



**ASSESSMENT OF MANHATTAN SPECIAL ECONOMIC ZONE  
DEVELOPMENT IN CAMBODIA**

**BATITH SY**

**MASTER OF BUSINESS ADMINISTRATION  
IN BUSINESS ADMINISTRATION**

**MAE FAH LUANG UNIVERSITY**

**2008**

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**THESIS SUBMITTED TO  
MAE FAH LUANG UNIVERSITY IN PARTIAL FULFILLMENT OF  
THE REQUIREMENTS FOR THE DEGREE OF  
MASTER OF BUSINESS ADMINISTRATION  
IN BUSINESS ADMINISTRATION**

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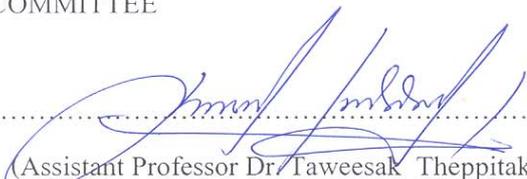
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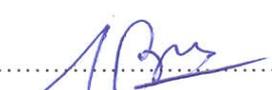
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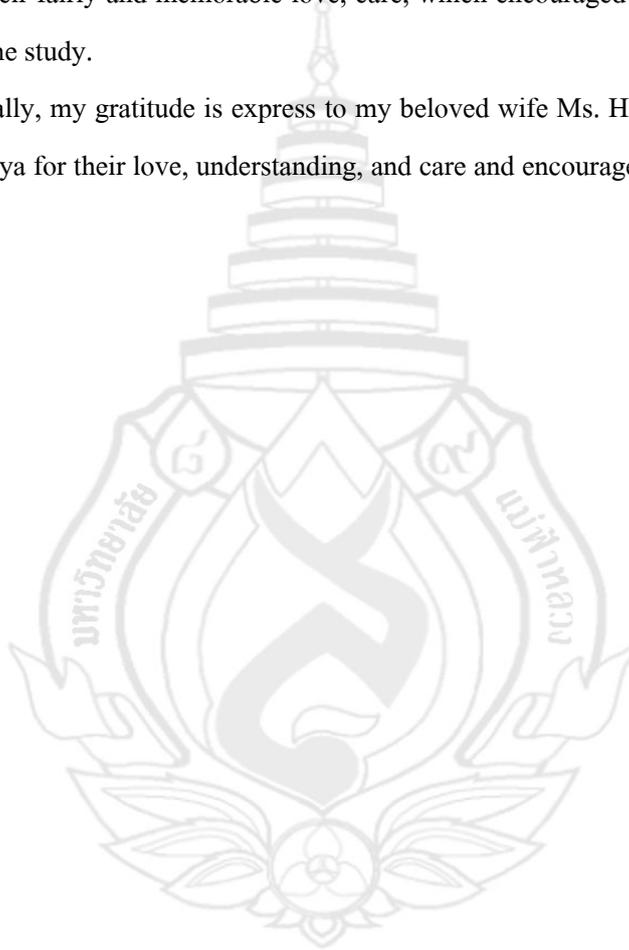
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Batith SY



<b>Thesis Title</b>	Assessment of Manhattan Special Economic Zone Development in Cambodia	
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## ABSTRACT

The study focuses especially the aspects associated with the development of SEZ in Cambodia especially performance of Manhattan SEZ and starts with a highlight on the theories and experiences from other countries. This thesis analyzes Special Economic Zone from a worldwide perspective and draws lessons from the accumulated experience in several countries. It argues that developing countries can take advantage of the opportunities provided by SEZs for the acquisition of superior technology, upgrading of labor and managerial skills, and greater access to foreign markets. The paper then examines the development and economic significance of SEZs and similar export-oriented regimes in Cambodia. This analysis shows that after the Royal Government of Cambodia has adopted the degree of SEZ, there are many SEZ project were approved to implement the project. The main factors which most affect the zone perform are government policy, infrastructure while labor performance and raw material is at medium importance level to zone performance. This study finds that the most problem faced by foreign firms are demonstration of labor performance problems, electricity cost of infrastructure problems, and only import and export clearance is still the high problems faced by the foreign firms in special economic zone in Cambodia, while the time of investment application, company

registration, take long time for document process and high informal expense for import/export document appear to be the medium problem level. More problems that we received from interviewees by their own opinion stated that Cambodia's legal system is not favor enough for their business because of Cambodia not set up the commercial court. Electricity cost is also still very high compared with neighbor countries. Most of raw material are imported it will lead the cost of product is high cannot compete with other countries. Moreover, skilled labor still very lack which need the time to train them after they are qualified to work in the factory.

The paper ends with a series of considerations and policy recommendations for SEZ development in the Cambodia. Among other policies, this paper focuses on the promotion of industry diversification of export-oriented activities, on the development of stronger backward linkages, infrastructure reform and on the upgrading of the export-oriented legislation in Cambodia.

The findings of this study lead to recommend that the Royal Government of Cambodia should focus and seek to improve in human resource development (HRD) and motivate the local investor to invest in raw material to support export industries. Government to attract the foreign investors by reducing some administration procedures; encourage education through the training; provide more incentive and open market through negotiating and requesting for GSP granted or import duty free from developed countries to secure the market access and should start to take steps and develop a plan of action aimed at made some improvements, particularly industrial and infrastructural development and infrastructure linkages to countries in the region, to attract FDIs. Promote technology transfer and industry diversification.

**Keywords:** Special Economic Zone, Zone performance

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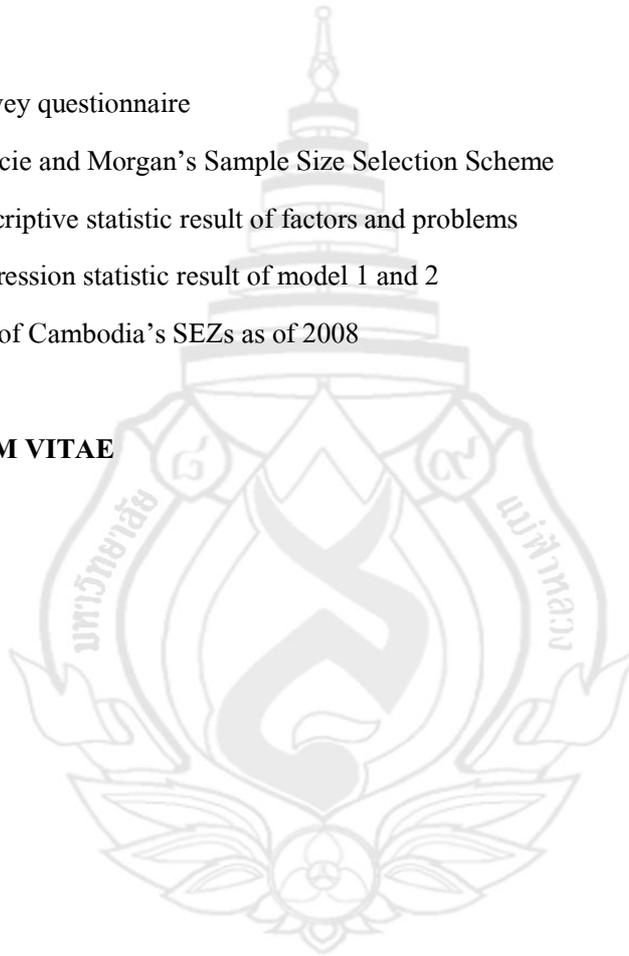
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## LIST OF ABBREVIATIONS

ASEAN	:	Association of South East Nation
APEC	:	Asia Pacific Economic Cooperation
CDC	:	Council for Development of Cambodia
DC	:	Developed Country
EBA	:	Everything but Arm
EDC	:	Economic Dispatch Control
EPA	:	Export processing area
EPZ	:	Export Promotion Zone
FTA	:	Free trade area
FLA	:	Fee logistic area
FZ	:	Free zone
EZAC	:	Economic Zone Authority of Cambodia
FDI	:	Foreign Direct Investment
GNP	:	Gross Nation Per capita
GSP	:	General System Preferences
GDP	:	Gross Domestic Product
GMS	:	Great Mekong Sub-region
ILO	:	International Labor Organization
IPR	:	Intellectual property rights
JICA	:	Japan International Cooperation Agency
LDC	:	Least Developed Country
MNEs	:	Multinational Enterprises
MFN	;	Most Favored Nation
MOLVT	:	Ministry of Labor and Vocational Training

**LIST OF ABBREVIATIONS (Cont.)**

MIME	:	Ministry of Industry, Mines and Energy
OPEC	:	Petroleum Exporting Countries
OPIC	:	Overseas Private Investment Corporation
PZ	:	Promotion Zone
QIPs	:	Qualified Investment Projects
QRs	:	Quantitative Restrictions
RGC	:	Royal Government of Cambodia
SPZ	:	Special Promotion Zone
SEZA	:	Special Economic Zone Administration
TIFA	:	Trade and Investment Framework Agreement
UNCTC	:	United Nations Centre on Transnational Corporations
UNCTAD	:	United Nations Conference on Trade and Development
WCO	:	World Customs Organization
WIPO	:	World Intellectual Property Organization
WTO	:	World Trade Organization

# CHAPTER 1

## INTRODUCTION

### 1.1 Scope of the study

This study centers on analyzing the factors affecting the development of Manhattan Special Economic Zone since its beginning in late of 2005 to 2008. The study covers all industrial firms in the zone.

### 1.2 Objective

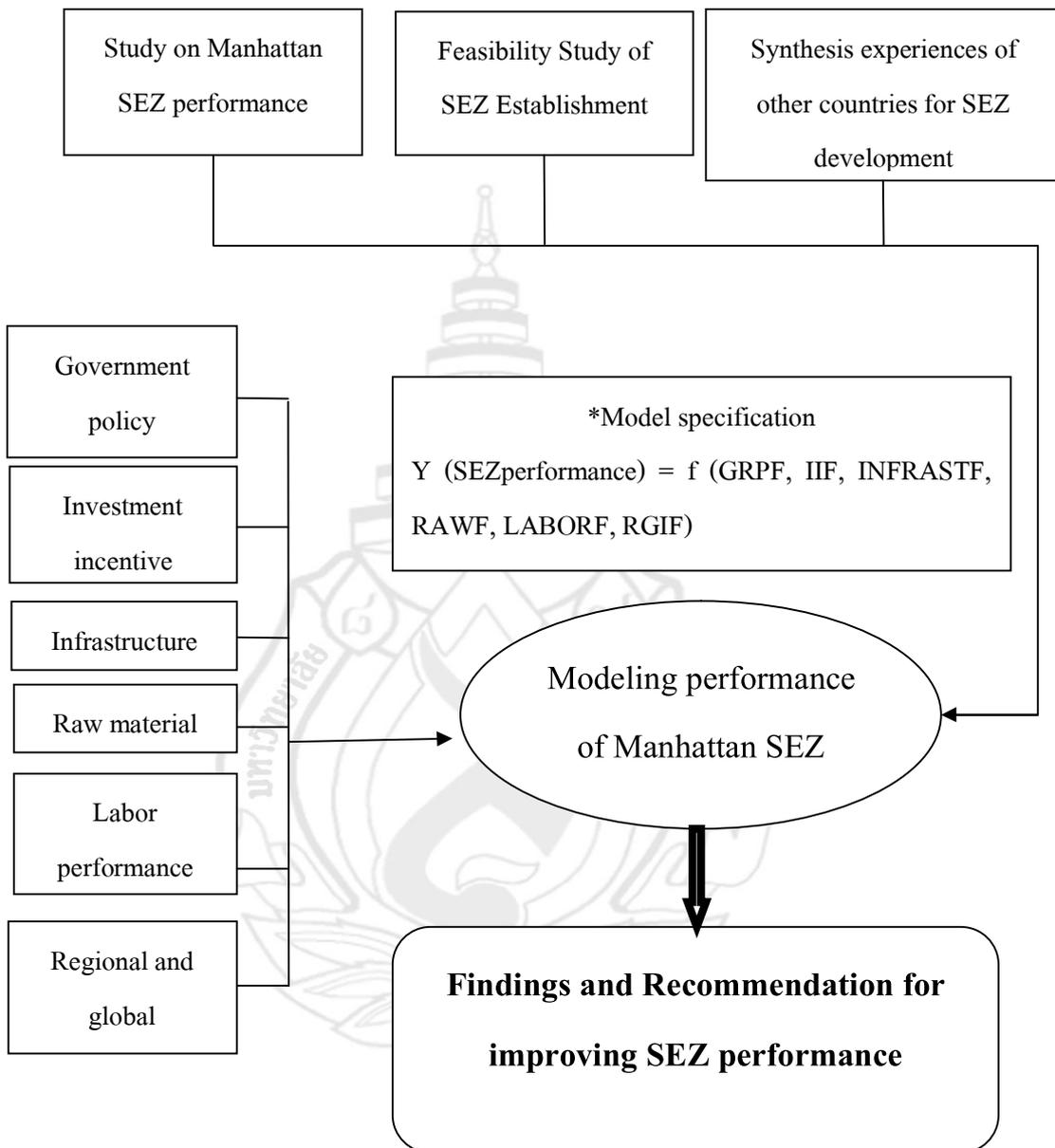
The objectives of the study are:

1.2.1 To examine the key factors to improve the zone development

1.2.2 To analyze the government trade policies in support of the development of  
Manhattan EZ

1.2.3 To provide the recommendation to encourage Manhattan SEZ development and  
other SEZs in Cambodia

### 1.3 Conceptual framework



*\*Note:* Y (SEZperformance) is growth arête of export, GRPF is Government regulation policy, IIF is investment incentive, INFRASTF is infrastructure, RAWF is raw material, LABORF is labor performance and RGIF is Region and global integration.

**Figure 1.1** Conceptual framework of the Manhattan SEZ development

## **1.4 Research questions**

1.4.1 To investigate factors attracting the FDI to Cambodia

1.4.2 To examine empirically the effect of government regulation policy investment incentive, infrastructure raw material, labor performance and RGIF is Region and global integration on the export performance of SEZ

## **1.5 Research methodology**

### **1.5.1 Survey design**

The survey design uses to identify the significant and describe the relationships of the variables to one another from the responses of the questionnaires getting from companies and government sector. This study also employs the survey method, which makes use of a questionnaire. There are many types of survey methods but in this case questionnaire survey was selected as the data collection. This method is commonly used in similar kinds of research of Narver and Slater (1990); Jaworski and Kohli (1993); Pelharn (1997) and Kumar and Yauger (1998).

### **1.5.2 Sampling method**

Due to the small of sample size, in this case study is selected all industrial firms and sectors representatives in the zone to fill the questionnaire survey. 3 people from each firm and sector are selected sample of research by start from low position, medium to high position because they have their own difference perspectives.

### **1.5.3 Questionnaire design**

The construction of the questionnaire is very much oriented by need to meet the objectives of the study and conceptual framework. In designing questionnaire, a great deal of thought gives to its comprehensiveness and length. A short questionnaire with conceptually clear and concise statement is judged to be desirable for both the respondent and the researcher, Zikmund (2000). With no obvious gains for the participants from cooperating in the research, it

would not be reasonable to expect them to spend too much of their time completing the questionnaire. The exclusive use of closed questions was considered important to fulfill that aims.

The questionnaire consists of a series of question and it divided into five main parts comprising general formation on firms, factors effecting to the zone performance, problems, future perspective and suggestion and recommendation. The questionnaire is shown in appendix A. To ensure the accuracy, the questionnaire has been developed through the process as follows:

1 Drafting questionnaires based on literature review, previous research and send to respondents in the field of study.

2 Undertaking pre-test to make sure the respondent understand the questionnaire by asks them directly by phone or e mail whether they understand the question or not?

#### 1.5.4 Survey instruments

Based on the results of questionnaire pretests, some modifications are made to the research instrument to make sure that respondents understand all questions in questionnaires.

**Table 1.1** Summary of factors influencing to Manhattan SEZ performance

<b>Factor</b>	<b>Description</b>
Government policy	Politic stability, Open economy, Regional arrangement, Market access, One-stop service
Investment incentive	Corporate income tax, Full import duty exemption, Reinvestment of earning
Infrastructure	Communication, Electricity, Water supply, Transportation
Raw material	Low technology, High price, No local supply, Unsatisfied quality, No adequate supply
Labor performance	Low-qualification job without investment in human capital, Skilled worker, Unskilled worker, Cheap labor cost
Regional and global integration	GSP granted by old ASEAN members, Free quota, Bilateral agreement, MFN granted by US, EBA granted by EU

Estimation of sample size in research using Krejcie and Morgan is a commonly employed method. Krejcie and Morgan (1970) used the following formula to determine sampling size:

$$S = X^2NP(1-P)/d^2(N-1)+X^2P(1-P)$$

S = required sample size

$X^2$  = the table value of chi-square for one degree of freedom at the desired confidence level

N = the population size

P = the population proportion (assumed to be .50 since this would provide the maximum sample size)

D = the degree of accuracy expressed a proportion (0.5)

The sample size can be calculated according to the recommendations presented in “Determining Sample Size for Research Activities, Psychological measurement” (1970) (See Appendix B). The sample size of this research is 30. So the sample size of this research should be at least 28.

#### 1.5.5 Data collection method

The data collection of this research contains only survey and expert group discussion. After modifying the questionnaire was designed in English version because most of respondents are understand English well.

#### Primary Data

The primary data is new information gained by distribution of the survey questionnaires to the participants who are chairpersons, executives, director and managers who working involved in the industrial firm in Manhattan SEZ. The questionnaires are done by sending through each representative firm and sector and make appointment for interviewing with the owner of firm and related government sector in the zone.

#### Secondary Data

The secondary data has been collected from various sources such as books, journal and websites. Other sources are used information published in the Ministry of Commerce, Council Development of Cambodia (CDC), Manhattan SEZ Administration and other relevant institutions.

### 1.5.7 Measurement of conducting questionnaire

Linkert Rensis (1932), questionnaire with 5 point scale are used to measure respondents' evaluation by asking them the degree of important with statements in the questionnaire that ranked from (1) very important or high problem to (5) not important or not problem. The higher score the more important the variables are as evaluate criteria.

