OCCASION

This publication has been made available to the public on the occasion of the 50th anniversary of the United Nations Industrial Development Organisation.

DISCLAIMER

FAIR USE POLICY

CONTACT

Please contact publications@unido.org for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
Vienna International Centre, P.O. Box 300, 1400 Vienna, Austria
Tel: (+43-1) 26026-0 · www.unido.org · unido@unido.org

EXPORT PROCESSING ZONES

Principles and Practice

UNIDO

PREFACE

A key part of any programme to develop an export-oriented industry sector is a regime which allows manufacturers duty-free access to imported raw materials and equipment.

The Export Processing Zone (EPZ) concept has been used by many countries over the last 35 years to initiate and promote export-led industrial development. Some countries, especially in East and South-East Asia, have used the EPZ with great success to initiate this type of development. Elsewhere, the concept has not always produced the expected benefits, often because of unsuitable location and poor infrastructure combined with ineffective management and an inappropriate policy environment.

A location close to good international transport and commercial support services is essential. There should also be adequate physical infrastructure and the policy environment should favour export growth.

As a general rule, EPZs can be used in a country where suitable conditions for export-oriented industry cannot be created on a nationwide basis because of infrastructural deficiencies and administrative obstacles. But, as this document explains, it should be viewed as a temporary solution and a step towards a countrywide duty-free regime for exporters. It should therefore not be planned in isolation, but as part of a broad, long-term strategy to develop an internationally competitive manufacturing sector.

This document is designed to help countries and governments considering EPZ development to decide when and where EPZ initiatives are appropriate, and how an EPZ should be managed and organized. It is based on the wide experience of UNIDO and other international agencies with EPZ development, and was prepared by UNIDO's Human Resource, Enterprise and Private Sector Development Division, with the assistance of consultant Mr. Tom Kelleher.

TABLE OF CONTENTS

Page

CHAPTER 7 - PHYSICAL PLANNING

CHAPTER 8 - COSTS AND BENEFITS OF FREE ZONES

ANNEXES

TABLES

BIBLIOGRAPHY

SUMMARY

Chapter 1 - Background

The EPZ is a useful policy instrument for countries which plan to develop an export-oriented manufacturing sector and have the basic conditions in which export industry can operate successfully, but lack the technical or administrative capacity to develop a countrywide system allowing exporters duty-free access to imported equipment and materials. It should be viewed as a first step in creating such a countrywide system. The number of countries using the EPZ concept has expanded steadily over the past three decades.

The EPZ was initially a physical concept, an industrial park which is fenced in and controlled by the customs administration. Later, "EPZ status" could be given to investors anywhere in a country. There is no difference in practice between an "EPZ status" investor and an investor operating under a duty-free licence or duty suspension regime.

EPZs at present are usually geared to accommodate investors assembling products for export using mainly imported materials. Linkages between EPZ firms and the domestic economy are often weak. Such linkages do not take place automatically; they must be planned and encouraged with appropriate policies, institutions and regulations.

Factors which will influence the shape and character of EPZs in future include increasing global competition for investment and lower stock levels/shorter delivery times in many industries.

Chapter 2 - Statistical Analysis

The statistical analysis is based on a UNIDO survey of 23 countries; other information sources complement the data provided by this survey.

Asia is the most important centre of EPZ activity both in terms of the number of countries involved and numbers of persons employed. Over half the total number of persons employed in EPZs in 1991 (2.2 million out of almost 4 million) were found in China. The rest of Asia constitutes the second largest concentration. It is followed by Latin America.

The importance of EPZ employment varies from country to country. In small economies with significant EPZ programmes, EPZs may account for over 40 per cent of total manufacturing employment. In countries with successful EPZs, employment growth in the zones often far exceeds that in manufacturing as a whole.

Garment manufacturing is an important industry in a large number of EPZs, and electronics is a significant activity in the more advanced Asian zones and to some extent in Mexico. With the exception of the advanced Asian zones, few raw materials are sourced domestically.

Most of the output is exported. Caribbean and central American EPZs mainly export to the United States of America; most African exports go to Europe. The origin of foreign investment follows a similar pattern.

EPZs are often considered to be enclaves for foreign investors. The survey however shows that 43 per cent of the investors are domestic; foreign/domestic joint ventures account for another 24 per cent.

Chapter 3 - Export Processing Zones as a Policy Instrument

The EPZ is only one among many methods by which exporters can be given duty-free access to materials and equipment. It can be very effective in the early stages of an export drive, as a means of attracting investors and demonstrating a country's export potential - especially in less developed countries which cannot package the critical elements to initiate an outward oriented development strategy. It is also easier to establish and administer than the other schemes, and has a promotional appeal. Over time however the EPZ should decline in importance as country-wide duty-free schemes are successfully put in place and export industry is developed throughout the country.

A successful EPZ needs:

(i) A policy environment which emphasizes a competitive exchange rate, access to credit at reasonable interest rates, the development of private enterprise and of technical and management skills;

(ii) A good location in relation to international transport, financial, and communications services. As a general rule, the first EPZ should be located in or close to the commercial capital of a country;

(iii) An organization with an appropriate structure which efficiently assists investors in the approval as well as the operation of the project.

An EPZ is extra-territorial from a customs viewpoint. Operating conditions are often better than in the domestic economy: little bureaucracy, good infrastructure and tax incentives. Until conditions in the domestic economy match those in the EPZ, trade between the two should be treated as import/export trade: EPZ products sold domestically should be subject to import duty, and sales to the EPZ should be treated as exports which benefit from all export incentives. This helps domestic suppliers of EPZs to compete with foreign firms.

A customs union or free-trade area is in many ways an extension of the domestic market. Trade between an EPZ and the customs union or free trade area in which it is located should therefore be treated in the same way.

Chapter 4 - Free Zone Management

Only governments or government-sponsored agencies can grant privileges to EPZ investors. Usually an EPZ means the development of an industrial park; regular contact is therefore needed between the park developer and users or investors. Various government agencies, most notably the customs administration, the ministry and/or agency responsible for EPZ development, and the organization responsible for physical planning and environmental control, have a role to play in promoting and controlling EPZ development. Different formulas or arrangements are used to accommodate the various agencies:

- At Shannon in Ireland, a Government corporation developed the EPZ and evaluates investor applications. The relevant ministry issues licences on the basis of the corporation's recommendations. Customs operate independently. The municipality is responsible for physical planning and environmental controls. The three organizations co-operate as equal and independent agencies.

- In East Asia the tendency has been to establish a strong zone administration agency with overall responsibility for licensing, developing and managing zones, and supervising the operation of other government agencies involved in zone activities.

- Mexico and Mauritius have no formal EPZ administration or development agency, or traditional fenced-in EPZs. In Mauritius, investors apply for EPZ status with the Ministry for Trade and Industry. If this is granted, they can enter into a bond arrangement with the customs and set up business anywhere. Similar procedures apply in Mexico. Physical facilities are largely private-sector responsibility. This is also increasingly the case in other developing countries.

More and more, private sector development of EPZs is preferred because of the many operational inefficiencies and poor location choices of public-sector EPZs. But government still has important functions in promoting zone development. It has to ensure that a single private-sector developer does not abuse his dominant position, and to encourage the gradual increase in technological standards and linkages between zone investors and the domestic economy.

An efficient and relatively honest customs administration is important, as this allows the investors to operate independently. In other cases, the zone administration can be given a supervisory role over, or even responsibility for customs. A special EPZ division in the customs administration can also be established, if necessary with new staff. Customs should be involved from an early stage in the planning of the EPZ project, including the drafting of legislation. Zone customs staff should receive special training since their traditional attitude is to prevent smuggling or imports without proper documentation, while in an EPZ the emphasis must be on speed in the movement of goods.

Chapter 5 - Legislation

Most EPZs are established under special legislation. The main elements of an EPZ law include:

(i) An outline of the procedure for declaring or designating an area or building to be an EPZ;

(ii) A statement of who is responsible for the supervision, control, and management of EPZs;

(iii) A section dealing with the establishment and role of an EPZ authority - if it is decided to establish such an authority;

(iv) Guarantees for unrestricted duty-free imports of materials and equipment;

(v) A section dealing with licences and permits;

(vi) A section dealing with taxation or tax holidays;

(vii) An outline of the customs procedures, and the powers and functions of the customs administration;

(viii) Provisions allowing the minister or government to make regulations for the proper functioning of the law.

Chapter 6 - EPZ Promotion and Incentives

For EPZs, investment promotion is essential because of the intense and growing competition for investment. It cannot be assumed that foreign or even domestic investors are aware of an EPZ or its strong points. Studies show that promotion activities have a particularly strong influence on investors in export activities.

Promotion of an EPZ is expensive. A careful assessment of target markets and sectors is therefore essential; flexibility is also essential: promotion efforts must be able to switch to new markets at short notice. In particular domestic investors should not be ignored. The importance of satisfied customers should be stressed: most potential investors talk to and are strongly influenced by existing investors. Advertisements should be properly targeted (e.g. by using trade journals).

Incentives should be geared to the type of industry which the zone hopes to attract. Some common incentives are grants and low interest loans for capital-intensive projects, and tax holidays for labour-intensive projects. They should be generally in line with those offered by the main competing EPZs. Incentives are crucially important when other conditions that are offered are similar to those in competing EPZs. But they can never compensate for major problems or deficiencies in, for example, industrial relations or infrastructure.

Chapter 7 - Physical Planning

Good physical planning includes site selection and the phasing of development in line with demand. The ideal site should be close to international transport and business services. The commercial capital or the main port is usually a good place to start an EPZ programme. It should be close to

infrastructure services so that the developer does not incur large off-site infrastructure costs.

A site of 40-80 hectares is ideal in most situations. It is large enough to benefit from economies of scale in development and small enough to avoid serious congestion. A minimum water requirement is 40,000 litres per hectare per day. The phasing of zone development is most important. The first phase should be completed and occupied within three years, and should be based on conservative demand projections. If demand is strong the second phase can always be accelerated.

About one third of the total zone area is usually devoted to roads, green areas, and administration buildings. This percentage will vary with the shape of the site and the planned building density. Zones catering mainly for prestige electronics and medical equipment firms will often have a low building density and plenty of landscaping. Garment producers may prefer high density buildings and low rents.

Both the zone developer and the planning authority must implement a package of controls to ensure that there are no environmental problems and that investors behave as good neighbours. The developer can implement controls through a series of by-laws or conditions attached to the investor's lease.

Chapter 8 - Costs and Benefits of Free Zones

Few cost/benefit studies have been made on EPZs. Studies of Malaysia, Indonesia and the Republic of Korea show internal rates of return of 15-28 per cent. A Philippine EPZ (Bataan) produced a negative return because of the high costs incurred in its development. Other zones in the Philippines however did well. Generally, zones which are developed quickly at a modest cost have become a success. The success of zones with high development costs is doubtful even if significant employment and exports are generated. World Bank studies have found that EPZs can have a major impact on employment, especially in small economies, and that in more than half the cases EPZs have been successful.

Backward linkages and technology transfer are often neglected. With the exception of the more advanced developing economies of East Asia, backward linkages have generally failed to develop. Major reasons include:

- The inability of domestic suppliers to meet the quality, delivery and/or price standards of EPZ producers due to lack of skills, high duties and taxes on the inputs imported by domestic producers, and their limited access to foreign exchange and low-interest loans;

- The reluctance of some expatriate managers to purchase locally;

- Inadequate stimuli for linkages and technology transfers. An important mechanism for transferring technology and skills, and creating opportunities for local suppliers, is the movement of people who have been trained in EPZ firms to the domestic economy. This should be encouraged.

Value added in most zones ranges from 20-30 per cent of gross output in the clothing sector and around 15 per cent in the electronics sector. Annual gross output per worker in the former is US$ 5,000-8,000 and US$ 25,000 or more in the latter.

Working conditions and wages in EPZs are generally better than in comparable employment in the domestic economy. Most national labour legislation applies in EPZs. In some zones there are minor differences. Union activity and the right to strike are sometimes restricted.

Most EPZs employ a high percentage of women (80 per cent or more) in assembly-type activity. On balance, the comparatively good wages and working conditions represent an improvement for these women. In some zones the number of women in technical and managerial positions increases steadily. The law prescribes equal pay and equal rights for women in many countries; these laws apply in EPZs, but they are not always enforced. Lack of employment security is a problem in many zones. Inadequate transport and crèche facilities are sometimes a problem, and mainly affect women.

CHAPTER 1
BACKGROUND

1.1 Objective

This study on Export Processing Zones (EPZs) is meant as a technical assistance tool for the establishment of EPZs, or similar facilities, in countries which want to attract domestic and foreign investment in export-oriented industries. The study would also help existing EPZs to evaluate their performance by providing information on other zones and by analyzing the main issues involved in operating and promoting EPZs.

On the basis of UNIDO's experience with technical co-operation in the past years, it is expected that those who will benefit from the study will include:

- Government officials in countries considering the establishment of EPZs;
- Government staff responsible for supervising/operating EPZs;
- Private EPZ operators;
- Investors;
- Business organizations wishing to promote export industry;
- International organizations, including non-governmental organizations;
- Academics, researchers, and journalists.

A recent study[1] listed twenty-three different terms to describe free zones and related concepts. All of these except maquiladora include the word zone. The various terms are grouped under five headings in Table 1.1. Of the terms listed, the most popular are: free port, free trade zone (FTZ), foreign trade zone, export processing zone (EPZ), export processing regime, special economic zone (SEZ) and free zone (FZ). A discussion of the various concepts may be found in Annex I.

TABLE 1.1 ZONE TERMINOLOGY

GROUP 1 - TRADE	GROUP 2 - EXPORTS	GROUP 3 - PROCESSING	GROUP 4 - ECONOMIC ACTIVITY	GROUP 5 - GENERAL
Customs Zone	Duty-free Export Processing Zone	Export Processing Free Zone	Investment Promotion Zone	Free Zone
Customs Free Zone	Export Free Zone	Export Processing Zone	Joint Enterprise Zone	Free Port
Free Trade Zone	Export Processing Free Zone	Free Export Processing Zone	Technology Zone	Maquiladora
Tax Free Trade Zone	Export Processing Zone	Free Production Zone	Special Economic Zone	Tax Free Zone
	Free Export Processing Zone	Industrial Processing Zone	Zone of Joint Entrepreneurship	
	Export Processing Regime	Industrial Free Zone	International Service Zones	

1) UNCTC - The Challenge of Free Economic Zones in Central and Eastern Europe, 1991.

1.2 The Growth and Spread of Free Zones

The EPZ and its predecessor the FTZ are policy instruments designed to facilitate the development of international trade and export industry. It is therefore logical to expect that such zones develop and prosper (i) at times when world trade is expanding; and (ii) in places (ports, airports, railway junctions) on or close to international trade routes.

The Asia and Pacific region clearly dominates in the EPZ category. The spread of the EPZ concept in Africa is also significant. It is perhaps surprising that quite a few European countries have established EPZs, even though these are usually considered policy instruments for developing countries. But a number of European countries have lower levels of development: Turkey, Cyprus, Malta and Portugal. The growth of the number of countries with FTZs and EPZs over the past 70 years is shown in Tables 1.2 and 1.3.

1.3 Evolution of the Concept

The free zone concept has been modified and adjusted in many ways over the years. The promotion of trade has always focused on creating a secure physical setting and a widely accepted set of laws or rules for transacting business. Without these, the cost and risks would make most trading unprofitable. From a trade viewpoint increased regulation has positive and negative aspects. Improved communications, new forms of business organization and certain regulations facilitate the growth of trade by reducing uncertainty in transactions. Trade regulation and taxes on imports, on the other hand, have a negative impact on trade.

Special zones were created at ports or transport nodes to overcome some of these negative aspects. Around the end of the nineteenth century the free zone concept spread throughout northern Europe, coinciding with the growth of industry and trade. There was stagnation during the economic depression of the 1930's and the Second World War. The only country to introduce free zones in this period was the United States of America. (Unlike most free zones around the world, which are export-oriented, the United-States zones are primarily import zones).

TABLE 1.2 NUMBER OF COUNTRIES WITH TRADE AND PROCESSING ZONES

REGION	PRE-1930	1930-45	1946-70	1971-93	TOTAL
Europe	9	0	4	7	20
Asia/Pacific	3	0	4	10	17
Middle East	1	0	5	2	8
Africa	2	0	6	11	19
S. America	0	1	4	3	8
C. America	0	0	2	6	8
Caribbean	0	0	5	4	9
N. America	0	1	0	1	2
TOTAL	15	2	30	44	91

TABLE 1.3 NUMBER OF COUNTRIES WITH EXPORT PROCESSING ZONES

REGION	PRE-1970	1970-1980	1981-1992	TOTAL
EUROPE	3	2	6	11
ASIA/PACIFIC	5	7	5	17
MIDDLE EAST	0	2	1	3
AFRICA	0	6	6	12
S. AMERICA	0	1	4	5
C. AMERICA	2	3	3	8
CARIBBEAN	4	3	2	9
TOTAL	14	24	27	65

Sources:
United States of America, Department of Commerce - Free Zones around the World, 1970; Economist Intelligence Unit - Tax Free Exporting Zones - A Users Manual, 1989; W. and D. Diamond - Tax Free Trade Zones of the World, Vol. 1-4, 1992; UNIDO files.

Note:
Because of limited data and the lack of universally acceptable definitions of what constitutes a zone, figures should be regarded as estimates. Tables are not directly comparable in spite of the large overlap. The combined figures for columns 3 and 4 in Table 1.2 are greater than those for column 5 in Table 1.1 because some countries which had trade zones before 1971 are included in column 2 to 4 in Table 1.1. If the country subsequently established an EPZ after 1971, it is classified in columns 3 or 4 in Table 1.1.

After the Second World War, the protectionist philosophy of the 1930's was rejected. Continuous economic expansion, very often based on exports, took place throughout the 1960s and up to 1973. Institutions such as the General Agreement on Tariffs and Trade (GATT) were established to promote international trade. Developments in technology, communications and international travel allowed splitting production between different locations. Parts of the production process in electronics, engineering, and light industries such as textiles and leather could be relocated to take advantage of low labour and power costs, market access, or some other advantage associated with a particular location. This meant shipping materials from one country to another for processing or assembly. The finished product was then exported either back to the country of origin of the raw material, or to a third country.

The original free trade zone idea was adapted to accommodate offshore processing. Ports or transport intersections were not always suitable places for manufacturing activity. New sites for manufacturing were developed. The first to promote the new type of zone were Ireland, Hong Kong and Singapore. They had the policy environment, infrastructure and cost structure required for foreign export-oriented direct investment in manufacturing. Taiwan Province of China, the Republic of Korea, Malaysia, the Philippines, Mauritius and the Dominican Republic followed soon.

As a result of telecommunications improvements, administrative functions are now being split between different locations and countries. Airlines, insurance companies and other organizations with routine administration functions are relocating these functions to locations with appropriate skills, facilities and lower labour costs. India, for example, with its large pool of university graduates and computer programmers, has attracted the "back office" activity of a number of major corporations.

1.4 Future Trends in EPZ Development

There are a number of factors which will shape the character of future export processing zones. These include:

(i) Increasing competition for foreign export-oriented investment;

(ii) The shortening of the response time between order and delivery from months to weeks in many industrial sectors;

(iii) The reduced raw material stock levels carried by many firms. (In some Mexican border zones firms carry zero inventory and receive deliveries on a daily basis);

(iv) Considerations relating to the transfer of technology and skills, and the development of linkages between EPZs and the domestic economy;

(v) The desire to broaden the industrial base in many EPZs;

(vi) The development of regional economic blocks and the promotion of intra-regional trade, e.g. the North American Free Trade Agreement or the Preferential Trade Area for Eastern and Southern African States;

(vii) The growing importance of international service activity;

(viii) The need for and pressure to make available EPZ facilities and benefits on a countrywide basis;

(ix) The trend towards and emphasis on private-sector free zone development.

Increased competition means that only the best zones will survive and prosper. The best will be those that have a good location (i.e. good international transport and communications facilities) combined with good organization and planning (i.e. good management, efficient customs and banking procedures, etc.). The shortening of the response time between order and delivery emphasizes the importance of the latter.

The transfer of technology and skills or the development of linkages cannot be forced, but will not take place automatically either. They can however be stimulated on a medium to long-term basis, by combining and co-ordinating EPZ development with a series of policy initiatives on technology, education, training, investment financing, incentives and entrepreneurial development. A broadening of the industrial base of EPZs must take place in conjunction with skill development and investment financing.

The availability of raw materials near the EPZ may result in the establishment of industries to process those materials. Initially, the emphasis was very much on garments and electronics, due in part to the poor raw material base in for example Singapore, Hong Kong, Taiwan Province of China and the Republic of Korea. But recently established EPZs in Africa process local raw materials.

The growing importance of international service industries such as data processing, software production and back office support activity which are moving to low-cost locations makes it necessary to provide specialised telecommunications and office facilities.
The development of regional trade blocks should open up the possibility of attracting investors producing a wide range of consumer and capital goods, assuming that the EPZ industries have reasonable or preferential access to a regional market. A significant number of the investors in the new African zones are focusing on the African market.

The pressure to spread the EPZ facilities and benefits on a country-wide basis will lead to the development of satellite EPZs, single factory EPZs and efficient duty-free licence systems and bonded warehouse facilities.

The successful EPZs of the future will be:

(i) Well placed in relation to transport and communications facilities;

(ii) Well planned and managed - probably by a private sector developer, and,

(iii) supported by efficient regulatory agencies.

Activities in many Eastern European and African zones could include:

(i) Processing local raw materials for regional and international markets;

(ii) Processing a range of consumer durables and capital goods for regional markets, and,

(iii) manufacturing of garments and leather products for developed country markets.

Notwithstanding the latter, the range of activities in many new zones will be wider than in most traditional zones, where there is a very heavy emphasis (up to 90 per cent) on garment production and/or electronics assembly for European and American markets. With the elimination of quota restrictions or voluntary restraints, the traditional EPZs will need to become very efficient producers of these products in order to remain competitive.

CHAPTER 2
STATISTICAL ANALYSIS

2.1 Introduction

Part of the information on export processing zones for this study was gathered by means of a questionnaire sent through the United Nations Development Programme (UNDP) offices to all developing countries. A total of 45 countries responded. Of these, 23 acknowledged having EPZs and provided statistical information. The other 22 countries stated that they had no EPZ in operation. The questionnaire dealt with both export processing zones and bonded manufacturing systems. Information sought in the questionnaire included:

(i) Whether a country has (or is considering) an export processing zone or bonded manufacturing programme.

(ii) Statistics on growth since 1980 (a) by activity (garments, other textiles, electronics, data processing, other activities), (b) in the number of firms, (c) of output, exports, employment and raw materials sourced locally. Information was also requested on the country of origin of investors as well as on the male/female employment ratio.

