political climates of countries are highly influential in their investment decisions. There is also an emphasis on the administrative environment and structure of an EPZ as important factors influential in investors' decisions.

7.14 The ILO/UNCTC study shows that investors' perceptions of the advantages and risks of the political, social, and economic climates of a country, the EPZ's legal and administrative framework in which they must interact, and the structure of the EPZ itself are key determinants in attracting investors and in encouraging them to expand. Analysis of the trends and current state of the QFA in particular, and interview responses to the author's field work in the QFA and Dubai generally, support these suggestions from experience elsewhere.

7.15 As we already discussed, Dubai as a commercial capital and a distribution centre owes its economic growth and development basically to the revolution in Iran, and to the subsequent eight years Iran-Iraq war and following period of reconstruction. During the revolution and after the fall of the Shah, many multi-national companies left the country and moved their offices to Dubai. Despite their moving, most of these companies kept

Iran as a main market for their production and services. So in many aspects Iran remains their first customer; a comparison of the lists of the top ten exporters to Iran in 1977/8 and 1990/1 shows that the United Arab Emirates (in fact Dubai) replaced the United States as the third largest exporter to Iran, mostly as a convenient conduit, and a re-exporter or third-party trans-shipper. Table 7.1 indicates that Iran's shares of goods exported from Dubai is more than for all other regional countries. The performance of the Dubai EPZ shows that Iran's market has directly affected the economy and other aspects of business activities in Dubai, in particular by its high imports of durable and consumable goods, food and so on.

7.16 There are more than 400 firms in the Dubai EPZ coming from 35 different countries, and the majority of them are of small size divided in to different types of activities, but the majority of them in trading and services. A considerable number of Dubaian businessman are originally Iranian, most of whom in favourable political and social conditions are willing to invest in Iran. There was a huge investment in Dubai on infrastructure of $2.7 billion up to 1993, when foreign total investment reached $1.95 billion.

Table 7.1

Re-exports from Dubai

Country	$US(million)
1. Iran	829,70
2. Saudi Arabia	206,54
3. Kuwait	206,27
4. Qatar	152,13
5. Yemen	129,15
6. Singapore	82,83
7. Bahrain	65,12
8. India	50,95
9. Tanzania	44,96
10. Germany	42,78

Source: Foreign Trade Statistics of Dubai (1993).

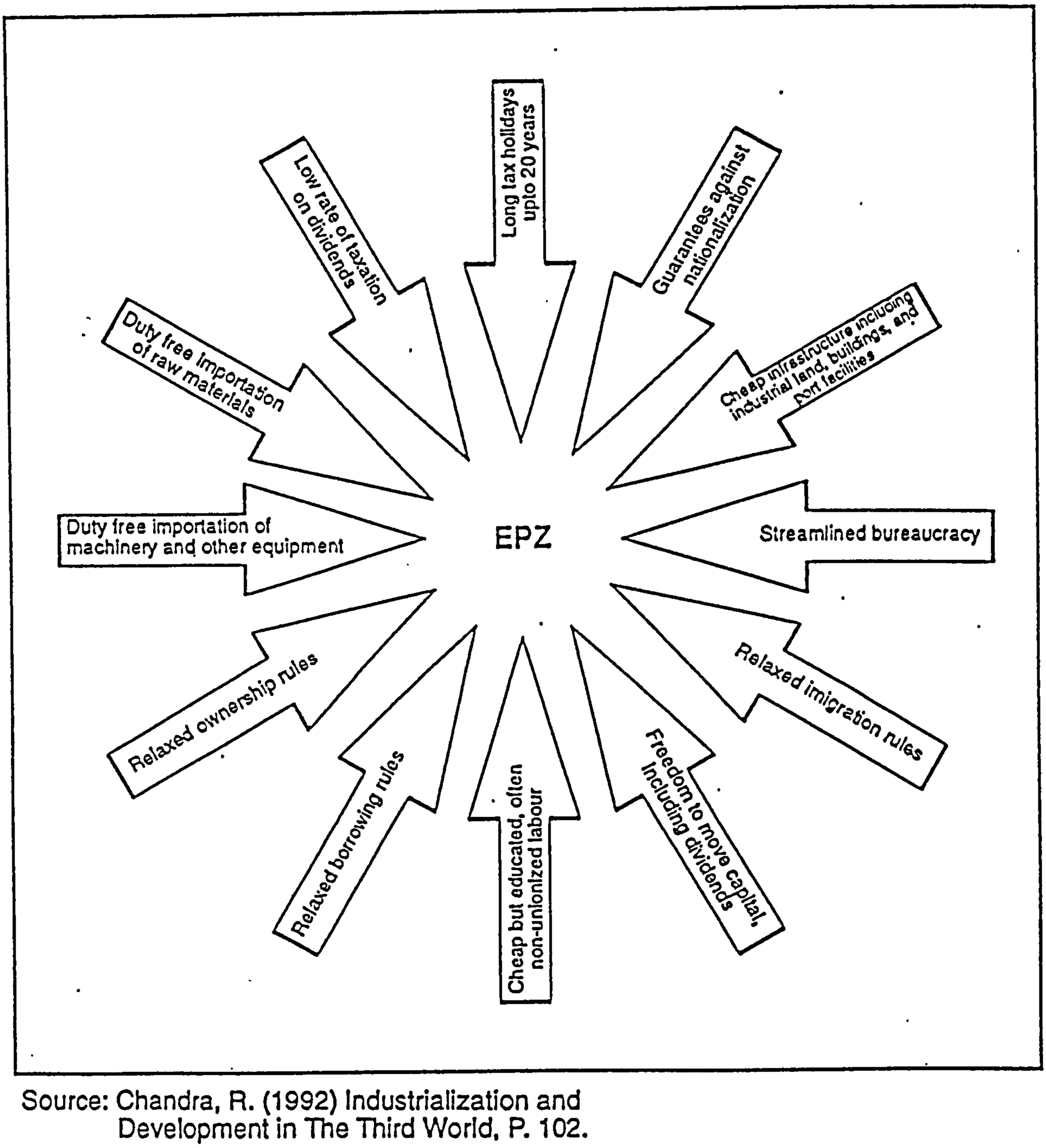
Table 7.2 EPZ performance factors

What factors attracted firms/ investors?

	Dubai		Iran	
What attracted (firms):	%of cases	%cited	%of cases	%cited
Total number of cases:	35		17	
Market access	28	84.0%	10	59.0%
EPZ Incentives Package	26	78.0%	3	17.7%
Personal connections to/in country	4	12.0%	2	10.8%
Availability of labour	13	39.0%	1	5.8%
Inexpensive labour	8	24.0%	0	-
Economic&social climate	22	66.0%	2	10.8%
Political stability	27	81.0%	1	5.9%
Opportunity to supply EPZ input market	9	27.0%	6	34.4%
Proximity to Iran's/Dubai's market (shipping quicker/cheaper)	21	63.0%	5	29.0%
Government promotion progress of EPZ	4	12.0%	2	10.8%
Reason unique to firm or industry	5	15.0%	3	17.7%
Geographical advantage	3	9.0%	3	17.7%
Abundant energy(natural resources)	9	27.0%	3	17.7%
Quality and quantity of regional distribution network	11	33.0%	1	10.8%
Quality of infrastructure	23	69.0%	0	0.0%

Source: Field work, survey by author.

Figure 7.1 A TYPICAL EPZ INCENTIVE PACKAGE



Source: Chandra, R. (1992) Industrialization and Development in The Third World, P. 102.

Attraction factors in general

7.17 Dubai firm managers were asked what most attracted them to set up in Dubai. The results of the interview responses and collected information tabulated in Table 7.2 show that six factors are especially important in Dubai: Market access to countries of the region, particularly to Iran and the Arab countries around the Persian Gulf; availability of labour; tax free incentives; political stability; infrastructure to support commercial activity; and a regional distribution network including availability of ports and airport. Figure 7.1 typifies incentives amongst Third World EPZs.

7.18 Most important for most firms stands Dubai's "political stability", the results indicating that the internal situation in Dubai is considered stable and suitable for attracting foreign investment in the view of most firms which answered this question.

7.19 Secondly, market access and particularly nearness to the Iranian market was a commonly stated attraction. As we mentioned earlier, Iran in the past several years was the largest importer from Dubai and most Dubai EPZ products are exported into Iran's market.

7.20 Ranked third by respondents was the favourable tax free incentives. There is full remission of corporation tax in Dubai's EPZ for a minimum of 15 years, extendable for 15 more years without conditions; in addition, there is no income or profits tax, with remission of all duties whether on imports to or exports from the Free Zone. This is one of the main factors in attraction of firms, and 75.6 per cent of the firms selected this as one of their six main factors. Fourth in the respondents' ranking comes availability of

port facilities. The Jebel Ali man-made port offers several advanced services such as covered cargo handling, rapid inland transport and modern spacious storage facilities. This port was established to serve the UAE as a whole, but later three other ports were made.

7.21 The "standard of infrastructure" is the sixth important factor in attraction to Dubaian firms which is very necessary for supporting foreign business. Most successful EPZs in the world have usually a high standard of infrastructure as in the NICs. The Dubai government spent around $5.5 billions for its infrastructure projects, namely Jebel Ali port, Dubai international airport and Port Rashid which links Dubai to other parts of the region.

7.22 In relation to the EPZs of Iran, potential investors at the Seminar on Motivations of Investment in Iran (1993), firm managers in the QFA and Dubaian potential investors, were asked which factors are important in their view for making decisions on investment in Iran and its EPZ. To the question "what are the best and worst factors related to investment in Iran and the EPZ", the interview responses and other collected information shows that there are five factors particularly important for potential investors: political stability; economic and social climate; abundant natural resources, particularly for activities based on natural gas and oil; domestic markets; as well as market access to Mid-Asian Countries (See Table 7.2). These factors will be discussed in the next part of this chapter.

1- Role of the State in Creating an Attractive Investment Climate

7.23 The previous discussion about factors important to attracting firms and encouraging their investment and expansion, points to several important roles for the state consistent with Sandbrook's propositions.

7.24 Sandbrook (1986) emphasises that the state is largely responsible for creating a socio-political and legal framework conducive to market relationships, and Rosenthall (1986) notes that by institutionalising guarantees the state reduces risks and costs so that the market can allocate resources more efficiently.

7.25 The establishment of EPZ legislation ensuring unlimited repatriation of capital and profit, guaranteeing against nationalisation, detailing the tax liability of firms and the like, is in fact one step to creating the legal conditions. This is seen in the factors that attracted firms particularly to Dubai, although the state's responsibilities especially in the case of Iran are wider than simply providing legal guarantees. Of six major factors in the case of Iran, four of them are made by or influenced by state policies, particularly economic policies that give more role to the private sector and reduced or at least controlled inflation by the setting of exchange rates.

7.26 The political climate which foreign and potential investors seek is in fact in many aspects out of the state's control. For instance, after the cease-fire in 1988 when the reconstruction of the war-ravaged economy had become the overriding national issue, a

series of heated debates re-emerged among major political groups within the Islamic hierarchy. Hard-liners emphasised the primacy of Islamic spirituality over Western materialism. They argued that success in achieving economic welfare and national prosperity should not result in religious and doctrinal defeats; nor should economic adjustment be sought at the expense of political and moral principles embodied in the 1979 Constitution, and the solution of the economic difficulty should not result in a moral and cultural setback (Kayhan, 1991). They emphasised that any rapprochement with the West, particularly the USA, would be a deviation from Imam Khomeini's way.