With 5 point scales, the important level of factors and problems effect to zone performance is calculated by :

$$\frac{5-1}{5} = 0.8$$

It means items with scores fall between the ranges of:

1.00-1.80 are considered as the very important or too high problem level

1.81-2.60 are considered as the important or high problem level

2.61-3.40 are considered as the equal of important and unimportant or medium problem level

3.41-4.20 are considered as not so important or low problem level

4.21-5.00 are considered as not important at all or too low problem level

## 1.6 Benefit of study

Benefit of this study is providing to government and private sector for improving the zone development in the future

## 1.7 Organization of the study

This thesis consists of six chapters. The introductory chapter includes the scope of study, objective, research question and research methodology followed by the development of special economic zone in Cambodia and related government policies. The literature review has provided in chapter two. Comparative study of SEZ development, performance of Manhattan SEZ

are shown in chapters three and four. The analysis of factor affecting to the SEZ is performed in chapter five. The final chapter summarizes the findings and recommendation.

## **1.8 The development of special economic zone in Cambodia**

Special fiscal and administrative arrangements designed to promote multinational companies are popularly practiced measure for a number of nations in the world. The early trials of such special arrangement began in 1950's, and became popular in 1990's worldwide, particularly in the form of export processing zone (EPZ). In recent years, the special economic zone (SEZ) encompassed a wide extent of measures to facilitate economic activities are implemented successfully in particular in developing countries, including those in southern part of China. These SEZ focuses not only on export processing but other essential services and business development, JICA: SSF, JR, 03-090. (2003). Neighboring countries, such as Thailand (1976) and Vietnam (1992) are already have many years of experience in developing and implementing export oriented industrial zones. For example, there are 57 Industrial Estates in Thailand, which have attracted more than 3,000 Japanese firms to invest in Thailand. Establishment of export oriented zones alone cannot solve all the problems. It is often argued that the zones need to be properly positioned in the overall policy framework of the host country, and its integration in the policy coherence is essential. There are pros and cons on arrangement for export processing as they pertain to the overall economic framework of a nation. Generally, most of the sources agree that export processing zones have a significant impact on economy, but that it depends on the condition of the nation in question, JICA: SSF, JR, 03-090. (2003).

The Royal Government of Cambodia initiates to enact the Law on the Special Economic Zone in order to actively encourage, promote, induce and accelerate a sound and balanced industrial, economic and social development of the country. Under this law, the government will establish the special economic zones in suitable and strategic locations in the country for attracting foreign and domestic investments through the implementation of transparent, predicable and accountable regulatory frameworks. Therefore, the law provides as follows:

1. Establishment of the legal framework and mechanisms for the planning and monitoring of the special economic zone;
2. Transformation of selected areas into highly develops industrial, commercial, servicing, tourism, agro-industrial, investment and financial centers and/or export-oriented industrial centers;
3. Promotion of the capital and investment flow into special economic zone;
4. Facilitation of foreign exchange earnings by promoting exports;
5. Promotion of industrial, commercial, serving and financial cooperation between the Kingdom of Cambodia and industrialized countries;
6. Establishment a separate customs territory within the special economic zone

The law categorizes the special economic zones into two types namely the special promotion zones and export processing zone. Both are different in terms of purposes of creations and supports. More specifically, the SPZ aims at promoting industrial, commercial, servicing, tourism, agro-industrial, investment and financial centers within the country. SPZ will be composed of two zones such as promotion zone (PZ) as domestic tariff area and the free zone (FZ) as separate customs territory.

The authorized investment project within the SPZ will be granted preferential fiscal and non-fiscal treatment. It is noted that under the draft law the free zone is considered as a fenced-in separate customs territory within the SPZ that is designed as an export oriented production base that used for the processing of high-value material, which are subject to the high duties or taxes. It is divided into export processing area (EPA), free trade area (FTA) and/or free logistic area (FLA).

Therefore, it is expected to comprise duty-free wholesalers/retailers, and export-related traders, service providers and warehouses. On the other hand, the EPZ is regarded as a fenced-in plot of land located physically for serving the industrial and other activities related to export-oriented production. EPZ must set up EPA and service center and may establish FTA or FLA. The authorized investment projects in EPZ will be granted as wide preferential fiscal and non-fiscal privileges as in the FZ of the SPZ. Enterprises in EPZ are free from duties, taxes and other restrictions for import capital equipment and raw materials, inputs and/or commodities, but

still liable for duties or taxes on imported goods from EPZ to non-EPZ or non-FZ area in the country.

There are many reasons which led to attract foreign investors to invest in Cambodia especially in the field of special economic zone as follows:

#### 1.8.1 Government foreign direct investment (FDI) policy

Foreign Direct Investment (FDI) has declined in recent years, but spiked in 2005 to \$300 million, compared to \$45 million in 2004. Most of the increase was due to a \$200 million Chinese hydroelectric power project. Given inadequate private investment and poor revenue collection, Cambodia remains dependent largely on foreign donor funding for budget assistance, capital expenditure and social services. Since early 1999, the Cambodian government has intensified its economic reform program, a process the international financial institutions and donors encourage, participate in and monitor closely. The government has over the past year publicly committed itself on numerous occasions to fighting corruption, pursuing good governance, and increasing transparency and predictability. This strategy is set out in the government's latest public reform effort called the "Rectangular Strategy for Growth, Employment, Equity, and Efficiency." The government has initiated specific measures to promote business, especially small and medium businesses, by reducing costs and the time required for business registration and by establishing a number of committees for trade facilitation and business promotion.

#### 1.8.2 Foreign investment law

Cambodia's 1994 Law on Investment established an open and liberal foreign investment regime. All sectors of the economy are open to foreign investment and 100% foreign ownership is permitted in most sectors. There are a few sectors that are open to foreign investors subject to conditions, local equity participation or prior authorization from relevant authorities. These sectors include manufacture of cigarettes, movie production, rice milling, exploitation of gemstones, publishing and printing, radio and television, manufacturing of wood and stone carvings, and silk weaving. Investment incentives vary according to the nature of the investment project. Processing and production of electric power by using waste imported from foreign countries are prohibited, as is business engaged in forestry exploitation.

### 1.8.3 Major taxation issues

The Taxation Law adopted in 1997 governs Cambodia's taxation system. Seeking to increase government revenue, the international financial institutions recommended that the Cambodian government scale back its investment incentives. Consequently, the Cambodian government amended the law in 1999 and 2003. The law creates regimes for profit (20%), salary (5 to 20%), withholding (4 to 15%), value-added (10%) and excise taxes (rates vary). The amendments to the law eliminated the special nine percent corporate tax rates for all new investments. Investments approved prior to the amendments to the Law on Investment are entitled to the special nine percent rates for a transitional period of not more than five years, beginning from the fiscal year after the promulgation of the amendments to the Law on Investment.

Article 44 of the Constitution provides that only Khmer legal entities and citizens of Khmer nationality have the right to own land. Aside from this, there is little or no discrimination against foreign investors either at the time of initial investment or after investment. Some foreign businesses have reported, however, that they are at a disadvantage vis-à-vis Cambodian or other foreign rivals, who engage in acts of corruption or tax evasion, or take advantage of Cambodia's poorly enforced legal regulations. The privatization of state enterprises and transactions involving state property has not always been carried out in a transparent manner. In several instances, the public learned that enterprises were for sale or swap only after the government announced a sale or deal to a particular buyer.

Investor rights (investment guarantees) provided for in the Law on Investment includes:

1. Foreign investors shall not be treated in a discriminatory manner by reason of being a foreign entity, except in respect to land ownership as provided for in the Constitution of the Kingdom of Cambodia.
2. The Royal Government of Cambodia shall not undertake a nationalization policy that adversely affects the private property of investors.
3. The Royal Government of Cambodia shall not fix the price of products or fees for services.
4. The Royal Government of Cambodia, in accordance with relevant laws and regulations, shall permit investors to purchase foreign currencies through the banking system and

to remit abroad those currencies as payments for imports, repayments on loans, payments of royalties and management fees, profit remittances and repatriation of capital.

#### 1.8.4 Conversion and transfer policies

There are no restrictions on the conversion of capital for investors, as noted above. The Foreign Exchange Law does allow the National Bank of Cambodia (the central bank) to implement exchange controls in the event of a crisis; the law does not define what would constitute a crisis. The U.S. Embassy is not aware of any cases in which investors have encountered obstacles in converting local to foreign currency or in sending capital out of the country. The US dollar is widely used and circulated in the economy. The 2006 exchange rate was stable, although slightly depreciated compared to 2005. The rate currently is \$1 = 4,100 riel. The government is committed to maintaining exchange rate stability.

#### 1.8.5 Expropriation and compensation

Article 44 of the Cambodian Constitution, which restricts land ownership to Cambodian nationals, also states that “the (state’s) right to confiscate properties from any person shall be exercised only in the public interest as provided for under the law and shall require fair and just compensation in advance.” Article 58 states that “the control and use of state properties shall be determined by law.” The Law on Investment provides that “the Royal Government of Cambodia shall not undertake a nationalization policy which adversely affects the private property of investors.”

#### 1.8.6 Dispute settlement

To handle specific disputes with regard to labor, the Ministry of Labor and Vocational Training, established a Labor Arbitration Council in May 2003. Basing its decision on the provisions of the Labor Law, the Council has 29 arbitrators. The Council is an independent body whose function is to resolve collective labor disputes that the Ministry is unable to solve by conciliation. The Council’s decisions are non-binding but it has been markedly successful and its decisions are widely respected. The Council has been able to significantly reduce the number of industrial actions in the garment sector. The Council plays a vital role in contributing to the development of healthy industrial relations in Cambodia. The Council’s success in the garment industry has prompted unions in other sectors, e.g., the hospitality and tourism sectors, to seek the Council’s arbitration and mediation services.

### 1.8.7 Right to private ownership and establishment

There are no limits on the rights of foreign and domestic entities to establish and own business enterprises or to compete with public enterprises. However, the Constitution provides that only Khmer citizens or legal entities have the right to own land. A legal entity is considered to be Cambodian when at least 51% of its shares are owned by Cambodian citizen(s) or by Cambodian legal entities. Investment incentives vary depending on the nature of the investment project. Under the 2001 Land Law, foreign investors may secure control over land through concession, a long-term lease (at least 15 years or more) or renewable short-term lease. If investors intend to take a long-term lease interest in land or ownership interest through a 51% Cambodian company, it is essential that caution be exercised to ensure that clear and unencumbered ownership of the land is verified. The Land Law establishes a comprehensive legal framework for long-term leasing. The leaseholder has a contractual interest in the land, which means the lease can be sold or transferred through succession and can be pledged as security in order to raise financing. It is also important to make sure that the land ownership is clearly and legally established before entering into any leasing agreement.

### 1.8.8 Protection of property rights

Cambodia has adopted legislation concerning the protection of property rights, including the Land Law and the Copyrights and Patent and Industrial Design Law. Cambodia is a member of the World Intellectual Property Organization (WIPO) and the Paris Convention for the Protection of Industrial Property.

Intellectual property rights (IPR): As a WTO member, Cambodia's IPR regime is in compliance with its WTO commitments; however, comprehensive enforcement remains problematic. The 1996 U.S.-Cambodia Trade Agreement contained a broad range of IPR protection, but given Cambodia's very limited experience with IPR, the WTO agreement granted phase-in periods for the Cambodian government to fully implement IPR protection.

Trademarks: The Cambodian National Assembly has approved the Law Concerning Marks, Trade Names and Acts of Unfair Competition, hereafter called the trademark law that complies with Cambodia's WTO obligations under the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). Signed in February 2002, the law outlines specific penalties for trademark violations, including jail sentences and fines for counterfeiting registered marks. It

also contains detailed procedures for registering trademarks, invalidation and removal, licensing of marks, and infringement and remedies. Before a trademark law was in force, owners of trademarks were unable to seek relief from infringement in court.

The relatively few complaints received were directed to the Ministry of Commerce, which has responsibility for registering trademarks but does not have clear legal authority to conduct enforcement activities. Nevertheless, the Ministry has taken effective action against trademark infringement in several cases since 1998.

#### 1.8.9 Investment incentives

Like other investment laws of developing countries, Cambodia Law on Investment of 1994 and its amendment of 2003 provides the following incentives to investment projects in Cambodia:

1. Tax on profit exemption of automatic 3 to 6 years. Tax exemption period is composed of a Trigger Period + 3 years + Priority Period. Priority Period will be determined according to the Financial Management Law and the maximum Trigger Period is to be first year of profit or three years after the qualified investment project earns its first revenue, whichever is soon. In other words, the tax exemption period is counted after the project gain revenue or the first year of making profit;

2. Exemption from import duties for construction material and production equipment. Duty exemption for production material, construction material, raw materials, intermediate goods, and production input accessories for Export Qualified Investment Project and Supporting Industry Qualified;

3. Exemption from export tax or duty;

4. Transfer of incentives by approved merger or acquisition;

5. Long term leases for foreign investor without time period restrictions. The Foreign investor can secure such leased land for mortgage or transfer rights and building on that land within contractual term;

6. Company owned by Cambodian more than 51% of the equity capital can hold the ownership of land for the purpose of carrying on promoted investment activities;

7. Permission to bring foreign persons who are management personnel and experts, technical personnel, skilled workers in case of no Cambodian are available, and spouse

and dependent of above persons into Cambodia pursuant to approval of the Council for Development of Cambodia and in compliance with the immigration and labor law.

#### 1.8.10 Investment guarantees

In addition to incentives, the law on investment provides a number of important guarantees for investors as follow:

1. Non-Discrimination of foreign investors
2. No nationalization adversely affecting the property of investors;
3. No price controls on products or services produced by licensed investors;
4. Remittance of foreign currencies abroad, for example payment for imports and repayment of principal and interest o international loans, payment of royalties and management fees, remittance of profits, repatriation o invested capital;
5. Protection of intellectual property rights.

Also, the government expressly prescribes certain sectors in which investment is strongly encouraged:

1. Pioneer and /or high-technology industries,
2. Job creation
3. Export-oriented industries,
4. Tourism industry,
5. Agro-industry and processing industry,
6. Infrastructure and energy,
7. Provincial and rural development,
8. Environmental protection, and
9. Investment in the Special Economic Zone (SEZ).

Due to being poor and least developing country, Cambodia has gained incentives and aid from develop countries. For example, Cambodia has received GSP from European Union, United States, Japan, Canada, Scandinavia and Australia. This attractive factor for foreign investors because exported products of Cambodia are exempted from customs.

#### 1.8.11 Labor

According to government statistics, the labor participation rate was 75 percent in 2005. The country has an economically active population (defined as being ten years of age and

older) of some 7.8 million people out of a population of 14.1 million. The labor force grows at a rate of 3.4 percent annually, with at least 250,000 people entering the work force every year. Of the labor force, approximately 73 percent are engaged in subsistence agriculture. About 330,000 people are employed in the garment sector while over 220,000 Cambodians work in the tourism sector. The economy is not able to generate enough jobs in the formal sector to handle the large number of entrants to the job market. This dilemma is likely to become more pronounced over the next decade. Cambodia suffers from a large demographic imbalance. According to the 200, Cambodia's Inter-censal Population Survey (CIPS) found those 20 years of age or younger account for 53 percent of the total population.

The statute also guarantees an eight-hour workday and 48-hour work week, provides for time-and-a-half overtime pay, with double overtime for night work or work on the employee's day off. The law gives the Ministry of Labor and Vocational Training (MOLVT) a legal mandate to set minimum wages after consultation with the tripartite Labor Advisory Committee. MOLVT set the minimum wage for the garment and footwear industries at \$45 per month in August 2000, and following negotiations in 2006, the existing minimum has been increased \$5 beginning in January 2007. There is no minimum wage for any other industry. Cambodia does not currently have legislation governing worker health and safety, but there are various detailed ministerial regulations regarding payments in the event of on-the-job accidents. In labor disputes in which workers complain of poor or unhealthy conditions, MOLVT and the Ministry of Commerce have ordered the employer to take corrective measures. Enforcement of many aspects of the labor code is poor, albeit improving, and the majority of labor disputes involve workers simply demanding conditions to which they are legally entitled. The U.S. Government, the ILO, and others are working closely with Cambodia to improve enforcement of the labor code, and workers' rights in general. The U.S.-Cambodia Bilateral Textile Agreement linked Cambodian compliance with internationally recognized core labor standards with the level of textile quota the U.S. granted to Cambodia. However, the quota regime ended at the end of the year 2004. Cambodia has seen reasonably low inflation and stable, if not spectacular, economic growth rates during the past few years, keeping inflation-driven wage increases in check.

## 1.9 Government policy for special economic zone

The Royal Government of Cambodia enact the Law on the Special Economic Zone in order to actively encourage, promote, induce and accelerate a sound and balanced industrial, economic and social development of the country. Under this draft law, the government will establish the special economic zones in suitable and strategic locations in the country for attracting foreign and domestic investments through the implementation of transparent, predictable and accountable regulatory frameworks. Therefore, the draft law will provides as follows:

1. Establishment of the legal framework and mechanisms for the planning and monitoring of the special economic zone;
2. Transformation of selected areas into highly developed industrial, commercial, servicing, tourism, agro-industrial, investment, and financial centers and/or export-oriented industrial centers;
3. Promotion of the capital and investment flow into special economic zone;
4. Facilitation of foreign exchange earnings by promoting exports;
5. Promotion of industrial, commercial, serving and financial cooperation between the Kingdom of Cambodia and industrialized countries;

### 1.9.1 Purported benefits of opening an SEZ in Cambodia

According to the Royal Government of Cambodia, the benefits of setting up an IZ are that it will:

1. Attract foreign direct investment (FDI) into Cambodia
2. Create jobs which will stimulate economic growth
3. Facilitate export development by creating infrastructure and utilities
4. Develop facilities for transport, communications, power, water, waste management, education, health care and shopping complexes that will be available to the surrounding area.
5. Act as a business incubator environment to exchange ideas and experiences
6. Help with poverty reduction.

The World Bank Poverty Reduction Strategy Paper (PRSP) for Cambodia affirms these points, and adds the unlikely advantage that the concentration of export-oriented

enterprises in SEZs would also “permit better control of environmental impacts of specific business activities.” There is no reason in either theory or past practice to believe that the will be the case, particularly as the draft law does not include any environmental controls.

