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SCOPE, STRUCTURE AND DETERMINANTS OF LINKAGES BETWEEN EXPORT PROCESSING ZONES FIRMS AND THE DOMESTIC ECONOMY IN THE REPUBLIC OF THE PHILIPPINES

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EXECUTIVE SUMMARY

The Philippine export processing zone system has been subjected to successive evaluations and commentaries by various disciplines since the first epz in the Bataan Peninsula started shipping out its manufactured exports to the world. In its formative years, it was generallly accepted for its role as a catalyst to industrialization as the country was treated to new products that came out of the assembly lines like watches, tennis balls, aluminum cables, jewelry, electric motors, optical lenses, flashguns, art objects, car-body parts, pleasure boats and a host of mass-produced semi-finished and consumer items. Objections to its establishment were swept by the developmental tides that swamped the country in the early 70's.

As the epz expanded, so did the criticisms. Scholars converged at Bataan, examined its accomplishments and came out with an almost unanimous verdict - that the program has not achieved its objectives. They claimed that real foreign investments were almost nil, foreign exchange generated was marginal, employment was insignificant, transfer of technology and skill was superficial and linkages with domestic industries were negligible.

This study was commissioned by the United Nations Industrial Development Organization particularly to verify claims of poor linkages of epz industries with surrounding economies and identify the factors that influenced their creation or discouraged their establishment. Based on its findings, it shall put forward policy recommendations to concerned authorities towards enhancing greater domestic value added in exports in the form of local raw material inputs. The study shall discuss the constraints of linkage creation, point to the areas where potentials are great, and propose the means to achieve it.

We have examined the industries at Baguio City and Mactan export processing zones, as well as industries at the Bataan EPZ in cases when we need to compare sectoral achievements. Selected export industries outside of epzs were also studied to determine the influence of location and investment incentives over the usage of domestic intermediate goods.

Baguio City and Mactan EPZs recorded better performances than the Bataan EPZ. The ratio of foreign investment and foreign exchange generated to public investment was a great improvement over that of the Bataan EPZ. Industrial peace and desirable levels of employment were maintained. Social problems although present, were not as volatile as Bataan's.

Existing linkages of industries in the two epzs studied were measured in terms of percentages to total value of input: where 0 to 10 percent is insignificant; 11 to 30 percent is modest; 31 to 60 percent is commendable and 61 to 100 percent is excellent. Most industries fall under the insignificant category while garments linkages position is commendable. The wood and food processing firms posted excellent ratings.

The performance of epzs in the area of integration of Philippine products in their exports was influenced in varying degrees by any or the combination of the following major factors:

- the epz concept
- incentive tariffs in the export markets
- industrial branch of activity
- nationality and equity structure
- lack of linkage promotion
- flaws in EPZA procedures

In spite of free trade, epz industries are willing to use local materials if they are constantly available at competitive prices and of acceptable quality. Wood and seaweed products, yarn, threads, zippers, plastics and carton packaging materials were among those locally sourced, with resource based industries posting the highest integration potentials.

Sub-contracting a part of production process is widely used in epzs and had created some form of permanent linkage with the community surrounding the epzs in at least two industries.

Epz style manufacturing could be undertaken with incentives outside epzs. For these industries, location per se, do not enhance linkages. While fiscal incentives encouraging the use of local materials were available (while absent in epzs), their influence to linkage creation was negligible.

The recommendations submitted were limited to factors within the control of zone management and may therefore be implemented without involving the whole bureaucracy. The proposed policy measures include:

a. Consistent with the Philippine Development plan for 1987 - 1992, the opening of the epz facilities to firms producing similar or related products for the domestic market in order to develop support capabilities in the area and to encourage complementation. The epz incentives may be extended to such firms to the extent of their sales to epz industries or their direct export activities.

b. The decentralization of decision functions involving all materials movement to and from epzs in order to guarantee a fast and comprehensive delivery of services;

c. adoption of procedures eliminating the system of tax credit. In its place, a mechanism advocating outright exemption from taxes and fees of sales to epz firms should be established.

d. sub-contracting by epz firm should be a matter of course, provided that the intention to engage in such practice is disclosed at the time of the project proposal.

e. epz marketing efforts should be geared towards attracting more resource-based industries. If warranted, EPZA should be ready to extend reasonable fiscal incentives.

f. there should be a regular program for the introduction of zone-made products to the public in order to encourage market encounters between the epz firms and local suppliers of intermediate goods; and

g. epz firms should be encouraged to coordinate with technical schools to help disseminate technology and conduct skills training suitable to the needs of epz firms.

Important factors which were touched in the study but which were not discussed exhaustively, like political stability, efficient delivery of services, import liberalization, achievement of a reasonable peso-dollar exchange rate, lower power costs, better labor productivity and industrial peace are also determinants of linkage creation. They are however considered as general prescriptions for an over-all efficient economic environment that affect all industries and are therefore too broad and complex for our purposes. They are treated as factors beyond the control of zone management.

CHAPTER I

INTRODUCTION

1.1 BACKGROUND

When David A. Miller[1] spoke before the World Export Processing Zones Association (WEPZA) Conference[2] at Flagstaff, Arizona, USA in September, 1985, he touched on various aspects of epz operations from the viewpoint of a zone user. His discourse proved to be a useful guide for this study. In the conference, Mr. Miller pointedly announced to participating epz developers and managers that they need only to sell cheap labor in order to attract entrepreueural market-oriented companies. He referred to other epz services as purely supportive to the labor cost factor.

Mr. Miller's message is not new to promoters of foreign investments in developing countries. What compelled the author's review of the presentation were his statements, in the course of relating his production experiences, to the effect that his company, EDEN TOYS, availed of US Tariff Article 807 in its operations at Haiti and Colombia. Under this scheme, US textiles were flown to Bogota and Port-au-Prince, sewn and processed into teddy bears, then returned to Jersey City for finishing, packaging and warehousing. Referring to his company's operations in Korea, Mr. Miller pointed out that he moved to that country because it was able to develop high quality fabric that is no longer available in the US. As a result, 60 percent of his product was made in Korea and remained competitive in the world market.

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[1] Chairman, Eden Toys, Inc., New York, NY, USA, and past President and Director of Toy Manufacturers Association of America and Director of the Committee for 806/807 in Washington, USA.

[2] International Conference of Managers and Users of Export Processing Zones, Flagstaff, Arizona, USA, Sept. 11 to 15, 1985.

Mr. Miller's statements reflect upon some of the factors that influence linkages between epz industries and domestic manufacturers of intermediate products. Haiti and Colombia's state of industrial development is a far cry from the Republic of Korea, the latter having joined the league of Asian countries[3] which have achieved moderately high economic growth.

Reference to the use of USTC Article 607 could be indicative of a behavioural pattern among foreign investors in sourcing raw materials for their operations in another country. In the case of his Korean operation, Mr. Miller implied that he abandoned the pratice of using US materials because "US textile industry let him down". Mr. Miller failed to mention in his report that his products from Korea were eligible under the Generalized System of Preference (GSP) which allowed its duty free entry into the US and other preference-giving countries, provided that the minimum value added requirement[4] had been met.

From our viewpoint, Mr. Miller's account applies in many foreign ventures located in developing countries like the Philippines. This study, which will look primarily into the experiences and results of the activities of industries in the Philippine export processing zones in Baguio City and Mactan, will confirm or disprove such view. By analyzing the various factors influencing linkages with the host economy, this study aims at providing national planners with a tool for formulating policy measures to enhance the domestic integration of epz activities.

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[3] Consisting of Singapore, Taiwan, Hongkong and South Korea

[4] 35 percent of the appraised value of the article at the time of entry into the United States.

1.2 OBJECTIVES OF THE STUDY:

The broad objectives of this study are:

a. to conduct an analysis of the operations of industries at the export processing zones in Baguio City and Mactan, and linkages generated with domestic industries in the surrounding areas and the country as a whole;

b. to determine the factors and motivations that brought about such linkages, if any; and

c. to put forward action-oriented recommendations to encourage closer integration between epz production and the national economy.

1.3 SCOPE AND LIMITATIONS:

Owing to the limited number of industries operating at the two epzs, the findings were at times compared with the performances of selected industries at the Bataan EPZ, particularly those which have longer operating experiences.

A special aspect of this study involves an analysis of the extent of the local sourcing of selected export-oriented industries outside of epzs. Its aim is to determine whether the site or location of industrial operation is material to the promotion of linkages. This includes the review of existing laws and procedures to the extent they are promoting or deterring such linkages.

The role that the Philippine epz had so far played in the total economic picture of the Philippines will likewise be touched as perceived by various sectors of Philippine society, international institutions and scholars.

Data were collected primarily from personal interviews with epz officials, experts, enterprise managers and staff. They were mostly unstructured but points raised were meticulously analyzed as to their relevance. A survey on existing linkages involving the use of local materials, parts processing and incentives availment were also issued.

Most of the figures used in this study were retrieved from raw data at the EPZA Head Office and in the fields. Since EPZA does not prepare statistics for the study's precise needs, maximum efforts were put into examining available reports for purposes of extracting useful information.

During the research, it was observed that EPZA does not strictly enforce compliance by epz firms and field offices with reportorial requirements and deadlines. As a result, we encountered inconsistencies in many areas of interests even from official sources. We were thus constrained to compare published data with records on file, in order to arrive at reasonable figures. There were instances when statistical information from the fields were incomplete because the transactions were not reported to EPZA, as in most local purchase cases. They were, however, reported as inputs in quarterly and annual reports prepared by epz firms which became a major source of our information for this study.

The difficulty in data gathering was greater in the study of selected industries outside of epzs owing to the rule of confidentiality[5] on transactions of industries at the Board of Investments (BOI). Herein lies the limitations on the study's conclusion or trends in selected industries outside epzs.

To achieve our objectives, we discussed industry behavior with BOI officials and analysts and obtained their views based on experiences and over-all trends in the industries supervised. In cases where figures were available, utmost discretion was employed so as not to violate existing policies or identify the specific enterprise discussed.

The figures used are rounded to the nearest thousand. Data denominated in US Dollar, when converted from Pesos, used the prevailing P to $ conversion rate for a given year. Where figures are measured in real terms, the consumer price index (CPI) used is the 1978 prices, unless otherwise indicated.

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[5] Art. 77, BP No. 391

Secondary data sources, including laws, rules and regulations, policy pronouncements, published studies and reports, and other relevant publications were used as references.

1.4 ORGANIZATION OF THE STUDY:

The work consists of seven (7) chapters and an Executive Summary.

The Executive Summary presents the highlights of the study and the conclusions and proposed recommendations for policy measures.

Chapter ONE contains a brief background of the study and its objectives, scope, limitations and organization.

Chapter TWO is an overview of the Philippine export processing zones and its role and experience in the country's economic and industrial development.

Chapter THREE describes the Baguio City EPZ and includes a general overview of its performances, measured in terms of the objectives of the epz program. It shall also touch on linkages established by its client industries with those based in the customs territory (CTA) and the factors that influenced or deterred such linkages. The potentials of the host locality will also be discussed.

Chapter FOUR delves with Mactan EPZ and its performance measured in terms of its over-all objectives and other aspects touched in Chapter THREE and some comparison with Baguio City EPZ.

Chapter FIVE shows the various types of linkages created and the interplay of different factors influencing or deterring linkage creation based on the experience and performance of epz firms.

Chapter SIX touches on the performance of selected export industries outside of epzs with emphasis on the effect or influence of location on the promotion of linkage between export producers and domestic manufacturers of intermediate materials. This chapter gives a comparison of incentives available to export manufacturing inside and outside epzs.

Chapter SEVEN correlates the conclusions drawn with the objectives of the study, discusses the perceived role of epzs in the Philippine developmental framework and presents recommendation for its attainment.

CHAPTER II

ROLE OF EPZS IN THE ECONOMIC AND SOCIAL DEVELOPMENT OF THE PHILIPPINES

2.1 EPZ NETWORK:

The present epz system of the Philippines consists of four (4) regular epzs, namely - Bataan (345 ha.), Baguio City (62 ha.) and Cavite (275 ha.), all located in the island of Luzon, and Mactan (119 ha.) in the Visayas Island. In addition, there are six (6) factory zones.[6] These factories produce copper cathodes, fertilizers, liquified petroleum gas or are engaged in shipbuilding and repair, and mineral roasting. Another area in Luzon (Pampanga, with 72 ha.), has been provided with basic infrastructure for an industrial estate/epz, but is still inoperational.

The regular epzs feature the standard infrastructure and other support facilities common to industrial estates. They were built at the expense of the government (EPZA), with funds drawn from the General Fund and official development assistance programs like those of the OECF. Bataan, Baguio City and Mactan have ready-to- occupy standard factory buildings. More than .8 million square meters of industrial land were developed for self-built factories and warehouses. Power and water are provided by government or private utility companies, while communications are adequately serviced by international carriers.

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[6] A designated area, usually a whole plant or factory located outside of epzs but is bestowed with full epz privileges and incentives under Sec. 2, EO 567.

2.2 ECONOMIC PROFILE:

Total equity investments as of year-end 1985 in all the epzs, including special zones, amount to P3.3B. Because of substantial capital requirement, the government, through the state-owned National Development Company, have considerable investments in the special epzs in joint venture with private entities. In the 3 major regular epzs, Philippine nationals dominate investments in Bataan followed by Japanese interests, while American investments prevail over Baguio City and Mactan epzs. By year-end 1986, there were 50 enterprises operating at the country's regular epzs (Table 2.1), employing 23,000.

Foreign equity investments in the country's epzs amounted to P1.6B by year-end 1985. The major sources of investments were the United States and Japan. Other sources were Germany, France, Pakistan, Switzerland, Canada and the Netherlands. There are twenty-four (24) enterprises wholly-owned by foreign investors. Fifteen (15) enterprises are fully owned by Filipinos. The rest are joint ventures. The Philipppine government own substantial interests in two (2) companies at the special epz in Leyte, and 40 percent of the shipbuilding and repair facility in Zambales. The LPG terminal in Batangas Special EPZ is fully foreign-owned.

For the period 1980-1985, the major sources of imports of equipment and raw materials of the epz enterprises were also the United States and Japan. Some members of the European Economic Community (EEC), Hongkong, Taiwan and other Asean countries likewise figured prominently as suppliers of raw materials.

The epz operation for 1980-1985 resulted in the export of a wide range of products. Garments and electronics head the lists. Other items were optical lenses, pleasure boats, artificial flowers and foliage, musical cards, wood veneers, watches and clocks, copper concentrates, fertilizers, liquified gas, packaging materials, footwear and appliances. During the same period, dolls, food products such as cocoa powder and mushrooms, electric motors and car-body parts were also produced at epzs, but have since withdrawn from the epz or have ceased operation.

The United States and Japan remained to be the major markets of the above products. Table 2.2 shows the relative position of exports of regular epzs compared with total Philippine exports of non-traditional manufactured products.

TABLE 2.1 NUMBER OF REGISTERED FIRMS BY MANUFACTURING SECTOR IN REGULAR ZONES AND STATUS AS OF YEAR-END 1986

ZONE	ACTIVITY	As of Year-End 1985	Regis-tered 1986	Ceased Oper'ns Perma-nent in 1986	AS OF YEAR-END 1986 TOTAL	Under Constr'n	Not Yet Oper'g	Temp'y Ceased Oper'n	Oper-ating
BEPZ:									
	FOOD	0	0	0	0	0	0	0	0
	TEXTILES	2	0	0	2	0	0	0	2
	WEARING APPAREL	13	0	0	13	0	0	0	13
	FOOTWEAR	2	0	0	2	0	0	0	2
	WOOD AND WOOD & CORK PRODUCTS	0	0	0	0	0	0	0	0
	PAPER AND PAPER PRODUCTS	2	0	0	2	0	0	0	2
	RUBBER PRODUCTS	1	0	0	1	0	0	0	1
	PLASTIC PRODUCTS	2	0	0	2	0	0	0	2
	FABRICATED METAL PRODUCTS	0	0	0	0	0	0	0	0
	ELECTRICAL MACHINERY	5	0	1	4	0	0	0	0
	TRANSPORT EQUIPMENT	1	0	0	1	0	0	0	1
	OTHER EQUIPMENT & INSTRUMENTS	1	0	1	0	0	0	0	0
	WATCHES AND CLOCKS	1	0	0	1	0	0	1	0
	OTHERS	5	0	0	5	0	0	0	5
	TOTAL	35	0	2	33	0	0	1	32
BCEPZ:									
	FOOD	0	0	0	0	0	0	0	0
	TEXTILES	0	0	0	0	0	0	0	0
	WEARING APPAREL	4	1	0	5	0	0	0	5
	FOOTWEAR	0	0	0	0	0	0	0	0
	PLASTIC PRODUCTS	1	1	0	2	0	0	0	2
	FABRICATED METAL PRODUCTS	2	1	1	2	0	0	0	2
	ELECTRICAL MACHINERY	2	0	0	2	0	0	0	2
	WATCHES AND CLOCKS	0	0	0	0	0	0	0	0
	OTHERS	1	0	0	1	0	0	0	1
	TOTAL	10	3	1	12	0	0	0	12
MEPZ:									
	FOOD	0	1	0	1	0	0	0	1
	WEARING APPAREL	2	2	0	4	0	1	0	3
	WOOD AND WOOD & CORK PRODUCTS	0	1	0	1	0	1	0	0
	ELECTRICAL MACHINERY	1	0	0	1	0	1	0	1
	OTHER EQUIPMENT & INSTRUMENTS	0	0	0	0	0	0	0	0
	WATCHES AND CLOCKS	1	0	0	1	0	0	0	1
	OTHERS	0	0	0	0	0	0	0	0
	TOTAL	4	4	0	8	0	2	0	6

TABLE 2.2

PHILIPPINE NON-TADITIONAL MANUFACTURED EXPORTS VS EPZ EXPORTS

NON-TRADITIONAL MFD. EXPORTS			EPZ EXPORTS		
YEAR	(FOB, US $M)	GROWTH RATE,%	(US $M)	GROWTH RATE,%	% SHARE
1981	2,566	--	241	--	9.3
1982	2,456	-4.3	251	4.1	10.2
1983	2,588	5.4	237	-5.6	9.1
1984	3,136	21.2	246	3.7	7.8
1985	2,857	-8.9	178	-27.6	6.2
TOTAL	13,604		1,153		8.4

2.3 ECONOMIC PERFORMANCE:

Much have been said and written about the Philippine EPZ program since the operation of its first facility in 1972. Results of various studies and evaluation of its performance to date were not very encouraging. Even the country's new economic managers called for the re-evaluation of the epzs program. Trade and Industry Minister Jose S. Concepcion was reported[7] to have said that existing epzs are a waste of infrastructure investments since the facilities are under-utilized. The Trade Minister's view was supported by the findings of ESCAP[8] in its evaluation of epzs that the Bataan EPZ has not achieved its objectives even at its peaked level in 1981. This aggravated the unusually high cost of its development, estimated in another study[9] to amount to $192M. The epz at Mactan was also cited as another case of excess capacity. The $8.79M epz located in Cebu Province was predicted to host some 30 export/import-oriented companies that would employ some 8,000 workers when fully operational.[10] By end of 1986, only 6 firms are operating with about 3,200 employees. Baguio City EPZ is likewise in the same predicament. The 62-hectare epz built at the cost of $10.1M is the site of 12 industries by end 1986 employing about 3,300; whereas EPZA forecasted 17 companies and 4,600 workers 5 years from its establishment.