7.27 By contrast, another group that is said to be pragmatist has argued that the Islamic revolution and Islamic Republic cannot succeed and survive politically unless they also succeed economically. This faction has argued that the Government should no longer ask people for further hardship in the name of the revolution or the 'imposed' war. The advocates of an 'open-door` policy have emphasised price de-control, trade liberalisation, export promotion, attraction of foreign private investment particularly via Free Zones. Led by conservative bazaaris and Islamic middle-class industrialists, this faction has opted for a revived market economy, guided by a large cadre of western-trained technocrats in the cabinet and the bureaucracy (Ehteshmi, 1995).

7.28 The other faction labelled as Third Liners, has taken a decidedly opposite view on both basic strategy and attendant policies. They have argued on continued self-reliance; import substitution; extensive protection of home industries; public control of prices and wages; state ownership and management of major industries; avoidance of foreign joint ventures, external borrowing and association with multinational corporations; and, finally, keeping up the value of the Iranian rial. The Third-Liners believe that privatisation and a

more open foreign policy are failing the country and that a return to Imam Khomeini's principles is of paramount importance (Kayhan, 1991).

7.29 Despite this contentious climate, since Mr Rafsanjani became president in 1989 the Government has tried to open a new line in its economic, political and cultural outlook in order to achieve more co-operation, particularly with regional states but also with the West. Although as a part of its economic reform programme the Government tried deregulation and marketization, its attempts in attracting foreign investors met with limited success. However, one obstacle has been the lack of adequate guarantees from the Government for foreign companies. According to the Economist Intelligence Unit (EIU) "potential investors, who suffered from wholesale nationalisation after the 1979 revolution, consider Iranian legal provision and verbal guarantees as insufficient (EIU, 1992).

7.30 From the internal policy point of view, the Government despite internal opposition has attempted liberalising the economy and given a greater role to the private sector, and has announced that it will continue these policies by the end of the Second Five Year Plan (1993-1998).

7.31 In relation to Free Zones, the parliamentary debates on the bill to establish the EPZ (Oct, 1989) made it clear that opposition groups also resisted the creation of free zones, arguing that they are overly capitalist and would make for a dependent economy and particularly for industries tied to an international capitalist system; it was even said that FTZs conflict with Islam. For example, the daily newspaper Salam (1992, June), condemned the free trade idea as being against Islamic law. However, the Government

finally pushed the bill on Free Trade Zones through the parliament in June 1992, which has provided a legal framework for Iran's three Free Zones and has allowed unrestricted investment in and trading in the zones.

7.32 In fact, the trend of Iran's EPZ growth in the past several years has been profoundly influenced by internal economic and political conditions, as well as by international economic fluctuations. It is difficult to expect EPZs to operate successfully in an environment which is not suitable or not consistent with economic rationality. It is a major lesson to be learnt from the failures of the unsuccessful EPZs' experience (West, 1990, 32).

7.33 On the one hand the Government has been not yet successful in its economic reform programs, in the short and medium term. It is a common view that economic reform must produce visible results, most importantly a reduction in inflation and an improvement in the standard of living. But on the other hand the State believes that it is too soon for a significant medium term result. In a speech after the presidential election in June 1993, Mr Rafsanjani said that he could not promise any easy transition and the Government would continue gradually to end subsidies and complete the painful structural reform, because there is no choice. In fact, this shows his commitment to the economic reforms and structural adjustments which are supported by the World Bank and International Monetary Fund (IMF) in the form of devaluation, deregulation, liberalised import policies, elimination of subsidies, relaxed price controls, privatisation by selling public companies and a greater role to the private sector in investment in the productive sectors, particularly in EPZs. Although the economic reforms, particularly privatisation,

created new business opportunities by selling public assets and public firms, the private sector's response to structural adjustment policies was varied.

7.34 Many in the private sector only slowly believed in the permanency of the reforms, and other groups did not believe in their permanency. Nevertheless, many Iranian managers and professionals have concluded that after the election of Mr Rafsanjani there was a considerable improvement in economic and social climates, as Mr Rafsanjani during his first and second presidential periods tried to create a renewed confidence in the country particularly in the private sector. But yet, investors are still seeking a more stable economic environment.

7.35 The social climate is also difficult for governments to quickly influence. However, Mr Rafsanjani's government has tried to attract different social groups particularly by encouraging a receptive, peaceful environment. On the other hand, due to the socio-political structure of the Islamic Republic, the Government particularly in its internal policies is keen to show its commitment to the religio-cultural aspects of everyday life in society, and also emphasise the issue of 'independence' and the centrality of national sovereignty, often demonstrated by anti-USA rhetoric. From the point of view of many professionals there is contradiction between internal policy and the new line of international co-operation, epitomised in the nature of joint international plans such as for EPZs.

The State`s Role in Facilitating

Domestic Participation in the EPZ

7.36 The experience of EPZ successes shows that there is another way by which governments can attract foreign investment, while simultaneously trying to maximise domestic benefits. This is by promoting joint EPZ ventures between foreign and domestic investors, and linkages between EPZs and the domestic economy via subcontracting and selling inputs to the EPZ. By maximising domestic participation and linkages, a country expands and retains more of its foreign exchange earnings from the EPZ, creates greater potential for high-skill workers and entrepreneurs to find employment, and creates more potential for domestic manufacturing to grow. This can also serve to broaden the base of capital accumulation in society.

7.37 The relationship between Jebel Ali and the local market or domestic manufacturing, as the work done by Al Ebrahim Khalil (1993) shows, is very poor and there is no co-operation between JAFZ and other parts of the country. They operate autonomously and individually and the contribution of JAFZ to domestic value added is low. For example, the use of local raw materials and wages paid to local workers which are part of domestic value added is still low, because UAE workers represent less than two percent of the JAFZ work force. Furthermore, total purchasing of goods by JAFZ firms from the UAE domestic market is low (AL Ebrahim Khalil, 1993, 32-45). This situation of a low contribution of the Free Zone to domestic value added is with some differences very similar to the QFA position which we discussed in Chapter Six .

7.38 A role of the state presented by Sandbrook (1986,39) shows that governments also play an important role in addressing potentially negative and conflict-prone aspects of industrial development. This responsibility includes controlling negative externalities and overseeing the capital accumulation process, and possibly redistributing income or establishing benefits.

7.39 An additional role of the state is that government should frequently and critically monitor, review and evaluate its own performance, and make adjustments to improve it.

The Role of the State in Administration

7.40 Among the other important factors in the state's role, administration is significant, including aspects of procedures, red tape, onerous paperwork, customs delays and so on. The field research and work done by researchers of Iran's Chamber of Commerce (ICC) has also shown how the complexity, inefficiency, and delays of bureaucracy have discouraged investors (Iran's Chamber of Commerce, December, 1991). The ICC study shows that many of the ministries duplicate their activities, particularly regarding the EPZs. Also, lack of co-ordination in policies and investment approvals has meant the loss of opportunities for the country. Potential investors who are unable to get rapid approval for their proposals become discouraged, and decide not to invest in the country. Respondents indicated that the long bureaucratic procedure and delays, particularly in terms of custom delays, are considered the most discouraging factors in operating inside and outside of the zones.

7.41 It is not only the lack of a favourable political, economic, and social climate that has made Iran's EPZs unattractive to investors, but the country's bureaucratic difficulties have also discouraged many firms and potential investors. Therefore, it appears that one reason for less growth than hoped for in the EPZs is bureaucratic difficulties.

7.42 The Government seems required to make a strategic decision in order to increase administrative efficiency amongst bodies responsible for attracting investment. If the Government wants to expand the EPZ, particularly in industrial activities with medium and large companies, it will have to improve the EPZ's administration and administrative services such as applying for firms' status, gaining building approvals and clearing customs.

Table 7.3

EPZ Performance Factors-Political Stability (PS)

	Iran(I)	Dubai(D)
Total Number of Cases:	18	25

	Important	Not Important	No Data
I-P.S Importance to Investment Decision	16	1	2
D-P.S. Importance to Investment Decision	22	3	0

	Stable	Not Stable	Unclear
I-Stability of Political Climate	6	5	7
D-Stability of Political Climate	21	0	4

(Note: 2 said climate "unstable now", but that was before the Gulf War)

Meaning of Stable Political Climate

	Iran %of cases %cited	Dubai %of cases %cited
Democratic system of government	2	3
Continuity of policies	3	5
Affecting business		
Absence of demonstrations	3	0
Absence of revolutions&violence	2	1
Nothing affecting trade&production	3	2
Freedom of expression and the press	2	0
Market-oriented-Government	2	0
Good relationship to the West	2	0
Don't know	1	1

Political and Social Climate and Stability

The view from Iran and Dubai

7.43 When the Dubaian managers were asked about the stability of the political climate in Dubai, nearly 85 percent of them believed the climate stable, and only 15 percent were unclear about the political climate. By contrast, for Iran only 33 percent of responses considered the climate to be stable, whereas 27 percent believed it to be unstable; nearly 40 percent were unclear or reluctant to make a suggestion, or said of the question that "it needed more consideration". Some mentioned that the social and political climate since the election of Mr Rafsanjani had been better. And other parts of the interviews also showed considerable concern about the social and political climate.

7.44 These findings in addition to other collected information show that political and social climates are crucial factors in location decisions.

7.45 It is interesting to note that interviewees in Iran and particularly in Dubai had somewhat different ideas about what political stability means (Table 7.3). Some viewed stability in terms of a stable electoral process, some others as a democratic system of government, or lack of revolution or political violence, lack of demonstrations particularly against the West, and other things which would adversely affect trade, production and the region. In fact , most of these factors relate also to the social climate.

7.46 It is also noticeable that EPZ consultants and MNC executives expressed to the Iranian delegation at the XIV World Export Processing Zones Conference in Dubai in

1994 that, although Iran has a good geo-strategic position and also a comparative advantage in relation to her abundant natural and human resources, if Iranian leaders and policymakers wish to have an active presence in world trade and to attract EPZ investors they will have to have good relations with the West, and particularly with the USA. Another suggestion in this regard was by the head of the Hong Kong delegation who said that" if your policymakers wish to expand the EPZs into active international trade and into high-technology industry by attracting Western European, multi-national corporations (MNC), they will have to move toward liberalisation and internationalisation and solve their political problems with the West." These views are almost similar to those of some Iranian commentators who believe that for an active presence in world trade and the attraction of foreign investors, the political impasse with the USA needs to be solved.

Relations with the West and the Persian Gulf States

1) Relations with the Persian Gulf Countries

7.47 In the Persian Gulf area, relation between Gulf Co-operation Council (GCC) states run at different levels. The GCC, which was established in 1981 by the pro-western conservative regimes of Saudi Arabia, Kuwait, The United Arab Emirates, Oman, Bahrain and Qatar, was intended to shield its member states from the spill-over effects of the Iran-Iraq War (Entesari, 1992, 54). Because of the GCC's heavy reliance on the West in general and the United States in particular, the organisation was viewed by Tehran as a scheme to isolate and contain the Islamic Republic. The GCC's pro-Iraqi posture throughout the Iran-Iraq War further enhanced Iran's suspicion of the ultimate policy objectives of this organisation. From the outset, Saudi Arabia's domination of the

GCC and Riyadh's hegemonic ambitions turned this organisation into an extension of Saudi Arabia's foreign policy in the region, thereby exacerbating growing tensions between it and Iran.