However, support for the EPZ strategy is not universal, even amongst the organizations that are pushing it as a strategy for Cambodia. The 2003 International Development Association and IMF Joint Staff Assessment found that: “international experience with export processing zones (EPZs) is inconclusive with respect to their efficacy in stimulating growth, and especially poverty reduction.” The Assessment recommended further analysis before opening Cambodian EPZs. The World Bank PRSP also raises a number of concerns, in particular that: “EPZs risk the export of all the benefits along with the products, if they do not guarantee backward linkages and address the possible intensification of income inequalities between rural and urban areas, increased rural to urban migration, and the creation of urban and peri-urban slums.”

There is no evidence that the income inequality problem is being seriously addressed, and as noted above, the plans for socio-economic infrastructure in Koh Kong at least, will not be enough to meet the demands of rural-urban migration or to shield workers from substandard living conditions.

#### 1.9.2 Incentive in the SEZ for

##### Zone developer:

1. The tax exemption period on profit shall be provided for a maximum period of 9 years.
2. The import duty and other tax shall be exempted for imported facilities, construction equipment and materials to be used for the infrastructure and road construction.
3. The zone developer may request, under the form of temporary admission (TA), the import of means of transport and machineries used for the construction of the infrastructures in accordance with the laws and regulations in force.
4. The zone developer may obtain a land concession from the state for establishing the SEZ at the area close to the border or isolated region.

#### Zone investors

1. The same incentives on customs duty and tax as other QIP (Qualified Investment Project) shall be entitled.
2. The incentives on VAT with the rate of 0% shall be obtainable unless the output materials of production are exported to the domestic market.

#### Common

1. Zone developer, investors or foreign employees can transfer all the income from investment and salaries received in the zone.
2. Non-discriminatory treatment of foreigner, non-nationalization and no-fixing price.
3. The main rationale of establishing SEZs is to:
  4. Provide investors with adequate infrastructure and supportive facilities
  5. Effectively respond to the challenge of diversifying the Cambodian economy and to promote demand-driven development, such as export promotion
  6. Enhance competitiveness of garment industry and other labor intensive activities
  7. Promote agro-industry, food processing
  8. Promote assembling industry
  9. Promote electronic and electric appliances industries

### 1.10 Terminology

**Special economic zone:** A Special Economic Zone (SEZ) is defined as a deemed foreign territory within a country with special rules for facilitating FDI for export-oriented production, and for purposes of trade and customs duties. These Zones (SEZs) are geographical region that have economic laws different from a country's typical economic laws. Different economic institution and government departments have defined it in different ways.

**Zone performance:** General situation of the zone especially for zone export growth development.

## **CHAPTER 2**

### **LITERATURE REVIEW**

In the last decades, world economic integration, including trade liberation, financial internationalization and production integration, has made a great progress. An increasing number of countries become involved in the international division of labor. For many least developed countries (LDCs), this seems to be a possibility to develop and expand their national economy. The relocation of aging industries from developed countries (DCs) to LDCs is very often explained by theories like production life cycle and similar. The shift of labor-intensive industry (textiles, shoes etc.) at first and capital-intensive industry (steel, ships, petrochemicals, electronics) later to LDCs led to the theory of “New Spatial Division of Labor”. The enormous growth of the industrial sector in many LDCs is based on their attractiveness for foreign capital and their export oriented industrial policies focusing on the world market. But industrialization is much more than this view reflects. It is a comprehensive process of learning and adjusting to a given national business system. This, of course, is not possible without extensive changes in the political administrative system. Therefore, the national political features as well as the global conditions must be taken into consideration in order to explain the local processes of industrialization. The remodeling of internal social structures was and is an important precondition for successful industrialization in East and Southeast Asia as well as in other LDCs worldwide. But, still, industrialization in LDCs remains local, concentrating on a few regions only. This again results in a (strong) polarization of economic weak and strong regions in a country. They can be urban industrial poles and industrial districts as well as SEZs that are found in LDCs all over the world. SEZs have a long history and appear in various types. They are the results of free trade policy, export-oriented industrial policy and deregulation. The first EPZ were established in Ireland and Taiwan in 1960s as a result of the relocation of industrial production between DCs and from DCs into LDCs. Since then, SEZs can be found in many LDCs, especially

in those countries that have focused on exports. In general, SEZs can be defined as export enclaves, where a national (or local) government provides foreign industries an international accessibility (e.g. harbor, transportation, etc.), gives up “ostensible” repressive national regulations (e.g. ban of trade unions) and offers economic incentives (financial and tax). The main advantage for the enterprises in SEZs is the low wages for the unskilled labor force. However, unless a country succeeds in establishing some sort of higher, i.e. more qualified forms of industrial production; its economy is threatened by other low wage countries.

## **2.1 Theories of SEZ**

### **2.1.1 The economic perspectives**

Mauritius, a very small country that set up its first EPZ in 1971, has risen to “middle-income nation” status in the World Bank classification, Kinunda-Rutashobya (2003) and has become one of African leading exporters of merchandise, which replaced sugar as the country’s main export. Its export earnings grew at an average annual rate of 70 percent in the 1980s, and its SEZs are credited with reducing unemployment from 20 percent in 1971 to less than 2 percent in 1994 of the resulting in an enviable position where labor to service the zones now has to be imported; Romero (1998); Kinunda-Rutashobya (2003).

Given the potential benefits, it is not surprising that many developing countries have developed SEZ programs. Arguably, the most successful (and certainly most discussed) zone is the Chinese SEZ in Shenzhen. Since its inception in 1979, this zone area developed from a small town of 20,000 into a modern city of 3.5 million, with a GDP per capita of \$4,000, an annual GDP growth rate of 32 percent, and investors representing a “who’s who” of major multinational firms. As an illustration of its global importance, in 1998 Shenzhen accounted for 14 percent, 6 percent, and 8 percent of world output in, respectively, floppy disks, PC motherboards, and hard drives, Wei (2000).

Chen (1994) classifies these into six main categories: FDI attraction, employment generation, export promotion, technology transfer, domestic integration, and regional development. Perhaps more effectively, McIntyre, Narula, and Trevino (1996) distinguished

between two major groups: direct and quantifiable benefits, such as FDI, employment, exports, and foreign exchange earnings, that can have an immediate impact on the host nation's economy, and longer term externalities that benefit the host nation through spillover effects and linkages with the domestic economy, which are harder to quantify but perhaps even more important.

Export Processing Zone is an industrial area that constitutes an enclave with regard to customs' tariffs and the commercial code in force in the host country. Traditionally therefore the concept of EPZs evolved to compensate for anti-export-bias created by the import substitution industrial (ISI) policy regime. An ISI strategy creates an incentive structure, which tends to be biased against the export sector. The overvalued exchange rate couple with high tariffs and quantitative restrictions (QRs) makes production for import substitution significantly profitable relative to production for exports. Attempts to promote export industry within an import substituting regime therefore requires countervailing fiscal measures such as duty drawbacks, cash compensation or import replenishment licenses to offset the effects of these disincentives. The policy of EPZs evolved out of this concern of providing special incentive package to offset the anti-export bias and promote exports. In the neo classical theory therefore EPZs considered as the second best policy choice consisting of compensating for one distortion (import duties) by introducing another ( a subsidy). This would however mean that the relative attractiveness of the system declines under free trading regime, Madani (1999). On the contrary, the recent experience shows that the adoption of export-led growth strategies by developing countries has led to a considerable increase in the number EPZs across the world. The traditional or the orthodox perspective of EPZs thus fails to explain the recent proliferation of EPZs in developing countries as discussed by World Bank (1992) and UNIDO (1995).

A number of researchers suggest that many of the issues raised are misstated or exaggerated or that they reflect early problematic experiences that are eventually addressed once a country gains experience with the zone concept. For example, Summerfield (1995) argues that using the shadow price of labor to assess SEZs ignores the broader benefits from employing women in zones (e.g., higher status in society and within the household).

The economics literature clearly supports a positive relationship between exports and economic growth and shows that developing countries with an export-led strategy grow faster than those that still focus on the earlier paradigm of import substitution, UNCTAD (1983);

Johansson and Nilsson (1997). The four original “Asian Tigers” (South Korea, Hong Kong, Taiwan, and Singapore) were the first adopters of strong free zone programs and are commonly cited as prime examples of successful EPZ-led, export-focused policies. But has the SEZ concept succeeded overall as an instrument for development? At first glance, the literature offers a somewhat mixed verdict.

By focusing on manufacturing, SEZs also help to shift the composition of exports toward higher value-added products and away from the traditional emphasis of developing countries on commodities, which are prone to elastic demand and price instability, Madani (1997). More broadly, SEZs may help to close “idea gaps”, Johansson and Nilsson (1997) by exposing domestic manufacturers to the modern business practices of zone based foreign investors. Lastly, SEZs can serve as testing grounds for reorienting a nation’s policies toward economic liberalization, Grubel (1983).

Thus although some researchers have tended to emphasize one SEZ characteristic over others, e.g., Romero(1998), calls them “investment promotion strategies”; the consensus among the concept’s supporters is that, as an instrument for development, EPZs can offer multiple potential benefits.

Madani (1997) compared in- and off-zone wages in five Latin American countries and found that those in EPZs were actually somewhat higher than the national rates in three cases, somewhat lower in one, and noticeably lower only in one (Panama). Lastly, concerning employment in the abovementioned case of Namibia’s SEZs, the ILO (2004) reports the current number of jobs as 29,000, or 16 percent higher than the initial target of 25,000 that was noted as badly missed by Jauch (2002) using 1999 as the reference year.

Furthermore, Kusago and Tzannatos (1998) have shown that the proportions of managerial and clerical staff within Malaysia’s SEZs in fact rival the national average (respectively 5 percent and 8 percent within zones, versus 4 percent and 7 percent in domestic manufacturing).

These two major areas of concern, coupled with confused or poorly thought out policies by host nations, which lead to poor zone management and discourage foreign firms, are commonly used to explain the failure or difficulties of various SEZ programs. Examples that are

commonly cited include the early experience of Africa, Romero (1998) as well as Russia, Manzhhev (1993), North Korea, Noland and Flake (1997), and India Kundra and Sharan (2000).

Notwithstanding their benefits, SEZs have not been without their critics, and several researchers have noted a number of potential limitations and problems. Of these, two stand out most prominently. The first concerns labor issues, including but not limited to inadequate wages, job benefits, health and safety standards, job security, and training, the latter also suggesting limited opportunities for zone workers to migrate from unskilled to supervisory jobs, Rondinelli (1987; Romero (1998). For example, analyses by ILO/UNCTC (1988) and others have concluded that the societal impact of SEZs may be negative because of the “shadow price of labor,” or the differential opportunity cost from bringing unskilled young females into the workforce for the first time, versus offering the jobs to skilled but currently unemployed men who could technically command higher wages. This is claimed to result in below-market wage rates within zones, as young females compose the bulk of SEZ labor, ILO (2004). Ironically, the latter risk may result in large part from the success of SEZ programs, which often bring about higher wages and force “foot-loose” manufacturers in sectors such as textiles or electronics to relocate in search of cost differentials, Shapiro (1981), Papadopoulos (1987).

EPZs make up for infrastructural deficiencies and procedural complexities that characterize developing countries and offer a more conducive investment climate. Trade related infrastructure and institutional framework are generally deficient in these countries. Besides, too many windows in the administrative set up, bureaucratic hassles and barriers raised by monetary, trade, fiscal, taxation, tariff and labor policies further increase production and transaction costs of exports. Since country-wide development of infrastructure is expensive and implementation of structural reform require time due to socio-economic and political realities, export processing zones (EPZs) are considered an strategic tool for promotion of exports in these countries. According to this modern view, the EPZ offers quality infrastructure and hassle free business environment permitting an economy to promote and diversify exports and develop a competitive industrial base Mondal (2001).

As well, Jauch (2002) posits that the incentives offered to zone tenants in southern African countries essentially constitute a “race to the bottom” and “greatly limit the net benefits of the new investment to the national economy,” Resulting in lower labor standards, restricted union

rights, and significantly less employment than promised by the country's government when promoting the relevant legislation. The author cites Namibia as a case in point, where only 400 jobs were created against a forecast of 25,000 as of 1999, after three years of operation of the country's zones. The second major area of concern focuses on negative and/or fewer-than-expected externalities. These include adverse impacts on the host society (e.g., human rights violations in the work environment, corruption among government zone managers, and implicit support for the informal economy in poorly run zone programs), as well as low levels of technology transfer, labor migration to city-based zones that burdens already weak urban infrastructures, and overdependence on zone investors who may move to other countries when labor costs rise, Rondinelli (1987), ILO/UNCTC (1988), Romero (1998) and Jauch (2002).

Baissac (2003) states that the growth of EPZs in export oriented regimes may be explained within the realm of new growth theory, neo institutionalism and the developmental state theory evolved in the 1980s. These theories reaffirm that economic, social and political institution has a key role to play in the development process. In contrast with advanced economies, developing countries face a chronic lack of capable institutional actors. Economic development can only result from state-led policies designed to address the numerous production failures and bottlenecks that characterize the economies of underdeveloped countries. EPZ is one such state led policy. EPZ are benefited, apart from general fiscal and non fiscal concessions to firm, from the following:

1. Location-specific advantage
2. Modern and efficient infrastructure
3. Better governance due to single window facilities to ensure corruption and red tape free business environment.

On the positive side, SEZs have been hailed as precursors and drivers of development where successful programs have been implemented. The objectives and results of SEZ programs of course vary by country, but most researchers in this group agree on the likely main payoffs from a successful program and focus on such direct benefits as FDI attraction and increased national exports (e.g., Romero (1998); Wei (2000); Kinunda-Rutashobya (2003)).

### 2.1.2 SEZs as Determinants of FDI flow

Woodward and Rolfe (1993) examine the determinants of location of export-oriented affiliates of U.S. multinationals in the Caribbean region. Using a Conditional Logit model and data from more than 20 countries, they test 12 different variables and find eight of them to be significantly correlated to their measure of export-oriented activity (i.e., the number of U.S. affiliates in each Caribbean nation). Among the variables with a positive correlation are per capita GNP, the length of income tax holidays, the existence of SEZs, and exchange rate devaluation. Negatively correlated are wage rates, profit repatriation restrictions, the inflation rate, and transportation costs. Interestingly, the probability of location is most sensitive to changes in the wage rate. Location is also highly sensitive to per capita GNP. The sensitivity of location with respect to the existence of SEZs, although significant, is relatively small. In a similar study, Kumar (1994) examines the effect of nine variables on the propensity of U.S. multinationals to establish offshore manufacturing operations. Using data for 40 countries and ordinary least-squares techniques, he confirms some of Woodward and Rolfe's results. For example, he finds the wage rate to be negatively related and the existence of SEZs to be positively related to the propensity of U.S. multinationals to set up offshore manufacturing operations. Furthermore, he finds that the share of manufactured exports in total host country exports has an important and positive effect on the location of these operations. Fiscal incentives given to affiliates of U.S. multinationals do not appear to be a significant determinant of location. Finally, Choi (1995) investigates the effect of nine variables in the location of export-oriented FDI by U.S. multinationals in the textile industry. Using data for 47 countries, he confirms that the existence of SEZs helped in attracting U.S. FDI, but found that the wage rate was not a significant factor. He also finds that exchange rate depreciation is positively and significantly related with export-oriented activity and that political stability ratings and the inflation rate have no apparent effect. His results, however, have to be interpreted with caution since most of his regressions include a dependent variable normalized by the host country's population, a procedure for which he offers no theoretical justification. In sum, the wage rate, the existence of SEZs, and some measure of economic development of the host nation (e.g., per capita GNP or the share of manufactured exports) all seem to be significant determinants for the location of export-oriented FDI.

## **2.2 Importance of Manhattan SEZ in the content of GMS economies**

### **2.2.1 Impacts of GMS economic cooperation on Cambodia**

A collaboration of the GMS is an important element in the process of regional integration. The integration process itself will be significant for the well being of the people in the region as this would provide in the future a viable foundation for a long term economic growth and sustainable development. The synergy of GMS and ASEAN economic integration, that Cambodia is a part of, certainly offers a huge potential for growth and profit for the poor country like Cambodia. Moreover, this kind of cooperation also provides the countries in the region with the opportunities to develop the region into a center of shared development. More specifically, the GMS, through an endless efforts by all whose concern is to have an integrated and prosperous and stable Southeast Asia, could be turned into an economic area with the potential to be one of the world's fastest and attractive economic and investment areas. The strong spirit of cooperation between GMS countries will serve as a kind of insurance that will keep the development and governance in Cambodia on track.

By better link in transportation, especially air, land and water transportations within the GMS framework, Cambodia expects that there will be improvement in many fields including trade, transportation, and tourism. With a good potential in tourist and economic attraction, Cambodia can gain more benefit from the framework by attracting tourists and investors, which already visit other GMS countries. The Mekong region will be a big target in tourist, industrial market for Cambodia as Thailand and Viet Nam are big immediate neighbors, and Yunnan province is the gateway for visitors from China.

As Cambodia has just emerged from civil war and destruction, there are plenty of rooms for business opportunities which attract Foreign Direct Investment from all part of the world, especially from the region such as China, Thailand and Vietnam. With the GMS cooperation, there are many opportunities for private sector to participate in investing in many sectors, which are already defined in the programs, especially in infrastructure, energy, telecommunication, trade, transportation, logistics, tourist related services and industry. As evidence, China has become the biggest investor in Cambodia for the past 7 years.

Economic integration has played an important role to the success of Cambodian economic development, which has been remarkably achieved through a stable growth of an average about 7 percent per year for the past 10 years. For last year, the growth surprisingly reached its record of 13.1 percent. (The Cambodia Daily, May 12, 2006). Regional frameworks also enhance the collective bargaining strength and power of individual countries, when they face external interlocutors, especially developed countries. Besides having an economy of scale, regional entities could, if effective, act as a buffer against the turmoil of financial or trade markets, and thus help member countries weather the economic and financial storms together. This is another reason why regional frameworks, such as the GMS are an advantage, especially for the smaller member-nations like Cambodia.