(iii) Information on sites, factories, infrastructure, environment, investment promotion, working conditions and labour relations, status of women, skill development, linkages and customs procedures.

Because of the gaps in the responses which were received, the statistical information on EPZs was supplemented from other sources. These are listed with Table 2.1, which gives an indication of the scale and growth of EPZs across the world.

The absence of a universally accepted definition of EPZs or a consensus about the boundary between EPZs and other duty-free manufacturing systems is a problem. For example, Mexican maquiladoras are classified in most statistics as EPZs (among others, in publications by the International Labour Organization [ILO] and the World Bank). Mauritius is included in Table 2.1 although it could be argued that the country's system falls under the heading "other offshore manufacturing facilities". The Barbados enclave sector is classified as an EPZ by the World Bank and as "other off-shore manufacturing facility" in a 1987 ILO survey. Thailand and the Republic of Korea have small EPZ sectors, but they also have large "other offshore manufacturing" sectors operating throughout the country (similar to the Mauritius EPZ or the Mexican maquiladoras) which are not included in EPZ statistics. The same is the case in some other Asian and Latin American countries. Because of time, resource and information constraints, these anomalies could not be resolved.

2.2 Employment

Asia is the most important centre of free zone activity both in terms of the number of countries and employment. A number of features are worth noting in the Asian statistics in Table 2.1. The outstanding point is the very large growth in China over the 1980s. Another notable feature is the fall in employment in many of the older EPZ locations e.g. Taiwan Province of China, the Republic of Korea, Singapore. With the growth in real wage levels in these countries, a number of functions in labour-intensive industries in EPZs were mechanised. New knowledge and technology-based industries are being developed in science parks and other locations in Taiwan Province of China and the Republic of Korea, outside the EPZs.

Recent years have witnessed a significant recovery of the Philippine EPZ programme. This is due to very strong growth in the Mactan and Cavite zones, both located close to major cities - Cebu and Manila respectively. Growth in both these zones has more than compensated for the steady and substantial decline in activity at Bataan (located in an isolated area 150 kilometres from Manila) since 1984.

In employment terms, central America is the second most important EPZ region, due mainly to the very substantial and rapidly growing activity in the Mexican maquiladoras. Activity has recovered in El Salvador after a decline in the first half of the 1980s due to civil strife. The Costa Rican

programme is starting to make a significant impact after a slow start in the early 1980s. Activity in the Caribbean is mainly concentrated in the Dominican Republic which accounts for about 85 per cent of total EPZ employment in that region.

Free zones in Africa employ almost 230,000 people, concentrated mainly in Mauritius and Tunisia. The Moroccan figure is understated because many offshore processing facilities outside the free zone at Tangiers are excluded from the statistics. The new zones being developed in a number of sub-Saharan countries have yet to make an impact.

The male/female employment ratio varies considerably among countries. According to the questionnaire responses, the share of men ranges from 7 per cent in Jamaica to about 40 per cent in Mexico. The male/female ratio depends to some extent on the industry mix. The garment industry employs the highest number of women, followed by data processing and electronics assembly. Residual manufacturing activities covered by the column "other" in Table 2.2 employ the highest percentage of men. The share of males in the garment industry ranges from 5 per cent in Jamaica to 27 per cent in Mauritius. The average, based on data from eight countries, is 17 per cent. In the textile sector (other than garments), the share of males ranges from 13 per cent in Botswana to 72 per cent in Barbados. The average over five countries is 48 per cent. In the electronics sector the share of males ranges from 11 per cent in Barbados to 40 per cent in Tunisia, with an average of 24 per cent over five countries. The male share in the category of "other" manufacturing activities ranges from 14 per cent in Barbados to 100 per cent in Jordan, and averages 50 per cent over nine countries.

The importance of EPZ employment was examined in a 1989 World Bank study[2]. Although it complained that "very little data is publicly available on global employment and less on wages", it found acceptable data for 23 countries and concluded that EPZ employment grew faster than overall manufacturing employment in all but two countries, El Salvador and Haiti, where employment had declined for political and military reasons. It concludes that "for most countries the differences (between EPZ and non-EPZ employment growth) are startling".

The study also reviewed the importance of EPZ employment. In small countries (with a population of less than 5 million) that have significant EPZ programmes, over 40 per cent of total manufacturing employment was in EPZs. In countries with a population of 5-25 million EPZ employment was still significant: about 1 per cent of total employment. In countries with larger populations, EPZ employment is relatively insignificant, except in Mexico where the maquiladora factories employ 12 per cent of the total manufacturing workforce.

2.3 Production and Trade

Table 2.2 provides a breakdown of production in 18 zones for which UNIDO survey statistics were available. Garments and textiles account for more than 50 per cent of total output in eight zones and for 30-50 per cent in three zones. Electronics are only important in Korea and to an extent in Mexico and the Philippines. The importance of the "other" category, which would include engineering, leather products, plastics and raw material processing, is possibly overstated.

Eleven countries provided details on the amount of raw materials sourced locally. In most cases this is very little. In the maquiladoras which have developed since 1965 only 1.5 per cent of materials are sourced in Mexico. Clothing and electronics are particularly import-dependent. In Cameroon, the emphasis is on processing (mainly of food), and most materials are sourced locally. In Mauritius, the domestic value added of free zone firms (mostly clothing) is 42 per cent. This is high: the normal value added in the clothing sector in free zones is 20-30 per cent. The reason is that garment makers often use the output of local spinning and dyeing firms. In the Republic of Korea the overall percentage of raw materials sourced locally is 30 per cent.

The questionnaire provided limited information on the destination of exports. However, the information that is available confirms what seems obvious: Caribbean and central American zones depend primarily on the North American market, while the principal destination for the output of African zones is Europe. Mauritius, Morocco, Tunisia and Cameroon export over 80 per cent of their output to Europe. Turkey and Jordan do much trading with the Middle East. Fiji exports mainly to Australia and New Zealand.

---

2) Paula Holmes and Paul Meo - EPZs in Developing Countries - A Global View, 1989.

TABLE 2.1 EMPLOYMENT IN EPZs, BY REGION, SELECTED YEARS

ASIA/PACIFIC	1980	1986/7	1990/1	1992
Bangladesh	-	4,500	10,000	n/a
China	-	1,873,000	2,200,000	n/a
Fiji	-	-	10,000	11,000
Hong Kong	60,000	89,000	120,000	n/a
India	6,000	17,000	30,000	n/a
Indonesia	8,000	13,000	50,000	n/a
Rep. of Korea (i)	31,000	39,000	22,000	n/a
Malaysia	70,000	82,000	99,000	n/a
Pakistan (i)	-	2,000	3,000	4,500
Philippines (i)	23,000	24,000	35,000	54,000
Singapore	124,000	217,000	210,000	n/a
Sri Lanka (i)	15,000	48,000	80,000	104,000
Taiwan Prov. of China	79,000	89,000	72,000	n/a
Thailand	-	3,000	28,000	n/a
Viet Nam	-	-	-	-
Subtotal (excl. China)	462,000	688,500	819,000	n/a
Subtotal (incl. China)	462,000	2,561,500	3,019,000	n/a
EUROPE/MIDDLE East				
Jordan (i)	n/a	200	30	n/a
United Arab Emirates	n/a	1,300	5,000	n/a
Turkey	-	4,000	7,000	9,000
Cyprus	-	n/a	n/a	n/a
Ireland	4,500	5,000	6,000	6,000
Subtotal	4,500	5,000	6,000	6,000

TABLE 2.1 (cont.)

CARIBBEAN	1980	1986/7	1990/1	1992
Bahamas	n/a	8,000	8,00	n/a
Barbados (i)	n/a	6,000	6,000	6,200
Dominican Republic (i)	18,300	69,500	120,000	150,000
Grenada	n/a	-	500	n/a
Jamaica (i)	200	7,800	5,300	n/a
Netherlands Antilles	n/a	400	800	n/a
Saint Lucia	-	1,500	1,500	n/a
Trinidad and Tobago	-	-	400	n/a
Subtotal	18,500	93,200	142,500	n/a
CENTRAL AMERICA				
Belize	-	200	600	n/a
Costa Rica	-	90	11,200	n/a
El Salvador	6,100	2,900	5,900	n/a
Guatemala (i)	n/a	400	400	n/a
Honduras	n/a	2,600	3,000	n/a
Mexico	120,000	268,000	487,000	n/a
Panama	n/a	2,100	6,500	n/a
Subtotal	126,100	277,100	514,600	n/a
SOUTH AMERICA				
Brazil	-	-	-	-
Chile	-	2,000	8,500	n/a
Colombia (i)	-	4,000	8,500	n/a
Peru	-	-	600	n/a
Venezuela (i)	-	1,000	300	n/a
Subtotal	-	7,000	17,900	n/a

TABLE 2.1 EMPLOYMENT IN EPZs, BY REGION, SELECTED YEARS

AFRICA	1980	1986/7	1990/1	1992
Botswana (i)	-	200	1,200	1,700
Burundi (i)	-	-	-	-
Cameroon (i)	-	-	-	600
Egypt	3,000	18,000	25,000	n/a
Ghana	2,300	2,600	2,600	n/a
Kenya	-	-	-	1,000
Liberia	100	700	-	-
Magadascar (i)	-	-	n/a	4,200
Mauritius (i)	21,000	74,000	91,000	90,000
Morocco (i)	900	2,700	3,100	n/a
Nigeria (ii)	-	-	-	-
Senegal (i)	200	800	500	n/a
Togo (i)	-	-	1,000	n/a
Tunisia (i)	33,000	80,000	105,000	109,000
Subtotal	60,400	179,000	229,400	n/a
TOTAL (excl. China)	671,500	1,255,300	1,741,700	n/a
TOTAL (incl. China)67	1,500	3,128,300	3,941,700	n/a

Sources (other than questionnaires):
ILO - Export Processing Zones in Developing Countries: Results of a New Survey, ILO Working Paper No. 43, 1986; ILO - Employment and Multinationals in the 1990s, Table 2.11, ILO Working Paper no. 43; World Bank - EPZs in Developing Countries: A Global View, 1989; World Bank - Free Trade Zones in Export Strategies, World Bank Industry Series No. 36, 1990; World Bank: Export Processing Zones, World Bank Policy and Research Series No. 20, 1992.

Notes:
(i) Survey results.

(ii) Respondents which are establishing free zones. Burundi: law passed - no zone operational. Viet Nam: zone under construction.

Brazil and Haiti are included in ILO and World Bank lists. Brazil has a free zone law. A number of sites have been designated under this law but none are yet operational - its response to the questionnaire was that it has no EPZs. Haiti is excluded because its response was that it has no free zone.

2.4 Origin of Investors

Table 2.3 provides details on the origin of investors. Over 43 per cent of investors were of domestic origin and another 24 per cent were foreign/domestic joint ventures. Only 33 per cent of the projects were classified as foreign. This result belies the traditional view that EPZs are foreign enclaves. Fully foreign-owned companies dominate in only five countries.

Usually, the major source of foreign investment is rather predictable. In Africa, most investors are European. Middle East investors are important in the Mediterranean region. The United-States presence in African zones is very limited - it is concentrated in the Caribbean and central America, where investors from the Republic of Korea are also relatively important. The newly industrialized countries are the major investors in Asian zones. Australian and New Zealand are the most important investors in Fiji.

TABLE 2.2 FREE ZONE OUTPUT - SUBSECTORAL BREAKDOWN (per cent)

COUNTRY	GARMENTS	OTHER TEXTILES	ELECTRONICS	DATA PROCESSING	OTHER
Botswana	3	17	-	-	80
Cameroon	-		-	-	100
Madagascar	33	58	-	-	9
Senegal	-	44	-	-	56
Mauritius	79	4	2	-	15
Morocco	68	-	4	-	28
Tunisia	44	14	21	-	21
Mexico	5	-	45	-	50
Costa Rica	39	3	7	-	51
Barbados	16	1	5	27	41
Jamaica	77	-	-	-	23
Venezuela	9	56	-	-	35
Jordan	76	-	-	-	24
Republic of Korea	1	4	70	-	25
Sri Lanka	57	-	-	-	43
India	9	-	12	8	71
Philippines	31	5	30	-	34
Fiji		20	-	-	80

Source: Survey results.

TABLE 2.3 ORIGIN OF INVESTORS

REGION	TOTAL	DOMESTIC	FOREIGN	JOINT VENTURES	MAIN FOREIGN INVESTMENT SOURCES
AFRICA					
Botswana	17	2	11	4	Africa, Asia, Europe, United States
Cameroon	8	1	2	5	Europe
Madagascar	19	-	2	17	France, Mauritius, Hong Kong
Senegal	9	1	4	4	Europe, Republic of Korea, United States
Morocco	36	-	34	2	Europe, India
Mauritius	586	352	67	167	Hong Kong, France, United Kingdom
Tunisia	1,458	725	367	366	Europe, Middle East
Cyprus	11	5	6	-	Europe, Middle East
Turkey	297	186	23	88	Europe, Middle East
Jordan	15	9	5	1	Middle East, Far East
Subtotal	2,456	1,281	521	654	
CENTRAL AMERICA					
Mexico	634	1,139	853	642	Canada, Japan, Republic of Korea, United States
Costa Rica	88	16	65	7	Canada, Italy, Republic of Korea, United States
Guatemala	12	12	-	-	-
Subtotal	734	1,167	918	649	

TABLE 2.3 (cont.)

REGION	TOTAL	DOMESTIC	FOREIGN	JOINT VENTURES	MAIN FOREIGN INVESTMENT SOURCES
SOUTH AMERICA					
Colombia	70	41	19	10	Canada, Europe, United States
Venezuela	13	5	-	8	Europe, United States
Subtotal	93	46	19	18	
CARIBBEAN					
Barbados	124	59	36	29	Canada, Europe, United States
Dominican Republic	357	70	287	-	Panama, Republic of Korea, United States
Jamaica	14	1	13	-	Canada, Hong Kong, United States
Subtotal	495	130	336	29	
ASIA/PACIFIC					
Republic of Korea	91	30	34	27	Germany, Japan, United States
Sri Lanka	139	5	59	75	New Industrializing Countries, Japan
Philippines	187	38	117	62	Europe, Far East, United States
India	102	79	2	19	Europe, Japan, United States
Fiji	119	64	36	19	Australia, Far East, New Zealand
Subtotal	666	216	248	202	
TOTAL	6,434	2,840	2,042	1,552	

Source: Survey results.

CHAPTER 3
EXPORT PROCESSING ZONES AS A POLICY INSTRUMENT

3.1 Introduction

A World Bank paper on the entry of East Asian economies into international markets concludes that:

"...free trade zones can be very effective in the early stages of an export drive as a means of attracting foreign investors and demonstrating the country's export potential, especially in less developed countries that lack the capacity to package the critical elements needed to initiate an outward oriented development strategy. However, development of infrastructure, formulation of appropriate incentives and other elements of the work environment must be well managed. It should be noted that where outward development strategies have been sustained and reinforced as in the East Asian newly industrialised countries (NICs), the relative importance of zone exports has tended to decline as exports of other domestic industries expand under free trade status" [3].

Table 3.1, showing the trend of exports from the EPZs of Shannon and the Republic of Korea in relation to countrywide exports, illustrates this point.

TABLE 3.1 IRELAND, REPUBLIC OF KOREA: EPZ EXPORTS AS A PERCENTAGE OF THE NATIONAL TOTAL

Year	Ireland (in M IR£)			Republic of Korea (in M$)		
	Shannon	National Total	Zone as % of country	Masan	National Total	Zone as % of country
1959-63	24	149	16			
1964	14	69	20			
1965	23	81	28			
1966	32	100	32			
1967	33	112	29			
1968	35	143	25			
1969	38	162	23			
1970	40	193	21			
1971	34	220	16	1	1,067	0.1
1972	36	282	13	10	1,624	0.6
1973	47	400	12	70	3,225	2.2
1974	53	544	10	182	4,460	4.1
1975	54	617	9	175	5,081	3.4
1980	131	2,250	6	674	17,504	3.6
1986	238	6,105	4	1,149	34,714	3.3
1991	385	10,526	4	1,586	71,870	2.2

Source:
Shannon Development and supplementary information provided with the questionnaire returned by the Republic of Korea.

At a 1988 seminar on EPZs in Bridgetown, Barbados, organised by the ILO, it was pointed out that a fall in demand for EPZs and indeed their eventual disappearance were key indicators of the success of EPZs. In the Shannon zone the customs boundary posts and the surrounding fence were removed some years ago.

3) World Bank - "Managing Entry into International Markets, lessons from the East Asian Experience, Industry and Energy Series Papers, no. 11, June 1989.

Many countries which have witnessed a rapid growth of export-oriented manufacturing in recent years have acknowledged that EPZs have helped to initiate this. Developed countries, notably France and the United Kingdom of Great Britain and Northern Ireland, have also used the concept in recent years to promote industrial and trade development. In 1983, a UK government report[4] concluded that "a free zone of the classic type with a ringed fence under customs control could have special appeal and marketability" and "that there would on balance be merit in opening the way to the establishment of such free ports in the United Kingdom". Legislation, the report concluded, should "permit all forms of activity, trade, warehousing, processing and related services".

3.2 Duty-free Options for Export-Oriented Manufacturers

The primary purpose of an EPZ in a developing country is to stimulate export-oriented manufacturing development through a physical and administrative environment which allows investors to operate efficiently and compete effectively in world markets. It is one of a number of options offered to export-oriented investors. In policy terms it should be viewed as an interim solution and first step on the way to providing an efficient countrywide duty-free system for exporters.

Access to materials, equipment and other inputs at world market prices is a key factor in making export industries competitive. Duty-free schemes aiming to achieve this are generally accepted and will not lead to retaliatory trade measures from countries importing the final products. The various duty-free options include: (a) prior exemption or duty-free licences for dutiable imports; (b) bonded manufacturing or bonded warehouses; (c) duty drawbacks; and (d) EPZs.

Prior Exemption/Duty-Free Licence System

Under the prior exemption or duty-free licence system, fixed quantities of specified products can be imported duty-free for processing and re-export. Customs may require a bond or bank guarantee in lieu of duty payment. A good customs documentation system is needed which can relate imports to exports at the firm level, for the customs administration must be able to establish a reliable "rate of yield" or import/export co-efficient to ascertain whether all the imported materials have been incorporated in exported products. Countries new to export-oriented manufacturing may not have the technical or administrative capacity to do this. If import duties are an important source of government revenue, customs may initially be reluctant to accept this system.

Duty Drawback

The duty drawback system also requires the establishment of a rate of yield or import/export ratio for each product. Compared to the previous system, the risk of evasion is much less: the duty is already paid and the onus is on the exporter to claim and get a refund. Most countries operate this system. Properly administered, it is an ideal way of providing "free trade status" to new or occasional exporters, and of encouraging domestic market suppliers to export. Very often, however, there are complaints about long delays and difficulties in getting drawback. The reasons are:

(i) Administrative inefficiency due to insufficiently trained or poorly paid customs personnel, or shortage of personnel;

(ii) Bad recordkeeping by producers due to lack of bookkeepers and accountants, making drawback entitlements difficult to prove, and,

(iii) shortage of funds to pay the duty rebates or drawback.

Bonded Manufacturing

The bonded manufacturing unit is like a single-factory EPZ. The investor can import materials and

4) Free Ports in the United Kingdom - Report of a Working Party under the Chairmanship of the Economic Secretary to the Treasury, March 1983.

equipment duty-free, but may be obliged to lodge the goods in a secure store under customs control in the factory. Materials are released by customs as needed. Many countries offer this facility. It usually requires the presence of one or more full-time customs officials, depending on factory size. Bonded factory facilities are usually granted only to large companies which export all or most (i.e. over 80 per cent) of their output.

Export Processing Zones

The EPZ is a fenced-in industrial park, controlled by the customs administration and/or EPZ authority, where goods can be imported free of duties and taxes to be processed and exported. Goods moving between ports of entry/exit and the zone are sometimes escorted by customs or zone authority officials. If the zone is located near the main port of entry/exit, this is not a major problem or expense. The fence is meant to facilitate control of smuggling or illegal diversion of duty-free goods, allowing a relatively relaxed customs regime compared with bonded manufacturing or duty-free licencing. The customs administration often favours an EPZ type regime. Many investors may also prefer an EPZ (especially when there is no successful record of manufacturing under duty-free licence or bonded manufacturing regimes) in the belief that it will provide a good, bureaucracy-free operating environment.

3.3 Requirements for Successful EPZ Development

The mere fact of declaring an area to be an EPZ, establishing an authority to develop and manage the zone, and providing a large budget will not lead to successful EPZ development. A successful EPZ needs the right policy environment, location, organization and management.

Government Policy

A government policy which helps reduce the cost and improve the availability of inputs is important. The first step in reducing costs is a competitive exchange rate. Major expansion of the EPZs in Mauritius and the Dominican Republic in the 1985/90 period coincided with a major devaluation in both countries. Facilitating the operation of foreign currency accounts is the second step in reducing foreign exchange costs and making it readily available to EPZ exporters. Costs can also be influenced by policies in the areas of taxation, employment, labour and transport.

Social legislation provides an example. From the point of view of workers, laws which ensure job protection, redundancy payments, etc., are obviously desirable. From the employer's viewpoint they increase costs and reduce the incentive to employ additional workers. Benefits and costs therefore need to be carefully assessed and balanced in such a case.

Transport policies which give a monopoly or quasi-monopoly to national carriers may lead to increased costs or a lower quality of the service, or both. As with social legislation, the costs and benefits of transport policies need to be balanced. A third important policy issue relates to trade and investment finance. The availability of short-term finance at internationally competitive interest rates for working capital is important for many investors, as is long-term funding (5-10 years) for capital investment.

Location and the Role of EPZs in Regional Development

The choice of location is of critical importance for an EPZ. Poor location is usually the key factor why EPZs have failed or why their development costs were excessive. As a general rule, EPZ development should begin in the main commercial centre of a country, close to a port or airport, and spread gradually to other cities.

An EPZ location in a less developed area should not only be suitable from the point of view of transport and communications; it must also be backed up by an appropriate policy environment. Incentives for location and investments in these areas should be treated as social costs for regional development until such time as EPZ occupancy picks up, and cannot be taken into account in the conventional cost-benefit analysis of the EPZ.

It is also important that institutions be created in such areas which ensure that vocational, technical

and managerial skills are developed to a minimum threshold, because only then can joint ventures and foreign investment projects initiate a learning process whereby skills are upgraded and technologies transferred.

In the long run the processing of materials from the free zone and the manufacture of components and parts should spread the benefits of free zones over a wide area. They can thus have a positive impact on less developed rural areas, reducing rural-urban migration and helping to achieve the objective of equitable and sustainable development.