Economic Planning Minister Solita C. Monsod was quoted[11] to have said that epzs are costing more in terms of dollar importations by firms situated in the zones than the foreign exchange they generate, although EPZA figures state otherwise (Table 2.3).

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[7] Business Bulletin, June 9, 1986

[8] Economic and Social Commission for Asia and the Pacific: Evaluation of EPZ is in the Philippines Working Paper, UNCTC Joint Unit on Transnational Corporations - May 1985.

[9] Peter Warr - Export Promotion via Industrial Enclaves and the Philippine EPZs (unpublished) - November, 1984

[10] EPZA Corporate Plan, 1983-1987

[11] Business Bulletin, June 9, 1986

TABLE 2.3 NET TRADE BALANCE OF REGULAR EPZS: 1981 TO 1985

(US$M)

E P Z	1981	1982	1983	1984	1985	ANNUAL GROWTH RATES 1984-85	1981-85
BEPZ	73,933	76,753	37,260	41,884	33,695	-19.6	-17.8
BCEPZ	12,271	10,771	-2,216	14,755	17,411	18.0	9.1
MEPZ	5,688	9,186	15,473	21,916	7,846	-64.2	8.4
TOTAL	91,892	96,710	50,517	78,555	58,952	-24.9	2.9

The 1985 ESCAP review, which emphasized on Bataan EPZ, integrated elements of various other studies[12] to bring into focus the costs and benefits of epzs in the Philippines. It finds that:

> "Taking the total infrastructure cost of $192M, it would appear that this item alone appears excessive in relation to the major benefits provided by BEPZ, namely, an employment figure at less than 23,000 workers and an average foreign exchange earnings of less than $4M a year. Taking employment as an example, it cost more than $8,000 in infrastructure cost alone to generate one job in BEPZ. More significantly, the majority of those are low paid andlow value added jobs. As for the foreign exchange earnings, the total net amount earned during the period 1973 to 1982 totalled only $82M, an amount which is less than half the infrastructure cost of $192M. If the employment and foreign exchange earnings benefit cannot justify the enormous development outlay for BEPZ, it is not unlikely that other benefits (such as linkages and technology transfer) are much less significant. In short, the cost have, so far, outweighed the benefits in BEPZ."

ESCAP cited several reasons for BEPZ's failure:

a. the site was an isolated, undeveloped mountainous coastal area that required expensive infrastructural development, including the construction of housing and social amenities.

b. the high infrastructural overhead cost required a minimum occupancy rate to guarantee feasibility. BEPZ never achieved more than 50 percent of projection. The low occupancy rate naturally involved a higher than normal operational cost.

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[12] Peter Warr-IBID; J. Castro "The Bataan Export Processing Zone" Working Paper of the Asian Employment Program, ILO-ARTEP, Bangkok, 1982.

c. a policy change after the establishment of BEPZ made the epz redundant. Customs Bonded Manufacturing Warehouses (CBMW) administered by the Bureau of Customs were authorized to be established even in urban areas contrary to earlier policy pronouncements. Epzs and CBMW operate similarly in many respects. The measure effectively defeated the incentive to locate within the epzs.

d. the high cost of operating in the BEPZ has badly eroded whatever fiscal incentive offered to industries to locate at the zone. The fees charged is not commensurate to the services. Utilities and facilities need repair and upgrading.

The UP Institute of Social Works and Community Development, in its preliminary report[13] on its study on the regional and socio-economic impact of epzs in the Philippines, also finds that the effect of the epz on the economy is insignificant. It points to the meager share of epzs in the country's non-traditional export manufacturers which at best was obtained only in 1979 at 9 percent of total export of non-traditionals. Employment generated constituted only from 0.6 percent to 1.4 percent of total manufacturing employment. Linkage with producers of domestic materials were seen as minimal on account of the great dependence of epz industries to imports (83 percent to 93 percent) of total non-labor inputs.

In the ILO-ARTEP study, it appeared that out of eleven evaluated BEPZ firms, three financed their investments mainly from foreign sources - one from its parent company and the other two from foreign borrowings. Six (6) of these firms financed more than 50 percent of their investments from domestic sources. Thus, foreign firms at BEPZ drew heavily from domestic capital.

In other studies[14] initiated by or conducted for EPZA in the course of its move to improve its services in the zones, the findings were the same - that epzs, despite 13 years of operation, has not achieved its goals and objectives.

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[13] Guerrero, S. The Regional and Social Impact of EPZs in the Philippines Preliminary Report; UP Institute of Social Works and Community Development - September, 1986.

[14] Bataan Export Processing Zone Project II - conducted by Nippon Jogesuido Sekkei Co., Ltd., October 1985, and separate studies - Mitsubishi Research Institute, Inc., SGV & Co.

A factor which has greatly contributed to the failure of EPZA to sustain investments is the export industry's vulnerability to fluctuations in prices and to trade policy changes in developed economies. It became increasingly difficult for some of those operating in the epzs to maintain their operation during the 1980-1982 world-wide recession following the second round of oil price increases in 1979 that resulted into a major slump in the world markets. Then this was followed by the Aquino assassination in August, 1983, that further aggravated the political instability already pervading in the country. Its aftermath was a massive capital flight. Also, the heavy borrowings of Philippine government to finance its development efforts and stimulate business activities did not perk up the economy as projected. It only succeeded in huge foreign indebtedness that made the Philippines the seventh biggest borrower from the World Bank.

In order to arrest the spiraling inflation and capital flight, the government declared a moratorim on payments of principal on its foreign exchange liabilities and imposed foreign exchange restrictions, stopping all dollar trading and requiring export revenues to be constituted into a foreign-exchange pool. The immediate effect of the foreign exchange control was to restrict the flow of imported material inputs to many industries. Moreover, payments of maturing obligations were withheld or suspended causing some apprehensions from foreign suppliers of materials. During this period, a total of twenty-two (22) epz industries folded up.

Those which remained operational shifted from L/Cs and other modes of payment involving foreign exchange to consignment basis or no-dollar imports. Materials and supplies were sent to the epz industries from principals and buyers abroad as "advances" or on a CMT basis to companies which have established performance and reliability.

EPZA reported that these issues have affected its promotional efforts contributing to the low occupancy of the different epzs.

On the other hand, the association of zone users,[15] in its report to the Minstry of Trade and Industry[16] on Bataan EPZ, cited several factors that contributed to the decline of investments. They were:

- inadequate facilities
- political uncertainty and high risks
- unstable trade policies
- labor unrests
- bureaucratic red tapes
- world-wide recession and depressed world market
- the development of competing epzs in other areas of the country and in neighboring countries.

2.4 SOCIAL IMPACT:

The epzs have succeeded in employing mostly young, single, inexperienced female. In the case of BEPZ, the workers were recorded to have migrated mostly from the rural areas of Region III and adjoining regions. While it has not drawn much migration from Metropolitan Manila, it has helped prevent more migrants to the urban center. However, Mariveles - the host locality, was not ready for the increase in population from 16,000 to 48,000. Inflation set in and brought prices of commodities at least 10 percent higher than normal market price. EPZA-provided housing units were not adequate to accommodate the migrant workers. The town was not ready to meet the housing needs resulting in congestion, shanties, poor sanitation, immorality and other social problems.

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[15]Export Processing Zone Chamber of Exports and Manufacturers (EPZCEM)

[16]EPZCEM report dated March 22, 1986.

The problems at BEPZ did not obtain at Mactan and Baguio, which were built near urban centers. Living quarters and basic needs of workers were supplied either in the host communities or in nearby centers of Mandaue or Cebu City in case of Mactan. Moreover, migration in the two later epzs were almost limited to the host provinces or within the regions.

While there appears to be more who are satisfied with their present jobs at epzs, workers have little job security.[17] Epz companies, by the very nature of their products and their markets, are easily vulnerable to fluctuations and proctectionism in the export market economies. Employment as regular workers in epz firms do not guaranty stability as evidenced by the closure of forty-five (45) companies at Bataan since it started operation, three (3) in Baguio and three (3) in Mactan.

2.5 LABOR PROBLEMS:

The frequency of strikes in epzs, particularly in Bataan during the 1981-1986 period, have largely contributed to the reluctance to invest in the area. The militancy of labor at epz have caused the loss of manhours costing millions of dollars in cancelled orders. It is widely known among enterprises in the BEPZ that at least two (2)[18] companies withdrew from the epz primarily because of labor problems, notwithstanding their good export performance.

[17] Guerrero, S., The Regional and Social Economic Impact of Epzs in the Phils., Preliminary Report, Institute of Social Work and Community Development, University of the Philippines, September, 1986.

[18] Astec Electronics (1984) and Wilson Philippines, Inc. (1985)

The enterprises are particularly wary about the tendency of labor strike on non-strikeable issues and the inability of the government to prevent such strikes. A publication[19] of the Ministry of Labor and Employment reported in 1984 that sympathy strikes comprised 51.6 percent of all the strikes in 1982, while violation of labor standards was the issue in 26.7 percent of the strikes, unfair labor practice and deadlocks in bargaining covering the rest of the 21.7 percent strikes held that year. For the period 1983 to 1986, there were fifty-three (53) strikes at BEPZ, two (2) in Baguio City, one (1) in Mactan, one (1) in Tabangao Special Zone and one (1) in Leyte Special Zone, involving 4.3M manhours lost.[20]

The Labor Ministry ascribes the rush of unions and mass actions at epzs to the following:

a. Concentration of industrial firms where workers freely intermingle and exchange grievances;

b. Highly visible labor law violations that cause growing workers' sentiments; and

c. Greater stress and uncertainties for workers as a result of the firms' direct dependence on the vagaries of the export market.[21]

EPZA Management was reportedly disposed to phase out the epz in Bataan instead of being a hostage to labor problems.[22] It sees the situation as major stumbling block to increase investments and export earnings of the zone.

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[19] The Bataan Export Processing Zone Employment, Labor Relations and Working Conditions - Ministry of Labor and Employment, 1984.

[20] Industrial Relations Office, BEPZ

[21] Business Day, July 26, 1983

[22] Business Bulletin, February 7, 1987

2.6 DELIVERY OF SERVICES:

EPZA, which manages the various epzs in the country, appears to have failed in its tasks of promoting a wholesome investment climate in the zones, particularly the trouble-plagued Bataan EPZ. On top of the numerous work stoppages occasioned by labor disputes, manufacturers have to contend with poor facilities, frequent breakdown of utilities and administrative bottlenecks brought about by lack of funds and constant changes in policies and procedures.

The difficulties set in at the outset of the 80's when the Philippines felt the consequences of its heavy developmental spending. Because the flow of investors to epz suffered a downturn, projected revenues were not realized, yet expenditures remained high. Table 2.4 shows the result of EPZA operations from 1978-1985 which indicate that except for 1980 and 1981, EPZA has consistently been losing from operating the various epzs. Nevertheless, EPZA made no effort to save, and proceeded with its development of Cavite and Pampanga EPZs. It continued to hire personnel which in 1985 reached more than 1,500 with a total salary of P34M. Meanwhile, facilities and utilities at Bataan EPZ started to deteriorate, even as the government reduced its development budget support for EPZA operations by 50 percent starting 1983, from P100M to P50M.

TABLE 2.4 RESULT OF EPZA OPERATIONS (1978 -1985)

(P'000)

YEAR	GROSS INCOME	NET INCOME LOSS
1978	P 19,850	P(1,415)
1979	28,450	(816)
1980	34,124	2,347
1981	48,048	657
1982	61,710	(2,057)
1983	73,465	(6,095)
1984	106,757	(14,301)
1985	126,071	(16,740)
TOTAL	P500,459	P(38,420)

There were also successive changes in top management from 1981 to 1986 which witnessed the helm of EPZA change three (3) times. Appointments were made not on experience or knowledge of running an industrial estate but more out of political considerations.

In July, 1986, the zone users' effort to check the deterioration of basic services and realization of the promised one-stop-shop operation was heeded by EPZA with the decentralization of management functions. Also, studies were conducted for the rehabilitation of BEPZ facilities and improvement of non-infrastructure services and streamlining EPZA organization, for inclusion in the 12th Yen Loan Package (OECF) from Japan. As per study, the rehabilitation and improvement will need P348M.[23]

Notwithstanding such moves by EPZA, disruption of manufacturing activities due to labor strikes, breakdown of utilities and communications continued. A recent politically motivated strike in January, 1987, seemed to be the last straw for some firms which threatened to move out of the country, citing EPZA ineptitude and the total government neglect of Bataan EPZ.[24]

2.7 MATERIALS LINKAGE WITH LOCAL INDUSTRIES

Most studies were consistent in their conclusions that no significant linkage was developed between Bataan EPZ industries and the domestic economy to encourage raw material sales to the former. The import incentive given to epz industries was put to maximum use, partly due to the failure of local suppliers to meet the quality and quantity required by zone enterprises. Estimates for domestic resource utilization of firms in epzs is only about 5 to 6 percent of value added.[25]

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[23]Final Report, Bataan Export Processing Zone II, Nippon Jugesuido Sekkei Co., Ltd. - October, 1985.

[24]Manila Bulletin, February 6, 1987

[25]BEPZ Project II, pp. 2 to 53

The BEPZ experience has alerted zone planners to the pitfalls of establishing epz of such size and magnitude away from existing utility, infrastructural support and urban amenities. Thus, when Baguio City and Mactan EPZs were conceived, the experience in the first epz played a major influence in the planning. We shall examine in the next chapters whether the two new epzs turned in a different result.

CHAPTER III

BAGUIO CITY EXPORT PROCESSING ZONE

3.1 PROFILE:

The Baguio City EPZ (BCEPZ) is 250 kilometers north of Manila. It is in Baguio, a mountain city resort of 5,000 feet above sea level that enjoys a year-round temperate climate averaging 19° C. Established in 1979 at the cost of $10.61M on a 62-hectare site, it was not until April, 1980, that its first client, a US multinational semi-conductor company started operation. By the end of 1986, a total of 12 companies have settled at the zone.

Baguio is a 48.9-square kilometers city accessible by four major land routes that connect it with the rest of Region I and onwards to Manila, and an airport that serves commercial flights to and from the Philippine capital. In terms of amenities, the city is host to first class hotels, apartments and lodging houses, recreational and sports facilities, 6 colleges and universities, 16 secondary schools, hospitals and medical clinics.

Region I is the economic and political zone where Baguio City belongs. Its main industry is agriculture, fishing and forestry which employ 58 percent of its labor force of 1.46M, followed by governmental and personal services. The next group consists of wholesale and retail trade (8 percent), manufacturing (7 percent), transportation (4 percent). The region's resources include gold, copper, chromite and timber. Sixty-nine (69) percent of land is planted with tobacco, rice, vegetables, cotton, corn, garlic, beans and coffee. A deep water international sea port is located at Poro Point, San Fernando, La Union, one hour away by land from BCEPZ.

The Baguio City EPZ operates like the Bataan zone. It offers the same incentives and services, foremost of which is the tax and duty free importation of equipment, supplies and raw materials for export production purposes. It also rents out factory spaces. However, BCEPZ offers only a total of 19,764 square meters of factory space compared with 102,032 square meters in Bataan EPZ (BEPZ). Just like BEPZ, industrial lands are available for self-built owner-designed factories. BCEPZ has 29 hectares of industrial land, while Bataan has 268 hectares.

As of year-end 1986, the factory spaces have been fully leased to 10 export companies. Three (3) firms constructed their own buildings in leased areas covering 182,000 square meters representing 60 percent of land space available. By 1985, BCEPZ has generated a total net income of P144M from the operations consisting of receipts from lease rentals and administrative services, against total losses of P13.3M incurred in 1980 and 1983.

Management is run by a Zone Manager with support from some 150 EPZA personnel providing control, maintenance and security. Unlike in Bataan EPZ, relationships with enterprises are generally cordial. Common problems and issues are threshed out in regular consultative meetings. The process of decision-making is bolstered by the relative autonomous powers exercised by the Zone Manager, hardly achieved by its counterpart in BEPZ.