#### 2.2.2 Promote regional production linkage

In order to maximize benefit from economic integration, GMS countries should reduce their competition amongst one another vis-à-vis FDI attraction and market access for local products because this will only cause a zero-sum game. Group cooperation should be focused to promote investment and trade at the sub regional level. Each GMS country should cooperate to set the position of their respective countries by considering an appropriate position and specialization for the competitive advantage of each country. After that, a harmonic framework should be designed for trade and investment in subregional levels so that every country can gain advantages instead of excessively compete with each other. All of the GMS countries should indicate their conditions for investment by selecting the kinds of investment that suit for their conditions and facilitate transfers technology. The information sharing on foreign investment promotion should work to increase the production network between countries. For example, helping and supporting each other to move the production base of labor-intensive industries and resource-base industries from Thailand to the border or to neighboring countries in order to hire workers, whose wages are low and where such countries are abundant in natural resources. These methods will help expand intra-regional trade and in so doing, the benefits from economic development will be distributed to the whole region.

#### 2.2.3 Improving trade and investment climate

Stronger GMS economic cooperation must be conducted in a policy and institutional environment that is fair, open and transparent and under proactive government guidance. In order

to attract investment, the Mekong region should coordinate to develop government services and administrative systems in order to deliver good governance and the best government performance as much as possible to serve investors. Support is needed for the transparent performance of a government's information system. Improving government service systems and training government officers to have integrity and be corruption free should also be promoted. Investment promotion should be made with clear and long term strategic planning.

The governments of Mekong region should also try to harmonize their trade and investment regulations, and base their business practices on a common standard. This will help reduce the transaction costs of foreign traders and investors doing businesses in the region. Potential investors will also be attracted by collective effort to expand markets in the regional markets, thus, allowing them to reach economies of scales.

#### 2.2.4 Infrastructure and transportation link

The Mekong's regional economies are integrated not only by removing barriers to trade and investment, but also being bound together by infrastructure linkages. Because they are not separated by the ocean, the GMS members are in a stronger position to set up, expand and strengthen these linkages. It is to be noted that ASEAN's land transport program has a specific relevance for GMS, because priority road projects of GMS have become integral parts of the ASEAN Highway Network. GMS as a sub regional arrangement can help to advance regional endeavors more rapidly by building strong infrastructure linkages, for example through the signing of agreement on inter-state transport, river transport and transit.

These interconnection projects on infrastructure and transportation link will have a clear and positive implication for the development of the region in a sense that the more developed its infrastructure, the more reliable the region is for investment site. Improved infrastructure provides an important basis for GMS economic and social development. The region needs to continue to implement cooperation projects on transport, energy, telecommunications and other sectors, expedite the construction of transport links along the North-South, East-West and Southern corridors, further develop shipping infrastructure and the information super-highway, and facilitate GMS power grids integration and power trade, thus laying the groundwork for regional economic and trade cooperation. Though the projects of infrastructure and transportation links are already identified through many feasibility studies, some countries with

lack of funding are slow to implement the construction of infrastructure and road link. Road, railways and waterways should be speeded up in order to connect Yunnan and other member countries. These projects will enhance economic development of riparian countries.

#### 2.2.5 Private sector participation

We must recognize that the private sector will have a crucial role to play in implementing these development projects. The private sector should be considered as an engine for regional development. The private sector's financial resources, expertise, management skill and modern technology constitute necessary ingredients to create and accelerate the dynamism for growth and development in the region and in each country. Therefore, the top priority for all governments in the region is to engage the participation of the private sector into this important endeavor. Efforts to induce the private sector into the GMS, with the help of local, regional and international financial institutions, should be coordinated to maximize the benefits to each and every nation within the "common" system. Fiscal advantages, legal and social frameworks and labor standards and regulations should also be harmonized to ensure maximum benefits to all, and tourism and air transport promotion across the GMS could be enhanced.

GMS is very different from ASEAN or other regional agreement, for it is informal and guided only by a general set of principles and institutional arrangements. Unlike ASEAN, the Program is not intended as a precursor to a trade bloc. Rather, it is a pragmatic, results oriented program whereby the six countries, or subsets of the countries, agree to plan and implement projects to their mutual benefit. Priority projects and initiatives are endorsed and donor assistance mobilized. In these ways, sub regional projects lead to improved employment opportunities and living standards, and poverty reduction. Sub regional economic cooperation also has a peace dividend, for it contributes to stability and better relationships.

These are important factors in creating a positive climate for investment and business enterprise, and thereby for promoting faster growth. The road of economic integration in the Mekong sub region will be a long full of obstacles and challenges. But with the strong commitment from all parties involved, especially the political leaders, the great success will happen. The Mekong regional economic integration will propel the socio-economic development of member countries.

Though there are constraints in the process of GMS cooperation, the GMS scheme not only provides huge opportunity for the future economic development in the region but it also reduces political and security tensions that plagued peninsular South-East Asia throughout the 1970s and 1980s. To overcome the challenge and to maximize the benefit from economic integration, the GMS members should sharpen common vision and redouble efforts for the future cooperation. The countries shall also consolidate the fundamental principles underpinning success and reaffirm commitment to partnership.

With the good location in the National Road Number 1 also mentioned as Road No. 1 of the GMS framework road link to Viet Nam (Journal of Asian Economics 15 (2004) 977–998). Cambodia has strong economic relationship with GMS countries, and has a good potential in economic attraction, Cambodia can gain more benefit from the framework by attracting investors, which already invest other GMS countries. The Mekong region will be a big target in tourist, industrial market for Cambodia as Thailand and Vietnam are big immediate neighbors, and Yunnan province is the gateway for invest from China. So Manhattan SEZ have the opportunity for enlarge the number of firms and attract more foreign investors to open business in the zone in present and future in term of transportation to Ho Chi Minh Port.

As a GMS country, Cambodia has a good potential in attracting foreign investors and tourists after the GMS high way and railway already complete their project. Infrastructures and transportations link is available for all GMS countries it lead to reduce the transportation and cost of products for export from special economic zone and all products from Cambodia to abroad.

### **2.3 Empirical studies on EPZs and SEZs**

Aradhna (2005) studies the performance of export processing zone on comparative analyses of India, Sri Lanka and Bangladesh of and finds that the zone performance and factors can be ensured a good investment climate from better location, modern and efficient infrastructure, general fiscal and non fiscal concession to firm and single window facilitate to ensure corruption and red tape free business environment. This in turn helps in reducing the costs of exporting and, hence enhances competitive advantages of firms in the zone. Good investment

climate may also be crucial for attracting FDI in the zones. The standard literature holds that market related factors are more important for domestic market seeking investment while cost related factors. This is particularly true for low cost developing countries. In practice, export oriented FDI in developing countries is cost efficiency seeking and remains essentially labor/resource intensive. Export oriented FDI in these countries may also take the form of relocation of some of the production facilities. Location of investment then becomes more responsive to the factors that ensure lower costs of production and availability of complimentary factors of production. He uses the following model to examine the factor that might have had a significant effect on the performance of the zones in south Asia:

PERFORM zone=f (RPCY, INDUSCUL, LOCINDEX, CPCY, WAGES, RAW, POLREG, Z-INFRAST, D-INFRAST, SOCINFRAST, Z-GOVERN, D-GOVERN, CONCESSION, SIZE, CONCERN, CAPINT).....

Where

PERFORM zone= Export performance and FDI inflows

RPCY : Development of the region

INDUSCUL : Industrial culture in the region

LOCINDEX : Strategic location factors

CPCY : Development of the country

WAGES : Labor cost

RAW : Raw material

POLREG : Policy regime

Z-INFRAST : Economic infrastructure

D-INFRAST : Infrastructure external to the zone in the rest of economy

SOCINFRAST : Social infrastructure

Z-GOVERN : Zone governance

D-GOVERN : Governance in the rest of economy

CONCESSION : Incentive package

SIZE : Size

CONCERN : Concentration of economic activities

CAPINT : Capital intensity of the zone

He states that given the limited technological and marketing capabilities of developing countries, the zones may not affect exports substantially unless they attract FDI also due to easy access to proprietary technology of their parents and international marketing network. According to an estimate, UNCTAD (1999) two-third of total world trade was accounted for by Multinational Enterprises (MNEs) in 1996; over a third was intra-MNE. Furthermore, in this era of globalization, they are restructuring their operations to avail economies of scale and scope by internalizing the economies of specialization through the integration of assets, production and marketing activities across countries to advance the core competencies in the global markets. They are locating different stages of production in different countries according to factor costs and capabilities and/or distributing similar production activities across affiliates in countries with similar capabilities to reap scale economies. The vision of EPZs in an export oriented regime is to establish a viable internationally competitive platform that is capable of attracting export oriented FDI to promote exports. Competitive advantage of EPZs may also be explained within the framework of the cluster approach, Porter (1990). EPZs are industrial clusters of companies that are concentrated in a geographic region. These companies share economic infrastructure, a pool of skilled human capital, and government and other institutions that provide education, specialized training, information and technical support. Also, these companies may co-operate to create joint companies, distribution agreement, technology transfer agreements and common manufacturing agreements. External economies of scale and other advantages of the cluster help the operating firm in reducing costs, acquiring competitive advantages and attracting foreign direct investment, Dunning (1998).

Special fiscal and administrative arrangements designed to promote multinational companies are popularly practiced measure for a number of nations in the world. The early trials of such special arrangement began in 1950's, and became popular in 1990's worldwide, particularly in the form of export processing zone (EPZ). In recent years, the special economic zone (SEZ) that encompasses a wide extent of measures to facilitate economic activities is implemented successfully in particular in developing countries, including those in southern part of China. These SEZ focuses not only on export processing but other essential services and business development, JICA: SSF, JR, 03-090 (2003).

Special Economic Zones of Cambodia are originally meant any specific and clearly delineated area. They are designated by the authority from time to time, where different economic principles, taxation systems, FDI treatment and/or institutional procedures are applied for the promotion of investment including FDI, foreign trade, especially exports, and inflow of up-to-date technologies, and consequently aim to increase employment and develop the regional and national economies. The EPZ generally follows the concept of a widely practiced “border based zone” zone, which utilizes labor forces of the host nation in conjunction with the industrial activities already in operation in the neighboring nation in an attempt to outsource part of the labor intensive elements. EPZ tends to be a single purpose border-type zone, and little backward linkage is said to be difficult to come about, JICA: SSF, JR, 03-090 (2003).

SEZ is a broader concept than EPZ including a promotional area for related enterprises to interact with FDI firms, chiefly in FZ. These enterprises will be essential in creating and enhancing the backward linkage from the FDI. The interactions could be provision of contract processing and/or services, as well as logistics. The principle advantage would be that, when it seems to be too difficult or risky to implement such different principles, systems or procedures were confirmed, they would be extended nationwide. In this way, the SEZ would contribute to the country where the government aims to actively encourage, promote, induce and accelerate sound and balanced industrial, economic and social development as a whole, JICA: SSF, JR, 03-090 (2003).

## **2.4 Summary**

The previous studies above are show that the benefits of SEZ establishment are FDI attraction, employment generation, export promotion, technology transfer, domestic integration, and regional development. Location is highly sensitive to per capita GNP. The sensitivity of location with respect to the existence of SEZs, although significant, is relatively small. Government policy is also very important factor for attracting FDI which lead to poor zone management and discourage foreign firms, are commonly used to explain the failure or difficulties of various SEZ programs.

Therefore, according to the above mentioned studies, most of the factor and problem which have been faced for the zone development are location, policy of the government, infrastructure and labor performance. So the finding of Aradhna Aggarwal (2005) which studied the performance of export processing zone on comparative analyses of India, Sri Lanka and Bangladesh of and finds that the zone performance and factors can be used with the case of Manhattan special economic zone in Cambodian



## CHAPTER 3

### COMPARATIVE STUDY OF SEZ DEVELOPMENT

#### 3.1 Experiences of other countries

##### 3.1.1 Asia

###### 1. Indonesia- Malaysia-Singapore grow zone

The Indonesia-Malaysia-Singapore growth triangle, like the ASEAN Free Trade area and the ASEAN Investment Area, is now part of part of ASEAN's strategy to expand both economic cooperation and integration. The concept of growth triangles emerged in Asia in the late 1980s. "Essentially, the concept is a simple one to link three areas with different factor endowments and different comparative advantages to form a larger region with greater potential for economic growth", Lee (1991). The growth triangle is "a sub regional economic zone encompassing geographically contiguous areas of two or more countries in an economic integration process which involves the flow of goods, services, investments and people. These integration processes cut across political boundaries and political and economic systems, and can occur with or without government initiative and support, and with or without formal institutions and structures. The rationale is to exploit the economic complementarity of geographically contiguous areas to achieve accelerated economic development through the inflow of foreign investment, development of infrastructure, joint development of common natural resources, and/or the promotion of industries for the export market" Chia (1996). In the other words, it is a means of enhancing the competitiveness of the participating growth areas and of promoting their exports in the global market place.

The Indonesia-Malaysia-Singapore grow triangle, which initially encompassed Singapore, Johor in southern Malaysia, and Batam in the western Indonesian province of Riau, was launched in the late 1980s. It was first called the Singapore-Johor-Riau growth triangle

(SIJORI) or Johor-Singapore-Riau (JSR) growth triangle due to the economic collaboration among the three participating areas. The growth triangle in essence is a “metropolitan spillover into the hinterland” type Chia (1996).

The development of the Indonesia-Malaysia-Singapore growth triangle occurred over two phases (1989-1992) started with a meeting between the Prime Minister of Singapore and the President of Indonesia. That meeting was instrumental in the crucial relaxation of Indonesian regulation on foreign investment and the strong Singaporean enterprises and foreign multinational corporations relocating out of Singapore. During that period, a memorandum and a joint venture agreement between Singapore and Indonesia were signed for the provision of a framework for the joint development of Riau Province. Two bilateral agreements on economic cooperation in Riau Province and a water contract were also signed in 1990. In 1992 the Batamindo Industrial Park was officially opened. Although the Johor state government was enthusiastic in promoting bilateral links, Malaysia’s federal government adopted a more cautious attitude, Chia (1996). In the first phase, the link between Johor and Riau was missing.

The second phase started with full support given to Johor by the Government of Malaysia to proceed with the growth triangle arrangement. The growth triangle was officially called the Indonesia-Malaysia-Singapore Growth Triangle in 1994 at a ministerial meeting at which these three countries signed a memorandum of understanding. West Sumatra province, Malacca, Negri Sembilan and Southern Pahang were added to the Indonesia-Malaysia-Singapore growth triangle in 1996. The Government of Indonesia agreed a year later to include the provinces of Jambi, Bengkulu, Southern Sumatra, Lampung and West Kalimantan in that growth triangle. Four states of Malaysia and seven provinces of Indonesia, along with Singapore, are currently participating in the growth triangle arrangement.

One significant development in the arrangement was the establishment of Padang Industrial Park in West Sumatra by Johor Corporation and the of West Sumatra government in 1997. The total development costs of the 616-hectar are estimated at 225 million ringgit. The success of this park encouraged Johor Corporation to commit itself to a second joint venture to establish another industrial park in Dumai, Sumatra (New Straits Time, 26 June, 1997). This development suggests that there is no longer a missing third link in the Indonesia-Malaysia-Singapore growth triangle.

The Indonesia-Malaysia-Singapore growth triangle currently covers a total area of 565,000 square kilometers, with a total population of 34 million.

There are five factors for this sub regional economic cooperation arrangement:

1) Geographical proximity to Singapore. This is a critical factor because it keeps down transaction costs and facilitates the flow of resources, workers, and products. Batam Island is only 20 km away from Singapore and 45 minutes by boat. It used to be a sparsely populated island with a population of only a few thousand, located on the northern periphery of Indonesia. A causeway physically links Johor to Singapore.

2) Infrastructure development in Singapore is a motivation factor for the growth triangle. It has a world-class airport and seaport for the shipment of goods, a modern telecommunications network and modern financial and commercial infrastructure to support business operation in both locations. Businessmen can therefore live in Singapore and commute daily to Johor or Batam/Bintam.

3) Historical and culture links play an important role. These three areas used to be under a single administration, that the Johor-Riau Empire, Lee (1991). Naturally, being part of the empire, there was free movement of goods and services among these three areas under different national administrations. Due to geographical proximity and historical links, there exist strong ethnic, language, cultural and kinship ties among the participating areas and “these reduce information costs and cultural misunderstandings, and create interpersonal bonding and business trust” Chia (1996).

4) The resources of the participating countries complement each other. Each of the three participating areas has its own comparative advantages. Singapore’s advantage lies in its managerial and professional expertise and its developed transport and telecommunications networks. However, it has lost its comparative advantage in labor-intensive and land-intensive economic activities, Naidu (1994)). Singapore’s real unit labor costs, as well as property prices, are very high compared with those of Johor and Batam. Labor costs in Johor are between one half to two thirds those of Singapore, while in Batam they are only about one half to two thirds those of Johor, Chia and Lee (1993). This complementarity of the three areas has made the Indonesia-Malaysia-Singapore growth triangle as a whole more attractive to investors than its separate parts Chia (1996).

5) Political and policy support by the leadership of the three countries and the easing of political tensions in the region are of particular importance to the formation of the Indonesia-Malaysia-Singapore growth triangle.

Without these motivating factors, the establishment of the Indonesia-Malaysia-Singapore growth triangle would have been impossible.

## 2. Bangladesh

Gauthier (2004) has studied about zone development and found a major reason behind the poor performance of some zones has been uncompetitive and restrictive policy frameworks. While investment incentives provided are generous, restrictive provisions and bureaucratic procedures erode their effectiveness. There are several main policy issues such as:

1) Uncompetitive Fiscal Incentives: The fact that virtually the same package of incentives is offered by successful zones and failed zones suggests that they are not a key success factor.

2) Weak Administrative Bodies: The weak performance of some programs can also be traced to weak government bodies established to develop and operate zones, and regulate free zone activity.

Other issues relate to the physical design, the development and the management practices of the Free Zone such as:

1) Poor site locations, entailing heavy capital expenditures. The economic failure of zones such as the Bataan EPZ in the Philippines is linked to poor site location, design and development practices

2) Poor zone development practices poorly designed or over-designed facilities, poor maintenance and promotion

3) Subsidized land and building lease rates rent. This is exacerbated if water, power and other utility services are also subsidized

4) Cumbersome procedures and controls

5) Inadequate administrative coordination between private developers and governments in infrastructure provision structures or too many bodies involved in zone administration. Most private EPZs and industrial zones in Viet Nam, for example, sat empty

because local and national authorities could not provide road and other infrastructure connections to the site.