If the right conditions are not available, EPZs can become expensive failures as regional development instruments. In Thailand, in the mid-1980s, an EPZ was set up at Lat Krabang (36 hectares) on the outskirts of Bangkok and another at Lamphun (24 hectares), near the northern city of Chiang Mai. Lat Krabang was soon fully occupied while Lamphun had only one factory after two years. In Guatemala, the zone at Santa Tomas de Castilla "has been a disappointment" due in part to its location 200 miles from the capital city. Development at the Bataan zone in the Philippines, about 150 kilometres from Manila in a rural mountainous area, has been well below expectations, while Cavite (close to Manila) and Mactan (in the city of Cebu) have been very successful by contrast.
The Shannon zone is an often cited example of an EPZ used successfully to promote regional development. It was indeed an important factor in stimulating development in the western, underdeveloped part of Ireland. However, there was already an international airport with daily flights to London and New York. In addition Shannon is less than 100 miles from major ports. In other words, good international transport facilities existed before the zone was established.

Organization

EPZ organization and management includes all government and private agencies involved with the zone. The most important agencies are:

(i) The government agency responsible for promotion, project evaluation and licensing of investors;

(ii) The public or private-sector agency responsible for the physical development and management of the zone, and,

(iii) the customs administration.

An organization which can deal effectively and quickly with investors' applications and assist them afterwards, in the establishment phase, is important. Very often the difference between two locations is marginal and the location decision will hinge on minor considerations. The overall impression made by the zone organization on the investor can be decisive in such circumstances.

An inefficient or bureaucratic zone authority or customs administration which takes three or more days to clear goods will defeat one of the main purposes of the zone: a streamlined bureaucracy-free environment through which goods can move without delay.

Other Key Factors

These include:

(i) Political and economic stability: for most investors this is a most important consideration. Essentially what most investors look for is a consistent economic policy favouring private enterprise, foreign investment and export development, and a politically stable environment.

(ii) Good transportation and communication facilities: for most free zone industries (e.g. electronics, light engineering and clothing) good air connections are important.

(iii) Good physical environment. Most free zone investors are international companies with a good

reputation; as such they will look for a pollution-free environment with high standards of physical planning.

(iv) Reliable infrastructure: a reliable water and electricity supply are very important.

(v) Market access: preferential access to major markets is a very big advantage, as in the case of the South Pacific countries vis-à-vis Australia and New Zealand, and the Caribbean countries vis-à-vis the United States and Canada.

vi) Support services: basic support services such as banking and freight forwarding are essential in all zones. If a zone is seeking higher skilled engineering or electronics activities, the existence of good quality sub-contractors and spare parts suppliers is an advantage.

(vii) Labour: the cost and productivity of labour and the range of skills will, more than anything else, determine the type of industry which will be attracted to a zone.

(viii) Urban environment: if a free zone hopes to attract good quality light industry and expatriate personnel, a well-developed urban environment is important.

(ix) Existing industry: it is an advantage both to the firms setting up in the zone and the host country that a certain amount of industrial development should have already taken place in or near the proposed zone.

3.4 Trade between EPZs and the Domestic Economy

Selling free zone goods in the domestic economy is a subject which has generated a lot of discussion over the years. When the modern EPZ began in the 1960s at Shannon, followed by Taiwan Province of China and the Republic of Korea, the rule was simple: EPZs were for export industry and therefore domestic sales should not (and were not) generally permitted. Occasionally, limited domestic sales were permitted in exceptional circumstances. The law of the Republic of Korea (Article 11 of the enforcement decree) permitted the Minister of Industry and Commerce to:

"... grant permission to dispose in the tariff area commodities not produced in it, or where domestic production does not suffice the demand in the following circumstances only:

(i) where it is deemed indispensable for the national defence or for countering national disasters; or

(ii) when it is considered urgent and necessary for the national economy."

The Malaysian law allows goods to be sent into the customs territory "with the approval of the (free zone) authority - provided the authority consults the regional comptroller of customs". At Shannon up to 5 per cent of goods could be sold domestically after paying appropriate customs duties. The law of Taiwan Province of China (Article 5) states that products of manufacturing industries in the EPZ shall be mainly for export. However, a certain percentage of the annual production may be sold on the local market as if they were imported from abroad, and customs duties are levied according to law.

This prohibition or limitation on domestic sales was not a problem for most firms. EPZ firms in the 1970s had very little interest in the small markets of Ireland, Taiwan Province of China, The Republic of Korea or Malaysia; they targeted Europe and North America. There were occasional examples at Shannon (and possibly elsewhere) of free-zone firms exporting goods to a neighbouring country (the United Kingdom), and re-importing them to bypass the prohibition or limit on domestic sales. After Ireland joined the European Union in 1973, the regulations on domestic sales were brought in line with European Union regulations. Quantitative restrictions on sales in the domestic market were dropped and duties were only payable on the imported (third country) raw material content of the product. The European Union regulations are explained more fully in Section 3.5.

Recent EPZ laws often have a more liberal attitude to domestic sales. The Nigerian decree of 1991 places no limits on such sales. However, the consent of the Free Zone Authority must be obtained for them. In addition, such goods are subject to normal customs import regulations, including import restrictions and customs tariffs.

Chapter 7 of the Togolese decree on free zones of September 1989 stipulates that products made from local inputs or inputs from the Economic Community of West African States (ECOWAS) are subject only to a general sales tax when sold in Togo. Goods are defined as "obtained from local/ECOWAS materials" when 60 per cent of the quantity or 40 per cent of the raw material value is sourced in Togo or ECOWAS. Other goods using imported materials "are assessed at the rate for finished products of that tariff classification". Togolese products bought by free zone firms "benefit from the reimbursement of duties and taxes paid", but these firms can only sell to Togolese customers through a non-free zone firm in the customs territory (Article 63). If a free zone firm is authorized to sell on the domestic market and the product is also made in Togo, the product will be subject to customs duties and taxes "plus an adjustment rate set by the interministerial decree which grants the import authorization" (Article 64).

Under Article 24 of the Kenyan free zone law, goods from the customs territory brought into an EPZ "shall be deemed to have been exported and paid for in convertible currency". Goods taken from the EPZ into the customs territory "shall be deemed to have been imported" and under Article 25 shall be "subject to normal import and customs procedures and payment of import duties".

In Costa Rica up to 40 per cent of the output of free zone firms can be sold on the domestic economy, subject to the approval of the Free Zone Corporation (or EPZ authority) and the Ministry of the Economy (Article 22 of the law). This approval will be given if the free zone goods contribute to import substitution and do not affect national producers. These goods are subject to the normal import duties. However, "duty will not be paid on the amount corresponding to the cost of national components used in the product".

Article 17e of the law of the Dominican Republic allows free zone operators to sell up to 20 per cent of their production in the local market, provided that the products are not manufactured in the country and are not prohibited by law; all import duties are paid; and local materials or components account for 25 per cent of the value added.

In Trinidad (Article 18.6 of the free zone law) goods can be sold in the customs territory with the consent of the minister (for industry), and provided that all duties are paid.

Under Article 15 of the Iranian free zone law, free-zone goods can be sold in the domestic market with the approval of the Council of Ministers and subject to the payment of import duty. Iranian materials and value added in Iran are exempted from duty payment.

The Fijian law does not provide for domestic sales. Goods in a free zone may be exported, sent to another free zone, or disposed of as the comptroller of customs may direct.

Trade between a zone and the domestic economy has some other aspects. Although not always explicitly mentioned in free zone legislation, sales from domestic producers to free zone companies are normally treated as exports, and the usual export incentives are applied. Most countries have arrangements for temporary imports of free-zone goods into the customs territory for repair or manufacture. The processing of free-zone materials in the domestic economy (sometimes called outward processing) is one way of spreading the benefits of free-zone development. Transferring work to subcontractors, often far away from the zone, has many advantages for the national economy, including development of rural areas, reduced rural/urban migration, and better use of existing infrastructure. It follows therefore that procedures for these temporary imports should be as simple as possible.

The reverse process (temporary export) should also be facilitated on occasion. EPZ firms may have technical facilities not available in the domestic economy (firms at Shannon in the 1960s e.g. had advanced machine shop or tool room facilities). Firms outside the zone should be able to use such facilities. This means that procedures must allow for the temporary export of materials or equipment from the domestic economy to the zone.

POLICY CONSIDERATIONS

In formulating policies and regulations for trade between a zone and the domestic economy, the main points to consider are:

(i) the evolving nature of EPZ trade;

(ii) the general attitude to regulation and deregulation;

(iii) the placing of EPZ companies on par with other foreign companies selling in the domestic market;

(iv) ensuring that free zone companies do not have an advantage over domestic companies on the home market, and,

(v) facilitating contact and business relationships between EPZ companies in the domestic economy, to promote the transfer of technology and maximise linkages.

EPZ investors operating in European and Asian zones had little or no interest in the domestic market before the 1980s, as noted above. Their focus was North America and Europe. Restrictions or prohibitions on domestic market sales were not an issue. Today, in Africa and South America especially, some investors will use zones as supply bases for regional and domestic markets. In such circumstances access to the domestic market for at least part of an investor's output is important.

The attitude towards regulation of the economy has changed significantly in the last 10 years. The current attitude is that the market is for the most part the best way of regulating economic activity. Only when there is clear evidence that the market mechanism is not functioning properly, or producing socially undesirable results, should the government intervene and regulate activity. This viewpoint should apply in free zones no less than elsewhere in the economy.

Investors in free zones are granted privileges and incentives to help them compete with foreign-based manufacturers in various export markets. But it is also logical and desirable (from a national economy viewpoint) that a country's free-zone investors should not be put at a disadvantage vis-à-vis foreign producers in the domestic market. In any country, foreign firms must comply with quotas and import regulations and pay customs and other tariffs; but they do not have to get permission from a ministry or free-zone authority to sell their goods. Free-zone investors however often need such permission, which places them at a disadvantage.

Operating conditions and incentives are often better for foreign and EPZ firms than for producers operating in the domestic economy. In the short term, it is reasonable for domestic producers to ask for some compensation or protection from direct competition with free-zone and foreign producers e.g. through tariffs. In the longer term, the logical solution is to create conditions (in terms of infrastructure and a bureaucracy-free environment) in the domestic economy which compare to those in a free zone.

Normally, producers who target the domestic market will opt for a location within the tariff area rather than a free zone location, if the latter means paying duty on the finished product. It is however not impossible that manufacturing costs in a free zone are much lower than those in the domestic market or tariff area and this would more than compensate for tariffs paid by the free zone producer.

The laws of the market can be relied on in most situations to regulate the percentage of total sales from a free zone to the domestic market. On balance, the most suitable arrangement would usually be to treat EPZ sales during the first 15-20 years of operation as imports, with duty payable on the full value of the finished product. This is done in most countries. There should however be no regulation or restriction on domestic market sales. This system, which is easy to operate, puts EPZ investors on a par with investors outside the customs territory.

In time, conditions and incentives inside and outside a free zone should be equalised as infrastructure and customs administration (including duty drawback and duty-free licence schemes) are developed countrywide. The government can then consider adopting a system whereby EPZ

investors selling in the domestic market would pay duty only on the imported raw material content of the product. The need for special arrangements in the form of free zones would then disappear.

3.5 EPZs in Free Trade Areas or Customs Unions

A free trade area or customs union is in many ways an enlarged domestic market. It is logical therefore that the relationship between the free zone and the free trade area or customs union should be similar to that between the free zone and the domestic market. To date there are few free zones operating in such areas or unions. Most free zones are in Asian or central American countries which are not members of a customs union. The best known examples of free zones in a customs union are those which operate in the European Union.

A basic principle of the European Union is free and fair competition. Anything which distorts or restricts competition is prohibited. Article 85 of the Treaty of Rome establishing the European Economic Community (EEC) provided that all "agreements, decisions and practices" which prevent, restrict, or distort trade or competition shall be prohibited as "incompatible with the Common Market".

Over the years the European Union has established common rules and regulations for a whole range of economic activities, including free zones. Procedures may vary from zone to zone, or country to country, but the principle of free and fair competition must operate. No free-zone firm can have a competitive advantage, however small, over other firms. Under European Union regulations, investors in a free zone pay duty on imported non-European-Union machinery and equipment, just as other firms. All firms pay duty on imported raw materials incorporated in finished products sold on the European Union market. Therefore, while free zones exist in a legal sense, there is very little difference between operating conditions inside and outside the zones.

Shannon provides an example. Most investors coming to Ireland (or other European Union countries) seek a location inside the European Union tariff wall to gain duty-free access to the European Union market. The Shannon free zone as such has no relevance for them. Some opt for Shannon for reasons such as proximity to an international airport, good infrastructure or a highly skilled workforce. Shannon-based firms which target European Union markets (about 75 per cent of the licensed investors) pay duty on imported raw materials at the point of import and are subject to no further customs controls. From a customs point of view, they operate as normal firms.

The issue of free zones in trade blocks has also been discussed by, among others, the Gulf Co-operation Council and MERCOSUR in South America. If a free zone is outside the domestic market for customs purposes, it is logically also outside the free trade area or customs union. Sales within the area would therefore be treated as imports subject to duty. Investors selling most of their output within the area will therefore choose a location outside the zones, and there will be little use for a free zone if this type of investment dominates. This is the case in e.g. the Southern African Customs Union (SACU). Investors setting up a manufacturing base in a member state like Swaziland or Namibia are likely to sell most of their output in SACU, and particularly in the Republic of South Africa. An EPZ would therefore have very limited relevance. A free trade zone in or close to one of the major ports may have potential as a packaging and transshipment centre.

CHAPTER 4
FREE ZONE MANAGEMENT

4.1 Introduction

A number of factors are to be considered in setting out a management and organization structure for an EPZ.

(i) An EPZ means granting privileges to investors (the right to import machinery/raw materials free of duties and taxes). Only the government or a government-sponsored authority can grant such privileges. It does so via a licence or permit. Users of other duty-free systems (bonded warehouses and duty-free licence systems) must also get a licence or permit.

(ii) An EPZ normally means the development of a limited geographic area (usually 40 to 80 hectares) as an industrial park and the management of the property. This activity can be performed by the state or private sector.

(iii) Most of the functions related to the development of a zone require regular continuous contact between the management and the investor community. This requires an ability to operate in a business-like manner. Where the developer is a private sector organization this is not a problem. If it is a government-sponsored agency, it must have the necessary flexibility to act in a such a manner. Accordingly, most public-sector free-zone development is undertaken by parastatals which have ample operational autonomy, and their own board of directors to enable them to operate in a business-like manner.

(iv) The phrase "one-stop shop" is often used in relation to free zone development. This means that all the decisions in relation to an investment project should be made in one place and ideally by one agency, i.e. the zone authority. The Board of Investment in Sri Lanka is a good example of a one stop agency.

(v) There is a need to control the movement of duty-free machinery and materials to ensure that such goods are not illegally diverted to the domestic market. Yet the controls must be such that goods can move quickly between the zone and foreign destinations.

(vi) A number of different government departments or agencies, some with apparently conflicting attitudes and functions must work in harmony if a zone is to operate successfully. This requires co-operation between equal partners, or an agency with overall responsibility, or the handing over of responsibility for various activities (responsibility for building permits, factory inspections etc.) to an independent free zone authority.

At the Shannon zone there has always been effective co-operation between the various agencies or institutions responsible for the promotion and administration of the zone: the zone promotion agency, the municipal authority responsible for building permits and environmental standards and the customs administration.

In the East Asian zones (e.g. in the Republic of Korea, Taiwan Province of China and Sri Lanka) the emphasis is on a strong zone administration. It has responsibility for the promotion and operation of the zone and for supervising other agencies operating in the zone. In some of the recently established African zones, lack of co-operation between the zone authority and other agencies with functional responsibilities (especially the customs administration) is causing problems.

(vii) The private sector is taking over traditional government functions, especially in the area of infrastructure development and including free zone development, in many parts of the world.

4.2 Organizational Approaches

The approach to EPZ organization differs strongly between countries. At one extreme there is the successful Mexican maquiladora programme, initiated in 1965, which has evolved over the years and has been promoted and developed largely by the private sector. At the other extreme there are successful East Asian examples (the Republic of Korea, Taiwan Province of China and Sri Lanka especially) of powerful government-controlled free-zone authorities which developed and managed zones. There are many variations in between.

Most countries have a specialized EPZ authority to oversee and sometimes plan, manage and develop the whole EPZ programme. Its designation ranges from the traditional and most commonly used "EPZ authority" to "corporation" (e.g. the Free Export Zone Corporation of Costa Rica); "council" (e.g. the National Free Zone Council in the Dominican Republic); "directorate" or "administration" (e.g. the Free Trade Zones Directorate or Administration in Turkey); and "limited company" (e.g. the Shannon Free Airport Development Co. Ltd.).

Mexico

The Mexican in-bond or maquiladora programme began in 1965 using existing regulations. Under this programme the Mexican government permitted the establishment of in-bond factories within 20 kilometres of the United-States/Mexican border. In 1972, the government allowed investors to go beyond the border area and establish plants in many parts of Mexico in which materials, imported free of duty, could be processed for export. Under the United-States tariff code, United-States materials incorporated in Mexican products are not subject to customs duty when imported into the United States. Duty is charged only on the value added in Mexico and on non-United-States raw materials. Combined with political stability and proximity to the United States, this has made Mexico a very attractive off-shore location for United-States investors.

There were difficulties in the early years. Municipal authorities and private sector investors had to eliminate bureaucratic and customs problems. This allowed the Grupo Bermudez (one of the main private-sector zone developers) to clear shipments through customs in very short time. Industrial parks for maquiladora firms had to be established through joint municipal and private efforts as well.

In August 1983 the Mexican government for the first time introduced a decree dealing with the promotion and operation of maquiladora plants. The procedure for approving applications and establishing in-bond facilities was simplified, and the co-ordination between the various agencies involved in the programme was improved. It was superseded by a decree issued in December 1989.

Over the past 30 years the growth of maquiladora activity has been significant. Since 1970, the annual growth rate has been around 15 per cent. This is an impressive figure in a country where per capita income fell from US$ 2,300 in 1981 to US$ 2,000 in 1989. The key factors in the success of the programme were proximity to the United States, the large disparity in wage rates (and labour costs) between the two countries, and the enterprising attitude of the Mexican municipal authorities and private sector industrial park developers. They saw an opportunity, took a risk, developed parks complete with infrastructure and support services to attract United-States (and later Far East) investors, and helped them to establish themselves in Mexico. The Mexican private sector organization responsible for developing and managing the zone even established a "shelter programme" to attract investors reluctant to commit investment or management resources. Under this programme, described in more detail in Section 6.4, it takes care of the management and operation of the enterprise.

Mauritius

The Mauritian EPZ law passed in 1970 did not envisage the establishment of an EPZ authority. Section 3 provided that "the Minister responsible for Commerce and Industry (now the Minister for Industry and Industrial Technology) may ... declare (a) any area of land ... or (b) any factory ... to be an EPZ". Section 4 provided that every EPZ should be bonded. Investors' applications for export enterprise certificates (i.e an EPZ licence) are made to the Ministry. These are reviewed by the Industrial Development Committee in the Ministry, which make recommendations to the Minister.

Land and buildings are provided by various organizations. The Development Bank of Mauritius (DBM) has provided factories since 1969. Since 1984, the Mauritius Export Development and Industrial Authority (MEDIA) has not only promoted investment, but also erected and managed industrial estates. A number of investors have erected their own buildings. Sugar factories, disused cinemas and other such buildings have been converted to EPZ factories.

The Mauritian EPZ programme has in many ways been an outstanding success. Unemployment, which reached 30 per cent in the 1970's, is almost zero and per capita income - over US$ 2,700 - is nine times that of most African countries. Over the last 20 years, EPZs have ranked alongside the tourism and sugar sectors as one of the three pillars of the Mauritian economy. Key factors in the successful development of the sector were:

(i) The traditional links between Hong Kong and Mauritius, especially in the 1970's (Hong Kong was an important source of investment in Mauritius at that time).

(ii) The existence of a core of business people in Mauritius with initiative and capital. Much of the capital came from profits of the sugar industry. Today, wholly domestically-owned enterprises account for around 60 per cent of the EPZ companies. Another 30 per cent are joint ventures and 10 per cent of companies are foreign-owned. Some of the largest groups in the island are domestically owned and controlled.

(iii) A reasonably good infrastructure.

(iv) A well-educated, bilingual (French and English), multi-cultural workforce.

(v) Traditional links with and duty-free access to the EEC market, especially the United Kingdom and France. Mauritius has access to the EEC through the Yaoundé Convention.

The Mauritian EPZ is not a single, fixed and circumscribed area because there was no area large enough for the purpose (Mauritius is only 2,000 square kilometres large, and most land is covered by sugar plantations), and because fully-serviced industrial buildings were only becoming available in limited numbers in the Plaine Lauzon when the law was passed[5]. Industrialists were therefore allowed to establish EPZ factories anywhere, provided adequate infrastructure was available.

To cope with the EPZ development programme, the Ministry of Industry and Commerce was re-organized, acquiring a project evaluation and formulation group to process applications quickly; a data collection group; an industrial promotion group; and a foreign trade division.

The Mauritius EPZ programme achieved success quickly. There were 66 firms employing 10,000 people in 1975, increasing to 146 enterprises and 26,000 workers in December 1983. Since then, growth has even accelerated. At the end of December 1991 there were 586 companies employing 91,000 workers; exports exceeded US$ 800 million annually - almost US$ 9,000 per worker.

Despite the very successful performance of the EPZ sector, a 1991 government report[6] commented that:

"...it is common knowledge that the starting of a firm is a lengthy process and that administrative bottlenecks and red tape continue impeding the smooth progress of industrialisation. This dilution of authority, cumbersome administrative networks, and fragmented legislation with ill defined responsibilities, have been identified as leading to environmental degradation".

Another government-sponsored report[7] points out that "after several years of intense industrialisation and other economic activity, Mauritius is increasingly aware of the costs to the environment". This "degradation of the environment stems largely from haphazard development, poor planning, weak legislation and diluted authority".

---

5) See G. Esser - "Export Processing Zones in Mauritius", paper presented at an EPZ seminar, Shannon 1977.

6) Ministry of Industry and Industrial Technology - Mauritius at the Cross-roads The Industrial Challenges Ahead, 1991.

7) Government of Mauritius - The State of the Environment in Mauritius, July 1991.

An effective "one-stop shop" procedure is one solution to the administrative difficulties. The report quoted first gives some examples of these:

- The Greater Colombo Economic Commission, now the Board of Investment (BOI), in Sri Lanka, where an investor can commence operations once authorization or approval has been received from the BOI. This usually take 2 to 6 weeks;

- The Singapore Economic Development Board, which provides a comprehensive and effective support service for investors, and,

- the freedom and simplicity of Hong Kong's concept of the "one-stop shop" which has direct liaison procedures with 23 government departments and organizations and offers an effective "after-sales service".