7.48 The GCC's inability to defend the member states became apparent when Iraq invaded Kuwait. The Kuwait crisis was in fact a turning-point, at which Iran used the crisis as an opportunity to close gaps with its Arab neighbours. Iran supported all UN resolutions against Iraq, including that authorising the possible use of military force. Iran also remained neutral during the war and rejected the call by the radical Islamic movement for a 'holy war'.

7.49 Iran's relations with Saudi Arabia and also Bahrain, remain unsteady, because of the official Saudi and Bahrain view of Iran as an exporter of revolutionary fervour, despite repeated attempts at reconciliation after the Gulf war they have remained tenuous as before.

7.50 Iran's relations with other countries in the region are also not smooth. Despite the UAE being the third largest exporter to Iran in the past several years, relations are under constant strain over the issue of sovereignty over the islands of Abu Musa and the Greater and Lesser Tunbs, which the Shah's regime annexed by contrast to its concession of Bahrain's independence.

7.51 Iran has good relations with another members, as with Qatar with which Iran is negotiating joint development of one of the world's largest gas reserves. Relations with Oman are steady and also with Kuwait, and have improved since the Gulf war.

7.52 However, Iran's establishment of EPZs/FTZs on Qeshm and Kish and Chah-Bahar in the Gulf area (Fig.7.2) has in many aspects been in competition with GCC members.

7.53 Of course, the superpowers and particularly the USA with their indirect interventions have played significant roles in regional conflicts and instability, by their influence on the policies of Gulf countries even in times of peace.

2) Relations with the Central Asian Countries

7.54 With respect to relations with the Commonwealth of Independent States (the former Soviet Union), Iran has expanded its economic and trade ties with Russia. Maximum advantage has been taken of economic opportunities presented by the new Republics and Independent States, promoting Iran as an economic and trading gateway to the Transcaucasian and Central Asian republics. A series of overlapping regional initiatives have been undertaken through both multi-lateral and bilateral arrangements. Multilaterally, the Regional Co-operation for Development (RCD), founded in 1964 with Pakistan and Turkey, and dormant since the revolution, has been revived and renamed the Economic Co-operation Organisation (ECO). Since November 1992, six former Soviet republics-Azerbaijan, Kazakhstan, Tajikistan, Turkmenistan and Uzbekistan, plus Afghanistan, have joined the ECO to make the new group amounting to 300 million people, the biggest economic bloc after the European Community. The expanded group's major objectives are to remove tariff and other trade barriers between members; expand trade, banking and tourism; integrate rail, road and telecommunication networks; and ultimately to establish an Islamic common market. Since February 1992, another

grouping under the name of the Caspian Sea Littoral States Co-operation Organisation (composed of Iran, Turkmenistan, Azerbaijan, Kazakhstan and Russia) has been formed to exploit the resources of the Caspian Sea, and to cooperage in conducting research on environmental issues affecting the littoral states.

7.55 With the other republics on both sides of the Caspian Sea, historic, cultural and religious links are very close. Thus, a number of bilateral agreements have been reached with Azerbaijan, Kazakhstan, Armenia, Tajikistan, Turkmenistan and Ukraine, involving oil, gas, rail, roads, trade in consumer goods, and joint industrial projects. Iran and the landlocked Central Asian republics are planning to extend their transport and communication links to Persian Gulf via Iran, consequently gaining gradual economic independence from Russia.

7.56 Iran and Turkmenistan agreed on June 1993 to build a 300 Km rail link from Tedzhan to Mashhad, which has connected Ashqhabad with Tehran, Ankara and western Europe. And also a 400 Km rail link is being built from Kerman to Bandar Abbas, which has connected one of the main port to the mainland and created an historic rail link between Europe and the Persian Gulf. This project was opened in March 1995 which also has connected the rail line between the port and Baqf in Kerman. Baqf is an important hub for the national rail network which connects to the central Asian and Caucasian networks. The construction of the line, reportedly the largest construction roject undertaken by Iran, cost an estimated $700m and took 13 years. The South Korean Daewoo corporation carried out the work in partnership with local firms.

3) Relations with the West and USA

7.57 After the 1979 revolution, one of Iran's key policies was to diversify the country's trade partners to reduce dependence on Western countries, particularly the USA. The revolutionary government wanted to acquire new friends and allies in the developing world and sought new markets for oil exports. This process still continues following the trends up to 1988 illustrated in Table 7.4.

7.58 Since the cease-fire of 1988, Iran's foreign economic attitude has had five principal dimensions: a diplomatic quarrel and difficult position with the US : amicable links with the European Community (EC) and Japan; correct but tenuous ties with the Gulf Co-operation Council members in the Persian Gulf; ambitious designs and close relations with new republic states in Central Asia and Transcaucasia; and friendly and co-operative relations with most Third World countries.

Table 7.4

Patterns of Iran's trade, selected years (%)

	1977		1980		1983		1985		1987		1988	
	E	I	E	I	E	I	E	I	E	I	E	I
	(E - Exports; I - Import)											
OECD	78	86	65	66	67	65	58	61	65	66	58	61
EC	36	43	32	42	39	38	35	38	36	41	41	39
LDCs	22	11	34	25	33	29	42	32	35	27	42	30

Source: IMF (various years).

Note: figures rounded up for convenience. E exports, I imports.

7.59 A comparison of the lists of the top exporters to Iran in the1980's reveals some remarkable differences. For example, trade with Israel and South Africa was officially banned and the US, as the third largest exporter of goods and services to Iran before the revolution, lost its position, because overall trade with Iran became negligible and the United Arab Emirates replaced the US as a convenient conduit, and a third-party trans-shipper. Table 7.5 indicates the switching emphases inthe mid 1980's. Subsequently, Germany and Japan retained their top ranking positions, so that by 1992/3, Germany's

reported $5 billion of exports made it Iran's number one trade partner, followed by Japan and Italy.

Table7. 5

OECD market shares in Iran in the mid-1980s (%)

Year	USA	Japan	France	FRG	Italy	UK	Other OECD
1984	1.7	17.5	1.9	23.1	9.8	9.7	36.4
1986	0.5	17.3	1.2	22.5	9.8	8.8	39.7

Source: Calculated from OECD (various years).

7.60 In fact, economic relations with the EC and Japan have been rooted in such objectives as securing the largest portion of Iran's needs for foreign financing from European and Japanese sources, obtaining modern technologies particularly for oil and other basic industries, and isolating and marginalising the US's influence on European and Japanese trade and investment with Iran. As the Table 7.6 shows, Iran has been able to attract more exports from OECD countries since the mid 1980's, and stands second to Saudi Arabia as an importer amongst Middle Eastern countries.

Table7.6

Total OECD exports to selected Middle Eastern countries ($ billion)

Year	Saudi Arabia	Iran	Egypt	Algeria	Iraq
1977	12.2	12.1	3.9	6.0	3.7
1978	16.6	15.4	4.6	6.6	4.3
1979	19.8	5.9	6.0	6.9	6.9
1980	23.3	7.6	8.3	8.8	10.0
1981	27.4	8.0	9.2	8.7	14.3
1982	31.3	6.4	9.9	8.3	14.8
1983	30.3	12.2	9.9	8.2	7.1
1984	24.9	9.7	10.3	8.0	6.4
1985	18.9	7.2	9.3	7.3	7.0
1987	17.7	6.0	8.2	5.8	4.5
1989	17.8	5.6	8.2	6.3	6.1
1990	19.3	10.5	9.2	8.5	4.4
1991	25.2	15.4	9.6	7.4	0.6
1992	27.5	16.0	9.3	6.8	0.4
1993	27.2	15.7	9.4	7.1	0.4

Sources: OECD (various years); COMET Bulletin(various issues).
Note: Figures rounded up for convenience.

7.61 Trade between Iran and the US which peaked in 1978 with American exports of $3.7 billion and imports of $2.9 billion, plunged in 1980 to sales of merely $23 million and purchases of $458 million which was mostly of oil.

7.62 After the cease-fire between Iran and Iraq, trade sanctions were somewhat relaxed, and some US oil companies tried to buy crude oil directly from Iran. In 1993, US Oil Companies replaced Japanese firms as Iran's main customers (MEED, April, 1993).

7.63 The Clinton administration announced new policy imperatives towards the Middle East (emphasis on Iran for the first time), in a speech to the Washigton Institute for Near East policy on May 18, 1993, by the director for Near East and South Asian affairs at the National Security Council, Martin Indyk (EIU, 1993). He said that both Iran and Iraq were hostile to US interests in the region. He rejected the old policy of balancing the power of one state by building up the power of the other as the USA had done during the Iran-Iraq war. Instead, the USA intends, he said, to adopt a policy of "dual containment" for Iran and Iraq by aiming to keep both countries militarily weak through restricting the supply of weapons and dual technology goods to both.

7.64 According to EIU (1993), although the Clinton administration's new policy stems from a number of factors, one of the main factors is the increasingly close relationship between the Clinton administration and Israel, in contrast to the often prickly relationship between the USA and Israel during the Bush administration's term.

7.65 Although, the Clinton administration's new policy measured have not been endorsed by the EC, which appears to be too less worried than the USA about what it called the potential Iranian threat, the EC Ministers agreed to keep a tight watch on Iran's defence programme. Nevertheless, the Community adopted a policy on dual-use equipment which did not differ substantially from the USA's suggestions.

6.66 On May 1, 1995 the US President, announced to the World Jewish Congress in Washington his administration's intention to impose an embargo on the trade between US companies and Iran.

7.67 An earlier Executive Order, issued by the President in March, had prevented the US oil company Conoco from signing a deal with Iran in relation to taking part in the development of oil and gas fields.

7.68 In March 1995, two bills put forward by a senator, Alfonse D'Amato, in January, were published in detail. The first of these was a draft of the "Comprehensive Iran Sanctions Act of 1995". The bill calls for "a total embargo" on trade between the USA and Iran. This would bar anyone subject to US jurisdiction from trading in Iranian rials, conducting any transaction involving property in which Iran or any Iranian national has any interest or importing into the USA any goods or services which are entirely, or in part, grown, manufactured, processed, or extracted in Iran. The bill calls for the US government to instruct the US directors of IMF and the World Bank and the US ambassador to the UN to vote against the extension of any assistance to Iran. Although his first bill is in line with US policy on Iran, the second draft bill under the heading " The

Iran Foreign Sanctions Act", calls for sanctions against foreign companies or individuals dealing with Iran; it would bar them from receiving US government contracts or receiving US export licences.

7.69 The main victims of Mr Clinton's decision up to now are the US oil companies, which have spent much of the past three years developing deals with Iran. For example, Conoco, and in addition to Conoco a number of US oil companies have been negotiating with the National Iranian Oil Company (NIOC) for contracts to redevelop fields damaged during the eight years war with Iraq, and to develop new gas and oil structures in the Iranian oilfield in the southern Persian Gulf particularly in the Qeshm island area. Until the current embargo, US companies were responsible for lifting 15-20% of Iranian crude oil.