All the above problems can be resolved by the following key guidelines:

1) Permit industrial estates to host EPZ enterprises as well as those licensed under other regimes.

2) Ensure that the EPZ regime is flexible, allowing a range of commercial as well as manufacturing activities.

3) Promote private rather than public development of zones. International experience suggests that private rather than public development of zones increases the chances of success.

4) Concept of extra-territoriality as defined in the Revised Kyoto Convention, free zones should be treated as outside the domestic customs territory, but should be eligible for national certificates of origin and participate in trade and market access agreements.

5) Private zone development is clear definition of private zones, benefits, obligations, rights and public-private partnerships for zone development.

6) Zone designation criteria physical development standards and clear criteria for the designation of new zones. The main issue is to guide but preserve the flexibility of individual zone development proposals, while optimizing the impact on government funding for off-site infrastructure connections.

7) Eligibility criteria the openness of an EPZ regime is defined in terms of minimum export requirements and the types of activities and ownership forms permitted.

8) Labor regime international experience strongly suggests that the long-term competitiveness of a free zone depends on the quality and productivity of its workers. To achieve this, it is important that labor regimes are fully consistent with ILO standards and obligations but they should be defined within a flexible and liberal labor market regulatory framework.

9) Introduction or reform of free zones regimes should be leveraged as an opportunity to rationalize corporate income tax incentives. Best practice approach for income tax incentives is to have performance-based incentives in a country's tax code rather than through special legislation such as EPZ regimes.

10) Zone regimes should be used to advance demonopolization and deregulation of telecommunications and other utilities where applicable. Jamaica and other countries have used their free zone regime to accomplish this.

11) Incentive framework should be WTO compliant.

This is best done by removing any export obligation and allowing zone enterprises full access to the domestic market on

1) Install streamlined procedures for business registration embodying a simple declarative investment registration system, rather than any sort of investment approval regime. Key elements would include application to a single government office to provide the license; promulgation of a negative list of ineligible activities and other explicit criteria for approval or denial; default clause authorizing automatic approval of the application if no ruling has been issued within the review period.

2) Facilitate provision of secondary permits and authorizations. Additional permits land, buildings, labor, health and safety, etc., can be facilitated by vesting all such authorizations within the zone authority rather than other ministries and agencies. The zone authority should have offices within each zone to perform these services.

3) Develop a special customs rules and regulations drawing upon WCO and WTO provisions, and fast-track implementation of automated customs systems, with proper inventory controls and audit systems, within the free zones.

4) Ensure adequate autonomy of the zone authority particularly over staffing, budgets, spending and policymaking.

5) Ensure adequate authority by constituting an independent Board comprised of key government ministers and private sector representatives reporting to the highest level of government. Ideally, allow private sector representatives to constitute the majority of Board membership to ensure flexibility, results-orientation and customer-focus.

6) Ensure that the zone authority serves as a one-stop shop by promulgating legislation that provides the body with single-point authority over other government bodies in core areas.

7) Ensure that the body delegates, outsources and privatizes as many non-core functions and services as possible to focus on core activities.

8) Implement land use planning and zoning efforts in core areas to zone areas for industrial and commercial development to guide the actions of private developers.

9) Develop zone designation criteria in the free zone law and implementing regulations to ensure that private free zones are have the best topography, are well located (near population centers and transportation hubs), and minimize offsite infrastructure development expenditures of government.

10) Establish a land use planning and infrastructure development unit in zone regulatory authorities to ensure adequate planning and support of offsite infrastructure provision.

### 3 Shenzhen SEZ, China

Wanda Guo and Yueqiu Feng (2007) found many factors have contributed to the success and competitiveness of Shenzhen, some of which discussed below.

First, and most importantly, the Central Government has provided a special policy framework for the Shenzhen SEZ that has helped to create a “soft enabling environment” to enhance the city's industrial competitiveness. As a SEZ, Shenzhen has enjoyed by far the most liberal economic policies in the PRC, both in terms of attracting FDI and engaging in international trade.

Shenzhen has been a testing ground for comprehensive reforms. For example, it was one of the first cities to apply differential corporate tax rates for foreign and domestic firms. While foreign investors paid a nominal tax burden of 15% and an actual tax burden of 11%, the corresponding figures for 2 domestic investors were 33% and 23%, respectively. In other words, the tax burden of domestic enterprises was twice that of foreign investors' enterprises. In 2007, the PRC carried out reforms to unify the two tax rates, which eliminated the preferential tax rate of 15% for most enterprises. However, this tax rate still applies to the hi-tech sector and small enterprises in the city. An open and liberal policy environment is the most important reason behind Shenzhen's success.

Second, Shenzhen has been home to migrants from across the country and, more recently, from overseas. The innovative spirit of the city stems in part from its vibrant and strongly motivated migrant community. Migrants account for 83% of the total population. Shenzhen's demographic profile favors economic development, given that permanent citizens

under the age of 16 make up 21% of the population, 17- to 24 year olds comprise 13% of the population, 25- to 44 years-old make up 49%, while people aged 60 and above account for less than 6% of the population, compared with the national average of 11%.

Third, Shenzhen's enabling financial environment ensures that finance is available even for relatively risky ventures. This has been important for the city's industrial transformation, increasing its competitiveness. Indeed, Shenzhen is the PRC's most active city as far as the availability of venture capital is concerned. By the end of 2005, the number of venture capital firms in Shenzhen accounted for one third of the total number in the whole country. The city also houses the Shenzhen Stock Exchange, the Shenzhen Small and Medium Sized Enterprise Guarantee Center, and other critical financial architecture.

Fourth, there is well-established infrastructure in Shenzhen. Shenzhen's harbor ranks fourth in the global container transportation business, and Shenzhen's airport ranks third in PRC, with 18.4 million passengers in 2006. The supply and quality of other infrastructure, such as roads, telecommunications, and utilities, also rank highly in the PRC. All of these conditions have built a favorable logistic environment for the upgrading of industrial competitiveness in the city.

Fifth, Shenzhen enjoys the advantage of location. As a coastal city bordering Hong Kong, China, Shenzhen's bid to upgrade its industrial structure and competitiveness has benefited hugely from its proximity to Hong Kong, China as a major international financial, information, and services center. A large share of investment to Shenzhen has come from Hong Kong, China, especially during the early years of Shenzhen's development.

Finally, the Shenzhen government is efficiently run, and apt to continuously reform and upgrade its administrative capacity.

The government has provided "convenient services," through direct one-stop services for large enterprises. Administrative transparency has improved over the years to strengthen the government's accountability. For instance, a development plan formulated by the Shenzhen government must be submitted to the People's Congress for approval. At the same time, local opinion is sought and encouraged to increase the transparency and effectiveness of the government decision making process. Business procedures in Shenzhen are simple and streamlined. The Shenzhen government has also implemented personal service responsibility to ensure that firms' applications for various categories of government approval are processed within

a specified period of time. Business approval procedures are currently under review and are expected to become even more business-friendly in the near future.

#### Key Policies Contributing to Shenzhen's Industrial Competitiveness:

One of the most important factors helping to facilitate Shenzhen's industrial transformation has been its ability to attract foreign investment, which undoubtedly lies behind much of the upgrading of the city's industrial structure and competitiveness. Output from foreign invested firms account for more than 40% of Shenzhen's GDP. Over the last few decades, FDI policies in the PRC, and especially in its SEZs, have become increasingly liberal. These include:

- 1) Permission to set up wholly foreign-owned firms,
- 2) Enabling easier access to land and infrastructure,
- 3) Allowing the repatriation of profits, and
- 4) Favorable export and import policies.

While FDI inflow was earlier concentrated in labor-intensive and small-scale operations, increased large multinational corporations from technology-intensive industries have begun to enter the PRC. To upgrade its industrial structure, the Shenzhen government has formulated a strategy to develop a “headquarter” economy by inviting multinational companies to move their headquarters into Shenzhen. This strategy consists of:

- 1) Formulating systems to certify the headquarters of manufacturing companies,
- 2.) Stipulating preferential measures to attract the headquarters of multinational corporations, and
- 3) Streamlining government procedures and enhancing government services for companies who choose to locate their headquarters in Shenzhen.

Industrial parks are an integral component of the Shenzhen SEZ. There are about 100 industrial parks located in the city, more than 90% of these located outside Shenzhen 3 checkpoint , and about 70% based in villages and small towns. Shenzhen plans to integrate the existing parks and develop 52 larger parks. Shenzhen encourages the formation of industrial clusters or concentrations to benefit from economies of scale and scope. Various industrial clusters have been formed in the city, including clusters for the garments, bicycles, furniture, and

semi-conductor industries. All these clusters have gained substantially from economies of scale and scope.

In the last 3 years, in order to upgrade its industrial competitiveness, the Shenzhen Municipal Government has proposed policies to develop a recycling economy, with the aim of improving the city's environment and saving resources.

On 16 March 2006, Shenzhen passed its Recycling Economy Promotion Rules, enforcing more than 10 key procedures and systems to assess a firm's mid and long-term performance and planning, and to provide government procurement and policy support for developing industries that are environmentally-friendly and energy-efficient.

In order to improve industrial competitiveness, the Shenzhen Government has decided to implement a new innovation strategy in early 2006. The aim is to structure Shenzhen as a "National Innovative City" in the PRC. Based on this decision, research and development investment will account for nearly 4% of the city's total GDP by 2010. The output value of high-tech products is expected to grow at an annual average rate of 20% over the next few years.

#### 4. India

Aradhna (2008) studied on examining the impact of SEZs on human development and poverty reduction in India. It identifies three channels through which SEZs address these issues: employment generation, skill formation (human capital development), and technology and knowledge up gradation. It examines how the impact of SEZs is passed through each of these channels. The study finds that the modality differs significantly according to the characteristics of the SEZs, in particular, the level of their development as reflected in the composition of economic activities. Within this framework, the study examines the sectoral and economic composition of SEZ activities in India. It finds that labor intensive; skill intensive and technology intensive firms' co exist in India's zones and, therefore argues that all the three effects described above are likely to be important in the Indian context. Employment generated by zones is remunerative. Wage rates are not lower than those prevailing outside the zones. Besides, working conditions, non monetary benefits (such as transport, health and food facilities), incentive packages and social security systems are better than those prevailing outside the zones, in particular, in the small/informal sector. The role of SEZs in human capital formation and

technology up gradation is found to be rather limited. The study argues that the zones' potential could not be exploited fully in India. This could primarily be attributed to the limited success of SEZs in attracting investment and promoting exports. The new SEZ policy gives a major thrust to SEZs. However, the creation of SEZs alone does not ensure the realization of their potential. The government will need to play a more proactive role for effective realization of the full range of benefits from SEZs. The key objective of economic development is to maximize the positive human development and poverty impacts. SEZs have the potential to enhance human capabilities. But for this potential to be realized, the government must devise strategies to strengthen the opportunities that are likely to emerge, protect interests of the SEZ workers, and forge linkages between SEZs and the domestic economy. The EPZ policy in India underwent gradual relaxation of procedural and operational rigidities. The changes effected in this policy since 1991 have been far reaching and significant. It is believed that the overall and EPZ investment climate has an overwhelming bearing on the EPZ performance. In India, however, the conducting policy framework has had only a limited impact on the zone performance. Though the gross exports, foreign exchange earnings and employment increased phenomenally in absolute terms, their growth rates declined substantially. Growth in exports per unit of employment also slowed down indicating deterioration in the export performance. Net value addition performance compares favorably with other Asian countries but it has not been consistent and the trend growth rate in value addition had not been statistically different from zero. Furthermore, zones also failed to promote non-traditional exports. Traditional sectors namely electronics and gems and jewelry dominate the zones. This could be due to the piecemeal nature of the policy changes. Various committees were set up to examine the performance of the zones. This committee made far reaching recommendations regarding incentive package, development of infrastructure and improvement in governance.

However, policy changes remained slow and extremely cautious. Even the introduction of the SEZ policy did not impact on the SEZ performance. Their performance continued to slide.

SEZs are expected to induce dynamism in the export performance of a country by eliminating distortions resulting from tariffs and other trade barriers, the corporate tax system, excessive bureaucracy, and missing infrastructure. Fall in the protective walls and reforms in the

tax system reduced the gap between EPZ and other units in the wider economy in respect of tax incentives. There should have been significant improvement in the quality of infrastructure and governance to compensate them for the lost benefits. But this did not happen. Dysfunctional policies, regulations, lack of single window clearance facilities, poor attitude of the officials, centralized governance, stringent labor laws and poor physical and financial infrastructure, all accounted for an undesirable investment climate. The Draft Bill 2004 may not lead us far. The study argues that the SEZ scheme requires a complete re-orientation if the hype created over SEZs is to be justified.

### **3.2 Summary of SEZ development**

In summary after we studied from many countries experience of SEZ performance we can find out also of successful and problem experiences as follow:

1. Geographically contiguous areas to achieve accelerated economic development through the inflow of foreign investment, development of infrastructure
2. Joint development of common natural resources,
3. Promotion of industries for the export market. Geographical
4. Infrastructure development
5. Historical and culture links
6. The resources of the participating countries complement each other
7. Political and policy support by the leadership

Problems that lead to poor performance of some zones:

1. Uncompetitive Fiscal Incentives: The fact that virtually the same package of incentives is offered by successful zones and failed zones suggests that they are not a key success factor.

2. Weak Administrative Bodies: The weak performance of some programs can also be traced to weak government bodies established to develop and operate zones, and regulate free zone activity.

3. Poor site locations, entailing heavy capital expenditures. The economic failure of zones such as the Bataan EPZ in the Philippines is linked to poor site location, design and development practices

4. Poor zone development practices poorly designed or over-designed facilities, poor maintenance and promotion

5. Subsidized land and building lease rates rent. This is exacerbated if water, power and other utility services are also subsidized

6. Cumbersome procedures and controls

7. Inadequate administrative coordination between private developers and.

And these problems can resolve by:

1. Ensure that the EPZ regime is flexible, allowing a range of commercial as well as manufacturing activities.

2. Promote private rather than public development of zones. International experience suggests that private rather than public development of zones increases the chances of success.

3. Zone designation criteria physical development standards and clear criteria for the designation of new zones. The main issue is to guide but preserve the flexibility of individual zone development proposals, while optimizing the impact on government funding for off-site infrastructure connections.

4. Eligibility criteria the openness of an EPZ regime is defined in terms of minimum export requirements and the types of activities and ownership forms permitted.

5. Labor regime international experience strongly suggests that the long-term competitiveness of a free zone depends on the quality and productivity of its workers. To achieve this, it is important that labor regimes are fully consistent with ILO standards and obligations but they should be defined within a flexible and liberal labor market regulatory framework.

6. Introduction or reform of free zones regimes should be leveraged as an opportunity to rationalize corporate income tax incentives. Best practice approach for income tax incentives is to have performance-based incentives in a country's tax code rather than through special legislation such as EPZ regimes.

7. Zone regimes should be used to advance demonopolization and deregulation of telecommunications and other utilities where applicable. Jamaica and other countries have used their free zone regime to accomplish this.

8. Incentive framework should be WTO compliant.

9. Facilitate provision of secondary permits and authorizations. Additional permits land, buildings, labor, health and safety, etc., can be facilitated by vesting all such authorizations within the zone authority rather than other ministries and agencies. The zone authority should have offices within each zone to perform these services.

10. Develop a special customs rules and regulations drawing upon WCO and WTO provisions, and fast-track implementation of automated customs systems, with proper inventory controls and audit systems, within the free zones.

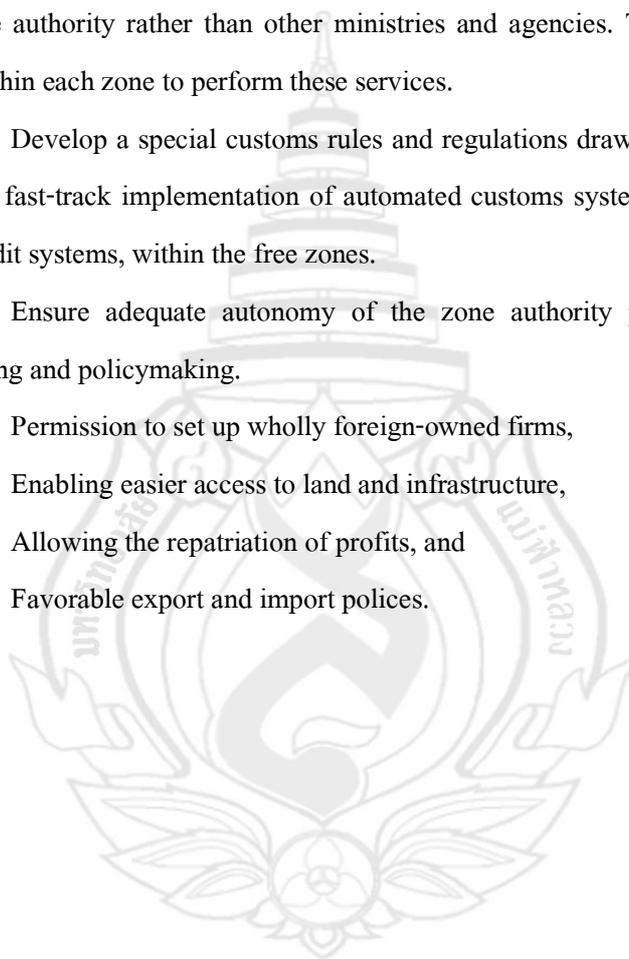
11. Ensure adequate autonomy of the zone authority particularly over staffing, budgets, spending and policymaking.