Labor problems in the zone are contained to individual firms. The unions are not as militant as their counterparts in Bataan, although there were two strikes in 1986 which led to a withdrawal of foreign capital and sale of the company to Philippine interests.

3.2 ECONOMIC PERFORMANCE OF BAGUIO CITY EPZ:

Table 3.1 gives an overview of the performance of BCEPZ measured in terms of various economic indicators. Six years of operation would have given one enough data to gauge the epzs' performance based on the objectives* set forth for putting up such facilities in various sites in the Philippines, to wit:

- to stimulate and promote export trade
- to strengthen foreign exchange position
- to hasten industrialization
- to reduce domestic employment; and
- to accelerate the development of the countrysides.

*Section 2, Pres. Dec. No. 66

TABLE 3.1 ECONOMIC PERFORMANCE OF THE BAGUIO CITY EPZ FOR THE PERIOD 1981-1985

ECONOMIC INDICATORS	1981	1982	1983	1984	1985	AVERAGE GROWTH 1981-85 (%)	% CHANGE 1984-85 (%)
Number of Firms	3	4	7	10	10	37.5	-
Employment	753	1175	1571	2551	3383	45.6	32.6
Salaries and Wages (₱'000)							
a. Current Prices	5551	9108	18315	42988	72899	90.4	69.6
b. Constant Prices	3216	4607	8206	15575	20763	59.4	33.3
Exports ($'000)	62287	64027	76499	117023	91402	10.1	(-21.9)
Imports ($'000)	50016	53253	78715	102268	73991	10.3	(-27.6)
Net Trade Balance	12271	10771	(2216)	14755	17411	9.1	18.0
Public Investment (₱'000)	79369	79766	80294	81200	85179	1.8	4.9
Private Investment (₱'000)	137617	200663	483454	703214	640803	55.3	(-8.8)

3.2.1 INVESTMENTS:

Public investments grew at an average 1.8 percent per year since 1981. By 1985, a total of P85.1M has been spent by the government for infrastructure and utilities.

On the other hand, the private sector registered an 6.8 percent decline from its P703.2M investment in 1984. Nevertheless, the annual growth rate for the period averaged 55.6 percent (Table 3.2).

BCEPZ registered successes in terms of foreign investments objectives of epzs. Foreign investments which constitute foreign equity and foreign loans of firms established thereat accounted for 99.85 percent of total equity contributions and 99.03 percent of total loans as of 1985 (Tables 3.2.1 and 3.2.2). This means that the zone firms have drawn very little from the domestic capital market, unlike industries at the Bataan EPZ[27] which registered a domestic to foreign borrowing ratio of 6:64:1 in the 70's. Foreign exchange in the case of BCEPZ was substantially infused in the economy. It is believed that this development was influenced by the domestic credit squeeze that started in early 1980's. As foreign exchange became scarce, export producers were compelled to obtain their foreign exchange from their own sources to finance their imports. This would perhaps help explain the closure of three (3) epz companies at BCEPZ (predominantly Philippine capital) during the period.

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[27] Sevilla, p.55

TABLE 3.2 PRIVATE INVESTMENTS (EQUITY INVESTMENTS PLUS LOANS) OF BAGUIO CITY EPZ FIRMS 1981-1985

(₱'000) :

	EQUITY INVESTMENTS			ACTUAL BORROWINGS					
YEAR	FOREIGN	LOCAL	TOTAL	FOREIGN	LOCAL	TOTAL	CUMULATIVE TOTAL	TOTAL INVESTMENTS	GROWTH %
1981	17391	2	17393	120224	-	120224	120224	137617	-
1982	31216	160	31376	48450	613	49063	169287	200663	45.8
1983	259242	2198	261440	51660	1067	52727	222014	483454	140.9
1984	372424	3665	376088	103612	1500	105112	327126	703214	45.4
1985	312397	499	312896	781	-	781	327907	640803	(8.8)

Average Annual Growth:

Equity Investment : 210%

Loans : 29.8%

Total Private Investment : 55.8%

TABLE 3.2.1 EQUITY INVESTMENTS: BAGUIO CITY EPZ (1981-1985)

(₱'000):

YEAR	FOREIGN	% GROWTH	LOCAL	% GROWTH	TOTAL	% GROWTH	% OF FOREIGN TO LOCAL
1981	17391	-	2	-	17393	-	99.99
1982	31216	79	160	7900	31376	80	99.50
1983	259242	730	2198	1273	261440	733	99.20
1984	372424	44	3664	67	376088	44	99.10
1985	312397	(-16)	499	(-86)	312896	(-17)	98.85

Average Growth:

Foreign	:	209%
Local	:	2,288%
Total	:	210%

TABLE 3.2.2 ACTUAL BORROWINGS: BAGUIO CITY EPZ FIRMS (1981-1985)

(₱'000):

YEAR	FOREIGN	% GROWTH	LOCAL	% GROWTH	TOTAL	% OF FOREIGN TO LOCAL	CUMULATIVE TOTAL	% GROWTH
1981	120224	-	-	-	120224	100%	120224	41
1982	48450	(-60)	613	-	49063	98.7%	169287	41
1983	51660	7	1067	74	52727	97.9%	222014	31
1984	103612	100	1500	29	105112	98.5%	327126	47
1985	781	(-99)	-	-	781	100%	327907	0.2
TOTAL	324727	(-52)%	3180	51.5%	327907	99.03%	-	29.8%

Average Annual Growth:

Foreign	:	(-52) %
Local	:	51.5 %
Total	:	29.8 %

3.2.2 NUMBER OF FIRMS/TYPES OF INDUSTRIES:

At present, there are 12 manufacturing firms operating at the BCEPZ. The number is 5 firms short of the desired occupancy of 17 firms by 1986 as projected by EPZA.[28] There was a total of 16 registrations and 4 closures during the period. The highest growth in the number of entries in a year was experienced in 1983, 1984 and 1986, when an average of 3 enterprises put up their facilities in the zone. In 1985, two firms stopped operations, compared to one each in 1984 and 1986.

By product category, the industries are - electronics (2), garments (5), handicraft (1), metal (1), plastics (2) and precision machinery (1). The food sector and footwear's operation in epz were shortlived (1 year each).

TABLE 3.3 EQUITY STRUCTURE OF BCEPZ ENTERPRISES, 1986

EQUITY STRUCTURE -	1981	1982	1983	1984	1985	1986
Wholly Filipino	--	--	1	2	1	3
Wholly Foreign	3	3	3	5	6	6
Joint venture with Filipino	--	2	5	5	3	3
TOTAL	3	5	9	12	10	12

[28] EPZA Corporate Plan, 1983 - 1987

TABLE 3.4 **OWNERSHIP BY NATIONALITY**

NATIONALITY	FULL OWNERSHIP	%	JOINT VENTURE	%
Filipino	3		3	
American	4		1	
Italian	-		(1)	
Swiss	-		(1)	
Korean	-		(1)	
Malaysian	1		-	
Canadian	-		(1)	
German	-		(1)	
TOTAL	8		4	

As shown in Table 3.4, Americans are the leading investors in the BCEPZ with full control of 4 firms and one joint venture. Filipinos own 3 firms and have joint ventures with Canadian, German and American partners in three separate firms. The last company is an Italian-Swiss joint venture. Against total private equity invested in the epz, the Americans control 98.57 percent because of the big share of the semi-conductor firm (93 percent). The next three biggest companies in terms of equity are also Americans.

3.2.3 EXPORT/IMPORT PERFORMANCE:

Notwithstanding the decline of 22.3 percent in 1985, the export performance of epz firms during the period 1980-1986 posted a 42.8 percent average growth. In 1986, export reached $143M. The leading exporter was the electronics sector (93 percent), followed by garments (4 percent). For the period 1981-1985 the United States was consistently the major export market of BCEPZ electronics (69 percent) and garments firms (44 percent). Asean countries, notably Singapore, was the next major electronics market (16 percent), followed closely by EEC countries (14 percent). The EEC was the second major market (24 percent) for the garments sector, followed by Australia (8 percent), Canada (5 percent), Japan (3 percent), and Hongkong (3 percent).

In terms of imports, the BCEPZ firms posted a positive yearly growth of 28.6 percent, although imports in 1985 declined against the 1964 total by 25.1 percent. In 1983, imports exceeded exports (see Table 3.1), but for the whole period, BCEPZ posted a net trade balance of $52.9M for an average yearly trade surplus of $10.5M. For 1986, BCEPZ has imported $137.73M, an 85 percent growth over 1985. This was due to increased manufacturing activity in electronics sector.

For the 1981-1985 period, the leading country among the sources of raw materials imported in BCEPZ was the United States (49 percent). This was followed by Japan (26 percent), the EEC countries (23 percent), Taiwan, Hongkong and Korea. On an industry-wide basis, US and Japan were the main suppliers for the electronics sector averaging 51 percent and 26 percent in that order. In the garments sector, the EEC led at 79 percent followed by Japan (10 percent). Handicrafts give Hongkong and Taiwan an equal share (50 percent) with Japan in supplying the raw materials.

At least 4 companies were observed to make extensive use of inter-company open account(O/A) system and consignment mode of importations. Under O/A, goods were imported from parent companies on charge basis and paid for in terms of value of goods produced. Of course, consignment denotes non-payment of materials as they are owned by the shipper. The company gets paid for labor applied on the goods produced.

In terms of export target projections of EPZA,[29] the BCEPZ fared favorably in the 1963-1965 period. But the expected margin in the balance of trade (30 percent of export) was never achieved. The entry of 9 new firms that import capital equipment and raw materials pulled down the gains arising from the increases in exports of existing industries. There were also the 26 percent decline in the value of exports from the electronics industry attributed to a slack in demands in the market.

[29] EPZA Corporate Plan, 1983-1987.

The three leading epz firms failed to attain their targeted yearly export sales based on their own projections. The average percentage of success was 43 percent for handicraft, 65 percent for garments and 78 percent for electronics. In the over-all, actual experts in all the three sectors posted an average positive growth of 16 percent for handicraft, 46 percent for garments and 12 percent for electronics.

The net trade balance of $52.9M shown in Table 3.1 for BCEPZ represents the excess of gross exports over imports.

3.2.4 EMPLOYMENT GENERATION

The industries at the BCEPZ registered an average growth of 45.9 percent in terms of employment since 1980. As of September, 1986, employment in the 12 industries reached 3,300. This is short of the 1986 EPZA projected occupancy of 17 firms providing 4,600 direct jobs.[30] The number will increase if those employed in the sub-contracting activities of at least 2 epz firms are included. These firms have made extensive use of homeworker groups in areas in the peripheries of the zone and in the adjoining provinces to undertake assembly operations with the use of hands and basic tools. It is estimated by EPZA to be about 360, based on 30 registered contractors, employing 12 homeworkers each.

The BCEPZ provides for 3.5 percent of total Region I employment in the manufacturing sector. The workers are mainly from the Baguio and adjoining provinces. The largest group of migrants to Baguio came from the province of Pangasinan which is also in Region 1. The same province also leads other major sources of migrant workers to Bataan EPZ.

As in Bataan, female workers outnumber the male, six to one.[31] The largest employers are the electronics and garment industries employing 61 percent and 22 percent respectively in 1985. Handicraft and plastics constitute 15 percent. Metal precision/ machinery sector which is dominated by men, employs 2 percent.

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[30] EPZA Corporate Plan

[31] Guerrero

For the period 1981-1985, total salaries and wages generated at BCEPZ was P148M, or an annual average growth rate of 90 percent. In real terms however, the average growth rate was only 59 percent.

3.2.5 VALUE ADDED:

Epz industries' contribution to the economy is also gauged in terms of value added. It is the difference between the value of goods and the cost of materials and supplies used in producing such goods. All sales, whether export or local, represent output while the value of inputs (TVI) combines imported and local raw materials used, factory supplies and utilities consumed.

Table 3.5 shows the actual value added of BCEPZ exports, its growth and the average value added ratios. The value added ratio has been consistently above the standard 0.25 set by the National Economic Development Authority (NEDA).

3.2.6 LINKAGES WITH DOMESTIC INDUSTRIES:

a. SUB-CONTRACTING. The practice of some BCEPZ firms in sub-contracting segments of production outside BCEPZ helped bridge the epz enclave and the domestic economy. The program virtually expands the area of manufacturing activity to 50 km. radius from the zone and employ hundreds of homeworkers on a regular basis. Sub-contracting was repeatedly availed of and has become an integral part of a particular firm's operation. This form of linkage will be illustrated in one of our case studies in Chapter V.

b. LOCAL PURCHASE. In 1983, an arrangement existed in the food firm at the BCEPZ where raw materials (mushrooms) were cultured and developed in various growing farms around the zone and brought inside for further processing and packing, preparatory to exports. A significant linkage was established between the local growers and the epz firms until the operation was stopped because of lack of capital (see par. 3.1.1).

The above is a most ideal linkage of epzs with domestic industries as it enhanced the relationship of epz firms and local producers even as it helped promote domestic production for exports. The extent of the linkage is determined by computing the ratio of local materials and supplies to the value of inputs to production. The BCEPZ performance in this respect is disappointing as we examine the history of local purchase for the 1981-1985 period vis total sales. The resultant percentage share indicates the limited extent of local materials usage by epz firms. On an industry-wide basis, the BCEPZ average is a measly 0.62 percent (see Table 3.5).

The degree of local raw materials utilization varies depending on the industry. It is greater in the garment industry with 31 to 60 percent of total inputs. This is perhaps explained by one firm's extensive use of local yarn in its production of outwear garments. Other sectors like handicraft and metals posted an average of 7.25 percent and 12.78 percent local raw materials utlization to total value of inputs. Electronics account for 0.19 percent, but being the dominant industry in terms of exports registering more than P5.2B sales duringthe 1980-1985 period, it naturally pulled the BCEPZ average down.

c. LOCAL SALES. Local sales were recorded at BCEPZ starting 1983 at P0.30M. In 1984 and 1985, sales reached P2.37M and P3.80M. The biggest seller was electronics which sold its products to its local affiliate which in turn exports the product to neighboring countries or sells it to domestic industries, creating a sort of linkage between the epz firm and local producers of electronic products. As regards the other industries however, their products, being in the consumer category, did not undergo further processing outside the epzs. There was no linkage established except with traders marketing such products.

d. TRANSFER OF SKILLS AND TECHNOLOGY. A total of 94 employees in BCEPZ were trained abroad in parent companies or subsidiaries on new tecnnologies at the cost of $0.431M. Other skills, training programs were conducted in-plant at BCEPZ which involved the teaching of basic skills to operate machineries and equipment in such industries as garments, plastics and electronics. There is no known training coordination between BCEPZ firms and technical/vocational schools in th area.

TABLE 3.5 VALUE ADDED OF ALL BCEPZ INDUSTRIES (1981 to 1985) INCLUDING RATIOS OF IMPORTED AND LOCAL RAW MATERIALS, SUPPLIES AND UTILITIES TO TOTAL VALUE OF INPUT (TVI)

(₱'000):

YEAR	Total Value of Output	RAW MATERIALS USED Imported	RAW MATERIALS USED Local	FACTORY SUPPLIES USED Imported	FACTORY SUPPLIES USED Local	Utilities Used	Total Value of Inputs	VALUE ADDED	VA Coefficient (9/2)	% of Imported RMU/FSU to Total Value of Input (TVI)	% of Local RMU/FSU to TVI	% of Utilities Used to TVI
1981	442916	339714	162	1344	930	3637	345787	97129	21.93 %	98.63	0.31	1.05
1982	534193	378654	807	1743	1127	4577	386908	147285	27.57 %	98.17	0.50	1.18
1983	1004251	715628	603	231	557	7760	724770	279472	27.82%	98.77	0.16	1.07
1984	1908151	1308343	4566	13342	4140	19428	1349819	558332	29.26%	97.92	0.64	1.44
1985	1539916	1063902	8841	6905	2502	19746	1101896	438020	41.17%	97.17	1.02	1.79
TOTAL	5429427	3806241	14979	23565	9256	55148	3909189	1520238	27.99%	97.96	0.62	1.41

The assembly operation nature of epz industries precluded major skills or technology transfer. However, to a large extent, Filipino managers were honed to the ways and technics of international production and marketing, skills that may be used even outside epzs and in other industries. Recently, the entry at the BCEPZ at a high-tech machinery firm paved the way for the transfer of the latest engineering technology in machinery and shop mathematics to local engineers.

3.2.7 SOCIAL IMPACT:

BCEPZ being located near an urban center, the problems of housing and dearth in social and recreational facilities that obtained at Bataan EPZ were not experienced. Moreover, the relocation of tenants in the epz site was not in the magnitude of Bataan where a whole community was uprooted. Very few families were directly affected with the establishment of the BCEPZ in 1979. They were transferred to a relocation site with provision for basic facilities and were given some form of monetary assistance. This scene was repeated in 1984 with the development of another 20 hectare site for a new industry.

By and large, workers at the BCEPZ expressed satisfaction with their jobs and wage levels in the companies they were working for. Eighty-seven (87) percent of workers perceived some measure of improvement in their lives since working in the zone. However, due to a relatively higher educational attainment, many BCEPZ workers perceived little or no opportunity for promotion in the companies where they are presently working.[32] BCEPZ workers were not as zealous as their Bataan counterparts in unionism. Families of BCEPZ workers generally express strong disapproval of unions.[33]

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[32] Guerrero

[33] IBID

CHAPTER IV

MACTAN EXPORT PROCESSING ZONE

4.1 PROFILE:

It was also in 1979 when ground was broken at the epz located in the historic island of Mactan, Cebu Province. It was built alongside an international airport and 14 kilometers from the port of Cebu - the Philippine's second busiest seaport of entry. Designed primarily to attract light manufacturing export operations, the Mactan Export Processing Zone (MEPZ) is administered by EPZA. It is equipped with such utilities and facilities that characterize a complete industrial estate. It also offers the usual fiscal incentives that are extended to EPZA registered enterprises.