The Republic of Korea

In East Asia the free zone administration has very considerable powers within the zone and has the task of ensuring that all other government agencies perform effectively. In the Republic of Korea the Minister for Industry and Commerce has overall responsibility for free zone development. He is advised by an inter-ministerial "Deliberation Committee". A number of other ministers have delegated various responsibilities to the Minister for Industry for reasons of efficiency.

In charge of each free zone is a Free Export Zone Administration Office established by the Ministry and headed by a Director General. There are offices of various other government agencies in each zone, including customs, port office, emigration office, labour department and police. The Director General has the responsibility to supervise the other administrative agencies in the EPZ. In this way the exporter is assured of an effective one-stop shop service. If any of the administrative agencies are slow or inefficient, the Administrative Office has the authority to act.

Sri Lanka

The EPZ programme in Sri Lanka began in 1978 with the development of a 200 ha. zone at Katunayake across from the international airport in Colombo. This was followed in 1986 by a zone of 180 ha. in Biyagama. A third zone was established in Koggala close to the port of Galle in southern Sri Lanka in the early 1990s. From the beginning, EPZ projects could also be located outside designated zones for technical or economic reasons. By 1992 about 30 such projects were established. On 6 November 1992 the whole country was declared an EPZ. The zones are all public enterprises, modelled, according to Sri Lankan zone officials, on the Shannon EPZ concept.

Over 100,000 people are currently employed in free zone factories. Employment has expanded steadily. In 1980 employment exceeded 10,000, a good start by any standard; it increased to over 50,000 in 1988. EPZ exports as a percentage of the national total went from 3 per cent in 1980 to about 25 in the mid-1990s. Initially, exports consisted primarily of clothing, but dependence on this industry has gradually decreased. In 1984, garment and textile exports accounted for 81 per cent of the EPZ total; today, they account for around half the total. Jewellery (including cut and polished gems and diamonds); electrical and electronic products; fabricated metals; footwear and leather products; and polyvinyl chloride products are all significant export items. Government investment in EPZs is around US$ 35 million.

An innovation introduced by the government which contributed to the success of the EPZs is the offshore banking units. These arose from the need to supplement foreign finance flows to the EPZs. These units can accept deposits from non-residents, including Sri Lankans working abroad. The deposits are used to fund the working capital requirements of zone enterprises, including pre- and post-shipment finance.

The EPZ authority, called the Board of Investment, has extensive powers. Sri Lanka has probably gone further than any other country in providing a one-stop service for investors. At the project feasibility stage, the Board meets the potential investor and introduces him to the various ministries,

agencies and other investors. It recommends legal, accounting and engineering consultants and raw material sources. Once it has approved the project, no other approvals or permits (building permits, public health approvals, etc.) are needed. The Board is also responsible for monitoring discharges from factories and protecting the environment. During the establishment and operating phases, the Board provides an extensive range of support services. Visas for expatriate personnel are recommended by the Board and issued the following day by the Department of Immigration. The Board can also provide a serviced EPZ site and advise or assist the investor in sourcing whatever he needs - labour, accommodation, schools for expatriate children, etc.

With regard to imports and exports of equipment and materials, the Board works side-by-side with the customs administration. It issues import permits through its Investor's Services Department. There is a fast-track procedure (24 hours) for removing goods from the port of entry to the investor's premises. Inspection and verification of cargo takes place in the factory with Board and customs officials responsible for checks. Approval and monitoring of local sales and subcontracting is also a responsibility of the Board of Investment.

THE DOMINICAN REPUBLIC

The free zone programme in the Dominican Republic began in 1969 and has developed gradually since then. In 1981 there were 89 enterprises employing 21,000 people; by the end of 1992 there were 425 enterprises and 150,000 employees. The EPZ authority functions as a promotion and regulatory agency with limited involvement in the operational aspects of the zones. There are 26 free zones in the Dominican Republic - 10 private and 14 public zones, of which 12 are operated by the State Industrial Development Corporation (CFI) and two by the Sugar Corporation. There are two public/private sector joint ventures.

The agency responsible for the overall promotion, development and regulation of the free zone programme is the National Free Zones Council, a parastatal organization with a Board of Directors chaired by the Ministry for Industry and Commerce. The Board includes representatives from the Ministry of Finance, the Customs, the Central Bank and various government investment and promotion councils. There are also two representatives each from the free-zone operators group and from the investors.

The National Free Zones Council has a number of functions, including:

(i) Making recommendations to the government on the establishment of free zones;

(ii) Reviewing and approving (or rejecting) applications from investors to establish projects in free zones;

(iii) Formulating policies for the promotion and expansion of the free zone sector, and,

(iv) regulating and defining the relationship between the various elements involved in the development and operation of free zones, including free zone operators, investors and the Council.

Most of the promotion and servicing of investor requirements is undertaken by the free zone operators, especially the private sector operators. According to the Vice-President of the privately-run San Isidro zone "promotion is one of our most important activities"[8]. He also stresses the importance of customer service: the zone developer should provide a number of services including recruitment, payroll administration, maintenance and customs brokerage.

8) José Ceron - "Free Zones: Business Opportunity and Engine of Development", paper presented at a conference of the Foreign Investment Advisory Service, Washington D.C., September 1989.

Costa Rica

The Costa Rican free zone programme began with the Free Zone Act in 1981. Progress in the first five years was slow. By December 1986 there were 11 investors employing 879 people. In 1992 there were 10 zones in operation, most of them privately owned, with 88 investors employing over 11,000 people.

The Free Zone Export Corporation established and controlled by the government is responsible for the promotion, development and regulation of free zones. The Corporation is headed by a Board of Directors with the Minister for Trade as chairman. Other directors include representatives of the Chamber of Industries, export groups and local government representatives. The Corporation's tasks include:

(i) Reviewing applications from investors to establish projects and free zones;

(ii) Establishing and developing free zones;

(iii) Granting permission to private developers to build and manage free zones on sites approved by the government;

(iv) Supervising the operation of private free zones;

(v) Co-operating with other government agencies (Customs, Health) in the development and supervision of free zone operations.

Kenya

In sub-Saharan Africa a number of countries have considered the free zone option in recent years. The Kenyan programme is one of the most advanced of the "new wave" of African zones. An Act providing for the establishment of EPZs and an Export Processing Zones Authority came into operation in November 1990. The Authority is a parastatal organization with a Board of Directors drawn from the public and private sectors. Its main functions (as set out in the Free Zone Act) include:

(i) Making recommendations to the Minister (for Finance) on EPZ sites;

(ii) Examining and processing licence applications from zone developers and investors and issuing relevant licences;

(iii) The development and administration of zones;

(iv) Issuing certificates of origin;

(v) Acting as a one-stop shop" for processing applications and permits not handled by the Authority;

(vi) Processing building plans in consultation with the Ministry for Physical Planning.

At present one privately-owned free zone is operational in Nairobi (Sameer Industrial Park Ltd., a subsidiary of the Firestone East Africa Corporation), and there are two zones which were developed by the Zone Authority - one at Athi River near Nairobi and one in Mombasa. Three other privately owned zones are being developed. The Sameer zone had 16 enterprises and 1,500 employees in December 1992.

4.3 The Role of the Private Sector

The private sector can be involved at three different levels in the EPZ development process. It can be represented in the board of the EPZ authority. Such membership can include (if the law so prescribes) official representatives from the Chambers of Commerce and industrial or export associations. In addition, the relevant minister can also appoint individuals from the private sector whose contribution would be based on their experience or background. A minister, for example, might appoint a university professor to promote increased interaction between the zone authority, zone industries and the university, to facilitate technology transfer and promote research and development.

At Shannon, for example, the interaction between zone industries, the Zone Authority and the Technological University in Limerick, 15 miles from Shannon, was a key factor in raising the level of technology and research and development. This was facilitated by overlapping board membership. Zone industry executives were appointed to the board of both the University and the Zone Authority. The Chief Executive of the Zone Authority was Chairman of the University Board. The President of the University is a member of the Zone Authority Board.

At the level of the zone development and operation, the private sector is becoming increasingly involved. In the 1970s, private-sector involvement in zone development was a rare exception. At present, more than half of the zones which are being developed are private-sector zones. The zone investors, of course, are exclusively private businessmen.

The arguments for increased private-sector involvement, especially at the developer/operator level, are based mainly on the disappointing experience of some public-sector zones. The Santo Tomas de Castillo zone in Guatemala, for example, stands virtually empty due to poor location, poor management, and a lack of comprehensive measures to support free zone industry. In some public-sector zones factory space and utilities are subsidized and their badly paid and unmotivated administration provides poor management. This has led to criticism that the cost of zone development often outweighs the benefits.

A frequent response to such criticisms is to suggest that the private sector undertake the development. Government and taxpayers are spared the costs and financial risks associated with development, yet the whole country benefits from the increased employment and foreign exchange earnings if the zone is successful. The private sector is often better than a poorly paid and motivated public sector in promoting, developing and operating zones. A private developer is more motivated (and better rewarded financially if successful) and more in tune with the needs of investors than his government counterpart.

The evidence is that many private zones in central America and the Caribbean have outperformed public zones, even though some of the public zones have offered facilities at subsidised rates. The Itabo and San Isidro zones in the Dominican Republic, the Cartago zone in Costa Rica and the Free Port zone in the Bahamas have "consistently outperformed publicly subsidised zones in their respective countries"[9]. The World Bank is a strong advocate of private free zone development: "Private development and management of EPZs is to be encouraged and where the public sector is involved, special arrangements ought to be put in place to ensure full cost recovery and efficient management"[10].

4.4 The Role of Government

While there is a growing emphasis on the role of the private sector in zone development, the government has an important role to play at a number of levels. As already highlighted in Section 3.4.1, the government must create a suitable policy environment if the EPZ programme is to succeed. The government must also create the regulatory environment in which the zone developers and investors operate. It must also ensure that the EPZs do not remain isolated enclaves but are an

9) Philip Karp - "Free Zone Experiences in the Caribbean and Central America: Implications for Africa", paper presented at a FIAS conference on investment promotion in Africa, September 1989.

10) World Bank - Export Processing Zones, World Bank Policy and Research Series No. 20, March 1992.

integral part of a policy to develop a modern industrial sector. The government must adopt a balanced, pragmatic approach to developers, especially in the case of a first zone. A developer may seek exclusive rights to develop a zone in a selected city or region, or may seek a lease on a prime site. Exclusive rights or leases must be conditional: the developer should commence operations within a fixed time limit; certain leasing or employment targets should be achieved; and prices charged by the developer for the sale or lease of sites should be subject to a limit. Such conditions are not necessary if the developer does not have exclusive rights and prices, and development schedules are determined on the basis of market demand.

In the absence of private developers with the required resources and technical experience, the government itself will have to undertake the development. This is not a major problem provided commercial discipline is enforced. It is essential, however, that the location is a good one without major offsite infrastructure costs, and that first-phase development is modest in scale.

Frequent criticisms of EPZ development are the emphasis on low-skill, low-cost assembly activity and the limited technology transfers. But most zones are in developing countries or regions where industrial skills are scarce. In developed economies, EPZs are usually not needed. It follows that the type of investment attracted to zones in developing countries will be in activities which require few industrial skills, such as assembly. A government can stand back from the situation, as some Caribbean governments have done, and allow the cycle of low-skill assembly activity to continue indefinitely. Alternatively, it can encourage a gradual evolution in the zone to high-technology activity, as in Ireland, Singapore, Taiwan Province of China, and the Republic of Korea. Government initiatives in these countries included:

(i) Matchmaker-type programmes where components and raw materials used in the zone are compared with those that can be made domestically. Potential domestic suppliers and possible obstacles are identified, and over time an increasing share of raw materials, components and services sourced domestically.

(ii) Allied to the matchmaker programme: measures to improve the skills of the workforce at all levels (the manufacture of components often requires high-level skills) and facilities for product development and testing.

Many of these initiatives were the outcome of forums where zone investors, promotion agencies, the zone administration, training institutes and technical universities discussed such issues and proposed solutions. The initiatives should be backed up by adequate training and higher education facilities to ensure that the necessary skilled labour and technical expertise is available.

4.5 Control of Zone Activity

Freedom and absence of bureaucracy are essential for EPZs. Therefore controls within a zone should be limited to the minimum. Such controls include:

(i) Ensuring that firms engage only in the activity for which they are licensed and approved.

(ii) Approval and supervision of building plans.

(iii) The protection of the environment against pollution.

(iv) Ensuring that investors behave as good neighbours and adhere to regulations on noise, parking and storage of dangerous substances, etc.

(v) Preventing duty-free equipment and materials from entering the domestic market illegally.

(vi) Ensuring that workers have a good working environment with good conditions of employment.

(vii) Currency controls.

Items (ii), (iii) and (iv) are physical controls covered in more detail in Chapter 7 on physical planning. The control of investor activity is a matter for the zone authority and/or the minister responsible for zone development. Control of activity is normally achieved through conditions attached to the investor's licence or permit, or through a set of by-laws. The Free Zone Act should include a provision for revocation or cancellation of a licence or permit for serious breaches of the conditions attached to it, e.g. if an investor is consistently engaged in an activity not permitted by the licence, or is convicted of a serious offence against the customs regulations or violations of environmental regulations or standards.

It is usually the responsibility of the customs administration to prevent duty-free equipment and materials from entering the domestic market illegally, although the zone authority may also be involved. The normal method is through control of stock accounts. Each investor is usually obliged to keep a record of all goods received, production schedules showing the quantity of raw materials incorporated in each product, and records of goods sold. The requirement to keep such accounts can be part of the law or a condition in the operating licence. Permission for domestic sales is the responsibility of the zone authority or the relevant government ministry (see Section 3.4). Responsibility for inspecting stock accounts may rest with the zone authority or the customs.

Foreign currency controls in most zones are relaxed. Investors are normally allowed to operate foreign currency accounts with minimal control or supervision. The main concern of the host government is that domestic expenditure (wages, salaries and local purchases) is paid with foreign currency brought in through proper channels and exchanged at the official rate.

4.6 Zone Customs Administration

The customs administration in many countries has a reputation (deserved or otherwise) for being corrupt and bureaucratic. A corrupt administration can add considerably to operating costs. A study of the Jakarta EPZ[11] calculated that unofficial levies associated with customs clearance added 7 per cent to import and 2 per cent to export values. An article on EPZs in the Dominican Republic[12] states that problems with customs added 2.5 - 5 per cent to operating costs. Inefficient or corrupt customs have been cited as important factors in the lack of success of some zones.

The customs administration is normally a very powerful and relatively independent part of the Ministry of Finance, and the issue of its responsibilities is often a difficult one. If it is responsible and efficient, it can handle the customs administration of the zone as an independent authority working with the zone authority. If for some reason the government believes that the customs department may not be capable of handling this responsibility, it is faced with a difficult decision: it can give the zone authority a supervisory role over customs, as in the Republic of Korea and Taiwan Province of China; it can give the zone authority joint responsibility with the customs department, as in the Philippines and Sri Lanka; or it can establish a new division in the customs department with specially trained personnel, as in the Dominican Republic.

Assuming that it is responsible and efficient, customs should be involved from an early stage in the planning of the zone, including the drafting of legislation and regulations. Senior personnel should visit successful zones with other zone administrators. In some cases the customs department has been involved at a very late stage, presenting it with a fait accompli in terms of legislation. This is unlikely to make the customs department cooperative.

Proper training of customs personnel is also essential. The traditional attitude in a customs department is preventive. Some staff are in fact known as preventive officers: they prevent goods from entering the country on which duty is not paid, or which are prohibited. There is much emphasis on classification of goods and correct documentation in the normal work of customs.

---

11) Peter Warr - The Jakarta Export Processing Zone: Benefits and Costs, Bulletin of Indonesian Economic Studies, December 1983.

12) Raphael Kaplinsky - Export Processing Zones in the Dominican Republic: Transforming Manufactures into Commodities, World Development pp. 1851-1865, 1993.

A free zone requires a different attitude. A customs officer must facilitate the flow of goods, not prevent it. If documentation is incorrect, goods should still move; documents can be corrected later. With modern "just in time" production methods and short delivery times, such an attitude is more important now than 10 years ago. At present, one to three days is needed on average in most zones for the movement of containers from the port of entry to the investor's premises. Ten to twenty steps may be involved in clearing goods. Sometimes the consignment must be accompanied by a customs or zone guard from the port of entry to the zone. This may cost time and money. Within the zone, an investor may have to wait 24 hours or more for a customs inspector to arrive and supervise the unloading of the consignment. Ideally, goods should be delivered to a factory premises within 24 hours of landing. This of course necessitates streamlined procedures for moving goods between the port of entry/exit and factories.

4.7 The Organization and Management of an EPZ Programme

Organizational structure must take account of the circumstances and the country in which the zone operates. If the zone is just an administrative concept, the programme can possibly be managed by existing institutions. Minor modifications may be needed: the Ministry of Industry may be given a co-ordinating or supervisory role, or a national industrial development authority may be created which reports to the Ministry. Fiji, Mexico, Barbados (with its enclave sector) and Mauritius all operate administrative-type EPZ systems without a formal authority.

Most countries using the physical EPZ concept have a formal EPZ administration, usually an EPZ authority with a Board of Directors appointed by the Minister. Its power and responsibility depend on the perceived weaknesses in the administrative system and the importance which the government attaches to the EPZ programme.

There is widespread agreement among international organizations that the private sector should be involved as much as possible in development and management. This begins with representation on the board of the authority. Whether the private sector should have a majority on the board is a matter for debate. If private sector developers are willing to build and manage EPZs, they should be supported by the authority - assuming that they have the experience, finance and business reputation to successfully complete the project.

The government is usually the catalyst in initiating the free zone idea, undertaking feasibility studies, passing legislation and establishing the free zone authority. In the absence of private sector interest in developing zones, the government will have to develop and manage the zones through the authority. In addition, the government may have to persuade various agencies or departments under its control - the customs, immigration, physical planning, etc.- to co-operate in ensuring the efficient development and operation of the zone.

To prevent delays, inefficiency and unnecessary red tape, it may sometimes be necessary to transfer power or responsibility from government agencies to the EPZ authority with regard to physical planning; recommending visas for foreign personnel; supervision or partial control of customs administration; and issues such as labour, health and environment.

CHAPTER 5
LEGISLATION

5.1 Introduction

Legislation sets out the basis for the development of an export processing zone, in particular the basis for the relationship between the different organizations or groups which have an interest or an involvement in the zone. Different groups will emphasize different issues. Sometimes this can lead to direct conflict.

The two main groups involved in zone development are the government and the private investors. Within the government, there may also be agencies whose interests do not always coincide. These include:

(i) The agency or ministry responsible for economic/industrial development and export promotion, possibly represented by a single ministry for economy, industry and trade. (If there are separate ministries, there may be competition among these for the right to control EPZ development).

(ii) The customs administration, often represented by the Ministry of Finance. Its concern is that duty-free goods do not enter the domestic market. The Ministry of Finance may also be reluctant to grant tax holidays, which are a feature of many EPZs.

(iii) The Central Bank, which is concerned with the movement of foreign currency, may adopt a positive or negative attitude. The negative attitude, which is more a feature of the 1970s than the 1990s, would focus on whether or not there would be a drain on foreign reserves. The positive attitude is that the free zone will add to the volume of the country's external reserves.

(iv) Physical planning and environmental protection agencies. These want to ensure that proper planning guidelines are followed and the environment is protected. To date, free zones have caused few planning or pollution problems. Most industries (e.g. garment production and electronics assembly) use dry processes and produce only domestic effluent (standard waste water). However, some (e.g. dyeing of fabrics and stone washing of jeans) use large quantities of water. These can cause serious pollution if appropriate measures are not taken. Production of printed circuit boards leads to chemical wastes which must also be handled properly. Engineering processes leave metal particles in the effluent which must be chemically treated.

(v) The economic planning agency may take a positive or negative attitude. The latter was prevalent in 1970s in the Indian sub-continent and the Caribbean, where the economy was under strong government control. Free zones were considered to be for foreign investors. It was believed that concessions should be minimal. No domestic investment was to be allowed in the zones and the emphasis was to be on high-tech investment. Planners may however also take the positive view that a free zone is a key part of the country's economic development strategy, and may fully support the project.

In the early 1980s, the Karachi zone was an example of the negative attitude. The government took the view that the zone should be for foreign investors only. Domestic investors were excluded and overseas Pakistanis were given no guarantees on repatriation of profits. Zone investors were excluded from borrowing on the domestic market. This policy ruled out a large number of potential investors. By 1987, the zone had generated 2,000 jobs against a target of 20,000. A government report on the zone in 1987 concluded that the zone was well-organized, serviced and managed; the key reason for the poor performance was the restrictions on Pakistani investors. These restrictions were relaxed gradually from 1985 onwards and eliminated altogether in the last few years. As a result, investment flows into the zone have improved.

The private investors fall into two groups whose interests largely coincide. These are:

(i) The property developers or zone operators whose major concern is to attract enough investors to use the zone facilities; and

(ii) Manufacturers, traders and international service companies, who invest in the zone and use the facilities. The major concerns of both these groups are a bureaucracy-free environment with good infrastructure.

Satisfied zone users are of essential importance to developers, because they are undoubtedly the most valuable promotors of an EPZ.

5.2 The Approach to Legislation

The approach to legislation and the content of the free zone law depend on the objectives of the zone and the group responsible for initiating and developing the proposals. In the older free trade zones, the objectives were often limited to providing warehouses for duty-free goods in transit to other destinations. The initiative for the development came from the port authority or a similar agency (e.g. public or private sector warehousing groups), or the municipal authority in whose jurisdiction the zone would operate. The Ministry of Industry or Trade or Development had little interest in the project. Physical planning and environment issues were a minor consideration.

The only government group with a major interest in such a project was the customs administration, which wanted to ensure that no duty-free goods were diverted illegally to the domestic market. The intensity of their concern depended on the level of duties and the tradition and incentive to smuggle. In the older free trade zones, many of the goods were consumer items with high duties and immediate resale value. There was therefore a need for strict controls to prevent smuggling. Thus, much of the older free trade zone legislation provided for strict customs controls.

The law often provided that:

(i) The free trade zone or bonded warehouse be licensed by the customs administration;

(ii) The licence be granted to a port authority or warehouse operator or municipal authority - who is sometimes liable for the duty on missing goods;

(iii) The operator be subject to strict operating conditions set by the customs administration;

(iv) A customs officer be present during most activities;

(v) Manufacturing activity be prohibited, and,

(vi) stores be bonded (sometimes).

In the past, warehouse operators and traders could often tolerate these restrictions because time pressure was low and competition was limited. The modern EPZ operates in a very competitive environment; therefore it must be "user friendly". In an EPZ, most of the goods are raw materials and machinery which have limited appeal in the domestic market. This is particularly true of items like electronic components. Most bona fide investors have little interest in smuggling. They make their money from efficient production. Therefore, restrictions are often unnecessary and can defeat the raison d'être of the zone.