12. Permission to set up wholly foreign-owned firms,

13. Enabling easier access to land and infrastructure,

14. Allowing the repatriation of profits, and

15. Favorable export and import policies.



## CHAPTER 4

### CHARACTERISTICS AND PERFORMANCE OF MANHATTAN SEZ

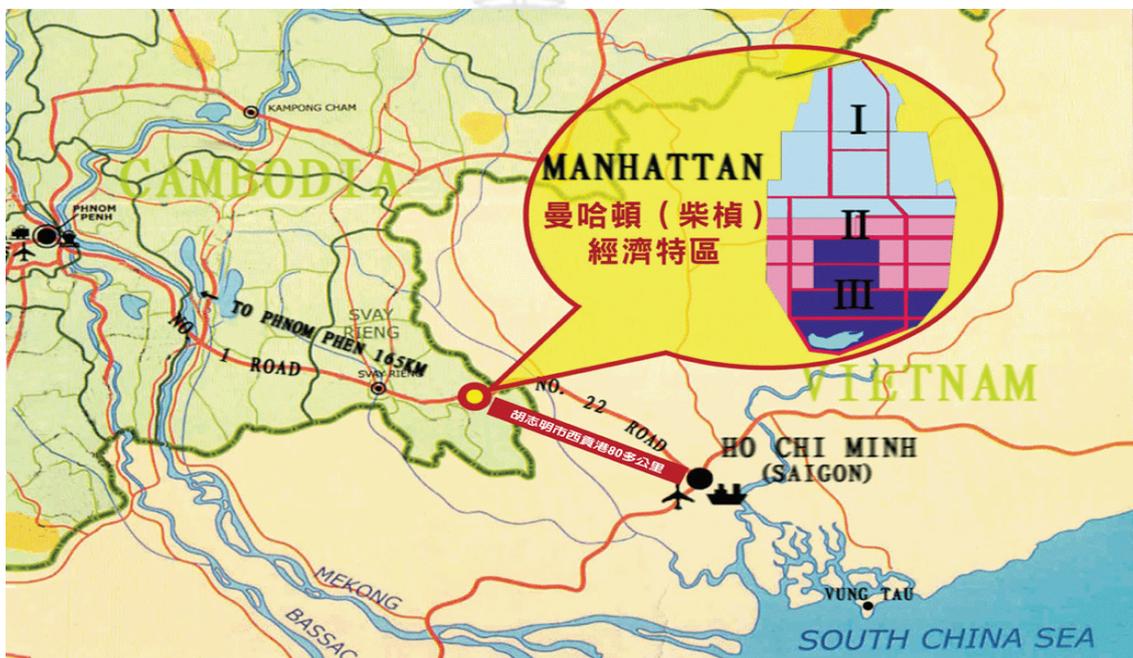
#### 4.1 Industrial structure in Manahattan SEZ

Industry always thought that traditional industries to the mainland or the Vietnamese investment, reduce costs, to survive the only way out, but a series of EU products in China and Viet Nam ruthless lesson to anti-dumping duties, bicycles, footwear industry in the mainland almost can not Viet Nam and survival, in Cambodia at this time without relying on overseas trade barriers and low labor cost advantages, and actively develop "Manhattan (Svay Rieng) Special Economic Zones" (Manhattan Special Economic Zone), to warm to mainland China and Vietnam's international investment firms waved and smoothly resolve the class of anti-dumping duties of the industry crisis, but also in Cambodia brought new business opportunities and goodwill.

From the mainland in 2004, the Vietnamese footwear, the EU has reported textiles, bicycle industry, the United States imposed punitive tariffs, the two companies to create serious obstacles to exports, or even industry immediately announced divestment, the other is beginning to find an invest in a new location to set up factories. Cambodia is still duty-free, quota-free protection, international investment companies set up factories in the best choice, the Government of Cambodia are under the premise of economic development, the concessionaire set up a special economic zone "Manhattan (Svay Rieng) Special Economic Zone."

Manhattan (Svay Rieng) Special Economic Zone to the state from the current group of Taiwan-listed companies Kay (1805) to invest for development in Cambodia industrial zone. With the first special economic zones in Cambodia, the average real wages of about 45 U.S. dollars, far below

the 100 U.S. dollars in China and Vietnam for 75 dollars in order to attract foreign investors. The Government of Cambodia granted many investment incentives that allowed foreign companies to set up factories by enjoying duty-free concession and profit since the start of the year. In the investment management services companies, the Cambodian Government established a "single window" with the manufacturers upgrade contact the efficiency of government agencies and investment firms set with various preferential policies, building infrastructure, land use, energy supply, transport and other areas to assist in all directions.



**Figure 4.1** Map of Manhattan SEZ

Manhattan Special Economic Zone Company invests in the development in Svay Rieng province of Cambodia only 5-6 km from Cambodia-Vietnam border (Bavet-Moc Bai) 65 kilometers to Ho Chi Minh City International Airport and 80 kilometers to Saigon port along 1st Highway of gold zone covering about 240 hectares, 80 hectares of the first. Now there are 4 industrial companies which already operated in this zone: Best Way Industrial Co.,Ltd., S.Y.G Steel International Co.,Ltd.,

Kingmaker (Cambodia) Footwear, Galaxy Textile (Cambodia) Co.,Ltd. Mostly of companies is expending from Vietnam coz of they can make the benefit from Cambodia's policy for investor in the SEZs.



**Figure 4.2** Main gate of Manhattan SEZ

Manhattan Development Co. has been investing in Cambodia for 10 years, and enjoys a strong support from the government of Cambodia. Cambodia is accorded Most Favored Nation (MFN) status by the US and European member states. Anti-dumping duties, protective tariffs and quota restrictions rarely apply to Cambodia and have had minimal impact on the country's export, especially export goods such as footwear, leather products, textile, bicycles, and hardware. Currently, the country enjoys GSP duty-free privileges from 29 countries, including USA, Canada, and Japan. Cambodia is a fast developing country. The population in Svay Rieng has reached 650,000. As the local economy advances, the population near the border will increase exponentially, providing abundant sources of low-cost labour. The minimum wage in Cambodia is 50USD/month.

#### 4.1.1 Public utility facilities

Located on the east side of the MSEZ near the main drainage and the existing flood retention basin, the sewage plant cover approximately 17,100m<sup>2</sup> and is the lowest elevation in the MSEZ after land preparation and filling. There will be three lots reserved for water supply systems by

the north fence and the southernmost fence. Each lot will cover about 3,000m<sup>2</sup> of land and will house reservoir tank and water wells. Warehouse will be located where most importers and exporters prepare their shipments to provide easy access to tenant companies and convenient monitoring to Customs officials. The warehouse will cover approximately 5,000m<sup>2</sup> of land. The MSEZ known has a 910m, 22KV transmission line installed along the west main road. The line is connected to the Economic Dispatch Control (EDC) Bavet local power supply network, and distributes 3 megawatts the MSEZ to temporarily meet power needs of tenant companies that are engaged in bicycle assembling, manufacturing of footwear and bolt, to just name a few. They expect to apply for a 110 KV high-voltage transmission line from Vietnam's power company, to be installed along the east main road toward the south. An 110KV/22KV transformer, a power plant and an electrical substation will be built 500m south of National High Way No. 1 outside of the fence of the export processing zone. The entire area will cover 3,000m<sup>2</sup>. In the long run, it is necessary for the MSEZ to have its own 12 MW power plant. The location selected for the power plant is 500 meters south of the transformer station. The station will take up 43,000m<sup>2</sup> of land.

Outside the fencing of the export processing zone, there will be 2 to 3 units for worker's housing. Only Cambodian workers who live at least 10km away from the zone can stay in the provided units. The rent will be co-paid by the tenant investors and workers. The land will cover about 117,400m<sup>2</sup>.

Locate at the south end of MSEZ, is temporarily reserved to gather non-polluting waste for further disposal out of the MSEZ. The site will take up about 3,00m<sup>2</sup>.

#### 4.1.2 One-Stop service office

One-Stop-Service this on-site officers will be appointed by government authorization to facilitate for all import and export documentations in the zone, there are many related representative from different sector.

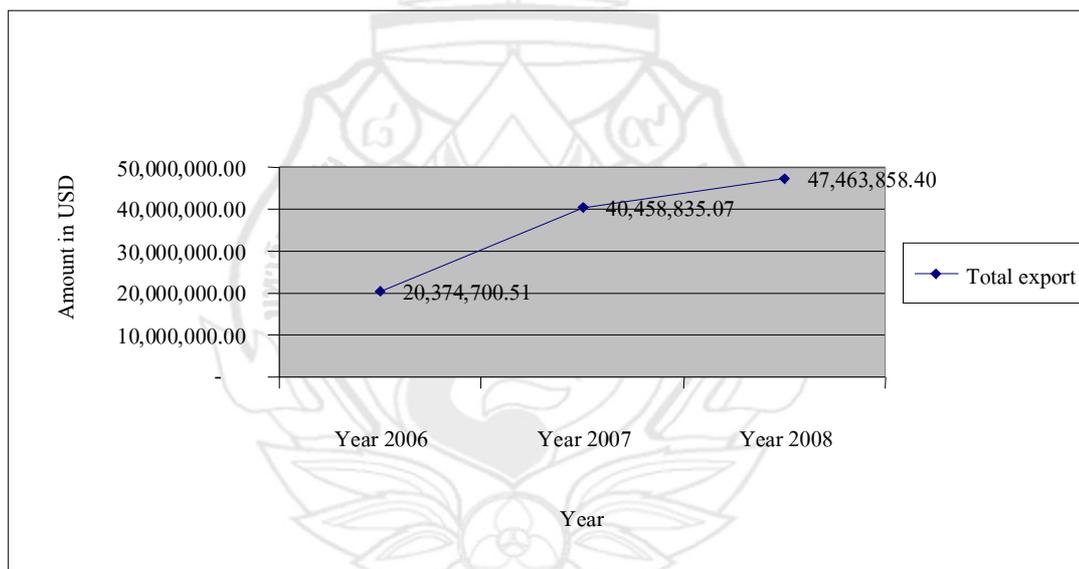
The representative from Cambodia MSEZ board is responsible for investment registration in the zone as the representative from Ministry of Commerce is in charge of issuing certificate of origin for all exports to abroad. Moreover, other sectors are Customs and Excise and Camcontrol are responsible for import and export inspections as the representative from MOLVT is in charge of

resolving any conflict which happens by the employer and employee. This office is helpful and facilitate to the investor in the zone reducing the time for import and export documentations.

**Table 4.1** Export statistic and worker of MSEZ from 2006 to 2008 (in USD)

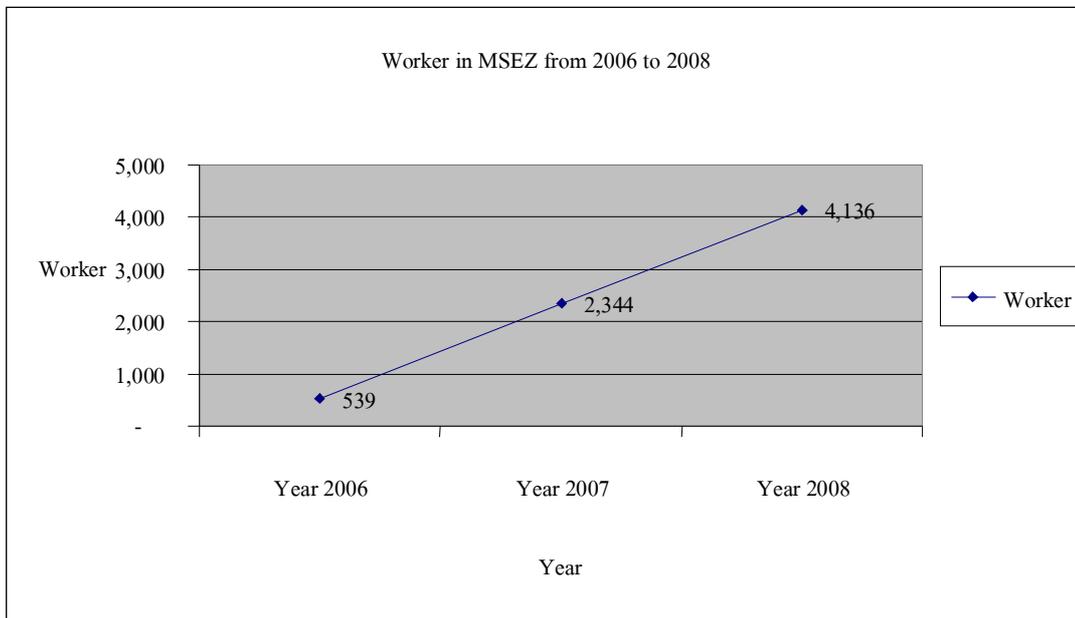
Year	2006	2007	2008
<b>Export</b>	20,374,700.51	40,458,835.07	47,463,858.40
<b>Worker</b>	539	2,344	4,136

Source: Table 4.2 and 4.3



Source: MSEZ Administration

**Figure 4.3** Export statistic of MSEZ from 2006 to 2008



Source: MSEZ Administration

**Figure. 4.4** Worker in MSEZ from 2006 to 2008

There are 4 industrial firms are operating in the zone with producing four different products for export. There are bicycle, stainless screw, footwear an garment and most of products are export to EU and other is export to South Africa.

#### 4.1.3 Industrial Firms in the Zone

##### 1. Bestway Industrial Co., Limited

Bestway Industrial Co., Ltd. is a company operating from the economic area in The P. R. China, Cixi City, Ningbo, bordering on Shanghai and Hangzhou, is located in the east of ZheJiang Province, middle part of China's coastline and southern flank of the prosperous Yangtze River Delta, it only takes 2 hours drivers to Shanghai Via Hangzhou Bay Cross-Sea Bridge. Bestway Industrial Co., Ltd. has own factories and many manufacture partners in Ningbo Area, the factories included Home Electrical Appliance; Lighting; Power Tools; Stamping & hardware. Etc.

Bestway Industrial Co., Ltd. Is the first company which operated in Manhattan SEZ Cambodia since early of 2006 with bicycle products export to EU. There are around 375 workers in 2006 and 930 in 2008.



**Figure 4.5** Picture of Bestway Industrial Co., Ltd.

## 2. S.Y.G Steel Int'l (Cambodia) Co.,Ltd.

After S.Y.G got the licensed from Council of Development of Cambodia (CDC) it's started operated and export since August 2006 with the worker of around 100, the main products for exports is stainless screw export to EU.



**Figure 4.6** Picture of S.Y.G Steel Int'l (Cambodia) Co.,Ltd.

### 3. Kingmaker

Kingmaker Footwear began in 1980 as a two-production line operation near Taichung, Taiwan. Mickey Chen, along with a small group of family and friends, started the company, which initially specialized in footwear for the U.S. discount market.

Success and strategy enabled steady growth. In 1988 Kingmaker opened a new manufacturing site in Zhuhai, Guangdong, China and an office in Hong Kong. An additional production facility was established in Macau in 1993.

By the time Kingmaker went public in 1994 and formally became the Kingmaker Group, the company was primarily producing branded product on eight production lines for North American companies. Within the next few years, the company moved towards producing only high-end, quality, branded product.

Within the past several years, the Group has moved out from its production facility in Macau to open new factory complexes in both Vietnam and Zhongshan, Guangdong. In January 2007, Kingmaker's newest venture began operations in Svay Rieng, Cambodia (within a short drive from the Vietnamese border) where initial phase production will see up to three lines specializing in men's footwear for export to the EU and Japan.

Within the past several years, the Group has moved out from its production facility in Macau to open new factory complexes in both Vietnam and Zhongshan, Guangdong. In January 2007, Kingmaker's newest venture began operations in Svay Rieng, Cambodia (within a short drive from the Vietnamese border) where initial phase production will see up to three lines specializing in men's footwear for export to the EU and Japan.

In July 2006, Kingmaker held the official groundbreaking ceremony for its newest factory, located in Svay Rieng Province in the Manhattan Economic Zone in the southern part of Cambodia.

First production began in January 2007. In its first phase, the factory will employ 1,100 employees and run three assembly lines, specializing in men's footwear for the EU and Japanese markets.

From its inception, the facility has been outfitted to accommodate physically challenged individuals. As every country has its unique characteristics and needs, Cambodia's citizens disproportionately deal with the devastation and disability caused by land mines.

Kingmaker recognizes that rehabilitation and integration of disabled people are essential for the health of greater society. Thus, the long-term plan for operations in Cambodia is to be inclusive of all Cambodians, including the differently-abled. Currently Kingmaker produces footwear for: Sketchers (310, Mark Echo, Echo Red, Sketchers, and Zoo York), Clarks (Clarks, Provo!), Stride Rite (Stride Rite, Robes), Elephantine, G-Star, Raw, Pedaled, and Land's End.

In Cambodia Manhattan, mostly Clarks are produced and export to European Union.



**Figure 4.7** Picture of Kingmaker (Cambodia) footwear

#### 4. Galaxy Textile

GALAXY TEXTILE GROUP CO., LTD, established in 1986 in P.R. of China, is a comprehensive complex which takes textile as the mainstay and integrates with spinning, weaving, knitting, garment, building, machine-processing, science, industry and trade. It comprises of Shandong Stars Textile CO., LTD, Shandong Yinhe Leader Textile & Garment CO.,LTD, Shandong Stars Weaving CO.,LTD, Laiwu Cotton and Textile Mill, Laiwu Stars Textile Import & Export CO., Economy Developing CO., Now it's products find a good place in Europe, America, Africa, mid-eastern Asia and nearby countries areas. In the mean while, their enterprise enjoys a good reputation

through high-quality products and good service at home and abroad. In 1999 it passed ISO9002 certificate of quality management system and ISO14001 certificate of environment system issued in 2000. Yearly it have gained the following reputations advanced unit of opening factory affairs, advanced unit of Contract-stressing and Promise-keeping Enterprise by Shandong Province, advanced unit of earning foreign exchange through export, stars enterprise of legally paying taxes by Laiwu City.

As a part of Galaxy Textile Group CO., LTD Galaxy Textile (Cambodia) Co., Ltd was established in Manhattan SEZ and start operated in early of October 2007, mostly of exports are trousers and skirts export to South Africa and EU, and will expend the market to America.