MEPZ features 710,000 square meters of industrial land and two standard factory buildings that have a total rentable area of 19,836 square meters. As of December, 1986, a total of 95,000 square meters land area have been rented to three (3) companies. The factory buildings are fully occupied by another five (5) enterprises.

During 1980 to 1985, EPZA generated a total income of P112M from the operation of MEPZ. Cost of operations was P103M thereby reflecting an over-all income of P9M from operations.

MEPZ is located in Region VII of the Philippine economic and political subdivision. It is one hour by commercial jet from Manila and 24 hours over the sea lanes. Mactan is part of Metropolitan Cebu, a conglomeration of cities and municipalities which have become the hub of economic and social activity in Central Philippines. The metropolis is host to 4 universities and 11 colleges, 20 technical schools and 2 training centers. It has complete commercial and social amenities that characterize a highly urbanized setting. The medical facilities are fully equipped. Professional and legal services are abundant and highly trained. Commercial shipping requirements of the area are handled by ocean going vessels and the country's international airline. Cebu is strategically positioned between producers of raw materials and their markets.

Region VII is predominantly an agricultural region where industry employs 56 percent of the region's workforce of 1.6M. Other major employers are the community and government services (13 percent), trading (10 percent) and manufacturing industries (9 percent). In 1986, the region's four (4) leading exports are rattan furniture, coconut oil, marine products and copper concentrates. The Metro Cebu which includes Lapu-Lapu City, Mandaue, Danao and Cebu City is home to 757,000 people.

4.2 ECONOMIC PERFORMANCE OF MACTAN EPZ:

The over-all performance of MEPZ is shown in Table 4.1.

4.2.1 INVESTMENTS:

MEPZ was built by the government at the cost of $9.4M or 67 percent of the investment in Baguio EPZ in 1980. Public investment until 1985 grew at an average of 3.6 percent a year, which indicates that no substantial infrastructure was introduced after it opened in 1980.

In 1986, EPZA attracted four (4) new companies to the MEPZ, bringing the total number of companies to eight. Private investments was increased by P36M which improved the registered investment of P503M in 1985.

4.2.2 NUMBER OF FIRMS/TYPES OF INDUSTRIES:

Industries at the MEPZ as of 1986 may be categorized into - electronics (1), garments (4), watch and clocks (1), food processing (1) and wood processing (1). Four (4) companies have since stopped operations. Two American firms in the electronics industry (telecommunications equipment and terminals) closed in 1983. A Hongkong firm (work gloves) moved out of the epz in 1985. A Japanese firm that makes buttons out of shells folded up in 1985.

TABLE 4.1 ECONOMIC PERFORMANCE OF MEPZ EPZ FOR THE PERIOD 1981-1985

ECONOMIC INDICATORS	1981	1982	1983	1984	1985	AVERAGE GROWTH 1981-85 (%)	% CHANGE 1984-85 (%)
Number of Firms	5	5	6	4	4	-(13)	-
Employment	1211	1778	2088	3785	3240	27.9	-(14.4)
Salaries and Wages (₱'000)							
a. Current Prices	18252	22724	46679	61646	82118	45.6	33.2
b. Constant Prices	10575	11494	20914	22336	23389	22.0	4.7
Exports ($'000)	19392	27347	39086	52803	26836	8.5	-(49.2)
Imports ($'000)	13704	18161	23613	30887	18990	8.5	-(38.5)
Net Trade Balance	5688	9186	15473	21916	7846	8.4	-(64.2)
Public Investment (₱'000)	68900	69156	69443	69800	80136	3.8	14.8
Private Investment (₱'000)	78104	215604	473642	503672	503165	75.4	-(0.1)

TABLE 4.2 PRIVATE INVESTMENTS (EQUITY INVESTMENTS PLUS LOANS) OF MACTAN EPZ FIRMS 1981-1985

(₱'000):

YEAR	EQUITY INVESTMENTS FOREIGN	EQUITY INVESTMENTS LOCAL	TOTAL	ACTUAL BORROWINGS FOREIGN	ACTUAL BORROWINGS LOCAL	TOTAL	CUMULATIVE TOTAL	TOTAL INVESTMENTS	GROWTH %
1981	36203	2000	38203	39601	300	39901	39901	78104	-
1982	92790	2000	94790	80913	-	80913	120814	215604	176.0
1983	145789	2000	147789	205039	-	205039	325853	473642	119.6
1984	168593	2000	170593	7226	-	7226	333079	503672	6.3
1985	144473	9940	154413	15673	-	15673	348752	563165	-(0.1)

Average Annual Growth:

Equity Investment : 52.5%

Loans : 94.8%

Total Private Investment : 75.4%

TABLE 4.2.1 EQUITY INVESTMENTS: MACTAN EPZ (1981-1985)

(₱'000):

YEAR	FOREIGN	% GROWTH	LOCAL	% GROWTH	TOTAL	% GROWTH	% OF FOREIGN TO LOCAL
1981	36203	-	2000	-	38203	-	94.4
1982	92790	156.3	2000	-	94790	148.1	97.8
1983	145789	57.1	2000	-	147789	55.9	98.6
1984	168593	15.6	2000	-	170593	15.4	98.8
1985	144473	(14.3)	9940	397	154413	(9.4)	93.5

Average Growth:

Foreign : 53.6%
Local : 99.2%
Total : 52.5%

TABLE 4.2.2 ACTUAL BORROWINGS: MACTAN EPZ FIRMS (1981-1985)

(₱'000) :

YEAR	FOREIGN	% GROWTH	LOCAL	% GROWTH	TOTAL	% OF FOREIGN TO LOCAL	CUMULATIVE TOTAL	% GROWTH
1981	39601	-	300	-	39901	99.24	39901	-
1982	80913	104.3	-	-	80913	100.00	120814	202.7
1983	205039	153.4	-	-	205039	100.00	325853	169.7
1984	7226	(96.4)	-	-	7226	100.00	333079	2.2
1985	15673	116.8	-	-	15673	100.00	348752	4.7

Average Growth:

Foreign : 69.5%
Local : -
Total : 94.8%

TABLE 4.4

EQUITY STRUCTURE OF MEPZ ENTERPRISES, 1986

EQUITY STRUCTURE	1981	1982	1983	1984	1985	1986
Wholly Filipino	-	-	-	-	-	2
Wholly Foreign	3	3	4	3	3	3
In Joint Venture with Filipino	2	2	2	2	2	3
T O T A L	5	5	6	5	5	8

TABLE 4.3

OWNERSHIP BY NATIONALITY OF MEPZ FIRMS, 1986

NATIONALITY	FULL OWNERSHIP	IN JOINT-VENTURE
Filipino	2	3 *[1]
American	1	(1)
Japanese	1	(1)
Hongkong	-	(1)
Italian	-	(1)
Australian	-	1 *[2]
Swiss	-	(1)
T O T A L	4	4

*[1] -Separately with American, Italian & Hongkong
*[2] -With Switzerland

Filipinos were active investors in MEPZ industries, particularly in 1986. They are involved in garments and food processing as principals and in joint venture in wood processing. Americans are in electronics (semi-conductors) and watch and clock assembly. Italians are in wood processing while Australians and Swiss joint ventured in work gloves.

4.2.3 EXPORT/IMPORT PERFORMANCE:

As in BCEPZ, exports of industries in MEPZ also suffered a decline of 38.5 percent in 1985, compared with the previous year's records. The decline brought down the average growth of export of the zone to 8.5 percent yearly. It recovered in 1986 as exports hit a record of $76.9.

The major destination of MEPZ products was the United States (76 percent), followed by Hongkong (9 percent). Exports were dominated by the electronics and watch industry. In 1985, the US was the electronics' major market with 84 percent share. The watch firm also sold 67 percent of exports to the US. The garment sector which ranked third in exports, also exported to the US (64 percent) and the EEC countries (34 percent). Hongkong had been consistently importing from the semi-conductor firms and also emerged as a major market (15 percent).

In 1986, the export market of MEPZ expanded, as the garment sector grew by 500 percent. Markets were diversified to include Japan, New Zealand and Australia. The food and wood processing firms have Europe as market.

In the period 1980-1985, MEPZ firms imported raw materials and supplies from the US (66 percent), Hongkong (18 percent), and the EEC countries (7 percent). Other sources were Taiwan, Holland, Singapore and Japan. Following a decline in exports, imports in 1985 decline by 38.5 percent compared with 1984. Nevertheless, the average percentage of growth in imports during the period was 8.5 percent.

Like in BCEPZ, the intercompany open account and consignment modes of import financing were widely used. As in export, the leading importers were the electronics and watch industry which sourced their raw materials from the United States (83 percent and 55 percent). The Netherlands supplied 9 percent (average) of raw materials import of the semi-conductor firm and 4 percent were sourced from Hongkong. In 1985, Hongkong supplied the watch industry with 18 percent of its raw materials and supplies. The garments sector sourced 100 percent of its imported raw materials and supplies from Hongkong.

Except in 1985, MEPZ surpassed its projected export target set by EPZA.[34] The decline in 1985 was caused by a slowdown in productionof the electronics firm. Export sales declined by 59 percent from 1984.

Unlike in the BCEPZ, two (2) firms surpassed their own export target projections in the first three (3) years of operation by an average growth of 76 percent for electronics and 74 percent for watch products. On the fourth and fifth year of operations however, the watch industry exports declined by 27 percent and 35 percent while the semi-conductor firm registereed a decline in 1985 by 53 percent, after a substantial growth in 1984. The three other operating firms during the period did not go anywhere near their export targets, although all registered positive growths in export for at least 2 successive years of operation after which declines were experienced in 2 firms. The 2 have since withdrawn from operation (telecommunications and electrical parts). The third, a garment factory are still operational and has posted an average export growth of 43 percent.

The growth in exports in the electronics and watch industry in the first three years of operation could be attributed to strong export demands in the early 80's and the companies' decision to expand production capacities in MEPZ. The 53 percent decline in exports in electronics in 1985 was dictated by the slump in the market as experienced by the same sector at BCEPZ.

The total net trade balance of MEPZ for 1981-1985 is $60.1M.

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[34] EPZA Corporate Plan, p.75

4.2.4 EMPLOYMENT:

As of October, 1986, there are a total of 23,204 employed in the firms at MEPZ or 36 percent of the EPZA target[35] for 1985. Like in BCEPZ, the work force consists of more female workers than male. In the first year of MEPZ, it was able to attract workers mainly from Cebu province. The biggest employer was the watch company averaging 1,055, followed by electronics - 700, and garments - 350. The wood and food processing firms employ the rest.

MEPZ employment constitute 1.9 percent of the total employment for the manufacturing industry in Region VII. Total salaries and wages generated since the operation of MEPZ until 1986 is P231.4M for an average annual growth of 45 percent. In real terms however, the growth was only 22 percent computed at constant 1981 prices.

4.2.5 VALUE ADDED:

In terms of value added, Table 4.5 presents a fair idea on the value added ratios and growth in MEPZ per year in accordance with the EPZA formula (see par. 3.2.5 of the preceding chapter). The average percentage share of local materials and supplies in the total value of input is 4.09 percent.

On a sectoral basis, electronics posted the lowest local materials and supplies content at MEPZ with 1.91 percent of total value of inputs added. Watch and clocks registered 10.2 percent and garments posted a high 49.6 percent share in TVI.

Our attention was drawn to the wide disparity in the local material contents of the electronics semi-conductor industries in Baguio EPZ and Mactan, with the latter showing a higher percentage local content (+1.74 percent). An analysis of inputs showed that MEPZ semi-conductor firm have a higher cost of local supplies that went into production at a ratio of 65:35 against the BCEPZ firm. The MEPZ watch industry likewise reported higher costs in local supplies for the period.

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[35] EPZA Corporate Plan, p.74

TABLE 4.5 VALUE ADDED OF ALL MEPZ INDUSTRIES (1981-1985) INCLUDING RATIOS OF IMPORTED AND LOCAL RAW MATERIALS, SUPPLIES AND UTILITIES TO TOTAL VALUE OF INPUT (TVI)

(₱'000):

YEAR	Total Value of Output	RAW MATERIALS USED Imported	RAW MATERIALS USED Local	FACTORY SUPPLIES USED Imported	FACTORY SUPPLIES USED Local	Utilities Used	Total Value of Inputs	VALUE ADDED	VA Coefficient (9/2)	% of Imported RMU/FSU to Total Value of Input (TVI)	% of Local RMU/FSU to TVI	% of Utilities Used to TVI
1981	167617	82421	228	5954	3527	5991	98131	69486	41.46	90.06	3.83	6.11
1982	359347	89443	381	10910	6355	4093	111182	248165	69.06	90.26	6.06	3.68
1983	191366	106101	218	8348	4331	9621	128620	62746	32.79	88.98	3.54	7.48
1984	824290	536256	3583	45462	16513	28635	630449	193841	23.52	92.27	3.19	4.54
1985	413221	218180	2465	11307	13149	27230	272331	140890	34.09	84.27	5.73	9.99
TOTAL	1955841	1032402	66832	81981	43875	75570	1240731	715128	36.56	89.81	4.09	6.09

During the author's visit at the MEPZ, it was observed that the two firms have big power generating sets installed in their respective premises. It was gathered from zone officials that such generators were frequently used by the companies either because of power fluctuations or when the limits allocated to the industries approximates the guaranteed maxium demand. In the later case, the companies use the generators to avoid penalties. Considering that the nature of their operations require a dust free round the clock temperate climate, the cost of power generation was substantial. In comparison, the electronics industry at BCEPZ does not need air-conditioning system because of the temperate climate of the area.

Supplies in this above case pertain to supplies used in the generation of power to facilitate production.

4.2.6 LINKAGES:

a. LOCAL PURCHASES: MEPZ has accumulated a total of P145.7M in local purchases of materials and supplies for the period 1981-1985, for an average annual growth rate of 92 percent. At constant prices however, the growth rate is only 36 percent. It is 76 percent more than the Baguio EPZ total of P24.2M for the same period.

The higher proportion of local purchases to inputs in MEPZ was brought about by the higher utilization of local materials in the garments sector and as explained in paragraph 4.2.5 - the electronics and watch industries' high dependence on fuel oil for self-generated power (approximately 40 percent). Other purchases went to company service cars and utility vehicles, construction materials and other factory and office supplies, and equipment and packaging supplies.

MEPZ will improve its 36.50 percent average value added for all industries with the entry of the wood and food processing industries in 1986 and the three garment firms on account of the high local content of the garment industry. On the other hand, the handicraft (shellcraft) which utilizes 90 percent local materials have since ceased operation in 1985, and is not expected to re-open.

b. LOCAL SALES: Watches made in the MEPZ were sold regularly in the local market, pursuant to the authority granted by EPZA in its registration agreement. By 1985, a total of P17M has already been sold locally after payment of the appropriate duties and taxes. Other products worth P.35M were likewise sold in the local market during the period 1980-1985. In all these instances, the buyers were either traders or end users and no further processing was applied on the products sold. Therefore, the linkage created was limited.

c. TRANSFER OF TECHNOLOGY: Like the Bataan and Baguio EPZs, the mass production methods introduced by electronics, watches and garments firms at the MEPZ precludes the much desired technology transfer that was generally believed to accompany foreign investments. On the worker's front, the skills transferred are limited to assembly of parts or components of a product. Management staff learned technics in areas like materials monitoring, logistics, import and export, sourcing, marketing, human behaviour, discipline and the other rudiments of conveyor type manufacturing. Nevertheless, these industries in MEPZ spent P5.6M in training programs for its workers held in-plant or abroad. Modern machining and tooling techniques are definitely imparted in the watch industry.

However, there is a promise for real technology transfer in a recently registered food firm at MEPZ. The company will train and employ local chemists and technicians in the process of biotechnology for the purpose of extracting enzymes from seaweeds and locust beans which are products indigenous to the country.

The MEPZ firms' relationship with the government's regional manpower training center was however limited to the latter's approval of labor training programs for incentive availment purposes. No Instructional were conducted at the center to compliment the skills required by EPZ firms.

4.2.7 SOCIAL IMPACT:

The move to locate MEPZ near such urban centers as Cebu and Mandaue proved to be a wise decision, if it is to be related with the experience at Bataan. The cost of putting up the facility was dramatically scaled down since amenities, utilities and other services were already in place. Land acquisitions and relocation of families were implemented on a phase by phase, need only basis.

The gains achieved in providing employment opportunities were also significant. There is a general perception of greater improvement in the lives of workers and their families as a result of employment in the zone.[34]

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[34] Guerrero, S., Ibid

CHAPTER V

FACTORS INFLUENCING LINKAGES

5.1 TYPES OF LINKAGES:

In this chapter, we shall discuss at length the various forms of linkages developed between epz firms and local industries, aside from existing business relations with cargo forwarders and brokers, telecommunications, banking and other services indispensable to an off-shore manufacturing operation. The most desirable among the linkages is the integration of domestic products into epz exports. Other linkages include the sale of epz products to users in the customs tariff area (CTA) or local sales. There is also the trading between epz firms and export producers based on the CTA known as constructive exports. Finally, there is the sub-contracting by epz firms of a portion of production outside industries.

5.1.1 LOCAL PURCHASES:

Aggregate local raw materials and supplies purchases of the firms in BCEPZ and MEPZ in 1985 at current prices, decreased by 7 percent compared with 1984 figures. In real terms, the decrease was 25 percent. In the over-all, local purchases made by firms in the two zones from 1981 to 1985 at constant prices grew by 92 percent and 53 percent for BCEPZ and MEPZ respectively, indicating a positive trend towards the use of locally sourced raw materials and supplies. Tables 5.1 and 5.2 also reflect a higher volume of local raw materials and supplies used at MEPZ over BCEPZ even though there are more industries and higher investments at the Baguio Zone. The main difference lies in local supplies used by MEPZ firms which is 374 percent more than the P9.2M purchased by BCEPZ during 1981 to 1985 period.