4) Iran's relations with other world countries

7.70 Iran has also been active in expanding and strengthening economic ties with Third World countries in Asia, Africa and Latin America directly and bilaterally, or through such organisations as UNCTAD, IFAD, the Islamic Development Bank and the ASEAN group. Among those countries outside the multilateral orbits already mentioned, China, Brazil and Syria have forged special relationships with Iran. Since early 1989, Iran has also reached 'agreements in principle', or signed trade protocols, with a large number of other foreign countries Australia, Belgium, Canada, France, Germany, UK, Italy, India, Japan, Malaysia, Netherlands, South Korea and Sweden, among others for joint economic co-operation and development in such fields as automobile assembly, construction materials, electric power generation, iron and steel production, oil and

mineral exploration, gas and oil refining, petrochemicals, storage facilities, ship building, atomic research, and others.

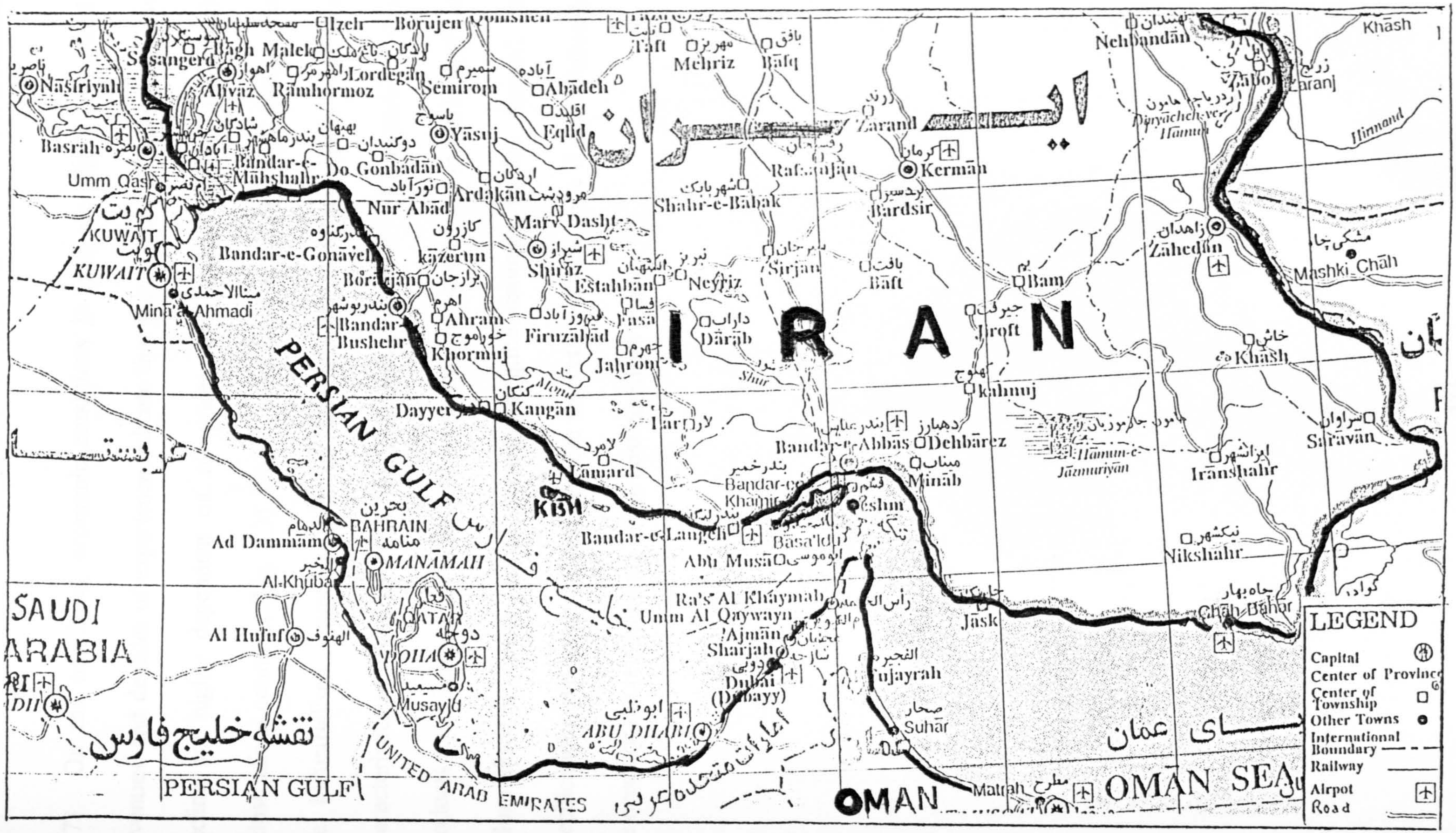
Prospects Under the US Embargo

7.71 To sum up, the United States's position concerning Iran and the Clinton Administration's campaign to isolate Iran politically and economically, undoubtedly has or will have direct effects on investment flows in both Iran and the QFA.

7.72 The embargo by the Clinton Administration on trade between US companies and Iran by executive order has prohibited all direct US export and import business with Iran, as well as all investment in Iran by US companies and their subsidiaries from June 1995. The draft bill under the heading "The Iran Foreign Sanctions Act" which calls for sanctions against foreign companies or individuals dealing with Iran would bar them from receiving US government contracts or receiving US export licenses. The US has made efforts to persuade its allies to follow suit. Undoubtedly, this US action has or will have a negative effect on the future trade of Iran. And due to the fact of a permanent military presence by the US in the Persian Gulf, some commentators believe that the future success of the QFA and its attraction to foreign investors depends on a solution of Iran and US disputes.

