

Cavite Export Processing Zone Development Project

Field Survey: July 2003

1. Project Profile and Japan's ODA Loan



Project Site



Water tower and power distribution facilities constructed under the project

1.1 Background

Cavite Export Processing Zone (CEPZ)^{*1} comprises 275ha of land encompassing the two towns of Rosario and General Trias in Cavite Province, which is located 30km south of Manila. CEPZ was developed in 5 Phases. In the part of Phase I that was completed in 1986, 13 factories were operating and 7 factories were under construction as of the end of October 1989, when the appraisal of this project took place. In addition, 63 companies were preparing to relocate to the Zone. Based on these circumstances, CEPZ forecast that 16ha of new land would be needed every year. As CEPZ is favorably located near Metro Manila and had attracted interest from domestic and foreign investors, demand was expected to continue to grow.

However, while site preparation in Phase I had almost been completed except for one block, most stages of Phase II to Phase V had not been prepared yet. Also, construction of most internal roads, water supply and drainage facilities and power distribution facilities had not been completed. Thus, CEPZ was not ready for companies in spite of the high demand as stated above. Under such circumstances, investors might have lost the desire to relocate their businesses to CEPZ if the timing of the development and expansion of CEPZ had been delayed.

1.2 Objectives

Because of the concern that lack of sufficient industrial infrastructure might prevent industrial investment in the Philippines, which was becoming more active, this project was designed to help strengthen the industrial base of the country by improving the condition of the target export processing

^{*1} Under the Economic Zone Act enacted in 1995, EPZA was abolished to form a better organization and the Philippine Economic Zone Authority (PEZA) was established to assume jurisdiction over all Special Economic Zones. After that, the Cavite Export Processing Zone (CEPZ) came to be called the Cavite Economic Zone (CEZ).

zone, located 30km south of Manila.

1.3 Output

The planned output is the construction of the following infrastructure in Phases I to IV (total area: 230ha) of Cavite Export Processing Zone and establishment of a necessary consulting service (detailed designing, bidding assistance, construction supervision). As for Phase V, which is planned to be expanded in the future, only the sewage treatment facilities were planned to be constructed under this project.

1. Internal roads
2. Water source facilities such as deep well and water supply facilities
3. Drainage facilities
4. Sewage treatment facilities
5. Power distribution facilities
6. Solid waste treatment facilities
7. Public facilities (streetlights, standard factories, public squares, sporting facilities, etc.)
8. Outer fence

1.4 Borrower/Executing Agency/Implementing Agency

Government of the Republic of the Philippines/ Export Processing Zone Authority (EPZA)
(Currently Philippine Economic Zone Authority (PEZA))

1.5 Outline of Loan Agreement

Loan Amount / Loan Disbursed Amount	4,028 million yen / 3,345 million yen
Exchange of Notes / Loan Agreement	March 1991 / July 1991
Terms and Conditions	
-Interest Rate	2.7 %
-Repayment Period (Grace Period)	30 years (10 years)
-Procurement	General untied
Final Disbursement Date	October 1997

2. Results and Evaluation

2.1 Relevance

2.1.1 Relevance of Project Plan at Appraisal

In 1988, the Philippine Government issued the Medium-Term Regional Development Plan for Region IV (1989-1992). Under this plan, 5 urban growth corridors were designated in the Calabarzon Region,^{*2} where urbanization and industrialization were advancing rapidly. CEPZ was regarded as the core facility of the Cavite Bay Growth Corridor. CEPZ was also consistent with the government policy of developing manufacturing industries by promoting export-oriented industries under the (national)

^{*2} Calabarzon: an area undergoing industrialization in the southern part of Luzon Island consisting of the provinces of Cavite, Laguna, Batangas, Rizal and Quezon.

Medium-Term Development Plan (1987-1992). Therefore, the project plan is relevant as it was consistent with the policy of the Philippine Government at that time.

2.1.2 Relevance of Project Plan at Present

After the project appraisal as well, decentralization of the population and industries from Metro Manila and the development of the Calabarzon Region in particular remain consistent with the current (national) Medium-Term Development Plan (2001-2004) and Medium-Term Regional Development Plan for Region IV (2001-2004). Bases and facilities returned by U.S. military forces have been developed as Special Economic Zones under the Bases Conversion and Development Act of 1992. In 1995, the Special Economic Zone Act was enacted and the framework for further development of Special Economic Zones was established. Thus, the Philippine Government is still active in developing Special Economic Zones.

The Philippine Medium-Term Development Plan (2001-2004) attaches importance to the promotion of foreign as well as domestic investment. In this regard, too, the objectives of this project remain relevant today.