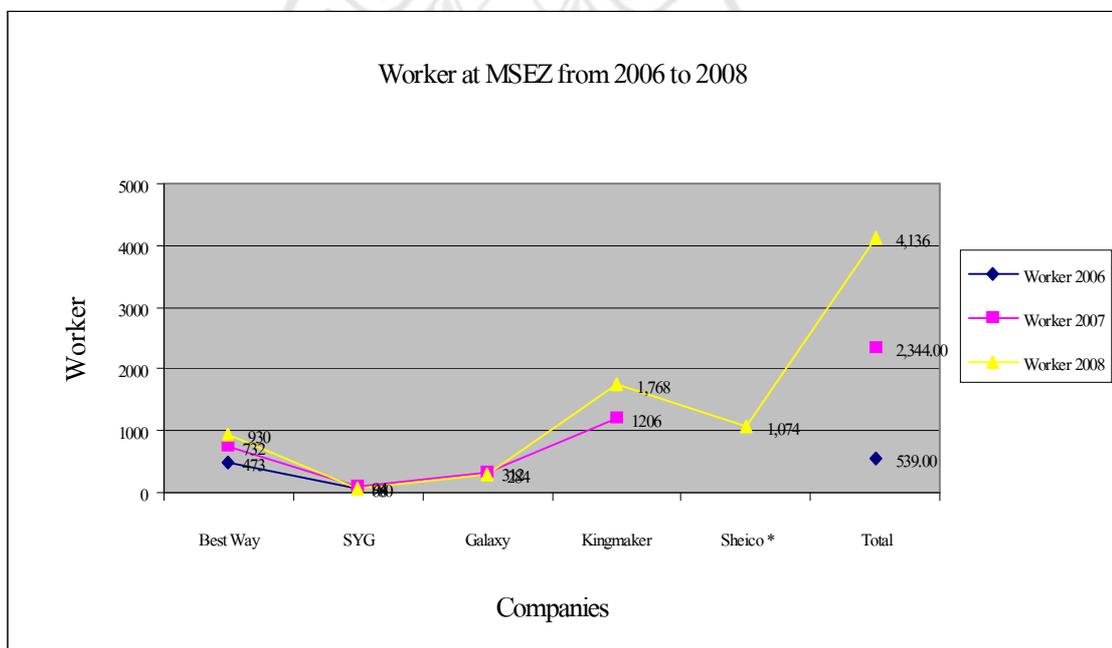
**Figure 4.8** Picture of Galaxy Textile (Cambodia) Co., Ltd

**Table 4.2** Worker at MSEZ from 2006 to 2008 by companies

No	Companies	Worker		
		2006	2007	2008
1	Best Way	473	732	930
2	SYG	66	94	80
3	Kingmaker		1,206	1,768
4	Galaxy		312	284
5	Sheico *			1,074
<b>Total</b>		<b>539</b>	<b>2,344</b>	<b>4,136</b>

\*Sheico just operated in December 2008

Source: MSEZ Administration



Source: MSEZ Administration

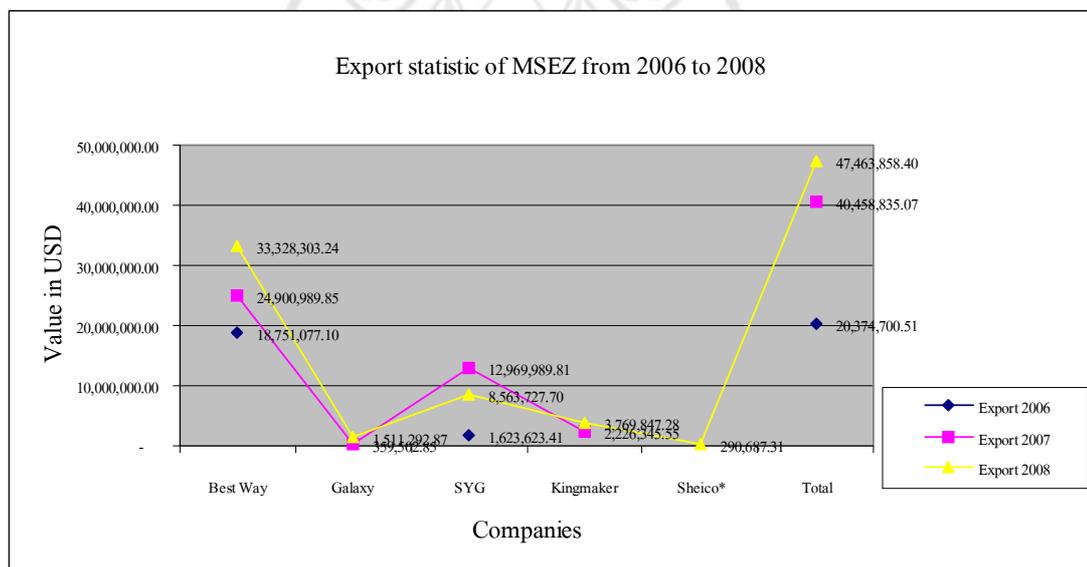
**Figure 4.9** Worker at MSEZ from 2006 to 2008 by companies

**Table 4.3** Export statistic of MSEZ from 2006 to 2008 by companies

No	Companies	Export		
		2006	2007	2008
1	Best Way	18,751,077.10	24,900,989.85	33,328,303.24
2	SYG		12,969,989.81	8,563,727.70
3	Kingmaker		2,226,345.55	3,769,847.28
4	Galaxy		359,502.85	1,511,292.87
5	Sheico *			290,687.31
<b>Total</b>		<b>20,374,700.51</b>	<b>40,458,835.07</b>	<b>47,463,858.40</b>

\*Sheico just operated in December 2008

Source: MSEZ Administration



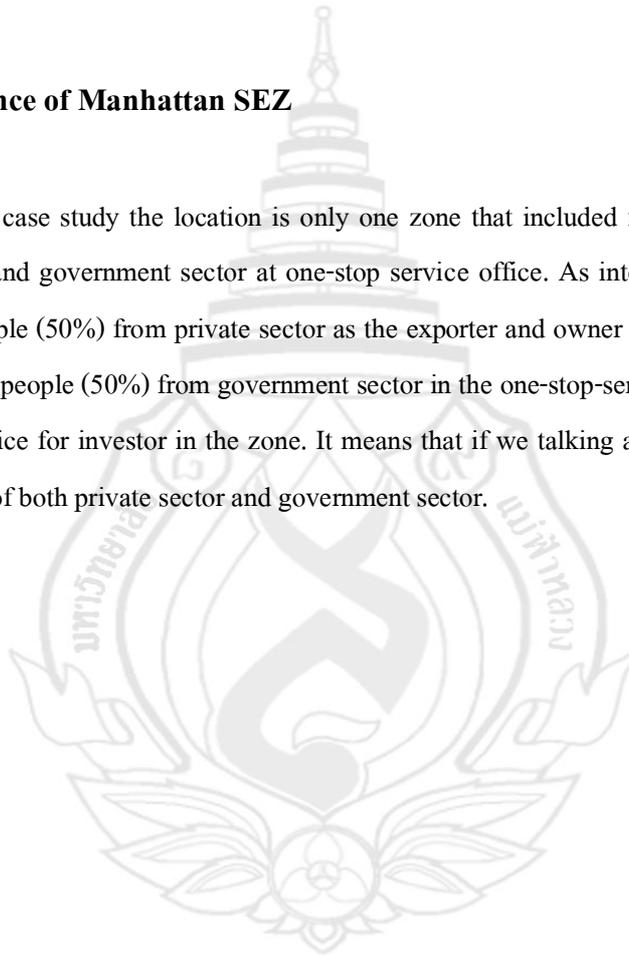
Source: MSEZ Administration

**Figure 4.10** Export statistic of MSEZ from 2006 to 2008 by companies

In December 2008 Seico, a new factory started to operate and export and the other new factories is under construction, the zone owner expects that next year more than 8 factories start their production and provide more jobs to Cambodian people more than 8,000 workers and some factories which operated will expand their productions line for support their markets.

#### **4.2 Performance of Manhattan SEZ**

This case study the location is only one zone that included four industrial firms; one is zone developer and government sector at one-stop service office. As interviewed with 30 people in the zone, 15 people (50%) from private sector as the exporter and owner of zone by 3 people in each company and 15 people (50%) from government sector in the one-stop-service office who provide the government service for investor in the zone. It means that if we talking about 50% of interviewee is represent 100% of both private sector and government sector.

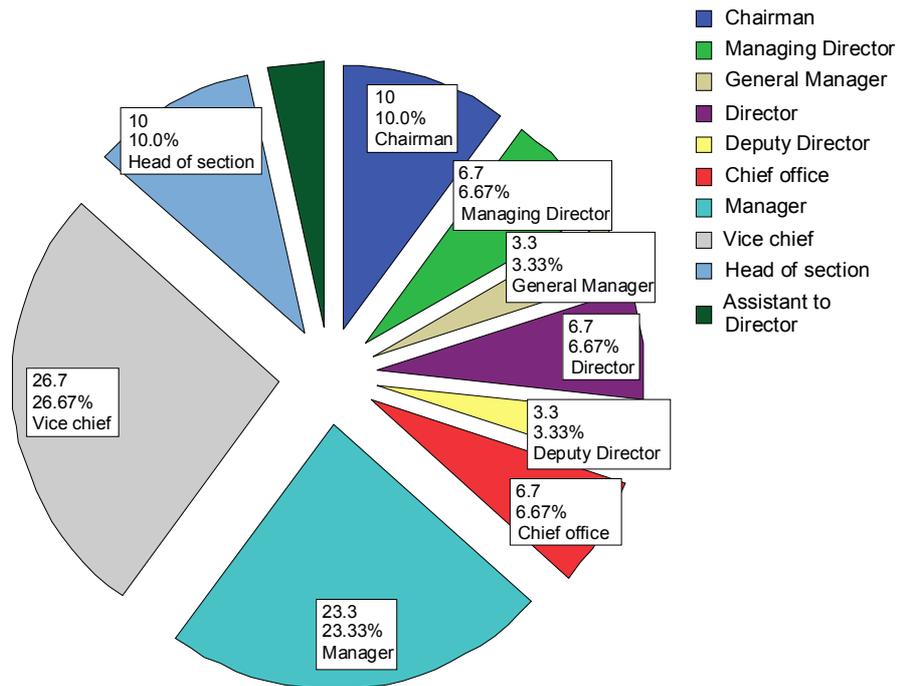


**Table 4.4** Distribution of employment by type of position

<b>Employment of the respondent</b>	<b>Frequency</b>	<b>Percent</b>
Chairman	3	10.0
Managing Director	2	6.7
General Manager	1	3.3
Director	2	6.7
Deputy Director	1	3.3
Chief office	2	6.7
Manager	7	23.3
Vice chief	8	26.7
Head of section	3	10.0
Assistant to Director	1	3.3
<b>Total</b>	<b>30</b>	<b>100.0</b>

*Source:* Complication from survey data

### Position



**Figure 4.11** Distribution of employment by type of position

Table 4.4 and Figure 4.11 show that position of the 30 qualified answers, the majority of the respondents are vice chief office from government sector that accounted for 26.7%, followed by Manager 23.3%. And other show that Chairman 10% same as the Head of section for 10%, Managing Director 6.7%, Director 6.7%, Chief office 6.7%, General Manager 3.3%, Deputy director 3.3%, Assistant to Director 3.3%.

**Table 4.5** Distribution of firms and government sector under survey

Function	Frequency	Percent
Investment application	3	10.0
Dispute settlement	2	6.7
Import/export clearance	6	20.0
Export document (C/O, License)	4	13.3
Exporter (Firms)	12	40.0
Representative of MSEZ (zone owner)	3	10.0
<b>Total</b>	<b>30</b>	<b>100.0</b>

Source: Complication from survey data

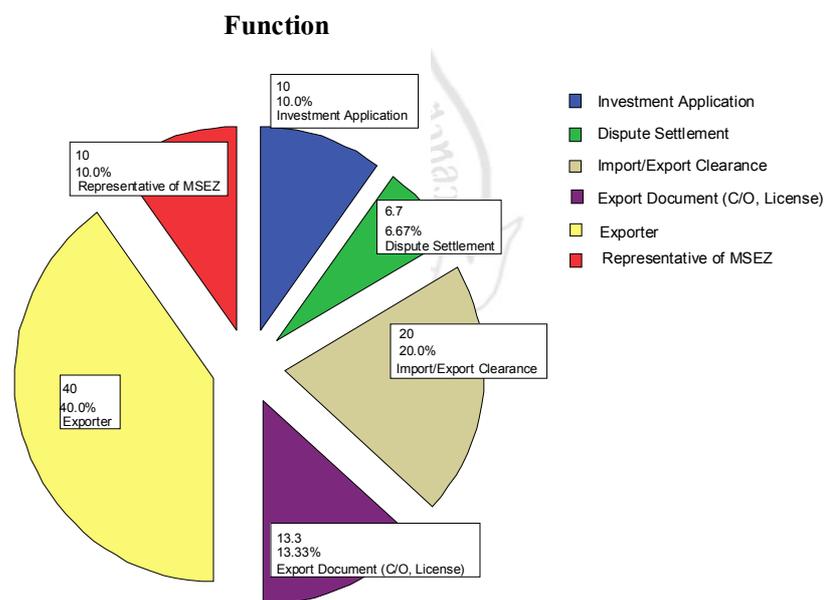
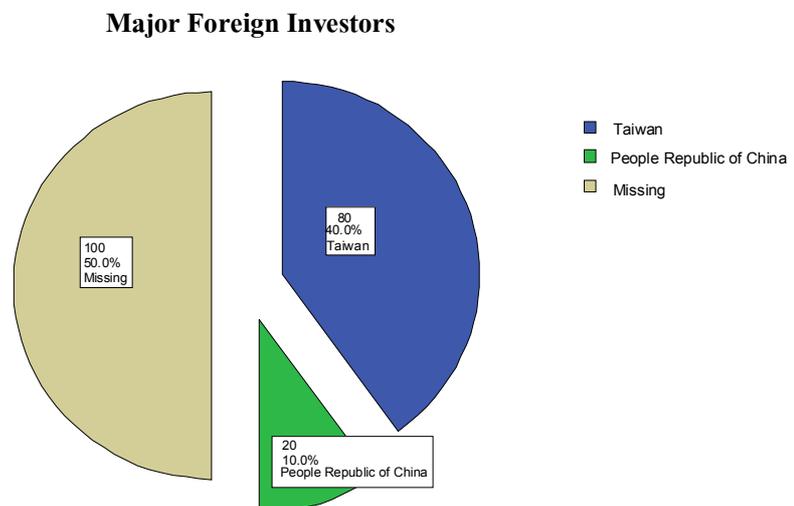
**Figure 4.12** Distribution of firms and government sector by function

Table 4.5 and Figure 4.12 represent the function of respondents, the majority are exporters, 20% are import/export clearance official, export document (C/O, License) shows 13.3%, representative of MSEZ (zone owner) 10%, investment application official from CDC 10% and dispute settlement official shows 6.7%.

**Table 4.6** Distribution of firms by investor

Investor	Frequency	Percent
Taiwan	12	40.0
P.R. of China	3	10.0
<b>Total</b>	<b>15</b>	<b>50</b>
<b>Missing</b>	<b>15</b>	<b>50</b>

Source: Complication from survey data



\* Missing is government sector

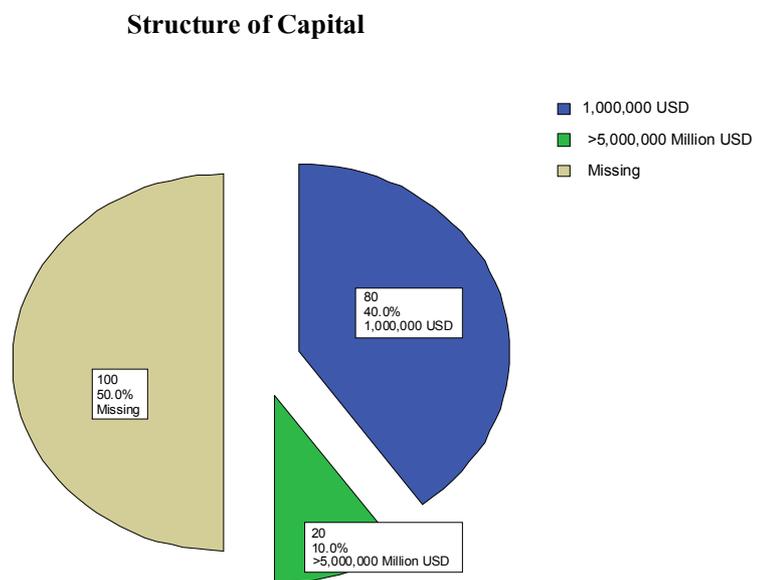
**Figure 4.13** Distribution of firms by investor

Table 4.6 and Figure 4.13 represent the country of origin, 50% missing is government sector. Therefore, other 50% represent 100% of private sector. Most of investor in the zone are from Taiwan 80% included the owner of the zone and 20% from P.R. of China.

**Table 4.7** Distribution of the firms by capital registered

Capital	Frequency	Percent
1 Million US\$	12	40.0
Less than 5 Million US\$	3	10.0
<b>Total</b>	<b>15</b>	<b>50</b>
<b>Missing</b>	<b>15</b>	<b>50</b>

Source: Complication from survey data



\* Missing is government sector

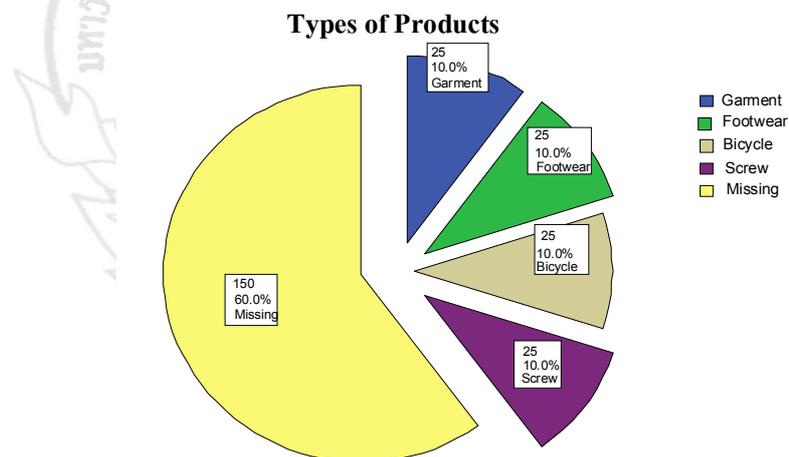
**Figure 4.14** Distribution of the firms by capital registered

Table 4.7 and Figure 4.14 represent the capital of the firms, 50% missing is government sector. Therefore, other 50% represent 100% of firms. For the registered capital that got from interviewed is 1 million US Dollars show 80%, and zone owner is around 5 million USD show 20%.