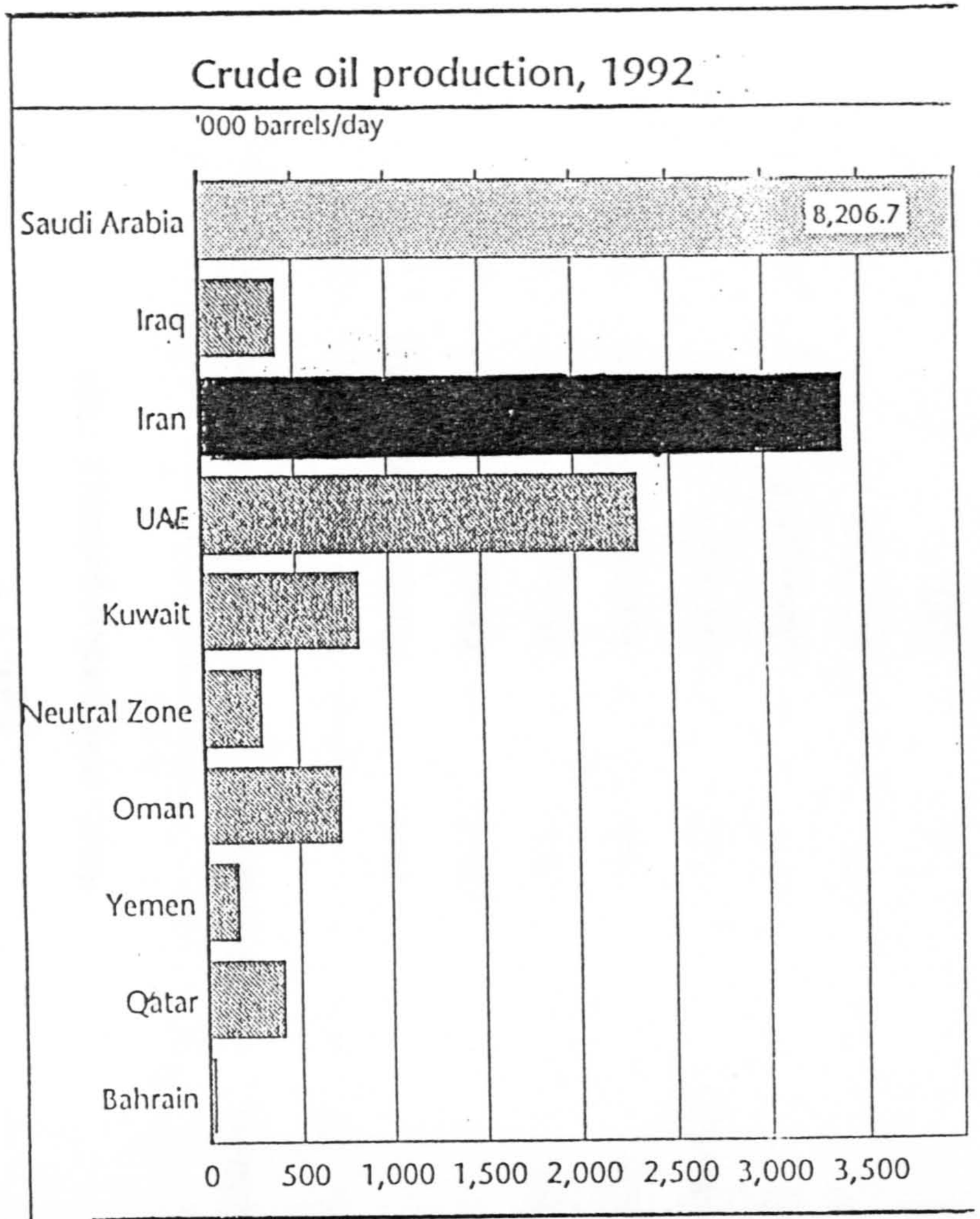
Figure 7-2

EPZs IN PERSIAN GULF COUNTRIES



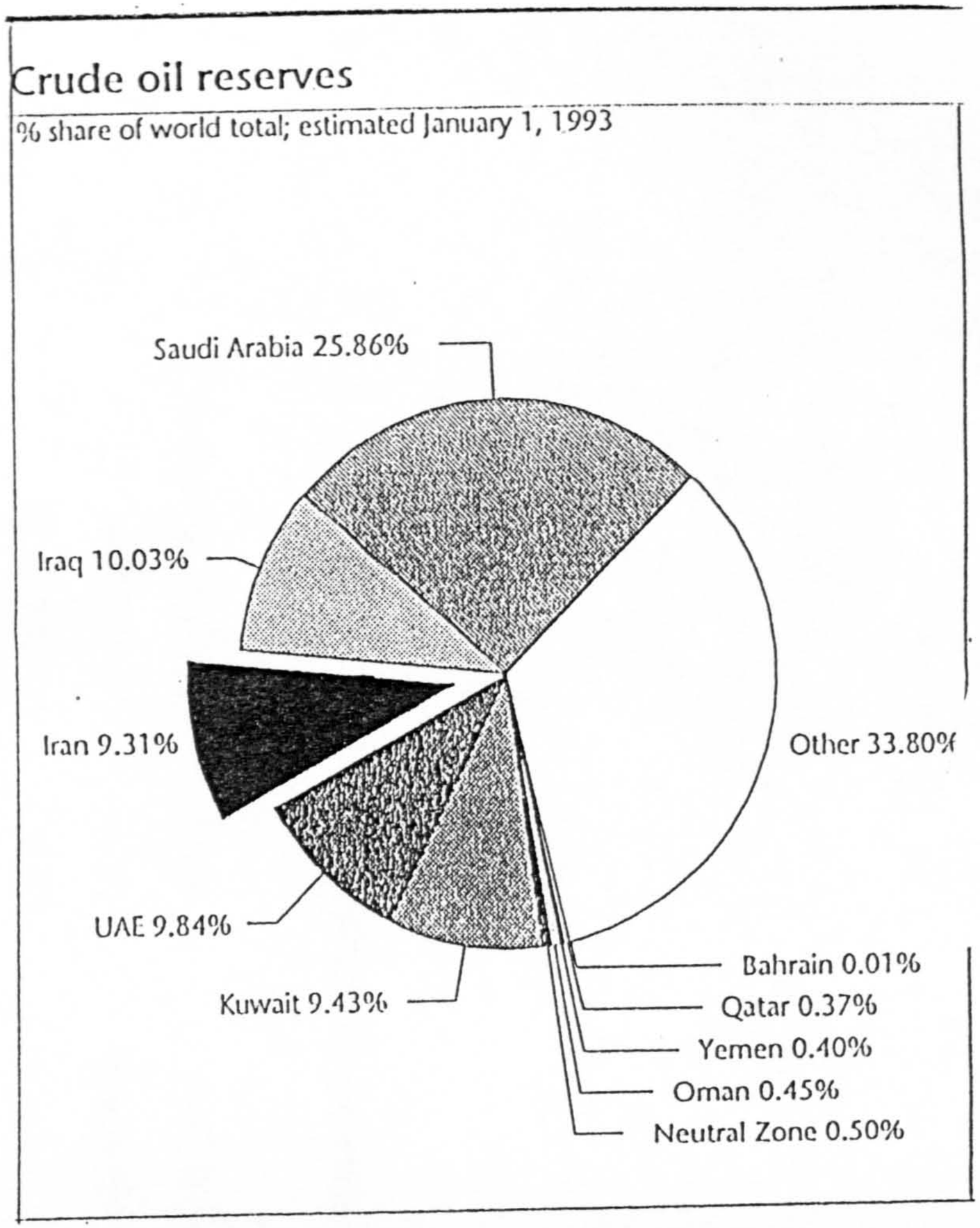
7.73 On the one hand, economic conditions in Iran are highly influenced by oil revenues, and decades of experience indicate that Iran's cycles of economic growth and decline are highly dependent on oil prices and market demand, particularly from industrialised countries (Fig. 7.3). On the other hand, dependency on foreign markets in the industrialised countries and on international competitiveness are two main characteristics of active EPZs. As the developing countries' EPZ experience shows, the products manufactured are to be sold primarily if not exclusively in markets of the highly industrialised countries, which correspond quite naturally to the demand, technical specifications and income levels of these markets, and bear little if any relationship with the needs or the requirements of the host country's market.

Figure 7.3



Sources: PennWell Publishing, Oil and Gas Journal; OPEC, Statistical Yearbook.

Figure 7.4



Sources: PennWell Publishing, Oil and Gas Journal; OPEC, Statistical Yearbook.

335(a)

Table 7. 7

Iran's main trading partners, 1989

Iran's exports to	% of total	Iran's imports from	% of total
India	16.4	West Germany (EC)	15.4
Japan	12.1	Japan	10.5
Benelux (EC)	7.3	Turkey	7.0
France (EC)	7.0	Italy (EC)	6.4
Netherlands (EC)	7.0	UK (EC)	4.8
Spain (EC)	5.6	France (EC)	4.1
Romania	5.6	Romania	3.8
Italy (EC)	5.5	India	3.7
Turkey	4.5	Brazil	3.3
West Germany (EC)	4.3	Australia	3.0
Proportion of total	75.3	Proportion of total	62.0

Source: Calculated from IMF (1988 and 1989 editions).

Economic Climate and Stability

7.74 In addition to a positive political climate, a favourable and stable economic climate is also important to investors. The eight-year Iran-Iraq war led to the Government extending its regulation and control of the economy into areas such as distribution and prices. Since Mr Rafsanjani became president in 1989, following the end of the Iran-Iraq war, the Government has been committed to a strengthened role for the private sector and an opening up of the economy. The Government's policy has been to introduce privatisation slowly and to restrict gradually the number of goods which can be imported at the preferential official rate of exchange, which stood at an average annual rate of $65.50:$1 in 1992. This process culminated in March 1993 when the government abolished the official exchange rate (IR70:$1) and the competitive rate (IR600:$1).

7.75 These changes amounted to a substantial effective devaluation. The inflationary consequences of the devaluation were an excessive economic burden on the poorer section of society, despite continuing subsidies on many goods. In consequence, Mr Rafsanjani took 63.2% of the vote in 1993, which was a significant drop from the 94.5% with which he was endorsed in 1989. It was a reflection of the electorate's unhappiness with the pace of the economic reform.

7.76 In a speech after the presidential election in June 1993, Mr Rafsanjani said that he could not promise any easy transition and the Government would continue gradually to end subsidies and complete the painful structural reform. He warned that selling oil cheaply would make the nation poor, and render the economy unable to meet even Iran's

most basic needs when resources run out. He pointed to the need to diversify from oil, in particular to build plants, roads and dams.

7.77 In the March 1993, the floating rate which is managed by the Government was pegged at IR1,538:$1 by the Bank Markazi the central bank. Previously, this rate had reached officially to IR1,3000:$1. Although, the former governor of the Bank Markazi, Mohammad Adeli, said at that time (April, 1993) " the new policy will bring order to imports, increase investment, employment and exports, and create a preference for consuming domestic products rather than imports", official reports do not show remarkable recovery in these aspects .

7.78 The Government at the same time announced that its attempts at liberalising the economy and giving a greater role to the private sector and encouraging foreign investment via EPZs would continue to the end of the Second Five Year Plan (1994-1999), and that the second Plan would " complement and deepen" the achievements of the First Plan.

7.79 In May 1993, the head of the Plan and Budget Organisation (PBO), Massoud Zanjani, announced policies to include:

reducing bureaucracy;

reducing the civil service through a merger of parallel organisations and moving some tasks to the private sector;

deeping privatisation by continuing to sell off state-run industries;

reducing subsidies on water, electricity and fuel;

allowing banks to decide on loan requests.

The policy outlined in the Plan included the need to diversify energy generation sources and to continue privatisation in the energy distribution sector, delegating to the private sector projects for building urban telecommunications facilities, offering government subsidies for developing new towns where needed, giving priority to the completion of existing projects, and creating ways and means for the public sector to assume a role in transportation and in building new railways. It was hoped to increase the attraction of Iran to foreign investors by portraying itself as the gateway to Central Asia and the Transcaucasus.

7.80 In order to attract foreign investment, in mid 1992 the High Council on Investment, a cabinet level group, announced its readiness to consider applications for foreign private investment in Iran with no limitation on ownership or management control. Such investment was to be guaranteed a free return on capital and profit to the investors' home countries, and of compensation in hard currencies in case of future nationalisation or confiscation. However, no application for notable long term private foreign investment has been subsequently announced.

7.81 As the UNIDO (1993) in its annual report in relation to Iran expressed, one reason for lack of foreign investors' interest may be the uncertainty as to whether a simple government directive is sufficient in lifting the 49 per cent ceiling on foreign stakes, or whether a Majlis act is needed which is a requirement which the Government is evidently reluctant to follow. Other reasons cited by prospective investors range from bureaucratic hurdles and frequently changing regulations to the volatile exchange rate, and high-cost labour as well as political uncertainty (UNIDO, 1993).

7.82 However, the economic difficulties and resultant budgetary problems and exchange rate policies, particularly in 1993-1994, had negative effects on both public and private sectors in Iran and Dubai. For example, as the result of the economic policy of Iran's government in terms of restrictions of imports in 1993, one high level administrator in the Central Bank of Iran explained that this caused a $US 600 million decrease in revenue for Dubai. Tables 7.1 showed the value of re-exports from Dubai to other countries, particularly those around the Persian Gulf, whereby the share of Iran in goods exported from Dubai is more than for all other countries in the region.

Table 7.8

EPZ Performance Factors

Factors Discouraging Firms/Investors

	Number of cases:	%cited
Total Number of Cases:	17	-
Inadequate/declining public infrastructure	6	35.29%
Market demand for products/services	2	11.76%
Economic instability (Rising/unpredictable costs)	6	35.29%
Bureaucratic procedures (custom delays/red tape/paper work)	5	29.41%
Low labour productivity (lack of industrial culture)	4	23.53%
Political instability	2	11.76%
Uncertain legal procedures	1	5.88%
Unexpected intervention by government	1	5.88%
No complaints	2	11.76%

Source: Author's Field work

7.83 Table 7.8 shows the result of asking Iran's EPZ managers: "what things in Iran and its EPZs have the most discouraging effects on your performance or on your decision to expand."

7.84 It was clear from the managers' answers that economic instability particularly in terms of rising and unpredictable costs, particularly fluctuation in exchange rate, and difficulty in bank affairs such as the credit ceilings of banks for purchases, problems in debt servicing and in the Government's short term foreign repayment problems, have been major negative factors for Iran. These problems had particularly negative effects on the trend of growing optimism among local businesses.

7.85 This experience shows that internal investors' responses can influence foreign investors, for potential investors frequently speak to internal investors and firm managers before making their decisions to locate or invest in an EPZ. Even positive or attractive conditions such as comparative advantage cannot keep investors from learning also of a zone's or a country's drawbacks.

7.86 Therefore, internal as well as international responses are important in the success of the zones and one of the State's aims must be to set up necessary conditions in the mainland as whole, and the EPZ in particular.

Fiscal and Financial Incentives

7.87 Among the other EPZ attractions, the structure of the EPZ itself might be an important factor in attracting investors to the country. The structure of the EPZ includes

the package of EPZ incentives, and the quality of the facilities and infrastructure related to the EPZ.

7.88 The package of incentives includes fiscal and financial incentives. Fiscal incentives include income tax exemptions for periods of usually up to 20 years, and duty-free imports with unlimited duration; financial incentives include freedom from foreign exchange controls; foreign ownership and guarantees for the repatriation of capital invested and the unrestricted remittance of profits; and also preferential rates for electricity and water supplies and for lease of land. It is notable that these kinds of incentive offered to investors inside the EPZs are in most cases similar to those offered to export industries outside the zones .

7.89 As a comparison of the interview responses in Iran and Dubai and other information shows, the package of incentives in Dubai is more attractive than Iran. Only 17.7% of Iranian investors mentioned this factor, while 73.0% of Dubaian investors selected this as one of their six main factors, as shown by Table 7.8.

7.90 These findings also indicate that the political stability and favourable economic and social climate of Iran is more important to investors than the package of incentives it offers.

7.91 The experience of successful EPZs shows that unusual advantages such as high political stability, specialised products or export markets, can improve their attractiveness and reduce the incentives that must be offered. Incentives likely to needlessly sacrifice a country's earnings are general tax holidays or moratoria. Because of this, they probably

should be utilised only if a country does not have sufficient competitive advantages to attract EPZ investors, and then be gradually retired as the country's EPZ becomes popular. In fact, the political and economic and social climate of Iran probably necessitates that it offers and extends a higher or specific package of incentives to investors, in particular foreign ones.

Facilities and Infrastructure

7.92 The range of infrastructure facilities on the inside of EPZs are usually wide, and in most EPZs the basic elements are rather similar such as access to a seaport and airport, facilities for containerised transport and preparation of the sites with landscaping and other supporting facilities. The support services will include physical services including supply of electricity and water, telecommunication facilities, sewerage and effluent disposal, as well as commercial services including banking, insurance, shipping and forwarding agents, and also social facilities or services. Of course, the relative importance of each of these elements can vary quite considerably from one zone to another.