The current Philippine Government's policy is to leave the construction of Special Economic Zones to the private sector as much as possible. As of July 2003, there were 162 approved Special Economic Zones in the Philippines. Among the 57 Special Economic Zones that are already operating, the 4 Zones of Cavite, Baguio, Bataan and Mactan are directly operated by PEZA, the successor to EPZA. The Cavite Economic Zone (CEZ) covered by the project was the last developed by PEZA. Among the remaining 53 Special Economic Zones in operation, 49 were developed with 100% private funds and 4 are government-affiliated Special Economic Zones^{*3} outside PEZA's jurisdiction.

Success of the government-led development of CEZ under the project gave an impetus to the private sector's development of many Special Economic Zones, mainly in the Calabarzon Region, which as of July 2003 housed 28 Special Economic Zones, or nearly half of all Special Economic Zones in the Philippines. Also, among the 852 companies doing business in the 53 Special Economic Zones under PEZA's jurisdiction as of January 2003, 268 companies, or 32% of the total, are registered in CEZ. All lots in CEZ are occupied. The project is relevant as it provided a foundation for realizing the Philippine Government policy of attracting companies, mostly foreign ones, and accelerated industrialization in the surrounding areas.

2.2 Efficiency

2.2.1 Output

The project originally planned to build infrastructure (internal roads, water supply, drainage and sewage treatment facilities, power distribution facilities, solid waste treatment facilities, and public facilities) in Phases I to IV (total area: 230ha). As for Phase V (45ha),^{*4} which was intended to be expanded in the future, only sewage treatment facilities were initially planned to be constructed. However, because of the sharp increase in demand for building sites, more infrastructure such as

^{*3} Government-affiliated Special Economic Zones outside of PEZA's jurisdiction are the Clark and Subic Special Economic Zones developed by the Base Conversion and Development Authority (BCDA) with the private sector, the Zamboanga City Special Economic Zone and Free Port managed by the Zamboanga City Special Economic Zone Authority in Mindanao, and the Cagayan Special Economic Zone and Free Port managed by the Cagayan Economic Zone Authority.

^{*4} Locally called "Phase IV Expansion"

building sites, internal roads and water supply facilities were constructed in Phase V. This change was made to respond flexibly to greater-than-expected demand before the project started.

2.2.2 Project Period

At the time of appraisal, the project was scheduled to be completed in February 1996. However, the project was actually completed in November 1997, 21 months behind schedule. The delay was mainly caused by expansion of the target area, which resulted in more designing, civil engineering and construction work. The originally planned output was mostly achieved within the initially planned period.

2.2.3 Project Cost

The total project cost was estimated at 5,370 million yen (foreign currency portion: 3,685 million yen; local currency portion: 248 million pesos = 1,685 million yen) at appraisal time. The ODA loan of 4,028 million yen was expected to cover the entire foreign currency portion and part of the local currency portion.

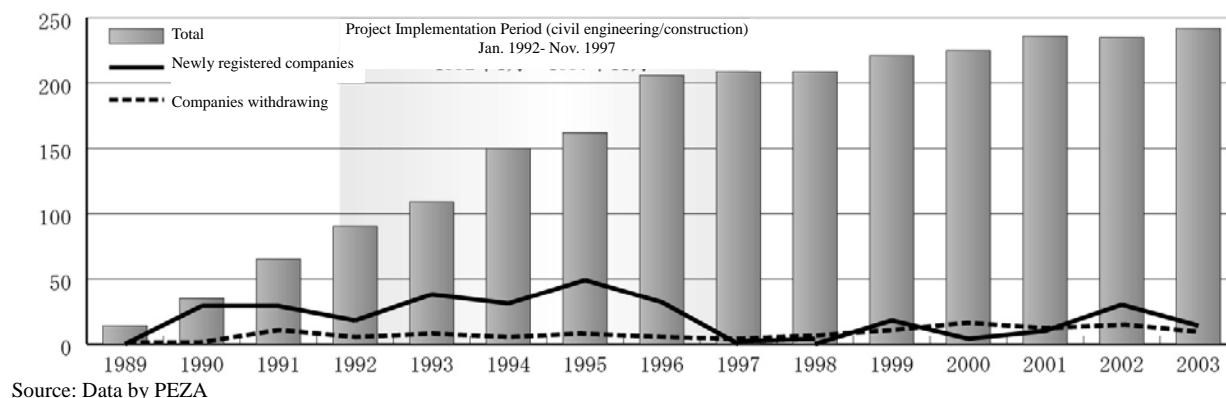
The actual project cost was 4,279 million yen (foreign currency portion: 1,275 million yen; local currency portion: 648 million pesos = 3,004 million yen), or 79.7% of the estimate at appraisal time. This is because the local currency depreciated at a greater rate than the inflation rate.