TABLE 5.1

LOCAL PURCHASES (P'000)
At Current Prices

						ANNUAL GROWTH RATE	
EPZ	1981	1982	1983	1984	1985	1984-85	1981-85
BCEPZ	1092	1934	1160	8706	11343	30%	179%
MEPZ	3755	6736	4549	20096	15614	-(22%)	92%
TOTAL	4847	8670	5709	28802	26957	-(6.4%)	110%

TABLE 5.2

LOCAL PURCHASES (P'000)
At Constant 1978 Prices

						ANNUAL GROWTH RATE	
EPZ	1981	1982	1983	1984	1985	1984-85	1981-85
BCEPZ	677	1060	557	2512	2783	10%	92%
MEPZ	2330	3763	2187	5799	3831	-(33%)	36%
TOTAL	3007	4843	2744	8311	6614	-(20%)	50%

Note : Used NEDA-NAS General Wholesale Price Index for the NCR

Table 5.3 shows the extent of integration of locally produced goods in epz exports for the same period. It is compared with a) the total value of output of the epz (value added plus imported and local inputs), b) the total value of inputs (local and imported raw materials and supplies and cost of utilities), and c) local value of output (total value of output less imported raw materials and supplies). It is patent that the share of local goods in epz products was almost nil, indicating the extensive use of imported materials and supplies by epz firms. Mactan EPZ firms posted a better ratio of integration of local materials, compared with BCEPZ.

The average for the epzs were pulled down by the low local material contents of semi-conductor firms. Of the four major industries where there was significant activity during 1981-1985 period, the percentage of average local input utilization was in garments with 47.34 percent (BCEPZ) and 60 percent (MEPZ). The share in the electronics area was 0.19 percent (BCEPZ) AND 1.91 percent (MEPZ). Watches reflected a local raw materials content of 10.2 percent, while handicraft (artificial flowers) registered an average of 6.05 percent. Shellcraft reached a high 91.76 percent.

Locally sourced materials purchased by the different sectors fall under the following dominant categories:

a. yarns and fabrics including threads and accessories

b. plastic and paper packaging materials

c. handicraft items and raw shells

d. oil products

e. lumber and agricultural products

f. chemicals

g. office supplies and equipment

h. automotive equipment and supplies

i. tools, hardware and construction materials

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TABLE 5.3 PERCENTAGE SHARE OF LOCAL RAW MATERIALS AND SUPPLIES TO A) TOTAL VALUE OF OUTPUT B) LOCAL VALUE OF OUTPUT AND C) TOTAL VALUE OF INPUTS.

(P'000)	(1)	(2)	%	(3)	%	(4)	%
BCEPZ:	LOCAL RM & FS	TOTAL VALUE OF OUTPUT	1/2	TOTAL VALUE OF INPUT	1/3	LOCAL VALUE OF OUTPUT	1/4
YEAR:							
1981	1092	442916	.24	345787	.31	101858	.07
1982	1934	534193	.36	386908	.50	153796	1.25
1983	1160	1004251	.11	724779	.16	288392	.40
1984	8706	1908151	.45	1349819	.64	586466	1.40
1985	11343	1539916	.73	1101896	1.02	469109	2.41
TOTAL	24232	5429427	.44	3909189	.62	1599621	1.5

MEPZ: YEAR:	(1)	(2)	%	(3)	%	(4)	%
1981	3755	167617	2.2	98131	3.8	79242	4.7
1982	6736	359347	1.8	111182	6	258994	2.6
1983	4549	191366	2.3	128620	3.5	76916	5.9
1984	20096	824290	2.4	630449	3.1	242572	8.2
1985	15614	413221	3.7	272331	5.7	183734	8.4
TOTAL	50750	1955841	2.5	1240713	4.0	841458	6.0

Most of the above items were sourced away from the epzs, in Greater Manila area. The handicraft and food sector also requisitioned materials from the localities where the materials were produced or extracted, which were not necessarily from the epz area. Isolated purchases of hardware and tools from immediately surrounding areas of the epzs were however recorded.

5.1.2 LOCAL SALES:

There were instances when an epz transaction involved the sale of epz products to consumers in the CTA. As a matter of policy, epz firms may sell in the local market up to 30 percent of its annual production or 30 percent of its export sales. This is true where the sale will not adversely affect the operation of any domestic industry.

Local sales were treated as ordinary importations and therefore the goods were levied with the applicable tariff but only on the local value added.

In 1985, epz firms in the regular zones sold locally a total of P48M which is a 7 percent increase over the P45M sales in 1984. Local sales activity in these two years constituted an average 1.2 percent of the total $422M exports generated from the regular epzs during the period.

Tables 5.4 and 5.5 present the local sales performances of the two epzs under review compared with Bataan Zone. At indexed prices, local sales of the regular epzs consistently posted a negative growth (except for BEPZ in 1983) brought about by closures of many companies at the BEPZ and the generally depressed market at the CTA after 1983 as a result of the economic crises.

In especially designated export factory zones, however, the companies in which the Philippine government has extensive investments, sales up to 50 percent of production is allowed. These capital intensive companies produce copper, phosphate fertilizers and liquified petroleum gas. In 1984 and 1985, sales totalled P881M and P1.3B against exports of $146M and $270M respectively. Local sales constituted 36 percent and 26 percent of exports in 1984 and 1985.

TABLE 5.4

LOCAL SALES (P'000)
At Current Prices

EPZ	1981	1982	1983	1984	1985	ANNUAL GROWTH RATE 1984-85	1981-85
BEPZ	61831	75303	98525	41674	47043	13%	-(7%)
BCEPZ	NDA	NDA	309	1494	466	-(66%)	NDA
MEPZ	11438	3660	1384	1924	799	-(58%)	-(49%)
TOTAL			100218	45092	48310	7.1%	-(9.9%)

Source : NEDA NIEP Report
National Industrial Estate Program
February, 1987

TABLE 5.5

LOCAL SALES (P'000)
At Constant 1976 Prices

EPZ	1981	1982	1983	1984	1985	ANNUAL GROWTH RATE 1984-85	1981-85
BEPZ	39356	43477	51719	14551	13342	-(8.3%)	-(23%)
BCEPZ	NDA	NDA	162	522	133	-(74	NDA
MEPZ	7281	2113	727	672	227	-(66	-(58%)
TOTAL			52606	15744	13701	-(13%)	-(26.4%)

Except for such products as copper and polyvariable condensers and semi-conductor devices and components, the local sales of epz firms constituted consumer-end products and did not entail additional processing in the customs territory. The electronics components were sold under re-export bonds which either implies that the final product will eventually be exported after some processing or that it will be sold in their original condition by a marketing arm based in the CTA. Copper were sold to domestic industries.

We do not have the figures to form an opinion over the extent of the share of epz sourced materials in the production inputs of the domestic industries. But since the over two years' sale is substantial at P2.2B (including those produced in special zones), we assume that the contribution is significant.

5.1.3 CONSTRUCTIVE EXPORTS:

Under EPZA procedures, an epz firm may sell its products to bonded warehouses of export-oriented manufacturers and export traders. The sale to the exporter in the CTA is tax and duty free, but covered by a re-export bond.

EPZA enterprises doing constructive exports are those engaged predominantly in the manufacture of packaging materials like corrugated cartons, polypropelene bags or plastic tubes for semi-conductors.[37] The products are not subject to further processing outside of epz but form part of the export products of the local firms as containers of such products.

The paper and carton producers in Bataan EPZ has made extensive sale to export oriented industries outside of epz equivalent to 71 percent and 92 percent of capacity in 1984 and 1985. Domestic linkage is therefore very evident in the industry. However, the practice drew adverse reactions from domestic manufacturers of the product with complaints that the epz firm had encroached in their market.

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[37] The epz firm producing plastic tubes for packaging of semi-conductors supplies the requirements of the electronic firms at BCEPZ and MEPZ, as well as a number of industries in the CTA.

5.1.4 SUB-CONTRACTING:

As earlier stated, the aspect in epz operation that has generated substantial linkage with domestic industries is sub-contracting or farming-out of production process. This involves an act of the principal manufacturer (the epz firm) of assigning materials and supplies (and sometimes equipment) to another entity outside the epz to execute certain processes of manufacturing at a specified cost. The practice of sub-contracting by epz firms gained prominence after the EPZA laid down the following guidelines in 1983, to wit:

a. the work to be undertaken outside of the epz shall involve specialized work not normally undertaken by the epz firm; or

b. when the required volume of work exceeds the production capability of the epz firm and deadlines to meet export commitments cannot be met.

The transaction is not allowed when it will result in the reduction of epz firms' employees or its authorization will interfere with the employees' right to self-organization.

The practice of sub-contracting is prevalent with firms at Bataan EPZ where there is a concentration of garments enterprises. The garment industry takes to sub-contracting more often because of existing capacities in the CIA. These enterprises resort to sub-contracting because it serves as a convenient solution to their operational problems. Sub-contracting enables the firms to avoid additional investments in putting up facilities or maintaining employees for specialized works. On the other hand, idle or excess capacities of industries outside the epzs are maximized. Technical skills are transferred and quality standards are upgraded at the contractor's plant.

In 1985, 23 enterprises at the epzs engaged in 335 sub-contracts involving 58 contractors in the domestic territory. The processes covered ranged from those performed in the epzs (30 percent) to those that are not normally integrated in their production (70 percent). These Bataan EPZ sub-contractors are all located within the surrounding areas of Metro Manila, or 160 kilometers away from the epz.

At Baguio City, two enterprises extensively engaged in sub-contracting activities. They consist of sending materials to homeworkers employed by the contractor to perform the job at home. The sites are located within 50 km. radius from BCEPZ. One company (artificial flower) has been consistently using the scheme which indicates that the system has become an integral part of operation. In Mactan EPZ, sub-contracting is being undertaken by the semi-conductor firm for non-critical or minor processes to the nearby Cebu area (7 kms.). The company supplies the raw materials and equipment to the contractor where the same is processed by an average of 16 persons. The sub-contracting cost an average of $10,000 p.a.

It is unfortunate that the EPZA was not concerned (until this study) with tracking or recording the impact of sub-contracting on the domestic economy. In the past, no earnest effort was made to look into direct employment generated and the value of work performed by the various sub-contractors. But judging from frequency and the author's own observation and interview of a new sub-contractor[38] in the Bataan EPZ area, the linkage in terms of employment generation is substantial.

The sub-contractor visited by the author was recently organized (1986) near the Bataan EPZ in view of the new policy at EPZA encouraging the promotion of support industries near the zone. It receives work from BEPZ garments factories and employs 68 people. Five other sub-contractors were tapped in the Bataan area, generating employment of 186 people. For a one and one-half months job, total contract price distributed among the 5 contractors was P1.1M.

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[38] Crescere Garments - Mountain View, Mariveles, Bataan.

5.1.5 TECHNOLOGY TRANSFER:

The processes employed in the two epzs studied are technically simple operations that made use of unskilled labor. As in typical production sharing arrangements, technology is retained in home bases where technological lead still gives a trade advantage. It is expected that in due time, the other processes shall be transferred to third world countries like the Philippines following the maturity of the product. As the process become more standardized, comparative advantage would shift to wage cost. Advanced labor skills would be devoted to the development of better and more complex products. This is already occuring in the semi-conductor firms in epzs where the plants are set to perform more processes transferred from other plants.

There were also considerable strides in the area of bio-technology, and machinery and tool making introduced by industries thereat. Strict adherence to exacting international standards also helped develop Filipinos' awareness to quality control and "just in time" style of production management. Some skills were also transferred from company sponsored in-house and overseas training at parent company's plant. Sub-contracting is another area where some skills were transferred to domestic industries.

5.1.6 ANOTHER TYPE OF LINKAGE:

It may not be deemed as part of integration, but equally significant is the opportunity for commerce developed by the opening of an epz. The job generated create a new demand for consumer goods and services. For the period 1981 to 1985, the two zones under study came up with total salaries and wages of P379M. This does not include the income of indirect jobs created as a result of the multiplier effect of epz jobs.

The resultant increase in consumer spending in the areas of the zone is by itself a linkage created by epzs with domestic producers of consumer goods.

5.2 FACTORS AFFECTING LINKAGES:

Consistent with other studies' observation, we find that linkages of epz industries with those in the CTA in terms of integration is generally insignificant. For the period 1981 to 1985, domestic materials used in the two epzs ranged from only 0.62 to 4 percent average. Their share in local value added of 1.5 and 6 percent from Baguio and Mactan respectively, is not encouraging either.

This led us to examine probable reasons that account for such poor showing and correlate them with actual experiences of zone enterprises. Factors which are inherent to conducive investment like political stability, efficient nationwide infrastructure support system, productive labor, etc. which could not be influenced by EPZs alone were not included in the evaluation, as they are matters which should be addressed at the macro level. Only matters which are directly related to the subject matter were discussed.

Based on our interviews and analyses of the firms' operations, we arrived at the conclusion that the following influenced in varying degrees the epz firms' performancee in the area of integration:

- the epz concept
- incentive tariffs in the export markets
- industrial branch of activity
- nationality and equity structure
- lack of linkage promotion
- flaws in EPZA procedures

5.2.1 EPZ CONCEPT

An epz is projected as a haven for an industrialist facing increasing labor costs and stiff competition at home and in the world market. It offers such opportunities as cheap labor, tax and duty free importation of equipment, raw materials and supplies, tax holidays, 100 percent foreign ownership, support facilities and infrastructure and a host of other fiscal and physical incentives including a relative freedom from the usual government bureaucracy. This is how epzs are promoted almost uniformly by host countries in their efforts to attract foreign investments. Even advanced economies like Australia adopted this concept in its first free manufacturing zone, launched in September, 1985, at its northern territory.[39] This was (and still is) the Philippines' position when it first entered the competition for foreign investments through epzs in 1972.

The trans-nationalization of production by multi-national corporations provided the impetus for the establishment of epzs or similar facilities in developing countries.[40] Following the product life cycle theory, a company whose market and competitiveness are threatened at home, expands its export market by first using home-based production. For further cost cutting, it transfers a portion of production off-shore in a facility such as an epz. As capability is developed, the whole operation is transferred to the off-shore location. Finally, the company satisfies itself with importing its product and selling in developed economies, while establishing its share in the host country's market.

because of free trade, the company could send raw materials and supplies tax and duty free to the off-shore plant from other affiliates located elsewhere or wherever they may be sourced, not necessarily from the host economy. This is also known as networking of production or production sharing espoused by economist Peter Drucker. The convenience offered by inter-company open account and similar arrangements for payment of materials, including consignment, strengthens the argument in favor of their importation.

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[39] Business Trading p. 49 - October, 1986

[40] KUMAR, p.11

5.2.2 INCENTIVE TARIFF STRUCTURES IN THE EXPORT MARKETS:

Products of the Philippines are eligible for some incentive tariffs in the export market like those offered by US Tariff Article 806/807 and the Generalized Systems of Preferences (GSP). Both schemes feature the use of imported components, although GSP encourages the use of wholly obtained products of the preference receiving country. Epzs help facilitate the enjoyment of these incentives by providing an atmosphere of free trade, withdrawn from the usual red tapes and bureaucracies of import/export trade in the CTA.

a. US ARTICLE 806/807: At the WEPZA Conference, Mr. Miller cited the advantage of applying US Article 807 in his operations. He availed of the incentive by sending textile materials to Haiti and Columbia and exported the processed products back to Jersey City for finishing, packaging and warehousing. Article 807 permits US goods to be sent abroad for assembly, and upon its return to the US, only the added value shall be assessed with customs duties.

US Article 806 provides for similar treatment for articles of metal. The watch industry in the MEPZ qualifies for such incentive, as its main source of raw materials and export markets is the US.

The epz semi-conductor industry is another user of Article 806/807. Although the product is covered by GSP, the industry failed to post the minimum 35 percent value added and its products exported to the US is therefore taxable. However, since the main source of raw materials is the US, its exports are entitled to reduced tariff to be based on their value added upon entry in the US.

b. GENERALIZED SYSTEM OF PREFERENCES (GSP): Industrialized countries like the US, Canada, Japan, the European Economic Community (EEC), Australia, New Zealand, the USSR and other advanced economies in Europe, extend duty free or preferential treatment for imports of manufactured products from the Philippines, a benefit-receiving country under the GSP scheme.

GSP eligibility is generally tested by either the process criteria or the percentage criteria or both. The process criteria calls for a substantial transformation of product from its original form. The percentage criteria requires the addition of a minimum value added (labor and/or material) on the manufacture product at the benefit-receiving country.

In both criteria, the product need not be indigenous to the benefit-receiving country. It may be imported in its unmanufactured form irrespective of source, or obtained in finished or semi-finished form from either the preference-giving country itself (preference-giving country content) or from another benefit-receiving country (cumulation). Under the GSP schemes of EEC, Japan and the US, benefit-receiving countries belonging to an association of countries which contribute to comprehensive regional economic integration among its members may be considered as one area for the purpose of meeting the rules of origin requirements. This refers to such country economic groupings like ASEAN, Central American Common Market, the ANDEAN group, etc.

The advantages offered by GSP is probably the reason for the common observation that investors usually determine whether raw materials and semi-finished goods could be conveniently imported from neighboring countries. Imported products, if used as inputs to produce a different product category, are treated as local content for purposes of value added computations in applying for GSP treatment in the US and other countries.