7.93 It is not possible to determine conclusively from the interview data whether or not the quality of facilities and infrastructure of the case study EPZs has been an important factor in attracting firms. Neither Dubaian nor Iranian EPZ firms mentioned these as important attracting factors, although Iranian investors have expressed their concern about the effect which weak infrastructure will have on their operations and possibility of expanding these.

7.94 When investors in Iran's EPZ were asked about infrastructure, the intensity of their complaints was considerable. This shows that Iran's EPZ infrastructure is in a poor

condition. By comparison, Dubai's EPZ spreads over 45 square kilometres with a total project cost of US £2.5 billion, including one of the world's largest man-made ports with 67 berths and cold storage with a capacity for 45,000 cubic meters, with large container handling facilities and modern transportation facilities which serve the port users. There is also an International Airport, which has a capacity of transporting 500 tons of goods daily and is one of the most active airports in the region. Thus, the infrastructure of Iran's EPZs in many aspects is not comparable with Dubai. However, recently an international airport and port were planned to be built in the QFA, but until that time Bandar Abbas will serve the QFA.

7.95 Despite the Government's improvements to port facilities with electrical and water supplies, telecommunications and roads, firms in the QFA were dissatisfied with other infrastructure features, and particularly so with the rapidly rising cost of electricity, the supply of water to the free zones, and lack of a public transport system.

7.96 To summarize the findings regarding the importance of infrastructure and facilities, it is possible but not certain that the quality of infrastructure is important in attracting investors initially, but it is clear that infrastructure becomes important to firms in their future investment or their expansion decisions.

Regional EPZ Competition and Performance

7.97 It is obvious that to a certain degree, countries within a regional bloc compete for EPZ investors and also for access to new markets. Up to now there are three Free Zones in the Persian Gulf region but in different stages of planning and development. One of them is shared between Yemen and Oman which is under construction as an Omani zone. The second is in Kuwait and is in the planning stage. The main competitor of Iran's EPZ is Dubai, with its main function as a distribution centre. In fact, the lack of regional competition for Dubai in the past decade has been a distinct benefit to it. And Iran during its eight years war with Iraq and after has been the major importer of goods and foods from Dubai. Despite a considerable increase in food production since the Islamic revolution, Iran remains a major importer of food, with imports amounting to US $2.5 billion in 1989 and US $2.7 billion in 1990. A considerable volume of Iranian imports has been through re-export from Dubai. Thus the establishment of Free Zones in Iran has threatened some reduction of Dubai's business activities in future, with the QFA and the Chabahar Free Zone as two potential competitors for Dubai.

Linkage Effects of EPZ's

7.98 The world experience of the success of EPZs shows that creating backward linkages between the EPZ and the domestic economy on the one hand and creating linkages to international markets on the other hand, are critical elements in realising the potential of EPZs, by accelerating the domestic conditions required for a country to produce manufactured exports that are internationally competitive. By providing inputs and services through subcontracting and other arrangements, domestic firms experience

demonstration effects, gain greater access to foreign technology and know-how, and have the incentive to produce competitively so that they can increase their sales to the EPZ. In the process of linking to the EPZ, domestic firms are more likely to develop the capacity to produce directly for export markets, hence increasing the industrial export capacity of the country.

7.99 Government can play an important role in encouraging this capacity by creating international trade regimes that favour exports. This includes adopting floating exchange rates and reducing tariffs and quotas on imported inputs used in export manufacturing. Government can also establish policies that encourage domestic investments in export manufacturing within the EPZ, outside of the EPZ, and between the EPZ and the domestic economy. According to the UNIDO study (1989) " Significant linkages have been created by EPZ enterprises in terms of purchases of domestic material inputs, reliance on domestic services (transportation, finance, insurance, packaging etc.), as well as subcontracting arrangements.".

Conclusion

7.100 The main findings of this chapter show that the world experience of EPZs demonstrates that the state plays a critical role in establishing the necessary conditions that will attract investment to EPZs, and to facilitate private economic development. The political, social, and economic climates are most important to investors in their investment decisions and are largely influenced by public sector policies.

7.101 It is important to note that the act of establishing EPZs neither necessarily reflects nor ensures the political and economic development of a country. World experience shows that EPZs fit within the overall political environment that exists in a country. Only over time may EPZs gradually encourage evolution in the political economy of a country. Thus, we can say that EPZs are not a substitute for political and economic liberalization and reforms in a country, and cannot be expected to attract high levels of foreign investment in the absence of an attractive political and economic climate country-wide. In other words, EPZs in the best conditions can play the role of an export platform zone with certain linkages to the national economy.

7.102 The structure of an EPZ probably plays a less significant role in investors` decisions. However, the location of an EPZ, the quality of infrastructure and the facilities which countries offer is likely to heavily influence decisions on whether or not to set up and expand operations in a particular EPZ.

7.103 Government also plays an important role in addressing potentially negative and conflict-prone aspects of industrial development. This responsibility includes controlling negative externalities and overseeing the capital accumulation process, and possibly redistributing income or establishing benefits.

7.104 An additional role of the state is that government should frequently and critically monitor, review, and evaluate its own performance and make adjustments to improve it. Specifically related to industrial development, as the ILO/UNCTAD study shows, the state also plays a role in monitoring and improving labour relations and in encouraging joint ventures and linkages between an EPZ and the domestic economy.

7.105 And finally, while the state thus plays all of the roles suggested above as well as a few others, successful fulfilment of these roles does not guarantee EPZ success. Though positive state behaviour is likely to benefit its EPZs, the international economic climate must also be favourable. The experience of Iranian EPZs so far shows that investors are usually more responsive to political rather than to economic factors. And the internal as well as the international responses are very important in the success of the zones. Indeed, internal investors' responses could probably motivate international investors. Thus, one of the state's aims must be to set up necessary conditions in the mainland as a whole, not just in the EPZs in particular.

7.106 In other words, in some countries EPZs offer a unique benefit in allowing policymakers to concentrate scarce national resources in a defined area to create certain conditions required by export producers. Also EPZs, as a bounded construct , make it possible to test new policies, to experiment to some degree, and to monitor more

easily changes in performance that result. But the experience of other countries which are similar to Iran in many aspects show that EPZs cannot substitute for economic, political, and social conditions required throughout a country to attract and keep investors. Government policies outside of EPZs that discourage market activities, destabilise and inflate wages and other input costs, make an environment of political and social instability which detract from EPZ investment.

7.107 It is important for policymakers considering EPZs for a country to realise that, as field work interviews with managers suggest, it takes more than an internationally competitive EPZ package of incentives and legal guarantees to create a successful EPZ. For example, the experience of Liberia and Ghana show that although both have had EPZ systems for several years, they have attracted few investors.

7.108 The Iranian government should better estimate the costs and benefits of the QFA and its other zones, and then compare these costs and benefits and every new investment with projections and particularly with other national unfinished projects. Thus, a conventional cost-benefit analysis of EPZs, even despite its obvious shortcomings would nevertheless be a guide for policy-makers.

Chapter Eight

THE FUTURE OF EPZs IN IRAN

Factors promoting and discouraging EPZs: lessons from other countries

Introduction

8.01 The main feature of this chapter is proposals for policy adjustments which might be introduced to Iran's EPZs, and in the Qeshm and Kish EPZs in particular.

8.02 The proposals derive from the analyses made in Chapter Six, where we concluded that Iran's EPZs have yet to yield appreciable developmental benefits. Notably, the QFA has contributed to an increase in imports to Iran while having a negative effect on tax income and failing to contribute to foreign exchange earnings. Nor has there been promise of significant technology transfer or of appreciable employment for local workers.

8.03 Observing these failures of the EPZs to progress sufficiently towards their five general objectives, we have discussed the significant roles of the State in creating a favourable environment for EPZ development. The evidence of our fieldwork indicates that the political context is critical to potential overseas investors in the EPZs. The state of relations between the government in Tehran and Washington dominates the Gulf's political context. Against that background, local economic policies cannot alone significantly improve the climate for investment in Iranian EPZs.

8.04 Nevertheless, this chapter:

(i) commences by summarising the context within which local policies might be adjusted. This comprises the experience of EPZs elsewhere and the specific context of the Persian Gulf;

(ii) proposes possible policy adjustments appropriate to the general objectives for Iranian EPZs;

(iii) appraises the contributions of the thesis and presents a resume of its conclusions.

Context for policy

8.05 EPZs around the world from a performance point of view can be divided for the purpose of evaluation into three groups: successful, less successful and unsuccessful. This comparison is based upon the criterion for success being primarily in generating new employment opportunities and promoting exports.

8.06 A meticulous comparison upon all the factors which have underpinned EPZ's in the many countries in which they have been launched is, of course, impracticable due to the data requirements involved. The literature on EPZs, particularly that published by international organizations, generally tends to focus on the countries and areas which have been successful particularly in promoting exports or in generating new employment opportunities via their EPZs. But by contrast with those 14 countries which in 1989 accounted for nearly 90 percent of employment in EPZs among the developing countries, there can be accounted an equal number of other countries which were not successful and could not take off (see statistical appendix, Table.). In other words, according to the ILO/UNCTC (1987, 107) there are throughout the developing world a considerable number of countries where newly created EPZs never really took off, their start being soon followed by stagnation or decline, or where ambitious plans remained as mere paper plans.

8.07 The experience of successful and unsuccessful EPZs offers a number of lessons to countries which have newly established or are considering EPZs. With regard to unsuccessful EPZs, the failure factors are sometimes difficult to explain, and experience of unsuccessful EPZs shows that in most cases their failure was seldom attributable to a single cause. Among the factors contributing to failure, as Kumar (1987) pointed out, the locational factor was one of the most important, and several EPZs were simply established in what came to be seen as the wrong place, too far away from good communications and facilities or in a region which was insufficiently developed. Unfavourable political contexts were for many EPZs the main reason for lack of success. According to ILO/UNCTC (1987), many EPZs suffered from unfavourable political circumstances in either the host country or in the neighbouring region. Undoubtedly, few regions in recent years have gained as much international attention and media news as the Persian Gulf, and the region has been the scene of several crises. There has been the eight-year Iran-Iraq war, the Tankers war, Iraq's invasion of Kuwait in August 1990, the subsequent war against Iraq by the US-led coalition and, eventually, US justification for establishing a long-term and permanent military presence in the region which has had a negative effect on Iran. These events created various economic and political problems in the region. It is evident that this situation has had a negative effect on the past and future of the QFA, particularly on the decisions of potential investors.

8.08 Among the unsuccessful EPZs, a few failed for what have been called by ILO/UNCTC "institutional reasons". For example, conflict between national policies with regard to foreign enterprises has contributed to undermining EPZ efforts to attract such enterprises(ILO/UNCTC, 1987). The failures, dismal or relative, of many EPZs seem to have been due in large part to their lack of international competitiveness.

8.09 Therefore, as a first lesson it is important for policymakers considering and assessing EPZs for their country to realise, as our interviews with investors suggest, that it takes more than an internationally competitive package of incentives and legal guarantees to create a successful EPZ.

8.10 As a second lesson, unsuccessful EPZ experience shows that EPZs are not for every country, and policymakers should take this lesson seriously. As already discussed, a precondition for the QFA success is the strong influence of a stabilising regional and international political climate.