2.3 Effectiveness

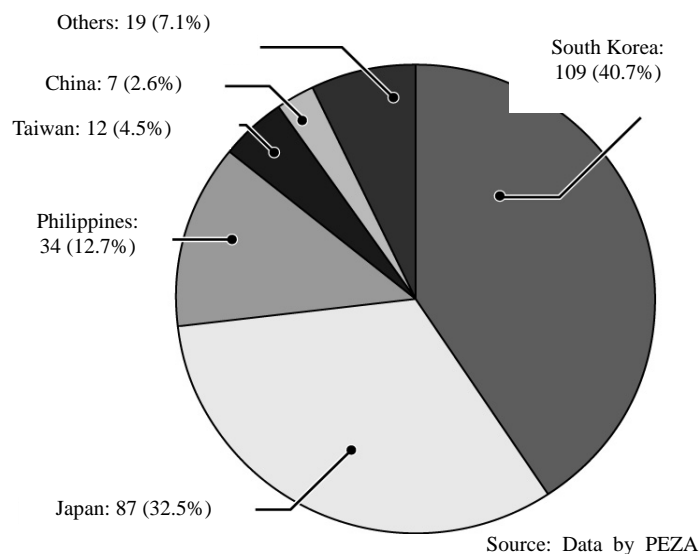
2.3.1 Companies in Cavite Economic Zone

As of 1991, before the start of the project, there were 65 companies in the Cavite Economic Zone (CEZ). The number of companies located in CEZ increased substantially from 1992 to reach 209 companies at the end of 1997, when the project was completed (see Fig.1), and the number had risen to 242 as of the end of June 2003. There are a total of 268 registered companies, including those that are applying to locate their factories and those that are constructing factories in CEZ. By home country of these companies, Korea has the biggest presence at 40.7 % (109 companies) followed by Japan, 32.5% (87 companies), the Philippines (34 companies, 12.7%), Taiwan (12 companies, 4.5%), and China (7 companies, 2.6%) (see Fig.2). By industry, high-tech companies such as semiconductor manufacturers account for a large percentage.

No. of companies



An area of 170ha out of the total 275.9ha of CEZ, excluding the sites for public facilities like roads, parks and sewage treatment plants, is offered as building lots for companies. These lots have been fully occupied since 1998 and there is a waiting list.



2.3.2 Exports and Trade Balance

Fig.3 shows CEZ's imports and exports from 1995-2002. Exports from CEZ steadily rose from 797 million dollars in 1995 to 2,118 million dollars in 2000. In 2001, the demand for the products of companies in CEZ, mostly semiconductor and related products, declined due to the deterioration of security in the country when President Arroyo assumed office following the impeachment trial of former President Estrada^{*5} and worldwide oversupply of semiconductors. As a result, exports that year plunged to 1,636 million dollars. However, exports in 2002 recovered to 2,033 million dollars, nearly the same level as 2000 and approximately 2.5 times more than in 1995.

Imports also increased until 2000, keeping pace with exports, but fell a little in 2001 for the reasons mentioned above. In 2002, imports further decreased because most companies manufactured products using parts and materials that were imported the previous year and in stock.

Exports from CEZ have always exceeded imports, giving CEZ a positive trade balance.

^{*5} Former President Estrada, who took office in May 1998, was impeached for alleged embezzlement at the end of 2000. During the impeachment trial, then Vice President Arroyo was inaugurated as President in January 2001. On April 25, 2001, former President Estrada was arrested on corruption charges, causing a major protest by his supporters in Metro Manila that led to clashes with the police and casualties. The furor died down in May when the government declared a state of rebellion and tried to calm the situation.