Similarly, restrictions on domestic investors can have an adverse effect on the zone performance. In most zones, domestic investors account for one-third to half of total investment. Any zone programme which inhibits or restricts domestic investors in effect excludes a large number of potential investors. Yet many promotion programmes fail to target domestic investors, assuming (often wrongly) that domestic investors know all about the EPZ programme and its advantages.

The balance between freedom and restriction/controls often depends on the strength of the different lobbies. This is where the large number of interest groups involved may become a problem. The

main area of conflict is usually between the development/promotion authority and the customs administration. Ideally, both agree on the contents of the legislation and subsequently work together in harmony to promote and develop a free-zone programme. This requires that both be involved in the planning and development of the zone concept from the outset. Mistrust, ambition or bureaucracy sometimes make this impossible. The Ministry of Industry and Trade or Development may proceed with free-zone planning with little or no reference to the customs administration or other agencies. Free zone legislation is presented as a completed document to these. In such circumstances the promoting agency will receive at best reluctant co-operation from the others.

5.3 The Content of Legislation

The content and balance in free zone legislation varies considerably from country to country. Some countries devote up to half the contents to restrictions, offences and penalties. Some acts or decrees give elaborate or substantial powers to customs; others barely mention them. In some legislation, key issues like the power to declare an area an EPZ are set out by implication. There may be a preamble defining various terms used in the document, including a statement that a free zone is an area which is declared as such by the government or the zone administration. An article outlining the powers of the zone authority may state that, among others, it has the task of evaluating sites and making recommendations to the government on areas to be declared "free zones". On the other hand, some legislation is very specific on the procedure for establishing zones. Some acts deal with employment or labour disputes, others ignore such issues.

Legislation in most of the British Commonwealth colonies follows a similar pattern. The first article is the "short title" for the act: "This act may be cited as the export processing zones act of 19..". The second article deals with interpretation or the meaning of particular words. The third article often deals with the establishment of EPZs: "The Minister (or Council of Ministers) may declare an area...to be a free zone".

The EPZ projects an image of freedom and absence of bureaucracy which appeals to many investors. Inside the zone investors feel they will be isolated from interference by various ministries. They expect and believe that import and export documentation, such as rule of origin certificates, will be simple and processed quickly. The law should obviously reflect these expectations.

The government will want to be in a position to control (and if necessary evict) investors whose actual performance is very much at variance with the proposals they originally submitted, and those whose behaviour is contrary to the rules and regulations of the zone. Customs will want adequate powers to ensure that duty-free goods do not enter the domestic market or that prohibited goods (e.g. arms, drugs) are not stored, manufactured or otherwise handled in the zone.

These considerations can be embodied in a simple piece of legislation - the Free Zone Act. In line with the image of freedom, the legislation should be simple and clear. Nothing will deter a potential investor more than a bulky document with laws and regulations. Important issues should be stated clearly rather than by implication. The main elements of a free zone or EPZ act are briefly described below. A draft free zone law may be found in Annex II.

Purpose

The purpose of the act is to "provide for the establishment, control and management of export processing zones and related matters". Some amendments to existing legislation may be necessary to cater for EPZ incentives and controls.

Establishment of EPZs

The act will normally designate one minister with overall responsibility for EPZs - usually the Minister for Trade or Industry. The act may give him/her (or an EPZ authority operating under the minister) the power to declare specified areas or buildings as EPZs. Sometimes the power to declare an area as an EPZ may be reserved for the government or the President or the Prime Minister. These can attach certain conditions to the declaration, e.g. that the area be fenced and/or patrolled, and that suitable facilities be provided for the customs administration.

Management, Development and Control of EPZs

Overall responsibility for EPZ development may rest with the minister or the separate EPZ authority. The task of developing and managing the zone may be delegated to a private company. However, ultimate responsibility for control will rest with the relevant authority. If a private developer is involved in managing/developing the zone, various conditions can be set out in the contract with the developer. This agreement can take the form of a contract, licence or permit with conditions attached to it. The provision in the act should give flexibility to the minister to experiment with different forms of management and control.

Free Zone Activities

The act should not specify in detail the types of activity which may take place in the zone. Considerable discretion should be left to the relevant authority. However, the act may set out some criteria for evaluating projects, e.g. that they should export all their output. All operators in the zone should be licensed by the minister or free zone authority. Conditions which can be attached to the licence include:

(i) Type of activity to be carried out by the firm;

(ii) Minimum employment levels;

(iii) Minimum value added.

Examples from Shannon show why the range of activities should not be limited. In the mid-1970s, a small aircraft leasing company applied for a licence to set up at Shannon. This was a new activity. After hesitations, a licence was granted. Over the next fifteen years, the company became a major international leasing company, creating hundreds of highly-paid executive jobs. In addition, other aircraft-related activities developed (e.g. maintenance and component manufacture), due in part at least to the presence of the leasing company. Maintenance and component manufacture have resulted in thousands of well-paid, skilled jobs at Shannon and in the surrounding region.

During the 1970s, a number of export-oriented financial service activities also developed at Shannon. Having noticed this, the government examined the potential for developing international financial services in Ireland. In the mid 1980s, an international financial services centre (or financial free zone) was established in Dublin. Over 100 companies are registered there now, employing thousands of people (mainly university graduates).

Duty and Tax Exemption

This section would set out the duty and tax exemptions the investors are entitled to. A basic condition is that imported materials and machinery are free of duties and taxes.

Licences or Permits

The act would empower the minister or zone authority to issue a licence or permit to an investor who wants to establish a business in the zone, and to attach conditions to the licence. The relevant authority would also have the power to revoke a licence for serious breach of conditions attached to the licence or free zone or customs regulations. Conditions may vary or be changed with the consent of the licensee.

Customs Controls

This section should be kept as simple as possible. It would deal with the control and movement of goods and the powers of the customs, and set out penalties for mishandling goods.

Miscellaneous Provisions

This would cover any item not already dealt with, e.g. power to make regulations for implementing the act.

CHAPTER 6
EPZ PROMOTION AND INCENTIVES

6.1 Introduction

Today almost every country in the world and many regions within countries are promoting and marketing themselves as suitable locations for foreign investment. Some countries have established specialised promotion agencies staffed by public relations, marketing and other specialists to plan and implement promotion campaigns.

In East Asia, in the 1960s and 1970s, the Singapore Economic Development Board and the Foreign Investment Board of Taiwan Province of China were particularly successful. In Europe, the Irish and Scottish Development Agencies also developed good, high profile reputations as successful, efficient organizations. Such promotion agencies are also found at the level of the region: many states of USA and regions in European countries have also established promotion agencies.

Promotion and marketing of a country or region as an investment location involves a wide range of activities: advertising, press and public relations, brochures, catalogues, direct mail campaigns, seminars, personal selling, participation in trade fairs and lobbying, influencing, and trying to persuade an investor who is about to make an investment decision by every possible legal means to choose a particular country or location. For very prestigious projects, even ministers may become involved in the promotion effort.

Such intense promotion efforts have made firms consider these new investment locations. The Apple Computer company is one example among many. In the summer of 1978, at least 12 promotion agencies visited the company to persuade the management to consider new plant locations. At that time, the management was not actively considering expansion. Yet three years later the company had new plants in Ireland and Singapore.

6.2 The Necessity of Promotion

Promotion of an EPZ (or any other location) is essential to attract investors for a number of reasons including:

(i) Lack of information. Many investors will not know (or at best will only have a very vague idea) about investment conditions in a particular zone. This applies in particular to countries which are far from the main sources of outward investment;

(ii) Increasingly intense competition for investment, and,

(iii) the fact that promotion efforts can influence investment decisions.

Several World Bank studies highlight the importance of information[13]. A study on foreign direct investment from newly industrialized economies surveyed 54 investors and found that "geographical proximity and familiarity were the over-riding factors behind most firms' decisions to invest in East Asia". The firms had good information on the work force, infrastructure and incentives in neighbouring countries, but had very little information about developing countries outside of Asia.

Another World Bank study analysed foreign involvement in export manufacturing in Africa. The studies concluded that the main factors holding back further involvement were ineffective implementation of export policies; poor trade infrastructure; the extremely negative image of Africa as an investment location; imperfect information on the countries for potential investment partners; and political instability. The study went on to suggest that solving the problem of imperfect information was even more important than export policies or trade infrastructure. Improvements in

13) See among others World Bank - "Building A Competitive Edge in Sub-Saharan African Countries", Industry and Energy Series no. 57, April 1992.

infrastructure or policy implementation would not change investors' perceptions of Africa. Without improved information they would not invest. Initiatives which bridge the information gap and allay fears and uncertainties which investors may have are therefore essential. A properly planned and managed EPZ can significantly allay fears and uncertainty, as it is a well-known concept and most investors are familiar with it.

There is widespread evidence that competition for investment is increasing. In Tokyo, prime minister of a Scandinavian country recently led a delegation on a visit to the Ministry of International Trade and Industry of Japan, to promote Japanese investment. He was followed the same day by two delegations from other European Union member states on similar missions. Most states in the United States maintain promotion offices in Tokyo. The re-orientation of economic policy in Eastern Europe, sub-Saharan Africa and the Indian subcontinent towards market-led export manufacturing is further increasing competition for investment.

When it comes to export-oriented investment, investors have a choice of location. In choosing a particular location, a number of economic and non-economic factors are considered. For many investors, ethnic/cultural ties are rated as important (the Irish-United-States connection helped the flow of United-States investment to Ireland). For labour-intensive manufacturers, labour costs (as distinct from wage rates) and the availability of labour are critical factors. Financial incentives are also important.

Very often, however, the choice between locations is marginal. In that case the impact of the promotion efforts of a particular agency can be decisive. A 1989 paper[14] surveyed a number of different investors and found that, in 19 out of 22 export-oriented investment projects, investment promotion agencies exerted an influence on the investment decision. In 11 cases the influence was "significant". In the case of investment oriented to the domestic market, investment agencies influenced only one project out of 11. Financial incentives have little influence on such investment. The key issues for such investors were the size of the domestic market, the level of protection and the degree of competition in the market.

Investment promotion, including support and advice for investors during the establishment phase, usually has a stronger impact on (and is more appreciated by) relatively small investors than on transnationals. The latter have the staff and resources to collect location information themselves. They also have enough influence on and access to high level decision makers to resolve problems quickly. But smaller investors welcome the provision of information during the decision-making phase, and support and assistance when establishing a project. The free zone with its bureaucracy-free environment, well-developed infrastructure, developed sites and buildings, and back-up support services provided by the zone developer/operator, is especially attractive for small and medium-scale investors. Most investors in fact are in the small-to-medium-scale category, i.e. they have a turnover of US$ 10-100 million. This type of investor should therefore be the main target of any investment promotion campaign.

6.3 Methods of Promotion

Investment promotion is the task or art of persuading an investor to invest in a particular location. There are a number of steps in the process. These include:

(i) The identification of target sectors, countries or groups at which the promotion effort will be directed;

(ii) The creation of a positive image of the zone or country;

(iii) The generation of interest by or enquiries from the targeted groups or sectors;

14) Louis T. Wells Jr. and Alwin G. Wint - Marketing a Country to Foreign Investors: Applying Existing Research to Sub-Saharan Africa, June 1989.

(iv) The response to enquiries and attempts to convert enquiries into project proposals for investment in the zone;

(v) Evaluation and approval (or rejection) of proposals;

(vi) The conversion of proposals which are approved into operating projects (in some zones less than one third of approved projects proceed to the operating phase), and,

(vii) providing support where possible to projects during the establishment and operating phases to ensure that they are successful.

The emphasis on the different promotion activities depends on the stage of development of the country or zone. Image building is something which is normally undertaken by a national agency, especially in the early stages of a country's attempts to promote investment. This is expensive, and probably beyond the resources of a zone authority or developer. The benefits of image building accrue not only to the authority but also to other economic interests dealing with foreigners, such as tourism.

Of course, there is no point in trying to build an image of a country as an attractive investment location if the reality is very different. In those circumstances image-building is simply a waste of resources. Resources would be better employed trying to improve the country as an investment location, including the streamlining of investment procedures and solving the operational difficulties of existing investors. It is extremely difficult to attract new investors if established investors are unhappy.

A realistic appraisal of the type of industry which might be attracted to the zone must precede a promotion campaign. If most of the labour force is unskilled and working for low wages, there is little point in targeting high-technology sectors.

All promotion should fit within an overall plan which is based on the resources available to the EPZ authority or zone operator. There is no point in devoting most of the promotion resources to an expensive advertising campaign and being short of resources for following up the enquiries it generates[15]. Advertising, direct mail, press and public relations campaigns and other methods of generating enquiries should be targeted at those groups who will show most interest in the zone and who are easiest to contact.

In many free zones, domestic investors make up a large percentage of the total. Fellow countrymen overseas or other groups who have a cultural or ethnic affinity with the zone are also important. Advertising in prestigious publications, e.g. the Wall Street Journal or The Economist, may impress some, but advertisements or articles in the national media are often much more effective and less expensive. "Good news" stories about successful zone investors can be very effective and inexpensive. It is wrong to assume that potential domestic investors are aware of the attractions of a free zone. It is necessary to mount a continuous promotion campaign directed at them.

6.4 Organization and Responsibility for Investment Promotion

The promotion and marketing of a zone is an integral part of its overall development and management. Whoever is responsible for the success or failure of the zone must be able to control and direct marketing and promotion - even if this is sub-contracted or delegated to another organization.

In the case of a private developer, the responsibility for marketing and promotion rests with him. He suffers the consequences of failure. In a government-sponsored zone, the responsible authority must have the power, responsibility, freedom and resources to market the zone. If there is a national

15) A good example of a co-ordinated promotion campaign is set out in: World Bank - Free Trade Zones in Export Strategies, Industry Series Paper no. 36, Annex 3.

investment promotion agency, the zone authority should co-ordinate its efforts with those of the national agency. Needless to say that even in the case of zones developed by a private investor, promotional efforts should preferably be coordinated with the national investment promotion agency.

Two of the most important issues in organizing a government-sponsored investment promotion programme are: the nature of the organization which should undertake the promotion effort, and overseas representation.

Investment promotion requires a number of skills not normally found in government: marketing, advertising, press, public relations and specialized industrial skills. In addition, it requires interaction between government and investor in a business context. A government trying to persuade an investor has to depart from its traditional role of regulating, issuing licences and responding to requests from the private sector.

The organizational options are:

(i) An organization within the traditional government structure, subject to the normal rules and procedures associated with the government service;

(ii) A quasi government or para-statal organization with a board of directors appointed by the government; or,

(iii) a private organization undertaking the promotion effort on behalf of the government.

Most countries opt for a parastatal rather than a private sector or government organization. For investment promotion, especially in foreign markets, it is necessary to gain access to high-level personnel in major private sector corporations and government departments. Personnel involved in promotion must be able to speak with authority on behalf of the promoting government - especially about incentives or concessions which the investor is seeking. Often, personnel with some formal government status will have greater credibility in this respect than private sector employees.

These considerations are supported by research by Louis T. Wells and Alvin G. Wint[16]:

"Our interviews with managers gave us some strong clues as to the effectiveness of government and quasi government structures. In eleven cases where investors indicated that promotional agencies had a significant influence on their investment decisions, in only one was the agency a conventional government agency: the remaining ten cases were decisions in which quasi government agencies or the one private agency were involved".

Overseas promotion should be based on careful targeting of countries and sectors. No long-term commitments (e.g. office leases or staff contracts) should be undertaken. It is important to be able to switch resources to alternative markets as the need arises. Good promotion material (a standard press information package, video and slide presentation, brochures geared to the market in question) is essential. It should be reviewed by somebody familiar with the language, business practices and culture of the country in question. There are many examples of major, expensive mistakes in advertisements or brochures arising from a lack of understanding of language or culture.

Probably the ideal situation when promoting free zones overseas is to have a group of private developers cooperating with the national investment promotion agency in projecting a positive image of the country and "selling" it as an investment location. Once the investor is persuaded of the merits of the country in question, individual developers can outline the advantages of their particular zone. In promoting particular zones, private developers can often introduce innovative or new services to attract investors.

16) Op. cit.

One such innovation was outlined at an expert group meeting on free zones held in Vienna in 1992, sponsored by UNIDO. It is known as the Nogales shelter plan. Under this plan, the zone developer/operator supplies the factory space, personnel and customs clearance services to the client or investor for an hourly rate (the labour costs are about US$ 1.5 per hour). The client is responsible only for the equipment, raw materials and manufacturing process. This formula reduces the risk for the client and allows him to assess the suitably of a particular country or zone as a manufacturing base. This type of initiative could prove very useful in countries with well-planned zones which are perceived as high-risk locations.

A related but important point stressed by the expert group is that free zone development is essentially a service industry: it provides services (infrastructure, commercial, and support) to investors so that they can operate successfully. The extent or range of services depends on the clients' requirements. Sometimes it may be necessary to provide a total service (as under the Nogales plan). In other cases (as in the case of many Far East zones) the provision of developed sites may be sufficient. The ultimate objective of the developer must be a satisfied client - this is the best advertisement for a zone. More than most other product or service purchasers, industrial park/free zone investors seek out the opinion of existing users.
A negative opinion can damage the reputation of a location for years. The Sony corporation established a plant at Shannon in the early 1960s. It closed a few years later through a combination of factors including an inexperienced management (there were very few overseas Japanese investments at the time), cultural and language misunderstandings, and a 15 per cent import levy introduced on imports into Britain, the main market. As a result of the closure, Ireland and Shannon gained a bad reputation in Japan as an investment location. It took a long time to overcome this: only 10 years later did significant volumes of Japanese investment begin to flow into Ireland.

6.5 Overseas Promotion

Overseas promotion needs to be particularly well planned. It involves a series of related or dependent activities which follow in a logical sequence, starting with initiatives (advertising, direct mail, etc.), to project a positive image and generate a flow of enquiries, and following the steps set out in Section 6.3.

Overseas representation is expensive. It can cost up to US$ 300,000 annually to maintain a free zone representative in a major centre of outward investment (the United States, Europe or Hong Kong) for a year. This would represent 20-50 per cent of the total EPZ promotion budget. It can take 6 to 12 months or more for a representative of a new zone authority to establish him/herself and start generating results, and it requires a particular type of individual with a flair for sales and marketing to succeed. If the wrong person is appointed, it can be an expensive failure. Appointing an overseas representative is therefore a high-risk venture, especially if the person is inexperienced in investment promotion work.

An alternative is to appoint a person based in a centre of external investment (an economic consultant or an accountant) as the EPZ representative. This also has risks associated with it, especially if the person is paid a significant retainer or representation fee. Another option is payment by results. The representative could be paid a fee which is related to the rental income which each investment project pays over a period of time. Finding a capable representative willing to work on such a basis may not always be easy - especially for a new zone.

A third option is a series of promotion missions overseas by people based at the EPZ organization's home office. To be worthwhile, such missions need to be very well planned. A co-operative embassy or national investment promotion office is a major advantage in planning such a mission. UNIDO maintains investment promotion offices in key locations in Europe, North America and the Far East. These offices will help new EPZs by making available data base information; in planning investment missions, and negotiating joint venture and technology transfer agreements. Donor agencies from individual countries, e.g. USAID, also have assisted in the promotion of EPZs.

In summary, there is no simple answer to the question of overseas representation for a new EPZ organization. It is an area where expensive mistakes can be made and where advice and assistance from multilateral and bilateral agencies involved in industrial development and investment

promotion is essential.

Several developing countries provide good examples of overseas promotion efforts. The efforts of the Jamaican Free Zone Authority include visits overseas by Zone Authority staff, direct mail, and telemarketing. The zone also uses the government's national promotion agency/trade commissioner service. Recently, a one-year contract was concluded with an independent marketing firm in the United States (financed by a grant). Although more is achieved by direct contact with the investor, overseas representatives have proved useful in the opinion of the Zone Authority.

The Sri Lanka Board of Investment (BOI) conducts a number of outbound missions each year. About 25 countries have been covered. No full-time offices are established in target countries, but BOI personnel have been stationed for 1-2 months in the Republic of Korea, Hong Kong, Australia, Japan and Singapore. The missions to the Republic of Korea led to "a large attraction of Korean investors".

A co-ordinated promotion campaign to attract leather and footwear firms was organized by the Dominican Republic[17]. The Dominican Investment Promotion Council targeted selected footwear companies in the United States (mainly those with Puerto Rican connections or subsidiaries). Each company received a sector profile and a typical cost structure for a plant in the Dominican Republic. The Promotion Council followed up with telephone calls and individual company visits. In addition, it participated in the New York footwear fair and placed major advertisements in trade magazines prior to the fair. All enquiries were followed up promptly. The quantifiable results within a year were as follows: 82 companies were identified; 23 companies sought quotations; 14 companies visited the Dominican Republic; five companies placed contract orders with existing companies, and two companies established plants in Dominican EPZs.

6.6 Incentives

Incentives in this context are defined as financial inducements offered by Governments to investors in the form of tax concessions, subsidised inputs (e.g. wages or electricity), low or subsidized loans, or non-repayable grants to establish projects in an EPZ. There is considerable debate about whether or not such incentives influence investors. There is a body of research to suggest that incentives do influence investors when there is a choice between two locations which are reasonably comparable in other respects. Incentives however cannot compensate for major deficiencies. An additional five-year tax holiday will not compensate for poor transport services, an unreliable electricity service or political instability.

Different investors are attracted by different incentives. For investors with large capital projects such as oil refineries or motor assembly plants, assistance with capital investment (e.g. low interest loans or grants) is more attractive than tax incentives. Attractive depreciation rates on equipment can compensate for the scarcity of capital in developing countries. Companies with large profit margins or labour-intensive projects with short payback periods are usually more interested in tax holidays.

An issue which often arises with tax holidays is whether the tax which the government foregoes is a cost or not. Some argue that, as investors would not come without the tax holiday, the government does not lose anything. In considering the appropriate incentive package, a government must take account of what it can afford in terms of grants and/or subsidies, the incentives major competitors are offering, the type of industry it hopes to attract, and the direct and indirect benefits of investments in a particular subsector or product group.

As most EPZ projects are labour intensive, tax holidays will usually be more attractive than grants, loans, or subsidies. Most EPZs offer some form of tax holiday, usually between five and 10 years. For a new EPZ, this should be adequate in most circumstances.

17) See World Bank - Free Zones in Export Strategies ; Industry Series Paper no. 36, Annex 3.