8.11 The rapid development of an EPZ, as Kumar's study (1987) shows, is rarely the result of one positive factor alone. It can be, for example, a combination of the local wage level, the political environment, the locational element or the institutional set-up. As

Kumar pointed out, success is commonly due to a multiplicity of positive factors and to a complex connection synergy between them (Kumar, 1987).

8.12 One of these positive elements and apparently very effective in the success of an EPZ is what could be called " the single purpose nature of an EPZ". Several countries' experience shows that zones conceived as instruments of regional development in addition to their primary purpose of employment generation and export promotion, and so on, tend to be somewhat less successful than those geared exclusively to exports and employment. In other words, the success of many EPZs was due to their single-minded pursuit of employment generation and export promotion, and not to pursuit of development in general or of technical development in particular.

8.13 So, one of the keys to the future success of Iran's EPZs seems likely to be a dominant preoccupation with exports and employment promotion; a simultaneous focus on regional development, social policy or the promotion of technological development and other multi-purposes is likely to detract from the main task, and hamper the EPZ's development.

8.14 As the past several years' performance of Dubai's FTZ and also Iran's EPZ shows, both countries have fallen short of their EPZ/FTZ's multi-purposes, particularly in the

cases of employment promotion, transfer of technology and promotion of technological development, and notably in diversification of the country's income from oil revenue which was the main aim behind establishing the QFA and JAFZ.

8.15 Therefore, a third lesson appears to be that the policymakers should reconsider the multi-purposes of Iran's EPZs. The objectives of Iran's EPZs, particularly for the QFA, are very wide and ambitious, including trade and service activities as well as large scale industrial activities, energy-intensive industries and export refineries. And simultaneously, policymakers have also expected the QFA to become a world financial centre, and to contribute to economic reform and act as an instrument of economic policies.

8.16 Nonetheless, EPZs as a bounded construct make it possible to test new policies, to experiment to some degree, and to allow policymakers to concentrate scarce national resources in a defined area for creation of the specific conditions required by export producers. A more narrow purpose of this kind for an EPZ makes it possible to monitor more easily changes in performance that result. But, as Gerald West's (1990) study shows, EPZs cannot substitute for economic, political, and social conditions required throughout a country to attract and keep investors. Government policies that discourage

market activities, destabilize and inflate wages and other input costs, and an environment of political and social instability will detract from investment.

8.17 World experience shows that very few EPZ industries have been established with a view to exploiting the host country's natural resources. Countries like Trinidad and Tobago, where EPZ firms in the chemical industry were set up to exploit the country's oil resources, are exceptions, as also is Ghana where the largest EPZ firm was set up to process the locally mined bauxite into alumina; however, these cases among the EPZs around the world appear to be the exception rather than the general rule.

8.18 According to Long (1986), most EPZ industries are not the type which tend today to have strong multiplier effects on other industrial sectors. With a few exceptions, EPZ firms were never set up to exploit the host country's natural resources (Long, 1986, 75).

8.19 To sum up, the success of EPZs appears to depend on certain conditions and institutions: objectives, strategies, politico-economic conditions and the state's willingness and eadiness; international atmosphere; location; the shape and kind of linkages between the EPZs and the mainland; resource endowment and mobility; and social overhead investments. We have seen that the degree of success can be generally measured against the following axes:

1. The volume of employment in the EPZ.

2. The size of foreign investment attracted.

3. The extent to which technology can be attracted.

4. The net value of exports

5. The extent to which the local economy is stimulated as a result of foreign firms using and linking with indigenous industries and local services.

8.20 No EPZ in the world appears to have managed to achieve success in every aspect listed above. Differences in the level of achievement of these aims are generally connected with internal and external conditions of each host country. These conditions include financial agility which most developing countries lack, the labour market situation, availability of large markets, strategic location, political stability and the availability of infrastructure. This strongly suggests the kinds of EPZ which fulfilled most of the objectives behind their establishment in one country, would probably be successful in another country with similar conditions.

8.21 Many of the unsuccessful EPZs belong to Africa, where the reasons for weak performance seem similar to those affecting the current state of the QFA. Gerald West (1990) has identified several reasons why EPZs in Sub-Saharan Africa have not succeeded, or have not performed well. This has been due to:

1. Political uncertainties
2. Complicated and poorly designed investment laws
3. Inefficient zone management
4. Delays in processing and clearing imports and exports
5. Poor location
6. Inadequate infrastructure
7. Unreliable and costly transport services
8. Lack of indigenous subcontracting capacity
9. Overvalued exchange rates
10. Expensive labour and productivity difficulties

8.22 Thus, as other countries' experience shows and as our field work's results confirm, policymakers in making their decisions need to consider three key elements:

1) Internal conditions of the country

2) External environment

3) Approach of the government

8.23 Internally, policymakers need to carefully consider where it is best to establish EPZ's, and they also should consider what unique input benefits can be offered to

investors and whether or not they can invest in the infrastructure required and whether it has sound economic justification. In other words, a sensitive cost-benefit or other dispassionate analysis is required, particularly in the planning stage. This should be engaged by government to determine if the potential benefits from the EPZs will exceed the investment required to establish or develop the zones.

8.24 Analysis in Chapter Five indicated that one of the main difficulties of Iran in its economic activities is basically lack of finance available as resources for investment. Because of Iran's poor international credit position in recent years, this has been one of the significant obstacles to investment. Many national projects under construction and unfinished such as the Arak petrochemicals industry and the Bandar Abbas aluminum plants, have run into financing difficulty and suffered by the poor international credit status of the country before completion.

8.25 Externally, the policymakers must consider what is the international reputation of the country? And what is the regional and international political climate in relation to the country? Has it opportunities or competitive advantages that attract investors? And significantly important is the international economic climate generally.

8.26 The Iran and Dubai EPZs/FTZ indicate that the regional and international reputation of the country is significant to foreign investors. On the one hand Iran's image is severely tarnished in most Persian Gulf countries, as by the recent dispute with the United Arab Emirates (UAE) over the sovereignty of the Persian Gulf Island, Abue Musa. There are also cold and tarnished relations with some Western countries, and particularly a quarrel with the US government. Consequently, it is difficult to attract foreign investors who might wish to export to these countries.

Possible policy adjustments

8.27 It is clear that the problems faced by Iran's EPZs can not be resolved entirely at local level, nor be completely changed within the short term. However, adopting or adjusting positive policies will be helpful for the success of the EPZs. Combining the survey findings and the experience of other countries, we can formulate a few proposals for policy adjustments.

8.28 We can categorise possible policy adjustments in three ways:

A) Short run policies B) Long run policies C) Action packages in relation to the EPZ objectives.

A) Short run policy recommendations:

8.29 1- To more directly face the unfavourable political and legal issues which have caused set backs in the attraction of local as well as of foreign investment.

2- To resolve the institutional problems, particularly the existing conflicts and contradictions between national economic policies, especially at the macro level, such as foreign currency rate stabilisation, and the main goals which EPZ establishments are pursuing.

3- To bring about a concrete manifesto for the EPZs in the country means that there should be well-defined objectives for the EPZs in the national development plan, particularly there should be a connection between development plans and resource endowment in the country, to better manifest linkage effects in the national economy as a whole.

8.30 In addition to making 'supply-side' efforts, the Government needs to market the EPZ by establishing offices in some rich and developed countries, and sending promotion missions to various countries around the world to attract new investors. In this relation, the Chamber of Commerce and Industry of Iran can also be active.

B) Long run policy recommendations:

8.31 1- Although most EPZs in the World, particularly in the initial stage, have followed

an export promotion approach, in the second stage of their existence they have targeted local markets to cover domestic demand. Iran should anticipate this.

2- To bring about better understanding between Iran and neighbouring countries in both economic and political arenas, to help to bring about a more favourable economic atmosphere in the trouble Persian Gulf area. For the EPZs to succeed, the Government must necessarily achieve fuller integration into the world economy.

3- In the newly established zones, the EPZ authorities should do the following:

a) not allow EPZ firms to compete with local firms. If EPZ firms are allowed to compete with producers in the Customs Territory they will have an unfair advantage and may force these firms out of business.

b) not make facilities of each EPZ the same, thereby attracting different types of investors to each zone.

c) they should provide some important services which are currently absent, such as a sewerage system and public transport .

8.32 The Government should play an active role in promoting domestic participation and linkages, by allowing commercial banks to lend Iranian capital denominated in foreign currencies, and make it possible for Iranians to invest in the EPZ both individually and in

partnership with foreign firms. And the Government should also allow banks to lend some capital to entrepreneurs for investment in manufacturing related to the EPZs.

8.33 In terms of linkages, local firms producing packaging, printing, plastic, paper, and other supplies for the EPZs, are doing some subcontracting for exports and EPZ firms. And although domestic firms which provide services in areas such as insurance, banking, construction, and transport can make a certain proportion of their loan capital available for (EPZ) investments at preferential interest rates, the Government should avoid policies which discourage linkages and domestic participation in the EPZ.

8.34 Also, policies in financing, interest rates and tax which create a shortage of loan capital for investment in export manufacturing or customs policies make it difficult to transfer goods between the customs territory and EPZ. The Government should note that high tariffs on imports and quota restrictions make it difficult for domestic producers to purchase needed inputs and produce at internationally competitive prices.

8.35 The EPZ firms together with some export firms out-side EPZs which subcontract with local firms or use domestic inputs, are at present negligible. Through the author's interviews they mentioned problems in quality, pricing and delays in receiving goods as reasons for avoiding domestic market purchases and subcontracting. To encourage

national economic development through linkages, policymakers will need to give domestic enterpreneurs access to the EPZs and encourage linkages between domestic markets and EPZ producers.

8.36 The policymakers should note that EPZs are not a substitute for political and economic reforms in the country, and cannot be expected to attract foreign investment in the absence of an attractive political and economic climate country-wide.

C) Special action packages in relation to the EPZ's objectives

8.37 Generating Foreign Exchange

Current EPZ shortcomings

- serious lack of earnings due to lack of foreign firms and to operating costs being paid in Iranian currency

Possible action package

- 100% tax relief on capital investment
- free health care for foreign employees
- fixed favourable exchange rate guranteed

8.38 Creation of job opportunities

Current EPZ shortcomings

- limitation of job opportunities due to lack of labour- intensive factories

- small number of EPZ manufacturing firms

Possible action package

- encouraging to investment in labour intensive production, specially in electronic and assembly items, as a part of activities in the EPZs

- improving the labour climate, particularly by establishing and regularly monitoring working conditions in the zones, such as guaranteed annual paid, vacation level, annual sick leave

- providing and improving adequate infrastructure for workers such as housing, and health centres

- helping to improve the facilities and conditions of service for workers such as, medical facilities and free bus transport.

8.39 It should be realised that emphasis on the creation of job opportunities might be in contradiction with transfer of technology, because it could lead to local and foreign

investment flowing into sectors which produce or assemble items that do not require much sophistication, therefore causing transfer of technology to remain limited.