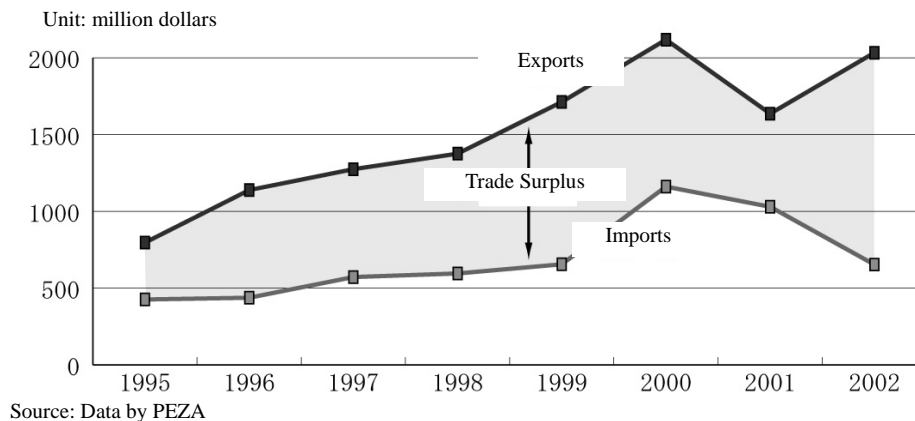


Fig.3: Changes in Cavite Economic Zone's Imports, Exports and Trade Surplus

The trade surplus during the 8 years between 1995 and 2002 amounted to 6,552.6 million dollars. In 2002, a record trade surplus of 1,379.1 million dollars was achieved.

Considering that the trade balance of the Philippines as a whole posted a trade deficit of 18.47 billion dollars in the 8 years from 1995 to 2002, CEZ contributed greatly to improving the trade balance of the Philippines by generating a trade surplus of 6.55 billion dollars during the same period.

2.3.3 Recalculation of Financial Internal Rate of Return (FIRR)

The Financial Internal Rate of Return (FIRR) of the project was 15.9% at the time of appraisal. Income from power distribution and the water supply service^{*6} was included in the benefits in addition to the increase in rents, and the project cost and operation and maintenance expenses were included in the costs. The project life was assumed to be 25 years.

This time, the costs and benefits assumed at appraisal were calculated based on the actual project cost and actual figures obtained from the financial statements of CEZ. The project life was assumed to be 25 years, the same as the assumption at appraisal. As a result, FIRR was recalculated as 21.7%. The recalculated FIRR is far higher than at appraisal time (15.9%) because the expansion of the project to include Phase V, which was not included in the original plan, led to higher benefits such as rents. In addition, the actual project cost turned out to be less than estimated at appraisal.

2.4 Impact

2.4.1 Provision of Employment Opportunities

The population of Cavite Province has grown remarkably in 10 years, from 1,150,000 in 1990 to approximately 2,060,000 in 2000. The average annual population growth rate was 4.10% for 1980-1990, 6.46% for 1990-1995, and 5.45% for 1995-2000. These rates far exceed the population growth rate of the entire Philippines for the same periods (2.35%, 2.32%, and 2.02%, respectively). This population growth is attributable to the



Photo 1: Inside of a textile factory

^{*6} CEZ purchases electricity from Magellan Cogeneration Inc., a power generation company, and water from MWSS, and sells them to companies in the Economic Zone via the power distribution and water supply facilities constructed under the project.

inflow of young people^{*7} from rural regions seeking jobs in Cavite Province, where industrialization has been advancing. However, as employment cannot keep up with the rapid increase in population, the unemployment rate in 2000 was 15.7%, far higher than the national average of 11.2%.

Under these circumstances, Cavite Export Processing Zone provided employment for a total of 71,738 persons, including 63,654 factory workers and 8,184 workers in related sectors,^{*8} as of the end of May 2003. Also, as evident by the high percentage of women workers (64.9%), it is playing a vital role in promoting women's participation in social and economic activities.

2.4.2 Promotion of Regional Development and Reinforcement of Industrial Base

In 1989, when this project was appraised, Cavite Export Processing Zone, managed by EPZA, and Gateway Industrial Park, managed by the private sector, were the only Export Processing Zone and industrial park in the Calabarzon Region.

After that, encouraged by the success of Special Economic Zones such as Cavite Export Processing Zone and private industrial parks, the private sector created a number of Special Economic Zones. As of the end of July 2003, 28 Special Economic Zones are operating in the Calabarzon Region, while 18 Zones are under development and 17 Zones have obtained approval (see Table 1). Nearly half the 57 Special Economic Zones in operation in the country are concentrated in this region.

Table 1: Special Economic Zones in Calabarzon Region

	In operation	Under development	Aproved
Cavite Province	7	7	5
Laguna Province	14	3	4
Batangas Province	4	6	7
Lizal Province	3	0	1
Quezon Province	0	2	0
Total	28	18	17

Source: Data by PEZA (as of the end of July 2003)

The GRP (Gross Regional Product) of Region IV, including Cavite Province, increased from 225.1 billion pesos (in 1995 price levels) in 1989 to 386.3 billion pesos (in 1995 price levels) in 2002, posting 171.6% growth (the national average: 147.0%).

The manufacturing sector share of the GRP of Region IV increased from 35% in 1989 to 42% in 2002, indicating that the economic growth of Region IV is being achieved by the industrialization of the Calabarzon Region centered on the Cavite Export Processing Zone.