The Philippine semi-conductor electronic industry, in its bid to improve its position in the EEC market is seeking the attainment of GSP status for its products through the relaxation of foreign content allowance and the applicatin of preference-giving country content rule.[4] The industry is a heavy importer of inputs.

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[4] From a position paper of the Association of Semi-conductor Electronic Industry of the Philippines, 1986

As regards the United States Markets, the Flagstaff Institute of Arizona, USA, which monitors world-wide flow of trade to the US under the different incentive tariff schemes, reported[42] that the semi-conductors area which is the top export of the two epzs under study, ($100.6M for 1984), continue to lead the growth in 1984 of 806/807. It grew by $466M in dutiable value among the top 15 countries. Korea and the Philippines each accounted for 21 percent of this growth followed by Malaysia with 18 percent.

5.2.3 INDUSTRIAL BRANCH OF ACTIVITY:

As shown in Table 5.3, the use of local raw materials and supplies in epz products during the reference period was not satisfactory because exports were dominated by the electronics industry which accounted for 67 percent of the total. The industry involves assembly components or high technology materials which were not locally available. Other epz firms like garments used high quality fabric and textile i.e., acrylic polyester (wool/nylon), animal skin (sheep, goat and furskin), which are not indigenous to the country. The handicraft sector used polyester fabrics, polyetheline and pigments as major materials. The metal sector imported brass ball valves and tubings. The plastic firm used imported PVC pellets as raw materials.

The Philippines is yet to reach that stage of industrialization where intermediate goods could be produced to suit export production. Its industry is basically domestic oriented, as a result of an import substitution program adopted since World War II. Until recently, the domestic industries remained protected and opened to additional investments only in terms of demand-supply gap (measured capacity), resulting in high prices for its product.

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[42]Journal of Flagstaff Institute, July, 1985.

On the other hand, the country's export manufacturng industry is still in its infant stage and depends largely on imported inputs for production. They are found mostly in bonded manufacturing warehouses and in epzs. It is hoped that with the recent adoption of an import liberalization program, the competition from imported products shall move the local industry to improve their quality and prices in order to be competitive. The program calls for the gradual lifting of quantitative limitation on imported raw materials and other intermediate products in favor of tariff controls over a two year period until April, 1986.

This should be a welcome development to epz firms. In interviews conducted, the firms signified their willingness to use more local materials. The opt cited reason include better chances for the product for GSP eligibility, low inventory to maintain, facility of contact and consultations with suppliers and less monitoring of material (international) movements, and faster delivery time. We do not doubt that with the right motivation, export firms will patronize local materials as Mr. Miller did in his Korean operation. The experience in the garment industry (outerwear), which utilizes about 90 percent local yarn in their exports supports this position. This is in spite of about 5 percent price differential over imported yarns.

Mactan EPZ has been successful in attracting resource-based industries, particularly in the wood and food processing sectors. Slated to be fully operational in 1987, the industries' potential for linkage generation is obvious. The wood firm shall convert local timber into wood veneer and furniture using the latest technology in the industry. We shall discuss the food industry in the latter part of this study.

5.2.4 NATIONALITY AND EQUITY STRUCTURE:

Global production sharing is fairly evident in Philippine epzs. Parent companies or affiliates of epz firms take charge of orders and marketing, design and product specification, production and/or procurement of intermediate goods while the Philippine subsidiary produces the final product (e.g., tennis balls, garment, frames, etc.), or semi-finished goods for export to another affiliate (e.g., capacitors, condensers, chips, watch movements, etc.).

As we examine the import patterns in epzs, we observed that the influence of nationality and equity structure was strong. In almost all sectors, the tendency was to source materials from the home base of the major investors. The American owned electronic firms in both epzs under study, import heavily from the US under inter-company open account. The Korean firm at the Bataan EPZ uses mostly consigned Korean products. The French optical company there uses chemicals and lenses from France. The Malaysian company producing plastic shipping tubes imports pellets from Malaysia. Even woodchips were imported from Singapore by the defunct mushroom company at Baguio where there were abundant logs and sawdusts. The chemicals used in the resource-based food industry came from Ireland. The Japanese lighter manufacturer and other electronic parts firms received consigned goods from sister companies in Japan.

There were however, consistent purchases from other countries other than the home base of investors. This proves that materials will be sourced where trading advantages exist.

Table 5.6 show the relationships between equity/nationality, imports and exports of representative industries at the Baguio and Mactan EPZs in 1985.

Production sharing should not entirely be blamed for the minimal linkage of epz firms with domestic industries as even export firms owned by Philippine nationals source poduction materials abroad. This only emphasizes the inability of Philippine industries to supply competitive intermediate inputs for export production. As gathered from the interviewees, epz firms will use competitive local materials when available. This has been observed in certain foreign owned garment and footwear industries which used wholly imported materials in their initial years of operation. As production stabilized and contacts were established, local materials were integrated in production.

Table 5.7 shows the percentage share of local raw materials and supplies to total value of inputs of selected industries at Bataan EPZ for the period 1981 to 1985.

TABLE 5.6 RELATIONSHIP OF EQUITY, RAW MATERIAL IMPORTS, EXPORTS AND LOCAL MATERIAL USAGE OF SELECTED INDUSTRIES

A. BEPZ (1985)

INDUSTRY SECTOR	OWNER-SHIP	% SHARE	HOME BASE OF AFFILIA-TION	(US $) IMPORTS	SOURCES OF IMPORTS	% SHARE	(US $) EXPORTS	EXPORT MARKETS	% SHARE	% SHARE OF LOCAL MATERIALS TO TVI
a. Electronics	American	100%	USA	$ 54 M	USA	51%	$ 80 M	USA	69.7 %	0.13 %
					Japan	26 %		ASEAN	15.0 %	
					EEC	21 %		EEC	14.6 %	
b. Garments (1984)	Italian	90%	Italy	$ 1.2 M	Italy	89 %	$ 0.33M	USA	58.9 %	2.66 %
	Swiss	10 %			Japan	6 %		Canada	22.7 %	
								Italy	16.4 %	
c. Handicrafts	American	100%	Taiwan	$ 0.45M	Japan	49 %	$ 1.28M	USA	93.5 %	6.16 %
					Hongkong	33 %		EEC	3.2 %	
					Taiwan	16 %				

B. MEPZ (1985)

INDUSTRY SECTOR	OWNER-SHIP	% SHARE	HOME BASE OF AFFILIA-TION	(US $) IMPORTS	SOURCES OF IMPORTS	% SHARE	(US $) EXPORTS	EXPORT MARKETS	% SHARE	% SHARE OF LOCAL MATERIALS TO TVI
a. Electronics	American	100 %	USA	$ 5M	USA	85 %	$ 16M	USA	84 %	2.51%
			Hongkong		Netherlands	9 %		Hongkong	15 %	
					Hongkong	5 %				
b. Watches & Clocks	American	92 %	USA	$ 3.0M	USA	55 %	$ 8.8M	USA	68 %	12.1 %
	Filipino	8 %			Hongkong	19 %		Canada	5 %	
					EEC	11 %				
					Taiwan	8 %				
c. Garments	Filipino	70 %	Hongkong	$ 0.67M	Hongkong	100 %	$ 0.67M	USA	64 %	76.75%
	Hongkong	30 %						EEC	33 %	
								Austria	2 %	

TABLE 5.7 PERCENTAGE SHARE OF LOCAL RAW MATERIALS AND SUPPLIES TO TOTAL VALUE OF INPUTS (TVI) OF SELECTED INDUSTRIES AT BEPZ

INDUSTRY	OWNERSHIP	PERCENTAGE SHARE 1981	1982	1983	1984	1985
Footwear	Korean	18	14	6	NDA	NDA
Garments	German	78	79	87	78	84
Garments	British	72	63	34	32	53
Garments	Filipino	4	4	10	NDA	NDA
Plastic Packaging	Fil-Japanese	9	10	16	8	6
Plastic Toys	American	31	34	25	NDA	NDA

Another contributory factor to the failure of linkage are the provisions in incentive tariffs in the export market of developed economies promoting the use of their own materials in granting preferential treatment to third world exports. This is known as preference-giving country content for GSP and the US Tariff Article 806/807 earlier discussed.

5.2.5 LACK OF LINKAGE PROMOTION:

There is no existing program nor discernible effort on the part of the EPZA administration to encourage the interaction of epz firms and local businesses. Epz firms are left on its own to establish business contact with suppliers. For at least one foreign enterprise, the omission proved disastrous. The supplier chosen was not reputable and materials paid for was never delivered. The firm never recovered.

It is observed that EPZA's promotional efforts have been limited to the attraction of investments and inviting public awareness to the epz performance and image. The annual epz trade fairs are geared primarily towards the opportunity for unloading excess production and inventory, not for linkage promotion.

5.2.6 FLAWS IN EPZA PROCEDURES:

While epzs are so structured that they are independent of the CTA, it is desirable from the development point of view to get maximum technology transfer from enterprises in the epz to those outside of the zone. The practical way to realize this is to develop a supplier-buyer relationship or forward linkage between epz firms and local manufacturers beyond the presently existing supplier-trader-consumer set-up of local sales. Technology fall-out from epzs cannot be expected unless there is a commercial relationship with local producers. To a limited extent, sub-contracting has achieved this.

However, the procedures covering these transactions are too cumbersome and restrictive. Local sales must have to be authorized on a case to case basis and the impact of such sales to domestic manufacturers must first be evaluated in order to avoid adverse effects of such sales. By policy, local sales is limited to 30 percent of production. On the other hand, the local sub-contractors are subjected to 4 percent contractor's tax totally ignoring the fact that the epz firms which are the primary contractors for export production are exempt from such tax. There is also the tendency to require sub-contracted materials to touch base first with the zone before the are farmed out to sub-contractors, which is a circuitous procedure considering that epzs like bataan are away from the ports of entry.

In the area of backward integration, the existing procedures are equally restrictive. While all materials introduced in epzs are exempted from all taxes, outright exemption is available to imports only. Local purchases are taxed at point of sale and tax credits may be obtained only upon the exportation of the product using such locally produced materials. Tax credit certificates are not transferrable and may be used only for the payment of national taxes duties and fees. It coud not be used for the payment of property taxes to which all epz firms are liable. Many epz firms entered into private arrangements with local suppliers to the effect that the selling price of goods they purchase should be net of taxes. This is not institutionalized and applicable only if the supplier is entitled to tax credit incentives under othe incenti[illegible] laws.

5.3 FACTORS IN LINKAGE DEVELOPMENT: ILLUSTRATIVE CASES

The relative freedom to import raw materials and supplies, tax and duty free under the epz concept shall be a common denominator in the actual cases discussed below. The epzs and industries involved will not be identified. However, certain indispensable information are indicative of the location and the industry itself.

5.3.1 CASE 1: APPLICATION OF US TARIFF ARTICLE 806/807

The industry involves the assembly of highly technical components which were primarily imported from the United States. It is owned by American nationals and 70 percent of production is exported to the United States. It employs an average of 1,000 employees over the 1981 to 1985 period. In the same period, its production performance are reflected in Table 5.8.

In current terms, the company had contributed 51 percent to total output in value added. Outside of value added which constituted wages and salaries, rent and ofit, the local contents were made up only of local factory supplies (10.2 percent) and utilities (15.01 percent).

There was no transaction recorded in the column of local raw materials used. We attributed this to production sharing (it imports high tech components from the US on consignment basis) and the non-application of the US GSP on its product. Its main market, the US excluded the company's product category from its GSP scheme.[43] Hence, even if its value added make up for 51 percent of output (over 35 percent is required in the US), its entry into US will not receive preferential treatment under GSP. But the product is eligible under Art. 806/807, which means that it will taxed only on the 51 percent added value, not 100 percent since materials came from the US.

[43] Preferences are granted for approximately 3,000 agricultural and industrial products under the US scheme. Among industrial products not eligible are the following: textiles and articles of apparel subject to textile agreements; most types of footwear; certain leather products; watches and certain import sensitive articles.

TABLE 5.8

(₱'000):

YEAR	Total Value of Output	RAW MATERIALS USED Imported	RAW MATERIALS USED Local	FACTORY SUPPLIES USED Imported	FACTORY SUPPLIES USED Local	Utilities Used	Total Value of Inputs	VALUE ADDED	VA Coefficient (9/2)	% of Imported RMU/FSU to Total Value of Input (TVI)	% of Local RMU/FSU to TVI	% of Utilities Used to TVI
1981	45433	5293	---	1054	2273	3813	12433	33000	72.63	51.05	18.27	30.68
1982	45497	1115	---	2207	4161	4003	11486	34011	74.75	28.92	36.23	34.85
1983	54817	20140	---	1380	1878	4445	27843	26974	49.21	77.29	6.74	15.96
1984	152290	53243	---	14980	7792	9681	85696	66594	43.73	79.61	9.09	11.30
1985	161531	57362	---	11307	6949	11618	87436	74095	45.87	78.53	7.95	13.52
TOTAL	459568	137153	---	30928	23053	33760	224894	234674	51.06	74.73	10.2	15.01

5.3.2 CASE II: GSP: SUBSTANTIAL TRANSFORMATION OF RAW MATERIALS

The company started operations in 1976 with 100% American capitalization. It expanded from the initial 400 employees to 1,200 employees in 1985. Its market for its GSP eligible product is the United States (65 percent) and the EEC countries. Raw materials and supplies are consigned from Hongkong (67 percent) and the USA (33 percent).

Its production peformance for the period 1981 to 1985 is shown in Table 5.9.

The company's export is entitled to GSP treatment in the US because the component imported materials from Hongkong and the USA are included in the computation of the 35 percent value added requirement. It is considered substantially transformed into a new and different material by US standards. Since it constitute 9.8 percent of the total output (sales), its value helps meet the value added requirement together with the direct cost of processing labor in the Philippines, including labor but excluding profit.

5.3.3 CASE III: GSP: EXTENSIVE USE OF LOCAL MATERIALS

This German-owned company produces outer garments for the mail order market of West Germany. It started operations in 1977 and produced its exports with 100 percent imported components. It gradually shifted to locally produced yarn finding the product acceptable, although the local yarn cost by an average of 5 percent more than the CIF price of imported materials. The company cited its desire to integrate more local products and faster delivery time as the main reasons for patronizing local yarns.

Lately, however, the company encountered delays in deliveries which it attributed to increased demand and operational problems of the supplier. Coloring was not consistent due to water problems at the supplier's plant site. If such were the case, the company intends to resume importation of materials.

TABLE 5.9

YEAR	Total Value of Output	RAW MATERIALS USED Imported	RAW MATERIALS USED Local	FACTORY SUPPLIES USED Imported	FACTORY SUPPLIES USED Local	Utilities Used	Total Value of Inputs	VALUE ADDED	VA Coefficient (9/2)	% of Imported RMU/FSU to Total Value of Input (TVI)	% of Local RMU/FSU to TVI	% of Utilities Used to TVI
1981	12898	1358	---	---	---	221	1597	11319	87.75	86.00	---	13.99
1982	16593	1242				235	1477	15116	91.09	84.09	---	15.91
1983	16934	1346	---	---	---	347	1693	15241	90.00	79.50	---	20.50
1984	34966	3797	---	---	---	809	4696	30360	86.83	82.84	---	17.56
1985	42947	4498	---	---	---	1403	5901	37046	86.26	76.22	---	23.78
TOTAL	124338	12241	---	---	---	3015	15364	109082	87.73	79.67	---	19.62

For the period 1981 to 1985, the comapny's production statistics is shown in Table 5.10.

Please observe that the percentage share of local inputs to TVI is 81.64 percent. However, its product qualifies for GSP treatment under the EEC scheme not because of its huge local content but because it was able to effect a change in tariff heading from the manufacture of yarn into another product falling under a different tariff heading under the Customs Cooperation Council Nomenclature. In this case, therefore, the company could have used 100 percent imported yarn and still qualify under the GSP of the EEC. But it opted to use available local yarns for the above stated reasons.

5.3.4 CASE IV: RESOURCE-BASED INDUSTRY

The most desirable linkage condition is illustrated in the following case:

Company A, which is 100 percent Filipino owned, has been producing refined carageenan in its marine farms in the seaweeds belt of a province embraced by a region hosting an epz. The seaweeds harvest undertake simple processing, then packaged and exported to USA, Canada and Australia.

The Philippines account for 64 percent of Asia's dried seaweed production and 38 percent of the world's. It is a P300M a year industry with production 23,000 tons per annum. Prior to 1986, seaweeds are exported abroad for further processing into products used in the food, pharmaceutical, cosmetics and other industries.[44]

[44] IBON Facts and Figures

TABLE 5.10

YEAR	Total Value of Output	RAW MATERIALS USED Imported	RAW MATERIALS USED Local	FACTORY SUPPLIES USED Imported	FACTORY SUPPLIES USED Local	Utilities Used	Total Value of Inputs	VALUE ADDED	VA Coefficient (9/2)	% of Imported RMU/FSU to Total Value of Input (TVI)	% of Local RMU/FSU to TVI	% of Utilities Used to TVI
1981	20398	1449	9084	451	57	610	11651	8747	42.88	16.31	78.47	5.24
1982	19975	1307	8027	321	39	461	10155	9820	49.16	16.03	79.43	4.54
1983	24965	864	10923	223	52	530	12592	12373	49.56	8.63	87.15	4.20
1984	37516	2828	14147	---	127	1094	18196	19320	51.49	15.54	78.44	6.01
1985	33613	2567	15768	---	221	432	18988	14625	43.51	13.52	84.20	2.28
TOTAL	136467	9015	57949	995	496	3127	71582	64885	47.54	13.98	81.64	4.36

In midyear 1986, Company B was established at the region's epz to undertake the processing of the seaweeds into final products using bio-technology. The firm is Filipino-owned but affiliated with an Irish company which shall provide the technology and absorb the company's production. The raw materials will be supplied by Company A. The epz was chosen because of the facility to import tax free consigned equipment and materials, the existing infrastructure and the proximate international airport through which the goods are shipped.