8.40 Transfer of Technology

Current EPZ shortcomings

- lack of transfer of technology due to lack of foreign and local manufacturing firms

Possible action package

- encouraging domestic investors to joint ventures between them and foreign investors
- promotion of foreign training for Iranian managers and engineers
- engaging in negotiations with trade partners to obtain technology licences
- providing special incentives for R&D
- paying more attention to R&D and activating local research centres and encouraging co-operation between them and manufacturing firms within the EPZ and outside of the EPZ
- helping encourage the level of R&D in manufacturing firms
- providing internal training for increasing the technology level of local expertise

- encourage the use of technical assistance from abroad

8.41 Encourage national economic development through linkages

Current EPZ shortcomings

- negligible linkages due to lack of foreign and local manufacturing firms and domination of trade activities

-discouraging of EPZ firms from purchases and subcontracting due to disadvantageous quality, pricing, and delay in receiving goods

Possible action package

- allowing banks to lend some capital to entrepreneurs for investment in manufacturing related to the EPZs

- encouraging domestic investors to joint ventures between them and foreign investors, and later linkages between the EPZ and the domestic economy via subcontracting and selling inputs to the EPZ

- establishing policies that encourage domestic investment in export manufacturing, within and outside of the EPZ, and between the EPZ and the domestic economy

- adopting a floating exchange rate and reduced foreign exchange restrictions and tariffs on the import of raw materials and of capital equipment for export manufacturing

- encouraging domestic participation and joint ventures in the EPZ by helping local entrepreneurs invest in the EPZ, and by requiring banks to make a certain proportion of their loan capital available for EPZ investment at preferential interest rates.

- establishing an industrial development fund in order to attract and finance foreign companies and their linking with domestic firms

Contributions of the Thesis

8.42 This study should contribute several important things to our knowledge and understanding of EPZs and their industrial development. It is one of only a few comparative in depth case studies that examines and integrates the political, economic and policy dimensions of the Asian EPZ model. It is one of the few studies to have systematically interviewed government officials and investors and document their perspectives and perceptions.

8.43 In so doing, it has provided empirical support for and helped to refine a number of propositions about the political, economic, and social conditions and policy environments conducive to industrial growth.

8.44 This work, in concert with the ILO study, also offers a framework for examining and assessing EPZs in other developing countries. The UNCTAD and ILO/UNCTC studies, with some refinements by this author, provide developmental criteria by which to evaluate EPZs. With some modifications to fit the country's context, the questionnaires used for this study could be used for further studies on developing country EPZs.

8.45 In a competitive environment where producers all offer a similar product, they can gain if they cooperate and set minimum standards of operations, and the like. EPZs themselves resemble such products, with many countries offering a similar package of incentives and competing to attract investors. In such a situation, policymakers should take full advantage of the existence of the World Export Processing Zone Association (WEPZA) to set minimum standards of operation (e.g. setting minimum labour conditions), collect uniform data on EPZs internationally, and monitor their progress. Some of the most useful data to be collected and published would be average monthly earnings of workers, estimated gross and foreign exchange earnings from the EPZ by

product and export market category, the value of domestic and foreign investments in the EPZ, and the value and proportion of domestic input in export products.

Conclusion and Epilogue

8.46 Our study has examined the role of Export Processing Zones (EPZs) and FTZs in economic development, and has instanced and compared EPZs around the world before focusing on the Persian Gulf area, with a particular interested in the QFA as a principal example. The country's strategy of economic and social development as well as the aims and objectives behind the setting up of Iranian EPZs in general have been examined, along with the extent to which the aims and objectives of the EPZs covered in this research have been fulfilled. Iran's development strategies have been explained and specific objectives have been identified which have permitted the role of EPZs in economic development to be clarified. The study has tried to reflect linkages between EPZ structure and public policy and the state, and between development in Iran, the economic role of its EPZs and the economy of the host country.

8.47 We have explored the political and economic obstacles and some of the difficulties the country faces in creating and operating EPZs, and in trying to foster their growth. We have identified the most important internal, external, political, economic, and financial policy factors responsible for attracting investors and encouraging zone operation and expansion, in addition to those factors which inhibit the operation and development of EPZs. Finally, we have offered a framework that

policymakers can use to consider whether or not to established EPZs in their countries. It is hoped that scholars, policymakers and concerned researchers will find this study to be useful for their purpose.

APPENDIX

QUESTIONNAIRE

QUESTIONNAIRE

DEVELOPMENT OF QESHM FREE ZONE

1. Name of firm.....

Activity at QFA:

Type	Commodity/ies

State proportion of activity in trading (T), distribution (D), manufacturing (M), assembly (A), warehousing (W), other (O).

2. At what date was the firm first established:

a. In Iran (.....)

b. In QFA (.....)

3 . Do you have any other branches in other FTZs

1.Yes (.....)

2.No (.....)

In case of Yes/ are they more profitable than at QFA

1.Yes (.....)

2. No (.....)

4. Why did you chose to locate in QFA?

Please rank the following factors by putting a number in front of the factor, when (1) meaning most important and (14) meaning least important.

Factors	Not important (cross)	Important tick (rank)
1. Market access		
2. EPZ Incentives Package		
3. Personal connections to/in country		
4. Availability of labour		
5. Inexpensive labour		
6. Economic & social climate		
7. Political stability		
8. Opportunity to supply EPZ input market		
9. Proximity to Iran's/Dubai's market (shipping quicker/cheaper)		
10.Government promotion progress of EPZ Reason unique to firm or industry		
11. Geographical advantage		
12. Abundant energy (natural resources)		
13. Quality and quantity of regional distribution network		
14. Quality of infrastructure		

5. Do you rent or own your present buildings?

6. What is the total investment of your firm in QFA? (.....)

7. Please indicate total value of plant and machinery. (.....)

8. Is the activity at present profitable?

1. Yes (.....)

2. No (.....)

9. Do you intend to expand the present establishment?

a. Yes

b. No

In case of Yes please mention the reasons.

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10. Please indicate the number of employees from 1990 to 1994

Years	Total employees
1990	
1991	
1992	
1993	
1994	

11. Please indicate the number of employees of different kinds in 1992.

Grades	Number		Average wage (per month)	
	Males	Females	Males	Female
Office				
Skilled				
Semi-skilled				
Unskilled				

12.Total wage costs per annum. (.....)

13. Are salary or other payments to QFA in made local or foreign currency?

a. Local currency (.....)

b. Foreign currency (.....)

14. What % of your input or supplies are from outside QFA and Iran? (.....)

Please state principal flows

Commodity	Origin	Value per annum
Total		

15.What goods and services are provided from local market? Please estimate their total value?

Goods and Services	Value per annum

16. How much of your production is exported to foreign market yearly? (.....)

17. Does the inspection & clearance of import commodities occur fast enough?

a. Inspection. Yes (.....) , No (.....)

b. Clearance. Yes (.....) , No (.....)

18. What % of your output or shipments pass outside Iran? (.....)

Commodity	Destination	Value per annum
Total		

19. What is the standard of infrastructure in the QFA? Compared with other FTZs would say it were. Please Tick:

A. Port and seaport (excellent - good - average - poor - bad) (.....)

B. Roads(excellent - good - average - poor - bad) (.....)

C. Buildings (excellent - good - average - poor - bad) (.....)

D. Communication (excellent - good - average - poor - bad) (.....)

E. Transportation (excellent - good - average - poor - bad) (.....)

F. Storage (excellent - good - average - poor - bad) (.....)

G. Sewerage (excellent - good - average - poor - bad) (.....)

20. Please estimate the value of annual expenditure on.

	Amount
Rent	
Utilities	
Fuel	
Other payment to QFA	
Total	

21. Are any restrictions imposed by QFA

1.Yes (.....)

2. No (.....)

22. Do you have any comment on administrative procedure in QFA?

1. Yes (.....)

2. No (.....)

In case of Yes please state it

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QUESTIONNAIRE

DEVELOPMENT OF JEBLE ALI FREE ZONE

1. Name of firm.....

2. Date of established

a. In UAE (.....)

b. In JAFZ (.....)

3. <u>Ownership structure</u>

a. Private 1- Local % Foreign %

b. Private & Public

Public % Private % Foreign %

4. Activity atJAFZ:

Type	Commodity/ies

State proportion of activity in trading (T), distribution (D), manufacturing (M), assembly (A), warehousing (W), other (O).

5 . Do you have any other branches in other countries or FTZs

1.Yes (.....)

2.No (.....)

In case of Yes/ are they more profitable than at JAFZ

1.Yes (.....)

2. No (.....)

6. Why did you chose to locate in JAFZ?

Please rank the following factors by putting a number in front of the factor, when (1) meaning most important and (14) meaning least important.

Factors	Not important (cross)	Important tick (rank)
1. Market access		
2. EPZ Incentives Package		
3. Personal connections to/in country		
4. Availability of labour		
5. Inexpensive labour		
6. Economic & social climate		
7. Political stability		
8. Opportunity to supply EPZ input market		
9. Proximity to Iran's/Dubai's market (shipping quicker/cheaper)		
10.Government promotion progress of EPZ Reason unique to firm or industry		
11. Geographical advantage		
12. Abundant energy (natural resources)		
13. Quality and quantity of regional distribution network		
14. Quality of infrastructure		

7. Do you rent or own your present buildings?

8. What is the total investment of your firm in JAFZ? (.....)

9. Please indicate total value of plant and machinery. (.....)

10. Is the activity at present profitable?

1. Yes (.....)

2. No (.....)

11. Do you intend to expand the present establishment?

a. Yes

b. No

In case of Yes please mention the reasons.

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12. Please indicate the number of employees from 1990 to 1994

Years	Total employees
1990	
1991	
1992	
1993	
1994	

13. Please indicate the number of employees of different kinds in 1992.

Grades	Number		Average wage (per month)	
	M ales	Females	Males	Female
Office				
Skilled				
Semi-skilled				
Unskilled				

14.Total wage costs per annum. (.....)

15. Are salary or other payments to JAFZ in made local or foreign currency?

a. Local currency (.....)

b. Foreign currency (.....)

16. What % of your present workers are from other countries?
Please mention countries of origin

.....
.....

17. What % of your input or supplies are from outside JAFZand UAE? (.....)

Please state principal flows

Commodity	Origin	Value per annum

18.What goods and services are provided from local market? Please estimate their total value?

Goods and Services	Value per annum

20. How much of your production is exported to foreign market yearly? (.....)

21. Does the inspection & clearance of import commodities occur fast enough?

a. Inspection. Yes (.....) , No (.....)

b. Clearance. Yes (.....) , No (.....)

22. What % of your output or shipments pass outside JAFZ? (.....)

Commodity	Destination	Value per annum
Total		

23. What is the standard of infrastructure in the JAFZ? Compared with other FTZs would say it were. Please Tick:

A. Port and seaport (excellent - good - average - poor - bad) (.....)

B. Roads(excellent - good - average - poor - bad) (.....)

C. Buildings (excellent - good - average - poor - bad) (.....)

D. Communication (excellent - good - average - poor - bad) (.....)

E. Transportation (excellent - good - average - poor - bad) (.....)

F. Storage (excellent - good - average - poor - bad) (.....)

G. Sewerage (excellent - good - average - poor - bad) (.....)

24. Please estimate the value of annual expenditure on.

	Amount
Rent	
Utilities	
Fuel	
Other payment to JAFZ	

25. Are any restrictions imposed by JAFZ

1.Yes (.....)

2. No (.....)

26. Do you have any comment on administrative procedure in JAFZ?

1. Yes (.....)

2. No (.....)

In case of Yes please state it

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