^{*7} The 20-39 age group accounts for 34.6% of the total population of Cavite Province, while the same age group makes up 30.8% of the national population (2002, NSO).

^{*8} General affairs division, personnel division, etc. of each factory.

San Technology Inc. assembles and processes high-density, high-precision electronic components (magnetic heads for FDDs, PCs, etc.). The company established its first factory in CEZ on November 8, 1988. At that time, international competition in industries was expected to intensify. The company started overseas operations based on its basic strategy of developing products in Japan and mass-producing them abroad. Since then, the company has moved more factories to CEZ. In 2003, they had 7 factories in CEZ, including the Second TFT Factory, which started operations in 2002. All the workers are hired directly by the company. The company had 3000 employees (including 27 Japanese employees) in 2003. Among them, about 150 were employed under a short-term contract of 3 months and 2850 were full-time employees most of whom had been working for the company for many years.



VCM Factory of San Technology

Two countries were proposed as the site of overseas factories: Taiwan, where labor costs are 30-40% of Japan, the level of education is high, and adequate facilities and systems are available; and the Philippines, where the labor costs are less than 10% of Japan, the level of education is relatively high, and the people speak English. In spite of some anxiety about security in the Philippines, the company finally chose the Cavite Export Processing Zone because 1) the Philippine Government and the Governor of Cavite Province were active in inviting foreign companies, 2) the zone is under the direct control of the government, 3) it was expected that labor cost would remain low in the future, and 4) the location was favorable.

45% of the products are sold to companies affiliated with Japanese manufacturers such as Hitachi, Toshiba, NEC and Matsushita in other Special Economic Zones in the Philippines (mainly in Laguna), and the remaining 55% are exported to Japan and other countries. As small and medium size firms in the Philippines are not developed well, the company purchases only 10% of necessary materials such as packing materials from local companies and imports 90% of parts and materials (60% from Japan). The company says production of parts and materials for high-density, high-precision electronic components requires a huge capital investment. In addition, it is very difficult to expect local companies to supply high quality parts on a steady basis.

Comparing the Philippines with rapidly developing China, the Philippines is superior in the stability and operations of its political and legal systems. Also, the Philippines is situated far more advantageously for imports from and exports to the U.S, according to the company.

CEZ is superior to the other 3 Special Economic Zones under the direct control of PEZA in terms of location and facilities. Its facilities are comparable to those of private Special Economic Zones and the rents are very reasonable, which is a great advantage.

2.4.3 Technology Transfer to Local Companies

Before the development of CEZ, it was expected that resident companies would purchase parts and materials from local companies and so accelerate technology transfer to local companies. However, according to a survey jointly conducted by PEZA and Semiconductor Industries Philippines Inc. (SEPI) in 2002, the domestic procurement ratio for parts and materials at semiconductor plants that make up a large part of resident companies was 20-25%. Increasing domestic procurement is a long-term

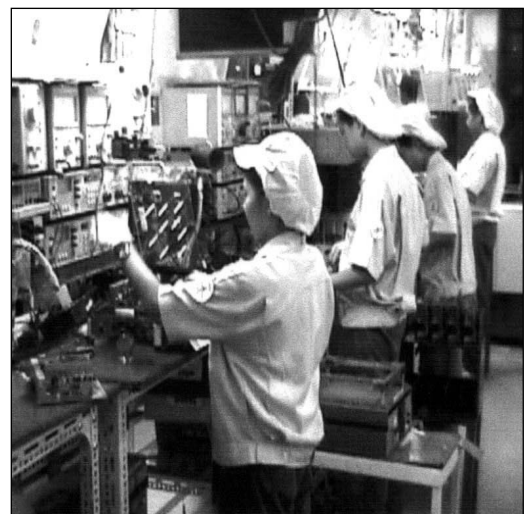


Photo 2: A car stereo factory

issue.^{*9}

In the case of a car radio and car stereo assembly plant funded 100% by a Japanese company, 85% of parts and materials are imported, and 10% out of the remaining 15% are procured through domestic imports from other Special Economic Zones in the Philippines. The plant purchases only 5% of parts and materials from local Philippine companies. The plant is planning to increase local procurement as part of cost cutting efforts. To this end, it provides local companies with training and management on the manufacturing of some of its plastic products.

2.4.4 Environmental Impact

Companies located in the Cavite Export Processing Zone must acquire an Environmental Compliance Certificate (ECC) prior to registration and conduct monitoring on a regular basis. CEZ also conducts monitoring of water quality, air quality and waste treatment.