This case demonstrates the backward and forward integration that promotes a completely processed indigenous product from the Philippines from seeding to growing to processing into final form.

5.3.5 CASE V: SUB-CONTRACTING A PRODUCTION PROCESS

The company was established in 1980 for the production of a GSP product involving intensive labor. It employs an average 176 workers in its 1,000 sq. m. self-built factory in the epz. The company is 100 percent American owned. It imports its raw materials from Japan (49 percent), Hongkong (36 percent) and Taiwan (16 percent). It exports 94 percent of its products to the United States. Its average local raw materials utilization is 6.16 percent of total inputs. These involve handicraft items which add native flavor to the product. Its value added however, reaches an average of 51.64 percent (principally labor value added and profit).

A big portion of the labor value-added involved indirect employment. The company sub-contracts the assembly part of its production to some 30 sub-contractors within the 50 kilometers radius of the epz. This features the daily delivery and receipt of sub-contracted items consisting of pre-cut pieces and accesories that are turned into a finished product by putting the pieces together. The homeworkers are paid on piecework basis. Per EPZA estimate, the process employs some 360 homeworkers.

The practice demonstrates the potentials of this type of epz industry in developing linkages in surrounding areas of the zones in terms of employment generation. However, there were charges that existing laws on compensation were circumvented.

CHAPTER VI

LINKAGES IN NON-EPZ EXPORT INDUSTRIES

6.1 EXPORT MANUFACTURING OUTSIDE EPZS:

Philippine laws offer an alternative to one who wishes to engage in export manufacturing with incentives outside of epzs. This calls for a registration under the incentive laws[45] adminstered by the Board of Investments (BOI). The BOI is a major governmental agency which is in charge of planning and implementing programs to encourage foreign and domestic investment in the country. Unlike EPZA, it is not limited to inducing the flow of investments to an epz. Under BOI regulations, equity structure, areas of investments and market are major factors for the grant of incentives. Thus, for export manufacturing purposes, non-epz enterprises may qualify for registration with incentives under the following general guidelines:

a. preference for registation and incentives are given to enterprises where the degree of ownership and control of Philippine nationals is greater;

b. majority shares of an enterprise may be owned by foreigners if it is engaged in a pioneer activity;[46]

c. majority share may be owned by foreigners even if the activity is in a non-pioneer area provided 70 percent of its products are for exports;

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[45] Principally, Export Investment incentives Act and the Omnibus Investments Code, as amended by BP 391.

[46] Areas of investments that a) produces goods that are not produced in the Philippines or b) uses new or untried technology in the country c) pursue predetermined services or projects in agriculture and food industry that are considered feasible and highly essential to the attainment of national goal taking into account the risks capital involved; or d) produces non-conventional fuels or such equipment which utilizes non-conventional sources of energy or the operation itself uses non-conventional fuel or source of energy, provided that in any of the foregoing circumstances, there is substantial use and processing of domestic raw materials, when avialable.

d. joint ventures with maximum 40 percent foreign participation may receive incentives, if the export activity is listed in the Investment Priorities Plan;

e. joint ventures with maximum 40 percent foreign participation may also receive incentives, if 50 percent of sales are export sales in activities not listed in the Investment Priorities Plan.[47]

As shown in Table 6.1 (Comparative Investment Incentives), export firms registered with BOI enjoy the incentives listed depending on the applicable law prevailing at the time of registration. The most relevant incentives for purposes of this study however, are:

a. Tax credit for taxes and duties on raw materials:[48] Export firms outside epzs may apply for this incentive for an amount equivalent to the taxes and duties paid on local materials and supplies used in their production activities.

b. Reduced income tax (RIT):[49] Within 5 years from registration, export producers are entitled to deduct from their taxable income, an additional amount equivalent to the direct labor cost of the product and the local raw materials utilized in production.

A further deduction for direct labor cost shall be allowed if the area of investment is declared by the BOI as necessary for the dispersal of industry or if the business will locate in areas deficient in infrastructure and utilization. The deduction shall not exceed 25 percent of export revenues. Moreover, RIT is only forthcoming to the extent of the taxable income for the year, otherwise the incentive is forfeited.

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[47] Art. 26, BP 391

[48] Art. 46 a) PD 1789 as amended

[49] Art. 46 b) PD 1789

c. Tax credit on net local content of exports:[50] Within 5 years from registration, export firms shall be entitled to tax credit equivalent to 10 percent of net local content of exports. The incentive may further be extended for another 5 years. The amount includes labor and profit and local raw materials which are available under clearly more favorable terms in the world market.

d. Access to the domestic market:[51] Depending upon the equity structure and areas of investments, export producers registered with BOI need only to export 50 to 70 percent of its production to be entitled to this incentive.

The incentives cited in paragraphs b), c) and d) are not available at EPZA. Their influence in promoting linkages with domestic manufacturers and suppliers of intermediate goods will be discussed in the latter part of this chapter.

As regards the incentive granted in paragraph a), the same is available in both BOI and EPZA laws, except that a tax credit obtained under BOI is transferrable to another BOI registered industry, while that obtained from EPZA is not transferrable unless the transfer is by hereditary succession or by operationor law. Tax credit certificate obtained under these incentive laws may be used to pay taxes, duties, charges and fees due to the national government only.

Epz firms do not have any real need for these incentives, since they could freely import their inputs tax and dutry free. Epz firms could use these incentives only if purchases from domestic suppliers were made. Only firms registered with BOI are constrained to use the incentives since taxes and duties must be paid upon importation of the raw materials and supplies and such payments may be recovered only as tax credits upon exportation of their products. They still have to suffer the administrative difficulties and delay that accompany tax credit applications, and shoulder the cost of financing the tax money. Thus, EPZA has an advantage over BOI firms in the importation of materials and supplies.

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[50] Art. 48 d) PD 1789 as amended

[51] Epz firms may be allowed to sell part of up to 30 percent of production in meritorious cases provided that no domestic industry is adversely affected.

6.2 EXPORT MANUFACTURING UNDER BONDED WAREHOUSES:

When the customs bonded manufacturing scheme (CBMW) became accessible to many export manufacturers in 1979, the above advantage enjoyed by EPZA over BOI firms were eroded. CBMWs may import intermediate goods tax and duty free for export manufacturing purposes after posting a re-export bond.[52] Many firms registered with BOI obtained CBMW licenses. Smaller export firms, mostly garments, were also authorized under similar schemes[53] to import their inputs sans taxes and duties. These export manufacturers outside of epzs are practically operating just like an epz firm, with better incentives and in more advantageous locations, quantified in terms of available economic and social infrastructure that are present in urban settings.[54] Just like in epzs, sub-contracting involving imported raw materials are also authorized in CBMWs.

6.3 EXTENT OF LINKAGES:

Does epz style manufacturing outside the zone improve linkages with domestic suppliers of raw materials and intermediate goods? The locational factor will be tested for linkage generation by examining parallel export indutries that enjoy both BOI and CMBW incentives. Because of the confidentiality of data on actual value added or percentage of local materials and supplies to total input, we were not able to obtain exact figures. Instead, we measured the degree of linkage with the extent of the firm's availment of the BOI incentives earlier mentioned, which was available. Furthermore, the insights of BOI officials interviewed were given much weight in forming our conclusion as their observation were based on actual knowledge and experience over a particular industry's behaviour in relation to the incentives administered.

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[52] Secs. 608 2001 and 2004 of the Tariff and Customs Code of the Philippines, or amended by PD 34 and PD1464; CAO No. 2-79.

[53] Imports made thru the bonded warehouse facilities of Philippine International Trading Corporation, NCD-NACIDA Raw Materials Corporation, Philippine Integrated (Mfrts.) Exporters, Inc., Mindanao Textile Corporation.

[54] In the Metro Manila area, there are over 200 bonded manufacturing warehouses under the Miscellaneous category that caters to different industries except garments. Eighty-five (85) are active. Garment industry is the other bonded manufacturing category where materials may be imported tax and dutry free under the firm's own CMBWs or thru other arrangements.

-Sec. 6, GIBD Circular No. 004, CAO 3-78

6.3.1 EFFECT OF INCENTIVES GRANTING TAX CREDIT FOR DUTIES AND TAXES PAID ON RAW MATERIAL INPUTS AND REDUCED INCOME TAX (RIT)

CASE No. 1: The best example would be a former epz firm which transferred its entire operation near Manila after more than five (5) years in the zone. The company is 100 percent foreign-owned and manufactures an eligible GSP product with an annual average value added of 57 percent, with 24 percent utilization of locally produced materials in its export production. Its main source of imports was Hongkong. The major export market is the USA.

For the duration of its operation in the epz, the firm did not applyfor any tax credit covering the locally sourced materials in its products. The local goods, mainly packaging materials and thread, were obtained net of taxes from the local BOI registered suppliers which asumed the burden of applying for tax credit for the goods sold to the epz firm.[55] During the firm's last year in the epz, it used about P34M of local products.

After moving out of the zone, it obtained RIT incentives in the total amount of P50M from its BOI registered bonded manufacturing operation for the same products. Like in its epz operations, it did not apply for any tax credit covering local purchases.

The firm's operation outside the epz did not improve its local materials utilization even as it obtained a P50M additional tax deduction. The export sales of the firm for the year was closed to P200M (P163M net sales).[56] Considering that the average value added is 57 percent the value of the raw materials, supplies and utilities imputed to the export was P86M. Since the percentage of locally sourced materials was established at 27 percent of total inputs, the value of local materials will not exceed P24M, which was 29 percent less than its previous years' consumption inside the epz. Moreover, further inquiry revealed that the RIT inventive consists mainly of direct labor.

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[55] LOI 942 treats sales to epz industries as export sales. The seller is qualified for tax credit on taxes and duties paid on the products sold under Art. 48 a) of PD 1789 if it is a BOI registered export producer, otherwise, drawbacks may be obtained under Sec. 199 of the Internal Revenue Code.

[56] As reported in IBON Facts and Figures, No. 190/14, July, 1986

CASE NO. 2: Our next subject is a BOI gloves and garment manufacturer which operates a CBMW in Metro Manila. It is a foreign company which receives its major materials under consignment from its principals abroad. The major market is the USA, as shown in the 1984 export quota allocation[57] released by the Garments and Textile Export Board (GTEB). In 1984, it recorded net sales of P134M.[58] We compared the non-epz firm with an epz glove manufacturing company which has similar equity structue and trading patterns. However, the epz firm is smaller in size with sales of P34M and is engaged in gloves export only, not in other garments trade.

The analysis was limited to 1984 where enough data was available. During the year, the non-epz firm obtained incentives in the form of special tax credits of P.15M and additional tax deduction (RIT) of P2M. The local purchase consists mostly of packaging materials. Applying a 20 percent sales tax rate,[59] the local purchase should be about P.765M for the entire year, or 0.55 percent of its net sales. Even assuming that P2M RIT deduction is made up entirely of local raw materials (which was not the case, as per inquiry), it will constitute only 1 percent of net export revenues for the year.

Significantly, the epz firm has not purchased raw materials and supplies locally during its last five years of operation, all materials being supplied under consignment basis from its parent company.

CASE NO. 3: The representative semi-conductor firm examined availed of special tax credit for raw material purchases in the amount of P1.206M for 1985. Based on a 20 percent sales tax, the value of the raw materials purchase was pegged at P6.03M. In 1985, the firm's gross export is $206,068M. Converted into Peso, it's total export would amount to P3.83B. The locally purchased materials would then constitute about 0.15 percent of output, which approximates the epz average of 0.12 percent.

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[57] Bulletin Today, February 3, 1987

[58] IBON, Ibid

[59] Average percentage for intermediate goods

In this connection, we compared the average local value added performances of epz and non-epz semi-conductor firms. The 28 member firms of the Association of Semi-Conductor Electronics Industry of the Philippines (ASEIP) have a total local value added of 21.54 percent in 1984 and 21.18 percent in 1985, against the two epz firms' average performances for the period 1981 to 1985 of 27.06 percent and 21.96 percent respectively.

The local firms figures already included profit, labor and local inputs. If local inputs were included, the epz firms' averages will further improve to 28.4 percent and 26.8 percent, indicating better integration.

6.3.2 TAX CREDIT ON NET LOCAL CONTENT:

This incentive was introduced in 1983 as an improvement of RIT. Net local content is defined by BOI as the value of export less depreciation of capital equipment and value of imported raw materials and supplies and indigenous inputs which are not available in the workd market under favorable terms.

The incentive is not expected to result in significant linkage between export firms and domestic industries considering the import dependency of non-traditional exports production. The incentive even penalize the use of indigenous materials in export production as it removed such matrials from the components of net local contents. Moreover, the intent of the incentive is to consider as raw materials only those used inthe processing of the indigenous raw materials. Again, it is the labor component of the product that constitute the bulk of local content.

The advantage offered by this incentive over RIT is the preservation of the additional deductions in the form of tax credit over a period of 5 years (or more). RIT provides only for additional labor cost deduction during the taxable year and only to the extent of taxable income. A loss during the year forfeits the RIT. Unlike in RIT, the amount of net local content incentive is not limited to a maximum of 25 percent of export revenue.

6.3.3 ACCESS TO THE DOMESTIC MARKET:

Non-epz export producers registered with BOI may sell in the local market its production in excess of the ceiling pegged for exports which is 50 percent of production in case it is a Philippine national and 70 percent of production for foreign controlled firms. This may work well for the concerned industries in terms of flexibility and corporate planning like building a manufacturing base for competitive export pricing, or weathering adverse economic conditions at the world markets. This incentive is not automatically available to epz industries.

6.4 IMPORT CONTROLS:

Local sourcing by domestic export manufacturers is also induced by government policies that regulate imports of certain raw materials. These regulations[60] have been introduced for various reasons vis: to assist local industry reach full capacity; to encourage local content of domestic production; to help conserve foreign exchange; and for public health and safety and national security, etc.[61]

These rules call for a prior clearance from the pertinent government agency before one could import the regulated products, say - synthetic yarns, fibers and threads. For intermediate inputs and production materials, the clearance involves a certification that there are no locally available competitive product that could substitute for the article sought to be imported. If they were available under these conditions, then the clearance will be withheld compelling the producer to use the local product. Epz manufacturing is exempted from this procedure.

The extent by which such restraints fostered linkages is not available. However, it is the perception that as a result of protection obtained, the domestic products are not at par quality-wise and price-wise with those offered in the world markets.

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[60] CB 1029 and Amendments PD 1206, EO 609, 537 & 623.

[61] Primer on Import Procedures of Philippine Exporters - 1985 Ministry of Trade

For example, the Tariff Commission estimates that synthetic fiber produced in the Philippines is 169 percent more expensive than the same product made in Taiwan, or that plastic buttons cost 3,419 percent more than these foreign counterparts.[62]

A case in point is the paper packaging industry. Most exporters outside epzs source their carton box requirements from domestic manufacturers which in turn buy materials from local paper board producers. When EPZA authorized an epz firm producing carton boxes from imported kraft paper to serve local exporters, the move elicited positive response from exporters.[63] In effect, imported boxes were made available duty free, but covered by re-export bond. They cited the reasonable price and high quality standard of the epz product compared with many local suppliers. Such factors enhanced their products' competitiveness with exporters in the Far East. As could be expected, the intrusion of the epz firm in their traditional market drew protests from the protected local industry as demands were displaced and under-utilization of existing capacities were aggravated.

The World Bank, in its latest country economic report in the Philippines,[64] encouraged import liberalization to improve the export manufacturers access to imputs at world prices. In fact, the trade liberalization program is being pursued by the Philippine government as a condition fo granting $506M IMF stand-by loan and the $300 WB economic recovery loan.[65]

6.5 EFFECTS OF LOCATION:

It appears from the foregoing that export producers located outside of epzs follow the same pattern of raw materials sourcing exercised by their counterparts in epzs. Heavy dependence on imported inputs and the nature of incentive structure have reduced linkages with local raw material suppliers. Where local materials are used, sectoral groups from both ends buy materials of the same category: thread and yarns, plastic and carton packaging materials, fuel, industrial gases and office supplies.

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[62] IBON Facts and Figures, Vol. 196, October 15, 1986

[63] Letter of Foreign Buyers Association of the Phils., Jan. 9, 1984

[64] Business Bulletin, January 25, 1987

[65] Manila Chronicle, September 2, 1986

In the case of thread and yarns which were regulated items, we noted that those locally produced were patronized by epz firms even if they could be freely imported, indicating international acceptance of the products. This is also true in plastic and paper containers, although the products of epz firms producing such containers have gained headway with exporters, both inside and outside epzs over local producers.

Location, per se, is therefore not a major factor in enhancing linkages of export industries and domestic producers of materials, although conditions outside of epzs may have attracted more investments. It is the products' availability in steady supply and consistent quality and price that guaranty patronage. This is supported by local purchases of the above products by epz firms in spite of their exemption from restrictions.

Simplified procedures is a factor that influences local sourcing. The procedures at BOI is well in placed compared with EPZA. It facilitates early enjoyment of incentives or offers flexibility to BOI firms. EPZA procedures covering tax credits are constricted. Tax credit incentives for local purchase may be enjoyed only if the materials purchased form part of the product and only after they were exported. The tax credit certificate is not transferrable, and although the law provides for tax free purchases, there are no implementing rules. Tax free purchases from BOI firms were the result of private negotiations, not by established procedures. This coud be the reasonof consistent tax credit availments at BOI while EPZA managed to have only two applicants.

RITs and net local content incentives may make investments outside epzs more attractive, but they do not generate significant linkages owing to the limitations on the type and price of local raw materials suited as inputs for export production.