CHAPTER 7
PHYSICAL PLANNING

7.1 Introduction

From a physical development viewpoint, an EPZ is constructed very much like a standard industrial park except that:

(i) The area is normally surrounded by a 2-3 metre high fence (the appearance of the fence should be aesthetically acceptable - no barbed wire);

(ii) Entry and exit are limited to one or two points controlled by customs or the EPZ authority;

(iii) Above average provision may need to be made for administration facilities, including customs offices and possibly other offices for government departments;

(iv) Facilities will have to cater for activities with a high export potential: garments, leather, electronics assembly, light engineering, international office activity, etc.

The key considerations in the construction of an EPZ are:

(i) The size of the site;

(ii) The shape of the site;

(iii) Its load-bearing capacity, and,

(iv) the location of the site in relation to physical services.

These factors have a considerable influence on the cost of development. Another very important consideration, of course, is the potential demand for space over time, together with details of the type of demand: the type of industry which may be expected, the plot sizes likely to be demanded, the standard of design and layout, factory density, and an estimate of the required support facilities. Are investors likely to seek pre-built factory buildings or plots on which they can build their own? Should the zone cater for different types of industry or should these be separated from each other? Demand for water, sewerage, electricity and telecommunications varies considerably with activities, and some estimate of the need for these services is required for the physical planning process.

Table 7.1 SITE INFRASTRUCTURE COST (US$)

	10 HA.	25 HA.	50 HA.
Roads, services	550,000	800,000	1,400,000
Treatment plant	450,000	450,000	700,000
Miscellaneous	100,000	150,000	200,000
Total	1,100,000	1,400,000	2,100,000
Cost per ha	110,000	56,000	42,000

Source:
Figures are based on a number of EPZ and industrial park feasibility studies.

7.2 Size of Site

Most zone sites are in the 40 to 80 ha. range. Larger sites can create congestion and transportation problems. Smaller sites can be very expensive to develop. There are significant economies of scale to be gained on sites up to 50 ha., as Table 7.1 shows.

7.3 Site Specification

The ideal site for a free zone designed to accommodate light and medium industry should have:

- A gentle slope for drainage (ideally less than 1:15);
- Good ground bearing conditions for foundations;
- Good access by main road to the city, port, and airport;
- A reasonable water supply. About 40 thousand litres per hectare per day would be close to the minimum. With larger supplies, e.g. 60 to 80 thousand litres per hectare per day, a wider range of industries can be accommodated;
- Reliable electricity supply and telecommunications facilities;
- Adequate storm water drains at or close by the site;
- Facilities for treating industrial effluent and a means of disposing of the effluent after treatment. A satisfactory method of disposing of dry waste is also needed;
- A clean, attractive environment in and around the site as well as proximity to a well-developed urban centre, to enhance the site's appearance and make it attractive to a wide range of investors.

7.4 Site Design and Layout

Industrial sites should be designed and laid out to suit the requirements of industry. Section 2.3 has shown how EPZ industries differ among countries and regions, and each industry has particular design and layout requirements. The type of industry likely to be attracted to a certain zone is therefore an important factor in determining design and layout.

As a general rule, about one-third of the site is devoted to public areas including roads, administration buildings and green areas. The remaining two-thirds are available for industrial buildings. Normally about half the site is built over, thus one-third of the zone when fully developed is covered with commercial or industrial buildings. If the zone is designed for terraced buildings rather than industrial plots, a higher percentage (up to 45 per cent) may be covered over with buildings. If a site is badly shaped (e.g. long and narrow), roads and green areas may occupy more than one third.

If the potential investors are what might be termed "prestige investors", such as transnational electronics companies or medical equipment manufacturers, a low-density layout with very high standards of landscaping and appearance may be necessary. The total built-over area would then be at most 25 per cent of the zone. For smaller garment manufacturers who are very cost conscious, a higher-density building design, possibly using terraced factories, would be more suitable.

7.5 Roadways

Roadways must be designed in outline at the preliminary stage, as their widths will determine the site layout and, together with their carrying quality, the costs. Obviously, the roads should be adequate for the estimated traffic flow and provide against congestion between the main highway and any point in the zone where goods or personnel will be loaded and unloaded. At the same time they must not occupy an undue portion of the total area. About 15 per cent would be a reasonable figure. Road design should provide for the installation and easy maintenance of the various utilities

such as water, power and sewerage mains on the verges of the road. Roads should not be congested by vehicle loading or unloading or by car parking. Such activities should be either completely separated from the roadway or in clearly defined docks with limited access to the traffic-carrying roads.

During the first phase of development some roadways may be paved only in part. It is necessary, however, to allow sufficient width from the beginning, with utilities so sited that they will not be covered by road widening. These considerations generally indicate a rectangular road pattern, if the shape of the site and natural drainage (which is desirable) allow this. Cul-de-sacs restrict movement and are undesirable where communications between factories and access to central services are important, but they may be necessary to open up isolated sites and have the advantage of eliminating through traffic and reducing road and utility costs.

7.6 Utilities

In the ideal situation, the zone is planned in relation to the development of a wider area. If a proportionate share of the cost of utilities is carried by those responsible for that development, then utilities can be made available very economically in the zone. A zone can not be commercially viable if it must shoulder large off-site infrastructure costs; nor should it provide free or subsidized infrastructural services to neighbours in need. In many cases the most practical solution for zone developers is to locate the zone close to existing utilities.

Where water and sewerage mains, electric power cables, gas and steam supply pipes are provided in a zone, these should run alongside roads, preferably under grass or hard, unmade ground for easy maintenance.

Water

As stated earlier, the water requirements for dry industry are in the order of 40,000 litres per hectare daily. Most EPZ industry is dry. But where dye houses are proposed, 500,000 litres per hectare per day may be required. A storage tank with up to two days water may be needed to cater for interruptions and breakdowns in water supply. The water storage system does not have to be located in the zone.

Where economically feasible, a ring system of mains should be used to reduce the danger of supply interruptions; enable sections of mains to be shut off for maintenance, and prevent pressure drops when users at different positions on the line are drawing water at the same time.

Sewerage

Pumphouses and treatment plants should be planned to minimize pipe runs while avoiding nuisance and smells, and have a capacity equivalent to the water supply for the area. Usually the system will be designed to accept normal domestic sewerage. Trade effluents which do not conform to acceptable standards must be treated by the factory concerned before entering the system, but as most EPZ factories are dry industries, such effluents are likely to be minimal.
A biological oxygen demand (BOD) reduction plant with aeration and sedimentation followed by sludge drying in filter beds is adequate for most EPZs. Such a plant can be built in modules to suit demand. A plant for treatment of 200,000 gallons of normal domestic sewerage per day costs about US$ 500,000. This does not include the cost of piping, which is site specific. In designing the sewerage plant it is necessary to provide enough space for sludge-drying filter beds and some additional space for sludge storage. Where effluents with chemicals or metals are produced, these should be pre-treated at the investor's premises to a specified standard before discharge into the main sewer.

It is difficult to recommend a set of discharge standards without detailed knowledge of where the treated effluent will be discharged. If the effluent is discharged into a river, the river water should be sampled and tested for 12 months prior to the construction of the sewerage plant to establish the existing level of contaminants in the river, corrective action that might be necessary, and a reasonable standard of discharge from the proposed plant.

Dry Waste

Most of the waste from EPZ activity consists of packing materials which can be disposed of in a municipal land fill or incinerator.

Power

It is more expensive to bury electric cables than to run them on overhead poles, but the extra cost may well be justified by the improved appearance of the zone, greater safety and security (there are many examples of overhead cables being stolen). As a general guideline, about 1 megawatt per 10 hectares of site area should be available. In many zones the power supply company guarantees an uninterrupted supply, or at least high priority for zone users. This is an important attraction for investors.

7.7 Pre-built and Multi-Storey Factories

Before planning begins it should be decided whether an EPZ should have pre-built, standard single or multi-storey factories. The construction of such factories may be precluded or limited by cost considerations. The arguments in favour of pre-built standard factories are that:

(i) It has been demonstrated that a great variety of industrial operations, particularly free zone type operations, can be carried out efficiently in non-specialised buildings;

(ii) They can be leased, saving the industrialists' capital expenditure at the development stage, which makes great demands on his capital;

(iii) They enable production to start quickly, which is often a requirement for a new industrial project;

(iv) They avoid problems and effort for the industrialist in an area where he has limited experience: construction;

(v) They can be planned to facilitate expansion even when this is not foreseen by the industrialist;

(vi) They can be used to improve working conditions and enhance the productivity of industry;

(vii) They give the developer better control over the appearance, facilities and amenities in the zone;

(viii) Rents can be adjusted according to the purpose of the zone, to encourage particular types of industrial development;

(ix) In times of high inflation, buildings can prove a valuable investment.

The disadvantages of building factories in advance of demand is the large capital requirement and the risk for the developer.

Multi-storey factories are less efficient from a production viewpoint than single-storey buildings. They are only suitable for light industries like garments, electronics, etc. Besides, some EPZ and industrial park developers have experienced considerable difficulty in leasing the upper stories. But in areas where land is expensive and scarce, cost considerations may dictate the use of such buildings.

7.8 Zone Services

The extent to which services should be supplied by the developer will depend on the purpose of the zone and the availability and quality of services from commercial firms, municipal authorities and the government. A checklist of the more important services which may be needed would include:

(i) Removal and disposal of industrial waste combined with salvage;

(ii) Fire and police protection;

(iii) Canteens. Most firms provide their own canteen facilities, but a central canteen may be necessary to cater for smaller companies;

(iv) Bus terminals for commuter traffic;

(v) Warehouse space;

(vi) Health services which can range from first aid stations (a minimum) to fully-equipped medical and dental facilities. In some zones health services are provided by individual firms. In other cases such services are provided by the zone developer/operator;

(vii) Post office;

(viii) Banks, shipping and insurance agencies;

(ix) Repair and maintenance shop;

(x) Training centre, mainly for semi-skilled workers;

(xi) Customs and administration office;

(xii) Recreational facility or area;

(xiii) Children's crèche;

(xiv) Central office services, ranging from translating, typing, copying and printing to data processing and computer services;

(xv) Meeting and club rooms;

(xvi) Advisory services, assistance in recruitment and selection, wage determination, industrial relations and welfare services;

(xvii) Common technical services as may be required, e.g. technical subcontract and testing facilities; tool rooms for making tools, dies and moulds; heat treatment facilities; etc.

7.9 Phasing of Development

The costs of developing land (drainage, roads and utilities) is high. Therefore development is normally carried out in stages related to the rate of growth. A successful industry operating in a pleasant environment and supplied with all the necessary utilities and services of a zone is good publicity. Therefore the first phase must be finished quickly and be reasonably complete in itself.

Grassing, tree planting and other landscaping should start as soon as possible; if necessary, fencing the areas involved against disturbance by building operations. It should be possible to route constructional traffic for further areas around rather than through the first area. For better promotion of the zone, the first phase should probably be located near the main highway.

The first phase should be restricted to an area which can be completely developed and occupied within two or three years. This means a realistic (or conservative) appraisal of the likely initial demand for space: 10-15 ha. is usually more than adequate. Many free zone and industrial park developers, particularly public sector developers, have overestimated the demand for space during the first phase. As a result, they were left with expensive unused capacity for many years, leading to

financial difficulties, lack of money for maintenance, and a gradual, steady deterioration in the general infrastructure. In some cases, transformers and sewerage plants had such excess capacity that they were unusable. If demand exceeds expectations, the second phase of the development can always be accelerated.

7.10 Control of Investor Activities

To ensure an orderly development of a free zone, some controls on investor activities are necessary. The main intention of the controls is to ensure that investors behave as good neighbours and construct buildings which are in conformity with an overall plan for the zone. The controls should also bind the developer to certain standards and policies. Investors (especially those which might be classed as high quality, like electronics or medical equipment manufacturers) will normally seek assurances that no unsuitable development will take place in or near the zone, e.g. activities involving smells, smoke or dust.

These controls can be implemented by conditions attached to a licence or lease agreement, or as a set of by-laws or protective covenants. All reputable developers have such controls and guarantees. They may include the following:

Limitation on types of activity

There would be a prohibition on heavy industry or industry causing smells, dust or smoke.

Building restrictions

Building plans should be subject to approval by the zone developer, in addition to any approvals from planning authorities or other agencies involved in building control. Normally, the developer will have a set of guidelines indicating the height and design restrictions, the building line (x metres back from the centre of the road or the edge of the plot), and the built-over or building/open space ratio in each plot. In many zones the ratio is 50, i.e. the building area can occupy half the plot area. In some higher quality zones the building/open space ratio may be as low as 30:70. If the zone is close to an airport there may be also restrictions on lighting and advertising signs.

Parking

All well-planned zones have parking restrictions. Each investor may be obliged to provide enough parking space for cars and trucks on the site to avoid parking on roadways. Truck parking in front of buildings may be prohibited.

Water

Water is normally piped to each plot or site. Investors may be advised or obliged to provide on-site storage for a minimum of one day's supply to ensure continuity in case of supply interruptions.

Electricity

Normally the individual client/investor will deal directly with the company supplying the electricity. Occasionally, the zone developer may generate his own electricity (as in the case of some Dominican Republic zones), or take on the responsibility for supplying electricity to individual investors.

Storm Water

No effluent or harmful material should be allowed to enter storm water drains. There is an example of a zone where dye house effluent overflows from drains along the main road on a regular basis.

Effluent Disposal

Domestic sewage can usually be discharged into the sewer system. Industrial liquid effluent is normally treated at the plant prior to discharge. The zone developer or environmental authority should approve the proposals for treatment of industrial waste and the equipment to measure the volume of the discharge. They may find it necessary to limit the volume of the discharge from time to time and to vary the discharge standards to comply with new environmental regulations.

Substances which would damage the sewerage system would be prohibited. These include: any liquids at a temperature exceeding 45 degrees centigrade; substances such as adhesives or paint which form viscous or solid coatings on the system; petroleum or other inflammable spirits; radio-active substances; effluents with high levels of acidity or alkalinity (i.e. with a pH value below 6 or above 9); and substances which produce fumes or odours. Solid waste should not be discharged into sewers or water courses.

The zone developer and/or the environmental agency should monitor effluent discharges from each investor on a regular (monthly) basis. This means that the developer or environmental officer would have the right to enter the premises of the investor at all reasonable times to take samples and do all that is necessary to ensure that environmental and effluent discharge standards are maintained.

Storage

The developer will often set down standards or guidelines for the storage of chemicals and/or hazardous goods. The developer may sometimes reserve the right to improve the storage of such goods.

Safety

Each building should conform to fire regulations and industrial safety standards.

CHAPTER 8
COSTS AND BENEFITS OF FREE ZONES

8.1 Introduction

The costs and benefits associated with EPZ development can be viewed from several perspectives. For a developer, it simply is a commercial or accounting proposition. A government can also look at a proposal for zone development in commercial terms. Many governments look at grants and subsidies for industry in this way. The Irish government, for example, expects to recover such payments in two years via taxation. An EPZ development can also be viewed from a national economy perspective through a cost/benefit calculation. This is a relatively complex exercise which involves specifying the main direct and indirect costs and benefits, and a calculation of a monetary value for each.

The main direct benefits are the commercial profits arising from zone development; government revenue in the form of increased taxation; net foreign exchange earnings; the jobs and income generated; and the multiplier effect on the economy. For a country which lacks foreign exchange and job opportunities these benefits, however small, are highly valued. The secondary or indirect benefits include training and on-the-job experience for workers and managers; learning through imitation or association by local firms and business people; local purchases, and the transfer of technology or information related to those purchases.

The principal costs include the consequential or indirect capital costs, e.g. the need to improve roads or other infrastructure; the cost of any subsidies provided to zone industry; and the possible adverse impact on the environment. The direct capital costs of zone development are included in the calculation of commercial profits or losses.

The social consequences of zone development can only be properly evaluated by the community or country in question. Jobs for young women may mean accepting crowded accomodation and wages which are low by world standards; but these wages may be 50 per cent above those offered for alternative employment.

8.2 Cost/Benefit Assessment

While many articles have been written over the years on free zones as "engines of growth", "enclaves" or "instruments of exploitation", there have been very few objective cost/benefit assessments. Peter G. Warr made such an assessment for four East-Asian zones - the Jakarta EPZ in Indonesia, the Masan free export zone in the Republic of Korea, the Penang free trade zone in Malaysia and the Bataan EPZ in the Philippines - in the mid-1980s[18].

The results are summarized in Table 8.1. It sets out the net present value, its composition and the internal rate of return (IRR) for each of the zones. Jakarta, Masan, and Penang all show positive values, with the IRR ranging from 15-28 per cent. The figure for Bataan is negative due in large measure to the very high infrastructure costs. The major gains in Penang and Masan arise from employment and foreign exchange earnings. The major gains in Jakarta arise from what are classed as unofficial taxes or levies associated with customs clearance - these account for over half the quantifiable benefits[19]. The costs include public expenditure on zone development and subsidies or artificially low charges for services (e.g. electricity).

The reasons for the positive returns in Malaysia, Indonesia and Republic of Korea were a combination of modest development costs and a rapid build-up of employment and exports. These yielded significant benefits within a few years.

---

18) Peter G. Warr - "Export Processing Zones: The Economics of Enclave Manufacturing", Research Observer 4, no. 1, January 1989.

19) See Peter G. Warr - "The Jakarta EPZ: Benefits and Costs", Bulletin of Indonesian Economic Studies no. 3, December 1983.

TABLE 8.1 WELFARE IMPACT OF EXPORT PROCESSING ZONES IN SELECTED COUNTRIES (millions of 1982 US$)

CATEGORY	INDONESIA	REP. OF KOREA	MALAYSIA	PHILIPPINES
Employment	4	39	111	56
Foreign exchange earnings	0	65	94	72
Local raw materials	5	16	18	3
Local capital equipment	0	0	10	0
Taxes and other revenue	23	18	10	11
Electricity use	-1	-13	-53	-4
Administrative costs	-13	-17	-4	-23
Infrastructure costs and subsidies	-3	-65	-43	-196
Domestic borrowing	6	0	0	-147
Total net present value	15	40	143	-225
Internal rate of return (%)	26	15	28	-3

Source: Warr, op. cit., Table 6.

The Penang zone at Bayan Lepas is on a site of about 80 acres which cost around US$ 5 million to develop in 1971. Within 6 years over 20,000 people were employed. In Masan, site and costs were of a similar order of magnitude. Development began in 1971 and employment exceeded 20,000 by 1975. The zone at Tanjung Priok in Jakarta is smaller (less than 20 acres). A number of multi-storey garment factories there employed 7,000-8,000 people in 1980 - 7 years after it was established. Bataan, on the other hand, was a very expensive project, costing about US$ 100 million. Employment peaked at around 22,000 in 1984.

As a general rule, a zone which still has a low occupancy rate after 10 or 15 years is a failure. If development has been exceptionally costly, the zone may be considered a failure even if employment is high. Development costs can be kept within reasonable limits if the site chosen is close to existing infrastructure, housing and commercial services.

While noting positive points such as the demonstration effect and the on-the-job training of local managers, the main conclusion which Peter Warr draws from his studies is that:

> *"...the benefits of EPZs are limited. They are definitely not engines of development. For countries in the early stages of development, zones can be an efficient and productive means of absorbing surplus labour. Even then, they will never be more than a modest part of the solution to the vast unemployment problems of these countries"* [20].

20) Warr 1989, op. cit., p. 85.

The assertion that EPZs represent only a modest part of the solution to the vast unemployment problems of developing countries is true for the four countries studied by Peter Warr. However, Paula Holmes and Paul Meo present a different picture in their 1989 study[21]. They found a "startling difference" between EPZ and total manufacturing employment growth. They also found that in nine out of ten countries which they examined, EPZ exports grew at a faster rate than national exports during 1978-1987. The exception was the Republic of Korea where the EPZ was not at that time a major factor in the development process. The final conclusion of the study is that "EPZs seem worthy of consideration by any small country considering an export drive".

A World Bank study which attempted to evaluate the costs and benefits (or the successes and failures) of free zone development around the world examined 60 zones in 27 countries which were in operation for five years or more. The study concluded that "25 of these zones are predominantly successful (including several which are clearly outstanding), another 10 come close, 7 are partly successful, and 18 are clearly unsuccessful". Most of the successful zones are found in Asia, and are developed and managed by government agencies[22].

It is difficult to reach a definitive conclusion on the costs and benefits of EPZs in global terms. According to the studies quoted above, the benefits have mostly exceeded the costs. With suitable sites, proper phasing of development and a back-up of appropriate policies and institutional support, this will generally be the case. The best way to achieve this is by leaving decisions on sites and phasing to the private sector. Over-ambitious public-sector EPZ projects and sites selected on the basis of political criteria are bound to lead to a negative outcome.

TABLE 8.2 EPZ RAW MATERIAL SOURCING, 1972-1982 (millions of US$)

	INDONESIA	REP. OF KOREA	MALAYSIA	PHILIPPINES
1. Total raw material purchases 1972	1.2(i)	17.5	1.37	0.27
2. Local raw material purchases 1972	-	1.0	0.07	0.07
3. Total raw material purchases 1982	23.3	424.4	625.7	130.8
4. Local raw material purchases 1982	9.5	142.7	105.1(ii)	8.5
2 as a % of 1	-	5.7	5.1	25.9
4 as a % of 3	40.8	33.6	16.7	6.5

(i) 1967 figure.
(ii) Includes raw materials sourced from other EPZ firms (US$ 82.3 million) plus local materials (US$ 22.8 million).

Source: Warr, op. cit., Tables 1-4.

8.3 Backward Linkages

Much has been written about linkages between export processing zones and the rest of the economy. During the 1970s there was an expectation that these would occur automatically. Linkages were supposed to be one of the means whereby EPZs would be engines of growth. The reality in many cases was different. Linkages were often slow to develop. Table 8.2 sets out the situation for Asian zones over the decade 1972-1982.

21) Holmes and Meo, op. cit.
22) World Bank 1992, op. cit.

A high percentage of raw materials is sourced locally in Jakarta because a number of clothing manufacturers in the zone buy fabric locally. In the Republic of Korea the share of total raw materials supplied from domestic sources increased from 3 per cent in 1971 to about 34 per cent in 1979 and has remained at that level ever since. For most EPZ sectors, the domestic raw material percentage is in the 30-40 per cent bracket. The exception is the footwear sector where 80 per cent of the raw materials are sourced locally.

In Malaysian zones dominated by the electronics industry, most of the domestic raw materials come from other free zone enterprises. The percentage of raw materials originating from non-EPZ sources in Malaysia was very small in the 1970s and early 1980s. It was only in 1987 that Malaysia adopted a new industrial strategy in which successful EPZs and their import requirements were to serve as poles of growth and EPZs were to be integrated into the rest of the economy.

The Philippine figure relates to the Bataan zone. The percentage of raw materials sourced locally in Bataan was usually below 10 per cent; only in 1972 and 1973 did the figure rise to about 25 per cent. In Baguio and Mactan, where there are many electronics companies, the percentage of raw materials sourced within the Philippines was insignificant.