As most factories operating in this zone are assembly and processing factories, they do not emit smoke that causes air pollution. Waste water and solid waste, which may have some impact on the environment, are discussed below.

a) Waste Water^{*10}

Monitoring of waste water is conducted for the purpose of satisfying the requirements of the Department of Environment and Natural Resources (DENR). Each company needs to appoint at least one Pollution Control Officer (PCO) who examines and reports whether the water discharge standards are met. Those companies that discharge toxic substances are required to establish their own treatment facilities. PEZA also examines the quality of the water discharged from the septic tank that finally treats waste water from each company. PEZA purchased a portable water quality meter to measure pH, BOD, COD, turbidity, conductivity, salt content and temperature of water discharged from filtration plants. In addition, a water quality analysis of the same sample is conducted quarterly at a water quality testing institute designated by DENA.

b) Solid Waste

Under the project, an incinerator was installed to treat solid waste and started operations in August 1995. This incinerator burned down in February 1998 and has been left unrepaired because it was expected that the planned revision of the Clean Air Act would impose stricter standards for the use of incinerators.^{*11} Since the incinerator burned down, waste from resident companies has been transported to a 2.5ha solid waste disposal site in the Zone. Operation of the waste disposal site is left to a private company. According to the staff in charge of the waste disposal site, 72-75 tons of

^{*9} According to results of a survey of small and medium Japanese enterprises presented in "The outlook of foreign direct investment by Japanese manufacturing companies – prospects of overseas business operations after the Asian Economic Crisis - " by Kaburagi, et al. in *JBIC Review* (May 2000, JBIC), the average local procurement ratio of parts and materials by Japanese affiliated companies in 4 ASEAN nations (Thailand, Malaysia, Indonesia, and the Philippines) in 1998 was 65% for the electric and electronic assembly sector and 34.5% for the electric and electronic manufacturing sector.

^{*10} Under another ODA Loan project, the "Special Economic Zone Environmental Project" (PH-P183), sewage reprocessing facilities were to be constructed in the Cavite Export Processing Zone. However, it was cancelled because CEZ decided to resolve the water shortage problem by digging a new well with its own funds instead of reprocessing sewage.

^{*11} The Clean Air Act was enacted in 1999, and its Implementation Rules and Regulations (IRR) were issued on November 7, 2000. However, IRR did not specify detailed rules for the use of incinerators. In 2002, it was determined to allow the use of the most advanced incinerators that combust waste at high temperatures.

waste/day is disposed of, and at the current rate, the disposal site will be filled to capacity in 1-2 years.

As a solution to the problem of solid waste treatment, the executing agency is considering 2 options: 1) constructing a high-grade incinerator satisfying the requirements of the revised Clean Air Act; or 2) requesting the waste disposal facility to be constructed in Cavite Province to accept solid waste.

2.4.5 Relocation of Residents

This project required the relocation of residents. The relocated residents consist of 1) the owners of the land of the project site, 2) the tenant farmers who grew crops in the project site, 3) illegal residents, and 4) those who illegally planted crops.

As for land owners in category 1), PEZA was to purchase the target land. The issue was finally settled by purchase or exchange of land. As for 2), each household received compensation in addition to an alternative plot of 180 square meters. As for 3), the fence surrounding the Export Processing Zone was shifted to exclude from the project site the place where illegal residents were living (the ownership of the land remains with PEZA). The illegal farmers of 4) filed a lawsuit claiming, "The land in question is subject to agrarian reform and therefore it should become our own land." Their claim was dismissed by the district court.

PEZA says that the issue of land acquisition was finally settled with no problems.

2.5 Sustainability

2.5.1 Executing Agency

At the time of project appraisal, 4 Export processing Zones, including Cavite, were operated and managed by the Export Processing Zone Authority (EPZA).

The Economic Zone Act of 1995 abolished EPZA and established the Philippine Economic Zone Authority (PEZA) to assume jurisdiction over all Special Economic Zones, including not only Export Processing Zones but also private industrial parks. At the same time, the Export Processing Zones (EPZs) that used to be under the control of EPZA and private industrial parks have come to be called Special Economic Zones (SEZs). The Cavite Export Processing Zone (CEPZ), which was developed and expanded under the project, has also been called the Cavite Economic Zone (CEZ) since 1995.

In addition to directly operating 4 former Export Processing Zones, PEZA's duties include approving Special Economic Zones developed by the private sector and giving them favorable treatment.^{*12}

Technical Capacity and Operation and Maintenance System

There is no specific problem with the technical capacity and operation and maintenance system of the executing agency that may affect sustainability.