TABLE 6.1 COMPARATIVE INVESTMENT INCENTIVES FOR EXPORT ENTERPRISES

	EPZs	R.A. 5186 (Investment Incentive Act)	R.A. 6135 (Export Incentives Act)	P.D. 789 (Omnibus Investments Code)
1. Tax exemption	. Tax and customs duty-free importation of machinery, equipment, raw materials and operating supplies . Export tax exemption . Municipal and provincial tax exemption . Exemption from property tax on movable production equipment . Exemption from contractors tax on gross receipts . Wharfage fees exemption . Economic Stabilization Tax exemption	. Capital gains tax exemption . Exemption on sale of stock dividends of pioneer enterprises	. Export Tax exemption . Exemption on imported capital equipment and machinery . Exemption on importation capital equipment . Exemption of pioneer firms from all taxes except income tax	. Full tax and duty exemption on imported capital equipment . Exemption from export tax, duty, impost and fee (including wharfage fee) . Capital gains tax exemption on sale of capital assests and invested in capital stock of the firm.

2. Tax Deductions	. Net operating less carry-over for first 10 years to next 6 years . Accelerated depre-ciation of fixed assets	. deduction for investment in pioneer enterprises . 10-year deduction for organizational and pre-operating expenses	. deduction on profit used for expansion of fixed assets . Deduction for labor training expenses	. 10-year net operating loss carry-over for next 6 years . 10-year deduct-ion of organi-zational and pre-operating expenses
	. 50% deduction for labor training expenses . 10-year deduction for organizational and pre-operating expenses	. Accelarated depre-ciation of assests . Net operating loss carry-over . Deduction on profit used for expansion of firm's fixed assets . 5-year reduced income tax equivalent to production inputs . Deduction for labor training expenses	. Reduced income tax on direct labor materials used as produc-tion inputs . Net operating loss carry-over, or, 1% tax deduction on export sales if firm uses a new brand name different from imported brands. . Double reduced income tax if establishment of plant is in a priority area for development	. Accelerated depreciation of fixed assets . Deduction from expansion re-investment of surplus profit for machinery and equipment . 50% deduction for labor training expenses

3. Tax credits	. Credits on sales, compensating specific taxes and duties on local purchase of supplies and raw materials	. 100% credit on purchase of domestic capital equipment . Credit for taxes withheld on foreign loan interest payments . 7% credit on cost of raw materials and supplies	. 10-year credit on raw materials supplies and semi-manufactured products used as production inputs	. Credit on domestic capital equipment . 5-year, 5% credit on net value earned . 5-year, 10% credit on net local content of exports . 5-year credit on withholding tax on foreign loan interest
4. Foreign Exchange Investment Incentives	. Priority in the allocation of foreign exchange for the importation of merchandise, equipment and raw materials . Repatriation of foreign investment and remittances of profits and dividends at any time in full at the prevailing exchange rates	. 100% repatriation of investment for foreign investors . Remittance of earnings for foreign investment . Remittance of earnings for foreign loan obligations	. -----	. 100% repatriation of foreign investment . Remittance of earnings in the original currency and at prevailing exchange rates . Remittance of sums to meet foreign loan obligations

5. Credit Incentives	. Financial assistance thru loans credits, guarantees or other forms of financial accomodations from government financial institutions	. Preference in grant of government loans . Private financial assistance . GSIS/SSS 5-year, 6% loans for investment in firm's shares of stock	. -----	. Preference in grant of government loans . 5-year, 6% GSIS/SSS loans for investment in shares of stock of the firm . Private financial assistance whereby insurance companies are authorized to invest in firm's new issues of stock

CHAPTER VII

CONCLUSIONS AND RECOMMENDATIONS

7.1 FINDINGS AND CONCLUSIONS:

As noted earlier, the linkage developed between EPZS and domestic economy was insignificant in most industries. Some of the reasons were structural. The epz facility for free flow of intermediate inputs and export products sans taxes, combined conveniently with the investors' desire to lower production costs to better serve the markets. The primary lure was the inexpensive labor available. Because of the epz concept, investors enjoy the option to source their materials anywhere. In many cases, product specifications and procurement were undertaken by parent companies.

There was evident bias in favor of sourcing materials from the home country, but nationality gives way to comparative advantages. Firms do not import only from parent companies. This is gleaned from the pattern of importations of the epz firms in the two zones. Considering the predominance of firms owned by US nationals, 1985 imports from the US constituted only 49 percent of total for BCEPZ and 65 percent for MEPZ. For the Bataan EPZ, garments firms (13 in all) which are controlled by diversed nationalities, - Hongkong and Japan, were the favorite source of imports.

Epz firms will use local materials if they are constantly available at competitive prices and of acceptable quality. Among the reasons cited were a) better chances at qualifying for GSP treatment b) faster delivery time c) low inventory to maintain d) facility of consultations with suppliers and e) less monitoring functions.

The type of industrial activity of epz firms taken with the present state of Philippine industrialization worked against the greater integration of local inputs. The inward looking domestic industries were more concerned with their protected share of the local market resulting into high prices of output and low quality of products. Whereas, the export markets served by the epz firms require the highest standards and competitive prices. They also used materials that were produced using high technology or which were not made or grown in the Philippines at all.

Epz industries recognize the importance of incentive tariffs at the export market. The GSP scheme was a dominant factor in sourcing raw materials especially for those whose main market is the US. For at least one industry, it appears that US Tariff Article 806/807 precludes the use of local or imported materials other than the US'.

There is no official program promoting linkages with domestic industries. The present procedures and incentives structure are deemed ineffective to encourage the purchase of local inputs over importation. Those who actually purchase local materials consider the procedures involving tax credits too cumbersome, leading to non-availment or entering into special arrangements with qualified local suppliers to acquire the input net of taxes.

Epz style operations may be undertaken in the CTA through the facilities of bonded manufacturing warehouses. Outside epzs, linkages are encouraged with incentives or compelled by import restrictions, but only to the extent that locally available inputs are competitive in price and quality. Location by itself, does not enhance linkages in export industries.

The greatest potential for linkage lies in resource-based industries, particularly in the agro-industrial sector. Subcontracting production processes is another area which should be encouraged for its potential linkage development with CTA industries.

In spite of successive devaluations, the Philippine Peso is still overvalued, thereby making it cheaper to buy abroad than the local sources.

7.2 PERCEIVED ROLE OF EPZS IN PHILIPPINE DEVELOPMENT FRAMEWORK:

The 1987-1992 Philippine developmental framework aims for the attainment of economic recovery, after the devastating performance in 1984 and 1985 that saw the economy slide by 5.49 percent and 3.84 percent of the GNP. The plan calls for the revitalization of existing incentives that are economically viable and the development of world-competitive industries to compliment the projected growth of agricultural output and rural income. Increases in foreign exchange earnings shall likewise be pursued in order to finance imports, augment the requirements for industrial expansion and meet foreign debt obligations which in 1986 amount to $26b.

Consistent with the plan's objectives, the facilities of existing epzs shall be made available to domestic oriented industries, preferably to those which are labor intensive and local resourced oriented. Linkages of trade and industry with the agricultural and natural resources sectors shall be improved in order to enhance their contribution to national development and increase domestic value added. The other objectives of EPZA's creation, promotion of employment, foreign exchange generation, technology transfer, industry dispersal - shall be pursued with renewed vigor.

Under the plan, the enclave nature of present epzs shall be abandoned. Epz industries must be encouraged to interact with domestic oriented industries paving the way for forward and backward integration. The epz industries shall remain to be drawn by the country's cheap labor and comparative advantage over specific types of products, while the domestic industries shall be assisted to serve both the domestic and international markets. The latter shall provide sub-contracting services and other support services to the epz firms within a particular regional industrial center. The program not only promises integration but probable achievement of economies of scale from revenues generated from concentrated industrial activities. This would lead to the build-up of enough resources to maintain and/or upgrade infrastructure and services.

7.3 POLICY RECOMMENDATIONS:

The improved role perceived for epzs under the 1987-1992 developmental plan, particularly in the promotion of linkages, may be further enhanced with the adoption of additional measures which are within the control of the epz authorities. Of course, the over-all success of the program on linkages hinges on the existence of an efficient environment nationwide that features a) political stability, b) highly improved delivery of services c) the upgraded capability of domestic industries to produce raw materials and intermediate goods expected to result from the import liberalizatin policy d) rationalized power and water costs e) a realistic peso-dollar exchange and f) prevalence of industrial peace and improved labor productivity.

The proposed measures are as follows:

a. Decision functions particularly those involving movement of materials to and from the zones should be decentralized at the zone level in order to guarantee a responsive delivery of services. The zone administration should be equipped with adequate administrative and financial support to implement policy measures. It should be more dynamic in its role and establish more linkages with other government agencies and private entities that are involved in various aspects of zone operations.

b. The epzs should accept domestic-oriented industries with export potentials in order to maximize existing facilities and to create more opportunities for forward and backward integration. Firms catering to the needs for intermediate inputs of epz firms should be extended duty free incentives in the importation of raw materials for its production. If this is not feasible, the epz firms should be authorized to import such materials to be farmed-out to the domestic market in the epz under suitable and less bureaucratic arrangments.

c. Instead of tax credit, an outright exemption from local taxes and fees for local purchase will encourage both epz firms and suppliers to establish permanent linkage. This is possible under the tax-free privileges attached to goods entering epzs and exemption from sales and export tax provision of the internal revenue law applicable to export sales (sales to epz firms are treated as export sale). A supplier's accreditation scheme approved by the internal revenue authorities and EPZA could simplify the task. The supplier need only to submit specialized documents as evidence of the sale and receipt at the zone of the materials.

d. The epz firms should be allowed to sub-contract certain production processes as a matter of course if conditions calling for such transactions exist. A system of accreditation of sub-contractors must be adopted in order to avoid the tedious verification processes and case by case approval presently obtaining at EPZA. For newly registered firms, the intent to sub-contract work processes must be disclosed to EPZA at the time of project application.

e. Epz firms must be authorized to sell in the CTA without further EPZA approval if the goods involved are included among the items liberalized for importation, subject of course to the payment of the appropriate duties and taxes.

f. While selectivity is not practical because of the low occupancy of epzs, its marketing and promotional efforts should be geared to attracting more resource-based industries. The potentials of the country's vast natural resources, particularly in the agro-industrial sector is great. Foreign firms processing raw materials grown or indigenous to the country should be identified and encouraged to establish in the epzs with reasonable incentive packages, like premium on lease rentals or tax incentives commensurate to the value of local materials used and labor applied thereon.

g. Sponsorship of market encounter programs where the epz firms' raw material requirements are announced or published and assistance extended to both buyers and producers to ensure legitimate wholesome business relationship. This may be achieved in a marketing and promotions unit in the Authority tasked with the development of data, management of trade fairs, etc.

h. Establishing tie-ups with trade and vocational schools in the regions hosting the industrial center for purposes ofharmonizing the epz skills requirements with the institution's curriculum. The participation of an epz firm's foreign expatriate technician in the instructionals imparting administrative, supervisory and technical skills in a program approved by the Authority should be considered substantial compliance with the required understudy program. Materials and equipments used in training provided by epz firms should be treated as part of deductable labor expenses.

BIBLIOGRAPHY

Ascano, J. and Discaya, J. - Investments in the Philippines, 1980.

Batas Pambansa Blg. 391 - Investment Incentive Policy of 1983.

Bataan Export Processing Zone, The - Ministry of Labor and Employment, Manila, 1984.

BEPZ Project II: Task 1.2 - Study on Improvement of Non-Infrastructure Services, Mitsubishi Research Institute, Inc., February, 1986.

BEPZ Project II: Final Report on Rehabilitation, Improvement and Development of Bataan Export Processing Zone, Nippon-Jogesuido Sekkei Co., Ltd. - October, 1985.

Castro, J. - Philippines: The Bataan EPZ, in Eddy Lee, ed. Export Processing Zones and Industrial Employment in Asia, Bangkok, ARTEP/ILO, 1984.

Central Bank Circular 1029 - Consolidated Rules and Regulations to Govern Import Transactions, October, 1984.

Corporate Plan of the Export Processing Zone Authority, 1983-1987 EPZA, Manila.

Customs Administrative Order No. 180 - Procedures for Constructive Exportations.

Customs Administrative Order No. 279 - Procedures for Direct Exportation.

Customs Administrative Order No. 378 - Teatment of Importation of Materials on Consignment, July, 1976.

De Dios, E. - An Analysis of the Philippine Economic Crisis, A Workshop Report. University of the Philippines, June, 1984.

Digest of Rule of Origin, Generalized System of Preferences, UNCTAD, May, 1982

ESCAP/UNTC - An Evaluation of EPZs in the Philippines with Special Reference to the Bataan EPZ - Joint Unit on Trans-National Corporations, May, 1985.

Export Processing Zone Chamber of Exports and Manufacturers (EPZCEM) - Study Paper on Bataan Export Processing Zone Problems and Proposals, March, 1986.

EPZA Periodic and Annual Reports - 1978 to 1985.

EPZ Enterprises Quarterlyand Annual Reports on Operations - Project Evaluation and Review Department, EPZA - 1980 to 1985.

Establishment and Management of Export Processing Zones in the Republic of China - EPZ Administration, Ministry of Economic Affairs, Republic of China, August 1, 1980.

Executive Order No. 567 - Reorganizing Export Processing Zone Authority and Providing Further Powers, November, 1979.

Executive Order No. 815 - To Safeguard and Promote the Development of the Philippine Semi-Conductor Industry.

Executive Order No. 823, Amending EO 537 - Creating the Garments And Textile Export Board (GTEB), August, 1982.

Foreign Trade Statistics of the Philippines, 1985 - National Census and Statistics Office, Manila.

Guerrero, S., Endencia, D., and Bautista, C. - The Regional and Socio-Economic Impacts of Export Processing Zones (EPZs) in the Philippines, A Preliminary Report. University of the Philippines Institute of Social Work and Community Development, September, 1986.

Handbook on the Scheme of the United States of America, Generalized System of Preferences, UNCTAD, July, 1986.

Handbook on Trade Laws of the United States of America, UNCTAD, June, 1985.

Handbook on the Scheme of Japan, Generalized System of Preference, UNCTAD, November, 1985.

Healey, D. T. - Scope, Structure and Determinants of Linkages between Export Processing Zones Firms and the Domestic Economy in the Republic of Korea, UNIDO, September, 1986.

IBON Facts And Figures, Vols. VIII to IX, 1984 to 1985 Compilations, IBON Databank, Philippines, Inc.

Industrial Estate Experience in the Philippines and Asia - National Industrial Estate Development Program, NEDA, 1983.

Investments Promotion Brochure, Export Processing Zone Authority, Philippines, 1986.

Industry Paper prepared by the Association of Semi-Conductor Electronics Industry of the Philippines, 1986.

Journal of Flagstaff Institute, Vol. IX, Number 1, January, 1985.

Journal of Flagstaff Institute, Vol. IX, Number 2, July, 1985.

Journal of Flagstaff Institute, Vol. X, Number 1, March, 1986.

Journal of Proceedings - World Export Zones Association, February, 1978.

Kumar, R. - Export Processing Zones in India, An Evaluation. Indian Council for Research on International Economic Relations, New Delhi, February, 1985.

Lester, Mark - Impact of EPZs in Developing Countries: Transfer of Managerial and Technological Skills in the Semi-Conductor Assembly Industry. Culture Learning Institute, East-West Center, Honolulu, Hawaii, March, 1981.

Letter of Instructions No. 942 - Simplification of Export Procedures and Availment of Tax Credit and Duty Drawbacks, October, 1979.

Letter of Instruction No. 1213 - Authorizing Certain BOI Registered Garments Firms to Receive Materials and Accessories on Consignment Basis, March, 1982.

Manual on Customs Procedures, Bureau of Customs, Ministry of Finance.

Ngo, H. L. - Promotion of General Trading Companies in an Export Oriented Economy - The Philippine Experience. Institute for Development Policy, University of Freiburg, West Germany, April, 1982.

Philippine Development Plan, 1987-1992. National Economic Development Authority.

Philippine Statisical Yearbook, NEDA, 1985.

Practical Guide to the Use of the European Communities And Scheme of Generalized Tariff Perferences, Commission of the European Communities, February, 1986.

Presidential Decree No. 66 - Creating the Export Processing Zone Authority, November, 1972 and Amendatory Decrees No. 1449, June, 1978; PD 1716-A, August, 1980; and Pd 1786, January, 1981.

Primer on Import Procedures for Philippine Exporters - Ministry of Trade and Industry, 1985.

A Report on the Performance of Major Industrial Estates in the Philippines - National Industrial Estate Program, NEDA, February, 1987.

Republic Act No. 6135 - Export Incentives Act of 1970.

Review of Masan Free Export Zone, A - Republic of Korea, 1985.

Sevilla, E. - The export Processing Zone: A life Cycle Approach. Asian Institute of Technology, Bangkok, Thailand, December, 1983.

SGV Group, Comparative Investment Incentives - SGV & Co., Makati, Metro Manila, 1986.

Tariff and Customs Code of the Philippines, The - As Amended by PD NO. 34, Particularly Sections 2001 to 2005.

Wang, K. J. - The Developent of Export Processing Zones in the Republic of China, March, 1981.

Warr, P. G. - Export promotion via Industrial Enclaves: The Philippines Bataan Export Processing Zone. University of the Philippines School of Economics, November, 1984.

WHAT CRISIS? (Highligts of the Philippine Economy in 1985), IBON Databank, Philippines, Inc.

World Bank, Philippines - Industrial Development Strategy and Policies, Washington, May, 1980.

World Bank - Planning and Implementation of Industrial Estate and Export Processing Zones Projects. World Bank Staff Working Paper, Vol. I.

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