Outside the more advanced developing economies, the percentage of raw materials sourced locally is very small, except in some zones which are dominated by textiles. In Taiwan Province of China, the percentage of raw materials sourced locally was about 5 per cent in 1968, rising to about 22 per cent in 1981 and remaining at that figure afterwards. The figures for the Mexican maquiladoras are very disappointing: less than 2 per cent of raw materials are sourced domestically. In Mauritius, where the textile industry dominates (accounting for over 80 per cent of total output), a number of firms have developed backward linkages. Many T-shirt manufacturers for example are engaged in weaving and dyeing of fabric as well as in making the garments. In addition, packaging and ancillary materials such as buttons, ribbons and fasteners come from local suppliers. In the Dominican Republic there are virtually no linkages between EPZ firms and the domestic economy.

The general conclusion is that, except in the more advanced developing economies and in the case of footwear and textiles, significant backward linkages with the domestic economy rarely develop.

There are a number of possible reasons why few backward linkages from EPZ firms have developed over the years. In most cases the major obstacle is the inability of domestic producers to supply EPZ firms with materials on time, at an acceptable quality and standard, and at a competitive price. A second possibility is the unwillingness of some EPZ firms to source goods within the domestic economy.

The lack of linkages of the Mexican maquiladoras has been the subject of a number of studies[23]. The more important factors inhibiting linkages in Mexico include:

(i) Pre-NAFTA rules which tax the value added in Mexico, including Mexican materials and components of maquiladora exports to the United States. However, United-States materials and components incorporated in such exports are tax free.

(ii) Import duty on equipment and raw materials to be paid by Mexican producers.

(iii) High sales taxes which must be paid by Mexican suppliers to maquiladoras.

(iv) The lack of an industrial base in the Mexico/United-States border cities where many of the maquiladoras are located.

(v) Lack of a skilled workforce. Unskilled workers are suitable for assembly type activities, but producing inputs for assembly activity requires a skilled workforce.

---

23) See e.g. Geoffrey T. Bannon, Dilmus D. James and G. William Lucker - "Generating and Sustaining Backward Linkages between Maquiladoras and Local Suppliers in Northern Mexico", World Development 1994, pp. 1933-45.

Apart from financial and technical factors, an important factor is the willingness of EPZ managers to source materials and services locally. This depends very much on whether or not local managers of EPZ firms have the authority to make purchases. A number of surveys have shown that parent company managers often have a more negative perception of local suppliers than local plant managers. Thus the chances of developing backward linkages improves significantly if local managers have autonomy in making purchasing decisions.

An important conclusion of a 1989 UNIDO study on the Philippines[24] was that in spite of easy access to imported inputs through free trade, EPZ industries were generally willing to use local materials if these were consistently available at competitive prices and in acceptable quality. Most investors in the Shannon EPZ are also willing to source materials locally, even at a small price disadvantage. The factors affecting linkages identified in the study included:

(i) The EPZ concept which allows investors to import from anywhere in the world duty-free.

(ii) Preferential tariff structures which may inhibit or encourage local sourcing. Under the European Union outward processing regime, or the United-States Tariff Code 806/807, duty is paid only on the value added outside the European Union or the United States. The generalized preferences (GSP) on the other hand require producers to achieve significant value added within the country in order to benefit from GSP.

(iii) Type of industry. It is easier to develop local linkages in some branches, particularly in food processing or garment production. Linkages in the electronics sector are more difficult because they involve the production of high-technology components or materials. In the Philippines, the electronics sector accounts for 87 per cent of exports in the zones which were surveyed.

(iv) Nationality and equity structure. It was noted that most EPZ companies in the Philippines sourced the larger part of their inputs from their home base. However, it was noted also that companies purchased significant amounts of inputs elsewhere, proving "that materials will be sourced where trading advantages exist".

(v) Lack of linkage promotion: the EPZ administration in the Philippines have made no obvious efforts to promote linkages.

The issue of linkages was discussed at the UNIDO meeting referred to in Section 6.4. It stressed that linkages do not occur spontaneously, but must be stimulated, and that governments have a role to play. In Ireland, for example, the government established a special programme to encourage and develop linkages between free-zone type export companies and local producers. Under this programme, many of the technical departments at universities were also involved in assisting local producers. Purchase managers of export companies were encouraged to work with local suppliers and often did so for long periods, helping them to achieve the quality, delivery and prices necessary for success. Many suppliers received orders - not just from free-zone companies at Shannon or free-zone status companies elsewhere in Ireland, but also from companies operating in Europe and the United States.

A number of countries now provide the same incentives and rewards to suppliers of inputs to EPZ companies as they do to direct exporters. In Sri Lanka local suppliers receive the same incentives as free zone companies, including rebates on import duties and other taxes. In addition, subcontracting procedures have been simplified. A World Bank report on Thailand's manufactured exports[25] stressed the need for measures which would ensure access to duty and tax-free inputs and preshipment finance for both direct and indirect exporters. It is essential, the report concluded, that domestic producers can compete on an equal footing with foreign suppliers.

---

24) UNIDO - Towards Linking EPZ Firms with the Domestic Economy : The Case of the Philippines, 1989.

25) World Bank - Thailand's Manufactured Exports - Key Issues and Policy Options, Report no. 5670, December 1985.

8.4 Technology Transfer

The issue of technology transfer is closely related to that of linkages. In most free zones, technology is transferred to the domestic economy via the movement of personnel. At Shannon, many individuals learned skills which they subsequently used to set up companies supplying components or services to the free zone. The E.I. company, an electronics subsidiary of the General Electric Corporation, was established at Shannon in 1963, producing consumer electronics such as smoke alarms and TV guns. It had its own toolroom facility. Many Irish employees were trained as toolmakers. A number subsequently left and established their own engineering service companies which were able to supply high quality precision engineering services to existing export companies. The existence of these service companies was also a factor in attracting new investment to Ireland.

In many cases free-zone companies also trained Irish managers in a range of production, management and marketing skills. Some of these managers left to establish new businesses. Others bought the free zone companies from the foreign parent companies. Initiatives and incentives which encourage the development of a strong local management are obviously an important part of any technology transfer programme.
An article in World Development[26] contrasts the turnover of professional staff in the Mexican maquiladoras and in Taiwan Province of China. In Mexico the annual turnover is 2.5 per cent, whereas in Taiwan Province of China it is 23.7 per cent. In Mexico, 90 per cent found employment in other free-zone firms, which means that very little knowledge or technology was transferred to the domestic economy. In Taiwan Province of China, by contrast, 85 per cent of the employees went to firms outside the zones. A World Bank study on free zones quoted before[27] examined the issue of technology transfer as well. It concludes that this takes place largely through the movement of people. In fact, in many cases the only way to acquire export skills in the early stages of a country's development (the EPZ stage) was on-the-job training, not formal training.

An attractive general business environment stimulates mobility from EPZs to the domestic economy. In Ireland there is a strong correlation between the growth of linkages in the 1970s and the improved business environment for small and medium-sized companies in the domestic economy: deregulation, improved infrastructure and buildings for small and medium-sized firms, and better access to capital.

8.5 Environmental Effects

EPZ firms rarely cause serious air or water pollution. The garment industry, which dominates in most zones, produces only domestic effluent. Electronics companies and some other industries use chemicals which are harmful if not properly treated or disposed of. However, zones usually have suitable preventative measures. Treatment or disposal measures are more cost-effective in free zones or industrial parks because of the economies of scale involved.

It has already been mentioned that the leather and textile sectors can be serious polluters - particularly dyeing, as the case of Mauritius has shown. Zones planning to develop backward linkages in the clothing and footwear sectors should make special arrangements to accommodate these industries.

Countries which responded to the question on the environment in the UNIDO survey stated that there are few environmental problems. Few chemicals or hazardous materials are stored and very little industrial effluent, smoke or smells are produced. In about 50 per cent of the zones, responsibility for monitoring and controlling pollution rested with the zone authority.

In Sri Lanka a separate department in the Board of Investment monitors the environment and pollution. Each zone maintains an environmental laboratory. Investors are given standards or tolerable limits. If they exceed these, they have to provide an in-house treatment plant. Solid waste is collected to be taken out or incinerated. Emission, effluent, and noise levels are periodically checked. Prospective investors have to provide information about the manufacturing process. This

26) Bannon, James and Lucker, op. cit.
27) Holmes and Meo, op. cit.

will be studied by the BOI's Environment Department, which will advise the investors. There are instances where projects have been rejected on environmental grounds.

EPZ development can sometimes cause pollution of the surrounding area if there is no proper planning to accommodate the flow of workers to the region which arises from the growth of the EPZ. Tijuana in Mexico is one example. Over the years, it attracted many maquiladora-type investors. As a result of this and other developments there was a major inflow of people. The absence of planning caused congested human settlements and pollution.

8.6 Exports

In 1990, manufactured exports from developing countries were around US$ 300 billion. The vast majority of the firms involved in exports benefit in some way from duty-free facilities. Data allowing a breakdown of exports between the different forms of duty-free facilities are lacking. The World Bank estimates that about 5 per cent of the total comes from fenced-in zones.

Exports per worker vary considerably from zone to zone, depending on the mix of industries. Gross output/exports per worker per year in the garment industry ranges from US$ 5,000-8,000. In most cases the figure is closer to US$ 5,000. In the electronics sector, gross output per worker can be upwards of US$ 25,000. In zones where electronics predominate, like those in Malaysia, the figure can exceed US$ 40,000.

8.7 Value Added

The percentage of value added produced in a zone varies with the product and skills involved. In garment zones the figure will be around 25-30 per cent. In the case of electronics, value added will be 10-15 per cent.

Domestic value added is a different matter. If no raw materials or services are sourced domestically, then the value added in the zone and country are the same. Sometimes, however, a significant portion of raw materials can be sourced locally, as discussed previously.

8.8 Working Conditions/Employment Effects

It was shown in Chapter 2 that the overall impact of EPZ development on employment is relatively small, in world terms, regardless of how a free zone is defined. Even so the impact is significant in particular locations - notably in Mauritius, the Dominican Republic, Sri Lanka and Malaysia.

A frequent criticism of free zone industry is that it exploits workers. Some zones may outlaw unions and ban strikes. Yet in relative terms, the employment conditions within most zones are good - in the sense that wages and working conditions in the zones are better than those in comparable activities outside the zone. Within zones, factories are new, lighting conditions are good and canteen and medical facilities are often available.

A World Bank study[28] made the same points, and the answers to a question on wage levels and working conditions in the UNIDO survey confirm the picture sketched above. Most of those who responded indicated that wage levels in the zone were "high" i.e. 5-20 per cent higher than comparable wage levels in the domestic economy. In making such comparisons it is important to compare "like with like" i.e. wage levels in the zone garment sector should be compared with those in the garment sector in the domestic economy.

According to Peter Warr[29], criticism from developed countries reflects a lack of familiarity with conditions and wages in developing countries: if workers were not better off being "exploited" by EPZ firms, the latter would find it impossible to hire them. Warr refers to a study on workers in the Bataan EPZ[30]. Most of them came from large households and for many the zone wages represented about half of the household income. On average, EPZ wages were 35 per cent above those in

28) World Bank, "Export Processing Zones", Policy and Research Series no. 20, March 1992.

29) Warr 1989, op. cit.

30) The Bataan EPZ, ILO/ARTEP, Bangkok 1982.

previous employment. EPZ firms, unlike many of those in the domestic economy, adhered to minimum wage laws and industrial safety standards.

Raphael Kaplinsky[31] highlights the dangers of depending in the long term on low-skilled, cheap labour activities. As more countries enter, say, garment production for export, there is downward pressure on wages to remain internationally competitive. Real wages in dollar terms paid by many EPZs in the Caribbean and central America have fallen significantly over the 1980s, even if EPZ wages may be higher than those in the domestic economy. Kaplinsky suggests that the best alternative is to develop activities where skills and specific local advantages (e.g. a good climate for horticulture) are important.

This underlines that EPZs are useful to initiate a process of export-led industrial development in a country where suitable conditions for such industries cannot be created easily on a countrywide basis. But they should be viewed as an interim step towards a countrywide duty-free regime and should not be developed in isolation but as part of a wider, long-term strategy.

In most EPZs national labour legislation applies. There are occasional exemptions, e.g. from a ban on nightshifts for women. Union activity may be restricted. In Turkey, strikes and lockouts are banned for 10 years after the start of free zone operations. In Sri Lanka and the Dominican Republic, union organizers were prevented from entering free zones. Until recently, the Republic of Korea restricted union activity in free zones. India's EPZs have been declared public utilities, which has the effect of restricting or delaying strike action. Individual firms may also try to keep out unions. The most serious dispute at Shannon in the 35 years of its existence was over union recognition; the company had eventually to concede and recognise the union. Firms (both inside and outside EPZs) sometimes pay wage rates well above the union rate to avoid trade union activity. In a number of EPZs, notably in Mauritius and Mexico, unions have been credited with achieving substantial wage increases for workers in recent years.

8.9 EPZs and Women

The EPZ is part of a wider economy and society. As such it will reflect most of its laws, practices, conditions and social attitudes. One of the important ways in which it differs from the rest of the economy is that there is usually a very high percentage of women workers. If the "demonstration effects" of new products, production methods, skills, management practices and attitudes are among the expected effects of an EPZ, it is perhaps reasonable to expect that the EPZ would also introduce new attitudes to the employment, role and status of women.

To collect information on the position and role of women in EPZs, the questionnaire which UNIDO circulated contained a section on the status of women. Information was sought on zone policies for promoting the status of women, facilities for supporting women in the workplace, equal pay policies, and whether or not women occupied senior positions with investor firms or the zone administration. Eight of the 23 responding countries answered the questions on the status of women. The following is typical of many of the responses:

"Women-workers in the EPZs have the same rights and privileges as the male workers. There is no sex discrimination existing in the management or operations of zone enterprises. Policies regarding the promotion of women are incorporated in the labour code. Women, in addition to the regular benefits given to workers and employees, can avail themselves of maternity leave benefits and the same opportunity for advancement."

All eight countries stated that maternity leave and crèche facilities are provided. A few countries provide special training facilities for women. Five countries indicated that women occupy senior positions in zone firms and/or the zone administration.

It is impossible to judge from the responses the extent to which equality for women applied in practice (as distinct from legally), or whether crèches and other facilities were adequate. The low level of response to the questions on women's status could be interpreted as meaning that zone

31) R. Kaplinsky - "Export Processing Zones in the Dominican Republic: Transforming Manufactures into Commodities, World Development, vol. 21, no. 11, 1993.

administrators (who for the most part answered the questionnaires) do not consider measures for improving women's status to be important. But some conclusions can be drawn on the basis of information contained in the EPZ studies which were already cited and a recent UNIDO study[32].

In some countries (Mauritius is one example) there is evidence of a steady increase in the percentage of women occupying professional and managerial positions. The stereotype of the young single woman worker (16-25 years) is changing. In many countries, an increasing share of women workers are older (in their twenties or thirties) and married with families. They are often the main source of income in the household. Wage discrimination between men and women seems to be more severe among married people, according to the UNIDO report.

The trend towards married women highlights the need for special measures, including crèches and maternity leave. Good transport is another important service for married women. In some cases measures which would bring the work closer to the women would help, such as the establishment of satellite factories by groups of women and/or the EPZ investors. These could include low interest loans, and business development and entrepreneurial support services.

The movement from low to medium and higher technology activity which is taking place in some countries, and which is very desirable from an industrial strategy viewpoint, may mean fewer opportunities for women because of their limited educational and technical qualifications. The development of services such as data processing, on the other hand, will mean more opportunities for women.

Overall, the EPZs have increased the job opportunities for women. But women still remain heavily underrepresented in senior positions in zone firms or the EPZ administration. There seems to be a general lack of consciousness on the part of zone managements that policies and measures to enhance the status of women should include more than crèches and maternity leave. Often the low skilled workers have less job security. There appears to be need for greater vigilance on part of zone managements for ensuring better working conditions for women, and equal pay for equal work.

32) UNIDO - Participation of Women in Manufacturing: Patterns, Determinants, and Future Trends, May 1995.

ANNEX I: TERMINOLOGY AND DEFINITIONS

Free Port

This was probably the first term used. It refers to zones established by the colonial and industrial powers on major trading routes in the eighteenth and nineteenth centuries. The first such port was Gibraltar, established around 1705. Others were established by the British in the nineteenth century in Aden, Singapore and Hong Kong. In Africa, the French made Djibouti an important free port and trading centre. After the Suez Canal was opened in 1864, Port Said became one of the world's busiest free ports. At the other side of North Africa Tangier prospered for centuries as a major commercial centre and free port. In Europe the best known free ports are Rotterdam and Hamburg, both of which developed in the second half of the last century. Hamburg had formal free port status which it retains today. Rotterdam does not have this status, but there are transit goods which can be stored duty-free and with a minimum of customs formalities in bonded warehouses throughout the port. Rotterdam is in fact Europe's major transshipment port. All the other major ports on the European mainland have formal or informal free port status. Some, like Genoa and Trieste, have a history going back to the Middle Ages. Others, such as Le Havre and Marseilles, are of more recent date.

Free Trade Zone (FTZ)

This term refers to free ports and zones set aside within port areas and at other major transport intersections (mainly road and rail). The area set aside could range from a small transit shed to hundreds of acres. Such zones are usually licensed and controlled by the customs administration. Within the zone, duty-free goods can be stored, packed, warehoused and transshipped. The emphasis in these zones is on trade and transshipment. Some of the zones are used exclusively for transshipment to a neighbouring inland country. The port of Karachi has a small transit zone to store goods destined for Afghanistan. Calcutta has a similar facility to accommodate Nepalese imports. Other zones, particularly the free ports like Singapore and Rotterdam, are major intercontinental trade and distribution centres.

Foreign Trade Zone (FTZ)

This term is normally associated with trade zones in the United States. There are currently about 200 such zones, and the emphasis is on importing. Under United-States regulations, goods can be stored or processed in foreign trade zones prior to importation into the United States. Over 75 per cent of the goods passing through United-States zones are destined for the United-States market. Duties are paid on such goods at the point of import from the zone into the United States.

Export Processing Zone (EPZ)

The EPZ concept was developed around 1960 at Shannon airport in Ireland. The EPZ is: (i) an industrial park which is usually 40-80 hectares large; (ii) surrounded by a fence; (iii) controlled by the customs administration and/or the EPZ authority; (iv) a place where investors can import equipment and materials free of duty, process the materials and export the finished product. The question of domestic market sales and trade between the EPZ and the domestic economy is covered in Section 3.5. In the last three decades, EPZs have spread rapidly throughout much of East and South Asia, Africa, the Caribbean and central America. A number of western European countries, including France and the United Kingdom, have also embraced the idea. At present, most former socialist countries in Europe and Asia as well as many countries in Africa and South America are examining the concept.

Economic Processing Regime (EPR)

This term refers to an administrative rather than a physical concept. EPRs exist in Mauritius and Fiji. In both countries investors are not confined to a particular zone: if they have EPR status, they can set up a facility anywhere and have the same privileges and status as an EPZ investor in other

countries. This means they can import inputs and equipment free of duty, process the materials and export the finished product. The EPR is very similar to "automatic import licensing" and "duty/indirect tax exemption" schemes. It may be a little less bureaucratic, among others with regard to access to foreign exchange. Some people may feel that the use of the term "export processing" has a promotional edge or appeal. The maquiladora sector in Mexico and the enclave sector (a term used by the ILO in a study on EPZs in the Caribbean) in Barbados could also be classified as EPR regimes.

Special Economic Zones (SEZ)

The term "special" or "free" economic zone (SEZ) has been associated with developments in China since 1979/80. More recently the term has also been used in relation to proposals for free zone development in eastern Europe. In the late 1970s, the Chinese government recognised the need for special measures to attract foreign capital, technology and management. In 1979 the government announced that two provinces could experiment with SEZs. These were established at Shenzhen, Zhuhai and Shantou in Guandong province and Xiamen in Fujian province. Local authorities in each zone were allowed to promulgate local legislation and regulations for promoting investment and approving investor applications. There were favourable tax and operating procedures, including duty-free imports of materials and equipment. Most of the output was exported, although up to 30 per cent local sales were permitted. The main benefits expected from these initiatives included foreign investment, employment, exports, and economic growth.

In 1984 the concept was extended to fourteen coastal cities. Over the last 11 years, it has been extended to other coastal and inland areas - reflecting a general satisfaction with the concept. The best known SEZ is Shenzhen, which is on China's border with the territory of Hong Kong. It covers an area of 327 square kilometres and is managed by the Shenzhen Municipal Authority. It has a population of approximately 1 million people.

The response of foreign investors to China's open door policy has been positive. In the 1980s about 20,000 SEZ projects involving foreign investors (mostly joint ventures) were approved, with an investment of in excess of US$ 30 billion. Most of this investment came towards the end of the decade, showing that it takes time for a country to gain the confidence of investors. In China, over half the investors are overseas Chinese, followed by the United States (20 per cent) and Japan (15 per cent). The Chinese government has granted increased autonomy to the SEZs over the last decade. Projects of up to US$ 30 million can be approved without reference to the Central government.

The government of the People's Democratic Republic of Korea is developing plans to establish an SEZ in the northern part of the country at Rajin/Sonbong. The total area of the proposed zone is 621 square kilometres.

In Eastern Europe, feasibility studies are under way for the development of SEZs. The idea is to develop limited geographic areas as centres for foreign and domestic export-oriented investment. The zones should have good infrastructure, a simplified regulatory framework and a range of support services which are "business oriented". Like the Chinese zones, they could be considered as "controlled experiments in economic reform". The primary emphasis in many of these zones is on freedom from bureaucracy and creating a "pro-business environment".

In Poland a feasibility study has been completed to establish a special economic zone in Mielec, in the Southeast of the country, on the site of an aircraft factory which experienced a very substantial drop in sales after the break-up of the former Soviet Union. The site area is about 200 ha. The objective of the zone is to replace the jobs lost as a result of the fall in aircraft manufacture through new engineering and other activities which can use the skills and specialised services (heat treatment, plating) which have been developed in Mielec over the years. In Romania, Bulgaria, Hungary, Slovakia, the Russian Federation and a number of other member States of the Commonwealth of Independent States, feasibility studies for the development of special economic zones are being planned or carried out.

Free Zone

The term free zone is often used to refer to free trade zones, export processing zones and special economic zones as a group.

ANNEX II: DRAFT FREE ZONES LAW

Note: Comments are given in square brackets.

THE FREE ZONE LAW 199...

A law which provides for the establishment, development, management and control of free zones and related matters.

Part One - Preliminary and General Provisions

ARTICLE 1. SHORT TITLE

This law may be cited as the Free Zones Act of 199...