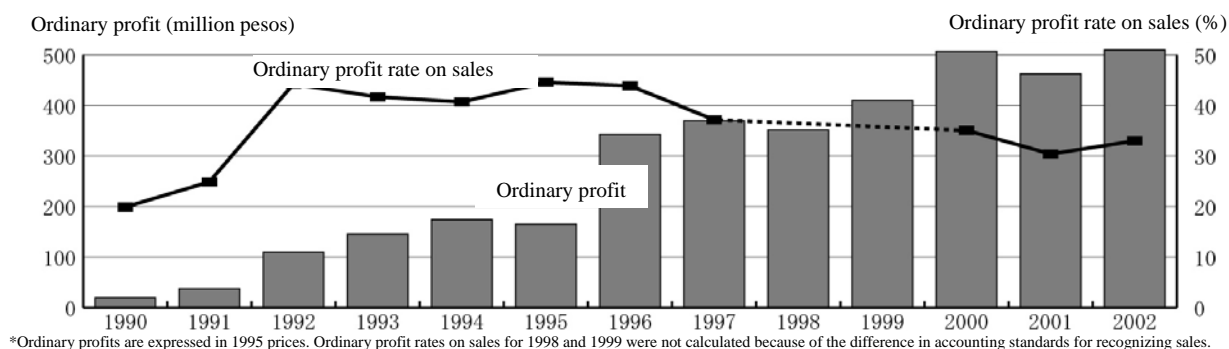
Financial Status

Although PEZA posted losses at first due to the failure in the operations of the Bataan Special Economic Zone in the early stages and the burden of interest payments, it has made ordinary profit in

¹² EPZA had jurisdiction over only Export Processing Zones, and the Board of Investment (BOI) was responsible for approving industrial parks and granting favorable treatment to investor companies. After PEZA was established, the roles of BOI have been reduced.

recent years. In the preceding 2 years, in particular, it has recorded double-digit ordinary profits on sales (19.5% for 2001 and 14.8% for 2002).

In the case of CEZ, it has been continuing to make a profit since the start of operations. As shown in Fig. 4, ordinary profit has been increasing each year and the ordinary profit rate on sales is maintained at an extremely high level. The two main income sources of CEZ are rents from tenants and income from power distribution, water supply and other services^{*13}, which respectively accounted for 17.2% and 78.2% of the total income.



Source: PEZA

Fig. 4: Changes in Ordinary Profit and Ordinary Profit Rate on Sales of CEZ

2.5.2 Operation and Maintenance Status

Operation and maintenance of infrastructure within CEZ are carried out by Engineering and Maintenance Division of CEZ except for facilities such as power distribution and water supply facilities. The budget for operation and maintenance comes directly from the headquarters of PEZA. According to Engineering and Maintenance Division of CEZ, the amount approved by PEZA used to be below the amount requested by CEZ until 2-3 years ago. In recent years, the budget has been approved almost as requested and therefore a sufficient amount of budget is secured. Power distribution and water supply facilities are operated and maintained by the National Transmission Corporation (TRNASCO) and Manila Metropolitan Waterworks and Sewerage Services (MWSS), respectively, and there is no problem.

2.5.3 Working Environment and Existence of Labor-Management Problems

Partly due to the high unemployment rate in Cavite Province, the ratio of applicants to job openings in companies in CEZ is as high as 50:1. Among job seekers, 20% are residents of Cavite and 80% are from other parts. Many of them are from outside Luzon Island.

If problems arise, such as employees being paid less than the minimum wage^{*14}, employees may file complaints with Industrial Relations Division of CEZ. If a complaint is filed, CEZ issues an improvement recommendation to the company in question and, if the company does not comply, its import/export license is suspended. One company had its license revoked, but implemented corrective

¹³ As for electricity, CEZ purchases electricity from independent power producers (IPPs) or the National Power Corporation (NPC) and makes income by selling electricity to resident companies. Several percent of the income is paid to the National Transmission Corporation (TRANSCO), which is responsible for the operation and maintenance of distribution lines. The same scheme is applied to waterworks, too. As for telecommunications, CEZ granted licenses to operate in CEZ to 4 private telephone companies and collects fees for the operating rights.

¹⁴ The minimum wage in Region IV containing Cavite Province is 237 pesos/day, the second highest in the country after 280 pesos/day in Metro Manila.

measures 1 week later.

3. Feedback

3.1 Lessons Learned

None

3.2 Recommendations

(To the executing agency)

The executing agency needs to intensify waste disposal measures

The issue of solid waste disposal was caused by an external factor which is the enactment of the Clean Air Act. The act imposed much stricter standards for incinerators, which is a serious problem not only for CEZ but also for the entire Philippines. It is necessary for PEZA to implement solid waste disposal measures before the existing waste disposal site is filled to capacity.