ARTICLE 2. INTERPRETATION

In this Act "Free Zone" means an area of land which is declared under Section 3 of this law to be a free zone. "Licence" means a licence granted under Article 26 of this Act. "Customs Officer" includes a member of the security forces or any person in the public service who is for the time being employed in the prevention of smuggling or investigating an offence against the customs acts. "Customs territory" means the customs territory of the country. "Minister" means the Minister responsible for the development of free zones [usually the Minister for Trade and Industry]. "Organization" means the Free Zone Development Organization established under Article 8 of this Act.

ARTICLE 3. ESTABLISHMENT OF FREE ZONES

3.1 The Minister [or Government or President as appropriate] may by order declare that on or after a specified date, any building or area of land shall be a free zone for the purposes of this Act.

3.2 The Minister may amend the order under Article 3.1 by varying the limits of the zone.

ARTICLE 4. NON-APPLICATION OF IMPORT AND EXPORT LAWS

4.1 The laws in force relating to the import and export of goods shall not apply to goods brought directly into and out of a free zone from and to other countries or other zones within the country.

4.2 Imported goods of any description brought into a free zone shall be exempted from import duties, taxes and restrictions for as long as the goods remain in the zone, provided:

(i) Such goods are part of the trade or business of a licensed operator or developer, and,

(ii) such goods are not prohibited for reasons of public order, security, public morality, public health, animal health or plant health.

4.3 Goods exported from a free zone shall be free of all taxes and duties and restrictions except goods whose export is restricted or prohibited by law.

ARTICLE 5. TRADE BETWEEN A FREE ZONE AND THE CUSTOMS TERRITORY

5.1 Where goods which are not in transit between a free zone and an entry/exit point are brought into a free zone territory from another part of the customs territory which is not a free zone, the goods shall be deemed to have been exported.

5.2 Goods brought into the customs territory from a free zone which are not in transit to another country shall be deemed to have been imported into the customs territory.

5.3 The Minister shall make regulations governing trade between free zones and the customs territory.

ARTICLE 6. CUSTOMS REGULATIONS

The Minister (with the approval or concurrence of the Minister responsible for customs) may make regulations:

(i) Adapting or modifying for the purposes of this act any of the provisions of the customs acts or any statutory instrument relating to customs made under statute;

(ii) Governing the movement of persons, vehicles and goods into and out of a free zone from and to parts of the state;

(iii) Covering the keeping, storage or handling of goods in a free zone;

(iv) Covering the keeping and preserving of accounts and records in specified form in respect of goods in the free zone;

(v) Relating to the provision of security by bond or otherwise as the Department of Customs may require in respect of goods in transit to or from the free zone and entry/exit points to or from the customs territory, or in transit between free zones.

Part Two - Management and Organization

[A country may decide not to establish a special free zone organization or authority, but to leave the responsibility for supervision of free zone development to the responsible Minister and his department. In that situation, the organization outlined in Articles 8-21 will not be necessary.]

ARTICLE 7. DEVELOPMENT AND MANAGEMENT OF FREE ZONES

7.1 The responsibility for the control, supervision, development and management of free zones will rest with the Minister.

7.2 The Minister may delegate responsibility for control and supervision of free zone development to an organization established under Article 8 of this Act.

7.3 The Minister may delegate responsibility for the development and management of a free zone to any developer licensed under Article 23.2 of this Act, or to the organization established under Article 8 of this Act.

ARTICLE 8. EXPORT PROCESSING ZONES ORGANIZATION

8.1 An organization known as the Export Processing Zones Organization shall be established to develop, promote and manage the EPZs. The organization shall enjoy an independent financial and administrative status and be entitled to carry out all legal transactions and procedures.

8.2 The organization shall be a body corporate having perpetual succession and a common seal and may sue and be sued in its corporate name and may perform such other acts as bodies corporate may perform.

8.3 The organization shall have the following functions;

(i) Establish free zones;

(ii) Manage, utilize, develop and maintain EPZs to serve the national economy;

(iii) Encourage and promote investment within the zones;

(iv) Receive applications from persons who want to develop and manage free zones;

(v) Make recommendations to the Minister on the designation of selected buildings or areas of land as a free zone;

(vi) Issue licences to persons to develop and manage free zones;

(vii) Receive applications from persons to establish business within a free zone;

(viii) Issue licences to persons to operate businesses within a free zone;

(ix) To do all other such acts as it deems necessary for the promotion, development and management of free zones.

Article 9. Board of Directors

9.1 The organization shall be governed by a Board of Directors appointed by the Minister.

9.2 The Board in Article 9.1 shall include representatives of relevant government agencies as well as private sector representatives.

[The ideal number for a board is six to nine. This is large enough to allow for a range of representatives and yet small enough to work effectively. Some EPZ laws set out in detail who the Board members should be - e.g. representatives from selected ministries and private sector organizations such as the Chambers of Commerce or exporters association, or representatives of zone developers or investors. The Minister should have some discretion in appointing members with special skills or competence.]

Article 10. Duties of the Board

The Board shall administer and supervise the affairs and activities of the organization including the following:

(i) Laying down a general policy for the organization within the framework of overall national policy;

(ii) Approving plans and programmes for the promotion, development and management of free zones;

(iii) Approving the annual budget of the organization;

(iv) Receiving and adopting the annual accounts and annual report of the organization;

(v) Fixing the remuneration level and conditions of employment for all employees excluding the Director General;

(vi) Appointing the Director General with the approval of the Minister;

(vii) Approving applications from investors to establish enterprises in the free zone;

(viii) Approving the issuing of licences;

(ix) Approving plans of the organization to borrow money.

Article 11. Period of Office

11.1 Board members shall be appointed for a period of [usually 2-3] years.

11.2 A retiring member shall be eligible for re-appointment.

Article 12. Conditions of Office

12.1 A member may resign his office by notice in writing to the Minister and the resignation shall take place on the date on which the Minister receives the notice.

12.2 Where a member has any financial interest directly or indirectly in any undertaking dealing with the organization he shall, before exercising any functions as a member, declare the nature of such interest to the organization and shall comply with such directions as it may give him in regard to it.

12.3 A member shall be disqualified from holding and shall cease to hold office if he is adjudged bankrupt or makes a composition or arrangement with his creditors, or is convicted of any indictable offence in relation to a company or of an offence involving fraud or dishonesty whether in connection with a company or not.

12.4 The conditions of office applicable to organization members set out in Articles 12.2 and 12.3 shall apply to members of committees constituted under this Act.

Article 13. Delegation of Functions

13.1 The Board of the organization may without prejudice to its general responsibilities under this Act perform any of its functions through or by any of the members of its staff duly authorized by the organization in that behalf.

13.2 The Board of the organization may delegate its functions to a committee constituted by it or to any of its members or to any member of the staff duly authorized by the Board in that behalf.

13.3 The Board may as it thinks proper from time to time constitute committees for the purpose of Article 13.2 and dissolve any such body.

13.4 Membership of a committee may include persons who are not members of the organization or its staff.

Article 14. Directives to the Organization

14.1 The Minister may give the organization such general policy directives as he considers appropriate having regard to the provisions of this Act.

14.2 A directive under article 14.1 shall not apply to any individual undertaking.

Article 15. Grants to the Organization

In each financial year the Minister may pay to the organization such amounts as the Minister with the consent of the Minister for Finance may sanction, to enable the organization:

(a) To meet its administration, capital and general expenses, and,

(b) to discharge the obligations or liabilities incurred by the organization under this Act.

Article 16. Other Revenue

The organization shall have the revenue from:

(i) Rents and levies collected in the free zones;

(ii) The sale of goods, services or property by the organization;

(iii) Trading income.

Article 17. Provision of Sites and Services

[It may be desirable or necessary to give the organization compulsory acquisition powers. If so, an article like the following is necessary.]

17.1 For the purpose of providing or facilitating the provision of sites or premises for the establishment, development or maintenance of a free zone the organization may:

(i) Acquire any land or building either permanently or temporarily and either by agreement or compulsorily;

(ii) Acquire (either permanently or temporarily and either by agreement or compulsorily) any easement, wayleave, water-right or other right whatsoever over or in respect of any land or water;

17.2 Payment of compensation for any land acquired (whether permanently or temporarily) to the persons entitled to such compensation shall be fixed in accordance with the general practice for the payment of such compensation in the country.

Article 18. Borrowing

The organization may with the consent of the Minister and with the concurrence of the Minister of Finance borrow by arrangement with bankers or otherwise such sums as it may require for the purpose of providing for current or capital expenditure.

Article 19. Staff of Organization

[If the organization wants to recruit high-calibre staff it must be able to offer attractive salaries and employment conditions.]

19.1 The organization may appoint such and so many persons to be members of the staff of the organization as it thinks proper from time to time.

19.2 A member of the staff of the organization shall be employed on such terms and conditions as the Board of the organization may from time to time determine.

Article 20. Disclosure of Information

[This article is designed to reassure investors.]

20.1 Subject to Article 3, a person shall not disclose any information obtained by him:

(a) While performing duties as a member of the Board of the organization, or of any committee of the organization, or as a member of the staff, or as advisor or consultant to the organization; or

(b) As a director or staff member of any body consulted in pursuance of any provision of this Act while performing duties relating to any such consultation.

20.2 A person who contravenes Article 20.1 shall be guilty of an offence and shall be liable on summary conviction to a fine not exceeding...

20.3 Nothing in Article 20.1 shall prevent:

(a) Disclosure of information in a report made by the organization or on behalf of the organization to the Minister;

(b) Disclosure of information by the organization or by a member of the organization for the purpose of a scheme of research or development or a scheme of acquisition of product or process technology.

Article 21. Reports to the Minister

21.1 The organization shall submit, in such form as the Minister may direct, an annual report of its activities as soon as practicable after the end of the financial year to which it refers.

21.2 The accounts of the organization shall be submitted annually by the organization for audit to an auditor designated by the Minister.

21.3 The organization shall submit to the Minister such other reports and information as the Minister may request.

Part Three - Licences and Miscellaneous Provisions

Article 22. Restriction on Unlicensed Activities

[The licence or permit is the government's main instrument for controlling free zone activity. All

investors and developers should be licensed. Small retail traders could be exempt.]

22.1 No person or corporate entity shall develop or manage a free zone or carry on a business therein (except minor retail activity) unless he is the holder of a licence issued by the zone organization (or Minister), granted under Article 23.1, which allows him to develop or manage the zone or carry on a business therein.

22.2 A person who contravenes Article 22.1 shall be guilty of an offence and liable to a fine not exceeding...

Article 23. Granting of Licences

[The organization or Minister may take responsibility for issuing licences. The practice varies from country to country.]

23.1 The organization (or Minister) may at its/his/her discretion and after consultation with the Customs Administration and Reserve Bank grant or refuse any person or corporate entity a licence authorising:

(i) The development and/or management of a free zone; or

(ii) The carrying on of any business within a free zone.

23.2 In exercising this discretion, the organization (or Minister) shall have regard for the extent to which the business for which the licence is sought contributes to objectives for which the zone is established, e.g.:

(i) The growth of exports;

(ii) The growth of employment;

(iii) The advancement of less developed areas of the country.

Article 24. Applications for a Licence

24.1 Any person may apply for a licence.

24.2 Every application shall be in writing, addressed to the Secretary, Free Zone Organization (or Minister).

24.3 The application shall be accompanied by such information as the organization (or Minister) may require.

Article 25. Conditions Attached to a Licence

25.1 The organization (or Minister) may attach to a licence such conditions as it thinks proper in the light of consultations with the Department of Customs and the Reserve Bank.

25.2 If a licensee does not comply with a condition attached to his/her licence, he/she shall be guilty of an offence and shall be liable to a fine not exceeding...

Article 26. Revocation or Variation of a Licence

26.1 The organization (or Minister) may at its/his/her discretion revoke a licence if:

(i) It is satisfied that there has been a breach of a condition attached to the licence; or

(ii) The licensee is convicted of an offence against the customs laws.

26.2 Before revoking a licence, the organization (or Minister) shall give not less than thirty days notice of its intention to the licensee and shall consider any representations made to it by the licensee within that time.

26.3 The organization (or Minister) may vary the conditions attached to a licence with the consent of the licensee.

Article 27. Register of Licences

27.1 The organization (or Minister) shall establish and maintain a register of licences (referred to as the register, in this Article) granted under Article 23.1 of this Act.

27.2 There shall be entered in the register in respect of each licence:

(i) The name of the person to whom the licence was granted, and,

(ii) the trade, business or manufacturer to which the licence relates.

Article 28. Restrictions on Bringing Consumer Goods into a Free Zone

28.1 Goods shall not be brought into a free zone for personal use or consumption or for sale or rental therein except from another part of the country and under conditions set out in Article 28.2 of this Act.

28.2 If goods referred to in Article 28.1 are liable to customs or excise duty, this duty shall be paid before they are brought into a free zone and shall not be entitled to a drawback allowance.

Article 29. Entry to a Free Zone by Certain Public Officers

29.1 Customs officers, tax officials, policemen and other officers and servants in the discharge of their official duties can at all reasonable times enter the free zones and buildings and vehicles therein.

29.2 Any person who prevents and obstructs any entry authorized by Article 29.1 shall be guilty of an offence under this section and be liable upon conviction to...

Article 30. Maintenance of Records

Any person authorized to transact business in a free zone under a licence granted under Article 23.1 shall:

(i) Maintain records

   a. In respect of any goods brought into the free zone, the date of receipt, from whom and whence received, the value and quantity and in the case of articles, materials or ingredients used for manufacture, processing or packaging, the quantity used per unit of the finished goods;

   b. In respect of goods sent out of the free zone, particulars of disposal, including selling price and quantity sold.

(ii) Keep available for a period of not less than three years for inspection by officers of the Department of Customs such records and all invoices and other documents relating to such goods;

(iii) Allow officers of the Department of Customs at all reasonable times to inspect such records, invoices and other documents and to take extracts from or copies of such documents and to examine and take samples of any such goods.

Article 31. Missing Dutiable Goods

If goods stored in a free zone are found to be missing without an acceptable explanation, the Director of Customs may request the licensee to repay the duty on such goods at the rate in force at the time, in addition to any fine or penalty which may be imposed.

Article 32. Settlement of Investment Disputes

32.1 Investment disputes which arise in the context of this Act can be settled in a manner agreed between the parties in the dispute; or if there is an agreement between the country and the home country of the other party; or by using the Convention for the Settlement of Investment Disputes; or by arbitration.

32.2 An arbitration board shall consist of two members appointed by the parties to the disputes (one appointed by each party) and a third independent person agreed jointly by the parties. In the event of the parties failing to agree on the nomination of a third member within 15 days of the nomination of the second member, the matter will be referred to the Free Zone Organization which will appoint the third member.

32.3 The findings of the Arbitration Board will be binding on both parties. The Arbitration Board will decide on the costs of the arbitration and who should pay them.

Article 33. Guarantee Against Nationalisation

[This article is partly for promotional purposes.]

33.1 Projects established in a free zone shall not be nationalised.

33.2 Assets belonging to free zone investors cannot be confiscated except by court order.

Article 34. Investors

[This article is for promotional purposes.]

34.1 Foreign investors can hold up to 100 per cent of the shares in any free zone enterprise.

34.2 Domestic investors can hold up to 100 per cent of the shares in any free zone enterprise.

34.3 Foreign and domestic investors will have equal status within the free zones.

Article 35. Repatriation of Profits

Foreign investors can repatriate profits from an enterprise without restriction, provided an auditor's certificate is produced certifying that the profits to be repatriated are the true profits accruing to a foreign investor as a result of a dividend being declared.

Article 36. Repatriation of Capital

36.1 Foreign investors may repatriate capital without restriction provided that:

(i) The capital has been brought into the country from overseas;

(ii) The capital to be repatriated is realized from the sale of physical assets or shares, and,

(iii) the proceeds from the sale in (ii) represent the true value of the assets in question.

Article 37. Operation of Foreign Currency Accounts

37.1 Each free zone enterprise shall be permitted to operate a foreign currency account with a bank in the country.

37.2 The terms and conditions under which the account shall be operated will be set out in the operating licences issued by the organization.

37.3 The Reserve Bank shall be consulted by the organization on the terms and conditions referred to in Article 37.2.

37.4 The Reserve Bank shall have the task of supervising the operation of foreign currency accounts. It shall be empowered to request any information it considers necessary from the account holder or bank.

BIBLIOGRAPHY

International Labour Office (ILO)

Employment and Multinationals in the 1990s, Working Paper no. 43

George Botchie - Employment and Multinational Enterprises in Export Processing Zones: The Cases of Liberia and Ghana, Working paper no. 30

Frank Long - Employment Effects of Multinational Enterprises in Export Processing Zones in the Caribbean, Working Paper no. 42

Rudi Maex - Employment and Multinationals in Asian Export Processing Zones, Working Paper no. 26

ILO/UNCTC

Proceedings of the UNCTC/ILO Training Workshop, Bridgetown, Barbados, October 1988

Antoine Basile - A Perspective on Free Export Processing Zones, October 1988

United Nations Centre for Transnational Corporations (UNCTC)

The Challenge of Free Economic Zones in Central and Eastern Europe, 1991

United Nations Conference on Trade and Development

Export Processing Zones in Developing Countries: Implications for Trade and Industrialization Policies, January 1983

Kurt Kwasny - Report of a Study Tour by Officials of The People's Republic of China, October 1980

United Nations Industrial Development Organization

Expert Group Meeting on Export Processing Zones, December 1992

Export Processing Zones in Developing Countries, August 1980

Export Processing Zones in Transition - The Case of the Republic of Korea, June 1988

Handbook on Export Free Zones, July 1976

Participation of Women in Manufacturing: Patterns, Determinants, and Future Trends, March 1995

Seminar on the Promotion and Development of Export Processing Zones in Xiamen, The People's Republic of China, January 1989

Towards Linking Export Processing Zone Firms with the Domestic Economy - The Case of the Republic of the Philippines, June 1989

World Bank

Industry and Energy Series Papers

"Export Processing Zones", no. 20, March 1992

"Free Trade Zones in Export Strategies", no. 36, December 1990

"Managing Entry into International Markets, Lessons from the East Asian Experience", no. 11, June 1989

Other World Bank Publications

"Building a Competitive edge in Sub Saharan African Countries" Policy and Research Series no. 57, March 1992

Paula Holmes and Paul Meo - "EPZs in Developing Countries - A Global View", mimeo, March 1989

Mauritius Managing Success, Report no. 7661 - MAS, July 1989

Thailand's Manufactured Exports - Key Issues and Policy Options, Report no. 5670, December 1985

Other Books and Articles

- "No Export Panacea", South, April 1990

Banco MEXT - The In-Bond Industry in Mexico, 1992

Geoffrey T. Bannon, Dilmus D. James and G. William Lucker - "Generating and Sustaining Backward Linkages Between Maquiladora and Local Suppliers in Northern Mexico" World Development, vol. 22, no. 12, 1994, p. 1933-1945

José M. Ceron - "Free Zones: Business Opportunities and Engines of Development", paper presented at a FIAS Conference on Investment Promotion in Africa, September 1989

Corporate Location - World Economic Zones: An Objective Study, June 1994

Walter and Dorothy Diamons - Tax Free Trade Zones of the World, Vol. 1-4, 1992

Economist Intelligence Unit - Tax Free Exporting Zones - A Users Guide, 1989

Dennis J Encamation and Louis T. Wells Jr. - "Competitive Strategies in Global Industries: A View From Host Governments", in Michael Porter (ed.) Competition in Global Industries, 1986.

G. Esser - "Export Processing Zones in Mauritius" - paper presented at an EPZ seminar, Shannon, May 1977

Free Zones Directorate, State Planning Organization, Prime Ministry - The Turkish Free Zones, April 1991

G.T. Galhenage - "Experience of Design, Development, Management, and Promotion of EPZs in Sri Lanka" paper presented at a UNIDO Expert Group Meeting on EPZs, Vienna, December 1992

Grupo Bermudez - Production Sharing/Maquiladora Programme, n.d.

Grupo Bermudez - Profile, n.d.

Government of Mauritius - Mauritius at the Cross-Roads - the Industrial Challenges Ahead, 1991

Government of Mauritius - The State of the Environment in Mauritius, July 1991

Government of the United Kingdom - Free Ports in the United Kingdom - Report of a Working Party under the Chairmanship of the Economic Secretary to the Treasury, March 1983

Raphael Kaplinski - "Export Processing Zones in the Dominican Republic: Transforming Manufactures into Commodities", World Development, vol. 21, no.11, 1993, p. 1851-1865

Philip J. Karp - "Free Zone Experiences in the Caribbean and Central America: Implications for Africa", paper presented at a conference of the Foreign Investment Advisory Service on Investment Promotion in Africa, September 1989

José Manuel Martinez Ayala - "Export Processing Zones - The Mexican Experience", paper presented at a UNIDO Expert Group Meeting on EPZs, Vienna, December 1992

N.M.G. Lal Kumara - "Country Report on EPZs - Sri Lanka", paper presented at an EPZ workshop, Shannon, February/March 1993

National Association of Foreign Trade Zones [US] - Foreign Trade Zones: A Positive Force in Trade and Economic Development, 1993

Eoin O'Malley - Free Trade Zones in Ireland and Four Asian Countries, Economic and Social Research Institute [Ireland] 1985

Pakistan Export Processing Zones Authority - The Karachi Export Processing Zone, January 1989

Paul Quigley - Pre Project Planning of Industrial Estates, Shannon Free Airport Development Company Ltd., October 1966

K.M.A. da Silva - "EPZs - Sri Lanka", paper presented at a seminar in Xiamen, People's Republic of China, June 1989

M. Sunnasse - "Industrial Development in Mauritius", paper presented at an EPZ seminar, Shannon, May 1977

M.K. Udayapala - "Role of EPZs in Promoting Exports and Foreign Investment", paper presented at a seminar in Shanghai, People's Republic of China, September 1991

United States Department of Commerce - Free Zones Around the World, 1970

Peter Warr - "The Jakarta Export Processing Zone: Benefits and Costs", Bulletin of Indonesian Economic Studies, December 1983

Peter Warr - "Export Processing Zones: The Economics of Enclave Manufacturing", Research Observer, June 1989

L.R. Watawala - "Public versus Private Zones; Sri Lanka's Experience with Public Zones", paper presented at a World Export Processing Zones Authority Conference, Colombo, November 1992

Louis T. Wells and Alvin G. Wint - Marketing A Country to Foreign Investors: Applying Existing Research to Sub-Saharan Africa, 1989

For more information, please contact:

Head,

Institutional Support and Private Sector Development Branch

Human Recource, Enterprise and Private Sector Development Division

UNIDO, P.O.Box 300, A-1400 Vienna, Austria

Tel: +43 1 21131 ext. 3641/3642 , Telex: 13 56 12, Fax: +43 1 239934

Internet address: unido-isp@unido.org