In the Evaluation Feedback Seminar held in November 2004, PEZA explained that at present, CEZ disposed of waste generated in the DENR accredited waste disposal.

Comparison of Original and Actual Scope

Item	Planned (as of appraisal by JBIC)	Actual
(1) Output	Phases I to IV (total area: 230 ha)	Phases I to IV (total area: 275.1 ha)
Internal roads - Trunk roads - Subsidiary roads	2,073m 7,790m	2,600m 7,900m
Water supply facilities - Deep wells, elevated tanks, distribution reservoirs - Water pipes	6 locations respectively 17,950m	As planned 16,826m
Drainage facilities - Trunk drainage - Side gutters - Manholes	10,771 m 12,217 m 16 locations	Unknown Unknown Unknown
Sewage treatment facilities - Sewage treatment plant - Rehabilitation of the existing lagoon - Sewer pipes, etc.	1 1 set 12.25 km	As planned As planned 12 km
Power distribution facilities - Distribution lines, transformers, etc.	1 set	As planned
Solid waste treatment facilities - Garbage trucks - Dump truck - Wheel loader - Bulldozer - Incinerators, etc.	4 1 1 1 3	3 As planned As planned Cancelled 1
Common facilities - Streetlight - Fire truck and ambulance - Recreation facilities - Standard factories - Emergency call system	1 package 1 package Playing fields, parks, etc. Floor area 1,000 m ² × 6 buildings 1 set	As planned As planned As planned Floor area 960 × 6 buildings As planned
Outer fence - Removal of the existing fence - Construction of new fence	1 8.8 km	As planned 9.87 km
Consulting Service	Detailed planning, construction supervision, bidding evaluation and contract assistance, training, etc.	As planned
(2) Project Period - Loan agreement - Detailed designing - Site acquisition - Procurement of equipment and materials - Civil engineering works	Jul. 1991 Jul. 1991 – Dec. 1991 Jul. 1991 – May 1992 May 1992 – Apr. 1995 Mar. 1993 – Feb. 1996	Jul. 1991 Sep. 1991 – May 1992 Unknown Mar. 1992 – Feb. 1996 Jan. 1992 – Nov. 1997
(3) Project Cost Foreign Currency Local Currency Total ODA Loan Portion Exchange Rate	3,685 million yen 1,685 million yen (248 million pesos) 5,370 million yen 4,028 million yen 1 peso = 6.8 yen (as of July 1991)	1,275 million yen 3,004 million yen (648 million pesos) 4,279 million yen 3,345 million yen 1 peso = 4.64 yen (weighted average)

Third Party Evaluator's Opinion on Cavite Export Processing Zone Development Project

CESAR E. A. VIRATA
C. Virata & Associates, Inc.
Chairman & Pres.

Sustainability

I believe that the Cavite Economic Zone (CEZ) will continue to be a preferred zone among investors because of its proximity to Manila and the positive attitude of the provincial and local government of Cavite towards investors.

The administration of PEZA is also aware of the future requirements of the CEZ in terms of power and water supply in order to maintain it as an attractive Economic Zone.

In the case of power, the installed generating capacity within the Zone is inadequate and therefore the CEZ has to be linked to the main energy provider, Manila Electric Company (MERALCO). In the near future, the transmission lines from Dasmarinas to Rosario will be sold to Meralco by National Power Corporation. It is very necessary for CEZ to have a reliable and high quality supply of electricity especially for high tech industries.

Water supply is provided by MWSS (or its franchisee) supplemented by a deep well pump. If some of the industries will require more process water then additional piped water sources should be provided. Ground water is a shared resource and therefore there could be a limitation to installing more deep well pumps. Furthermore CEZ is quite close to the shore of Manila Bay so the possibility of salt water intrusion is great.

The facility for the disposal of the solid wastes will be resolved by the PEZA authorities and the provincial government because it is a common problem. The environmental clearance has to be obtained for the solid waste disposal site.

Efficiency

Transport of goods in and out of the CEZ should be efficient. Under current traffic regulations delivery trucks are allowed to operate at night starting from 9pm to 6am. While there are projects to construct the extension of the coastal road to Cavite, Manila traffic authorities control the truck movements within Metro Manila. I would like the government/ private sector to build a container port facilities so they can transport their containers of raw materials or finished products by barge to the Manila international container port. The proposed container port facility could be used also by other economic zones in Cavite and Laguna to ease road traffic in Manila.