**Table 4.8** Distribution of the firms by products

Product	Frequency	Percent
Garment	3	10.0
Footwear	3	10.0
Bicycle	3	10.0
Screw and stainless	3	10.0
<b>Total</b>	<b>12</b>	<b>40</b>
<b>Missing</b>	<b>18</b>	<b>60</b>

Source: Complication from survey data



\*Missing are government sectors and zone owner

**Figure 4.15** Distribution of the firms by products

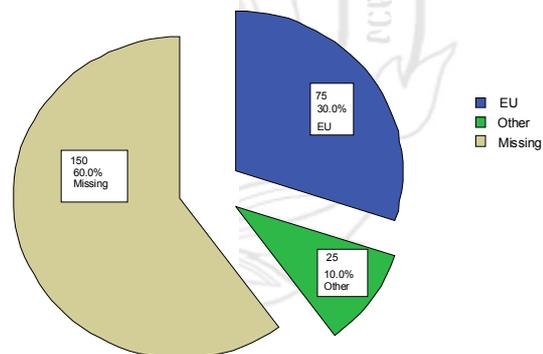
Table 4.8 and Figure 4.15 show the type of products of firms in the zone. For 60% missing are government sector and zone owner. Therefore, other 40% represent 100% of products. For all four industrial firms in the zone they have their own different products, garments 25%, bicycle 25%, screws 25% and footwear.

**Table 4.9** Distribution of the firms by markets

Market	Frequency	Percent
EU	9	30
Other	3	10
<b>Total</b>	<b>12</b>	<b>40</b>
<b>Missing</b>	<b>18</b>	<b>60</b>

Source: Complication from survey data

**Structure of Market**



\* Missing are government sectors and zone owner

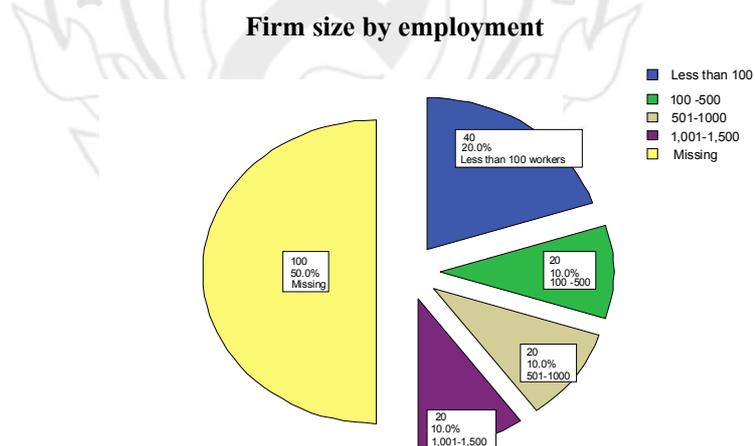
**Figure 4.16** Distribution of the firms by markets

Table 4.9 and Figure 4.16 represent the market of products in the zone. For 60% missing are government sector and zone owner. Therefore, other 40% represent 100%. There are four factories in the zone, three of them they export to EU show as 75% and another one is export to South Africa is 25%.

**Table 4.10** Distribution of the firms and by worker

Worker	Frequency	Percent
Less than 100	6	20.0
100-500	3	10.0
501-1000	3	10.0
1001-1500	3	10.0
<b>Total</b>	<b>15</b>	<b>50</b>
<b>Missing</b>	<b>15</b>	<b>50</b>

Source: Complication from survey data



\* Missing is government sector

**Figure 4.17** Distribution of the firms by worker

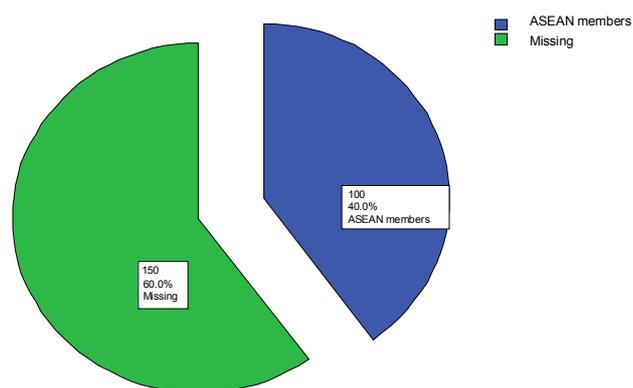
Table 4.10 and figure 4.17 show the number of worker in the zone. For 50% missing are government sector. Therefore, other 50% represent 100% of worker in private sector. Two companies included zone owner, the worker are less than 100 people. Other three are, one is 100-500 workers, one is 501-1, 00 workers and another one is 1,001-1,500 workers. If we mentioned only export industries, since the zone was established in late of 2005 worker increased every year from 367 workers to 2,344 workers within 2006 and 2007.

**Table 4.11** Distribution of the firms by originate raw material

Originate of raw material	Frequency	Percent
ASEAN member	12	20.0
<b>Total</b>	<b>12</b>	<b>40</b>
<b>Missing</b>	<b>18</b>	<b>60</b>

Source: Complication from survey data

**Market for Raw material**

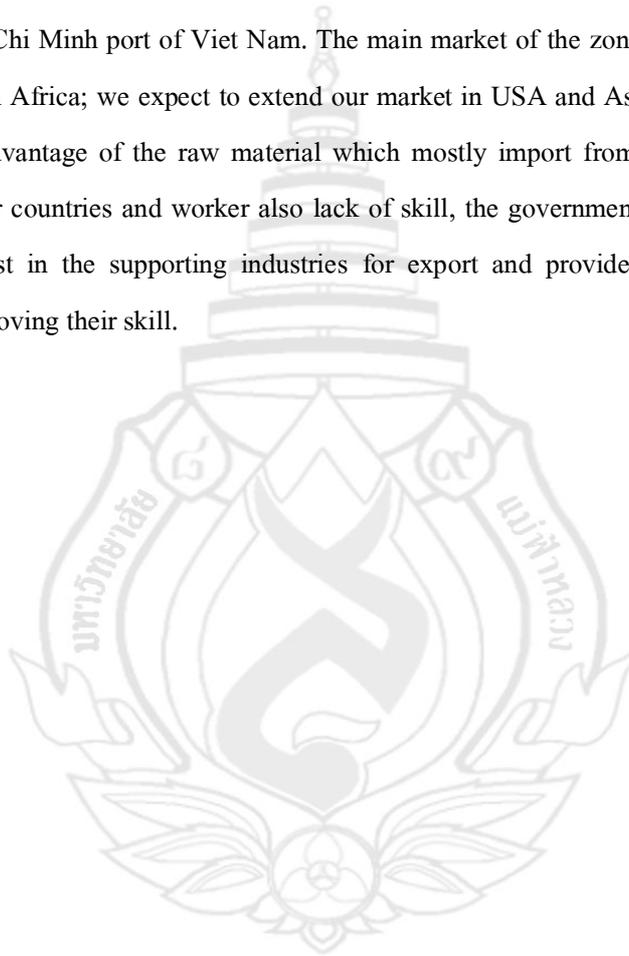


\* Missing are government sectors and zone owner

**Figure 4.18** Distribution of the firms by originate of material

Table 4.11 and Figure 4.18 represent the raw material for supporting the zone production. For 60% missing are government sector and zone owner. For all exporter industries in the zone the raw material is imported from among ASEAN members such as Vietnam and Malaysia.

In summary, most of foreign investors in the zone are Chinese and Taiwanese, the most advantage that attracts the FDI is government policy, cheap labor cost, and location of the zone is close to the Ho Chi Minh port of Viet Nam. The main market of the zone is European countries and follows by South Africa; we expect to extend our market in USA and Asian countries. Even we still have some disadvantage of the raw material which mostly import from other countries especially ASEAN member countries and worker also lack of skill, the government try to encourage the local investor to invest in the supporting industries for export and provide the vocational training to workers for improving their skill.



## CHAPTER 5

### MODELING PERFORMANCE OF MANHATTAN SEZ

#### 5.1 Model specification

In statistics, regression analysis refers to techniques for the modeling and analysis of numerical data consisting of values of a dependent variable (also called a response variable) and of one or more independent variables (also known as explanatory variables or predictors). The dependent variable in the regression equation is modeled as a function of the independent variables, corresponding parameters ("constants"), and an error term. The error term is treated as a random variable. It represents unexplained variation in the dependent variable. The parameters are estimated so as to give a "best fit" of the data. Most commonly the best fit is evaluated by using the least squares method, but other criteria have also been used.

Regression can be used for prediction (including forecasting of time-series data), inference, and modeling of causal relationships. These uses of regression rely heavily on the underlying assumptions being satisfied. Regression analysis has been criticized as being misused for these purposes in many cases where the appropriate assumptions cannot be verified to hold one factor contributing to the misuse of regression is that it can take considerably more skill to critique a model than to fit a model.

Regarding to the conceptual framework that mentioned in chapter 1, this paper is examine the factors that affect to the zone performance by learning from experiences from other countries. The factors that affect to the zone performance are government policy, investment incentive, infrastructure, raw material, labor performance, and region and global integration, which lead to Manhattan SEZ improving its development performance.

Our model is based on Aradhna (2005) which found that the zone performance and factors can be ensured a good investment climate from better location, modern and efficient

infrastructure, general fiscal and non fiscal concession to firm and single window facilitate to ensure corruption and red tape free business environment . This in turn helps in reducing the costs of exporting and, hence enhances competitive advantages of firms in the zone. Good investment climate may also be crucial for attracting FDI in the zones. The standard literature holds that market related factors are more important for domestic market seeking investment while cost related factors may explain export oriented investment more significantly. This is particularly true for low cost developing countries. In practice, export oriented FDI in developing countries is cost efficiency seeking and remains essentially labor/resource intensive. Export oriented FDI in these countries may also take the form of relocation of some of the production facilities. Location of investment then becomes more responsive to the factors that ensure lower costs of production and availability of complimentary factors of production. He uses the following model to examine the factor that might have had a significant effect on the performance of the zones in south Asia:

$$\text{PERFORM}_{\text{zone}} = f(\text{RPCY}, \text{INDUSCUL}, \text{LOCINDEX}, \text{CPCY}, \text{WAGES}, \text{RAW}, \text{POLREG}, \text{Z-INFRAST}, \text{D-INFRSAT}, \text{SOCINFRAST}, \text{Z-GOVERN}, \text{D-GOVERN}, \text{CONCESSION}, \text{SIZE}, \text{CONCEN}, \text{CAPINT})$$

Where

PERFORM zone=Export performance and FDI inflows

In case of Manhattan SEZ, it can apply some part of models above; there are many factors which effect to the zone development. Government and trade policy which attract FDI, the benefit from regional and global integration, infrastructure reform and the cheap labor cost is also advantage for SEZ.

After survey interviewed the model can be specified in terms of the factors which affect the Manhattan SEZ performance as follows:

$$Y (\text{SEZperformance}) = f(\text{GRPF}, \text{IIF}, \text{INFRASTF}, \text{RAWF}, \text{LABORF}, \text{RGIF})$$

Where

Y is Growth rate of export

GRPF is Government regulation policy

IIF is Investment incentive

INFRASTF is Infrastructure

RAWF is Raw material

LABORF is labor performance

RGIF is Region and global integration

So

Performance<sub>zone</sub> = GRP, II, INFRAST, RAW, LABOR, RGI

$$Y = \beta_1 \text{GRP} + \beta_2 \text{II} + \beta_3 \text{INFRAST} + \beta_4 \text{RAW} + \beta_5 \text{LABOR} + \beta_6 \text{RGI}$$

## 5.2 Data analysis and interpretation

In this study is using the multiple regressions to analyze each factor represents several different variables, and factors turn out to be more efficient than individual variables at representing outcomes in certain study. Therefore, this section is implemented to find out major factor effect to zone performance focusing on government policy, investment incentive, infrastructure, raw material, labor performance and regional and global integration. We use this multiple regression to analyze because it is useful in predicting the scores on another variable that we call the “criterion variable”. Multiple regression allows us to identify a set of predictor variables which together provide a useful estimate of a participant’s likely score on a criterion variable.

All statistical tests were performed using SPSS (Statistical Package for Social Science) software package to analyze and interpret. Those data are used in SPSS for using statistical analysis as follows:

The main presentation of analysis focuses on frequency table provides the number of people and percentage belonging to each category for the variable in the question. It can be used in related to all of the different types of variable. The pie chart shows the relative size of the different categories but brings out as well as the size of each slice relative to the total sample. The percentage that each slice represents of the whole sample is also given the diagram, which was also produced with SPSS for WINDOWS.

Descriptive analysis includes mean and standard deviation: Both were measured by statistic testing to identify the result of the more important variables. It would be statistically analyzed to identify the important variables. The analysis uses the following measurements for

statistical testing. (1) The measure of central tendency identified the important variables by comparing the mean among all variables; (2) the measure of data dispersion utilized standard deviation to check the characteristics of the data distribution. The advantage of using measures of central tendency is that it is more convenient to describe important variables, and utilize with other forms of statistical analysis. Mean is the most popular measure of central tendency whereas standard deviation (0) is the most popular measure of dispersion. It is not sufficient to consider the result of the mean only, but also the dispersion of data needs to be considered. If standard deviation is the lower figure, it means that the data distribution or dispersion is more effective and efficient. That is the respondents have a similar answer or opinion, the data dispersion would be wider. Moreover, the standard deviation will use to analyze and evaluate the more important variables. The important variable will have a mean 3.51 or higher.

Concerning the beta coefficients in the model, it tells us the effect of changes in independent the effect of one independent variable on the dependent variable. On this count, the independent variable still makes by far the greatest contribution, because a unit change in one independent variable has one unit change in the dependent variable. This ordering of the standardized beta coefficients of one independent variable is supported by consideration of the correlation between one independent variable and the dependent variable. The predictor with the largest beta coefficient also has largest correlation with the dependent variable. While the adjust R-squared ( $\bar{R}$ ) of the dependent variable accounted by regression display p-value=(X) of the variation on the independent variable. Moreover, the t-test is aimed at determining the conceptual model of the important variables for the independent variable if there are significant between one independent variable and the dependent variable. When the t-value greater than 1.50, it can explain that a positive significant effect between one independent variable and dependent variable at 5% level of significance. The  $\rho$ -value of independent variable displays its  $\rho$ -value, which is close to zero.

Co linearity is the undesirable situation where the correlations among the independent variables are high. Co linearity can be detected by the Tolerance statistic, which is the proportion of a variable's variance, not accounted for by other independent variables in the equation. A variable with very low tolerance contributes little information to a model, and can cause conceptual problems. The variance inflation factor (VIF) is the reciprocal of tolerance. So, by the

definition, the variables here with low tolerances have large variance inflation factors. The calculations of the variance for the  $i$ th regression coefficient use  $VIF_i$ , thus, its name. As the variance inflation factor increases, so does the variance of the regression coefficient. So if the VIF of a variables are less than 10 when the tolerance are close to 1 mean that model is not face multi co linearity problem.

### 5.3 Model results of factors affect to the special economic zone performance

Six factors were tested in this research study are shown in Table 6.1. Questionnaires in this research are consisting of six main parts of factors with 29 questions.

**Table 5.1** Statistic respondents' on the importance to the zone performance

<b>Factors</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Importance level</b>
<b>1. Government policy</b>			
Politic stability	1.5667	0.50401	Very importance
Free market	1.9333	0.36515	Importance
Regional arrangement under ASEAN & ASEAN +3	2.1667	0.64772	Importance
Market access	2.1000	0.60743	Importance
One-stop-service	1.2333	0.43018	Very importance
<b>2. Investment incentive</b>			
Corporate income tax	1.9667	0.18257	Importance
Full import duty exemption	1.8000	0.40684	Very importance
Reinvestment of earning	2.2333	0.43018	Importance
<b>3. Infrastructure</b>			
Electricity available	1.8667	0.50742	Importance
Water supply available	2.1000	0.30513	Importance
Communication available	2.0333	0.41384	Importance

**Table 5.1** Statistic respondents' on the importance to the zone performance (Continue)

Transportation available	2.0333	0.61495	Importance
Electricity cost	1.2667	0.44978	Very importance
Water supply cost	2.0667	0.25371	Importance
Communication cost	1.9333	0.36515	Importance
Transportation available	2.0000	0.52523	Importance
<b>4. Raw material</b>			
Low technology of machine	2.3667	0.66868	Importance
High price	2.6667	0.60648	Medium
No local supplier	2.2000	0.66436	Importance
Unsatisfied quality	2.4333	0.67891	Importance
No adequate supply	2.7000	0.53498	Medium
<b>5. Labor performance</b>			
Skilled worker	2.7333	0.73968	Medium
Unskilled worker	2.1667	0.64772	Importance
Cheap labor cost	1.3000	0.53498	Very importance
<b>6. Regional and Global Integration</b>			
GSP granted by old ASEAN Member	2.2667	0.63968	Importance
Quota free	2.8333	0.53067	Medium
Bilateral agreement	2.4000	0.62146	Importance
MFN granted by USA	2.4667	0.62881	Importance
EBA granted by EU	2.0000	0.58722	Importance

#### Government policy

Table 5.1 shows the respondent' opinions of the importance of government policy factors to the special economic zone performance. It indicates all five variables that are

considered the very importance and importance to special economic zone performance in Cambodia. Politic stability (mean=1.5667, S.D=0.50401) and one-stop-service (1.2333, S.D=0.43018) are considered the very importance level. Free market (1.9333, S.D=0.36515), regional arrangement under ASEAN & ASEAN+3 (mean=2.1667, S.D=0.64772) and market access (mean=2.1000, S.D=0.60743) represent the importance level to special economic zone performance in Cambodia.

In conclusion, all five variables of government policy factors, politic stability and one-stop-service are very importance factors to special economic zone performance in Cambodia, while free market, regional arrangement under ASEAN & ASEAN+3 and market access are not very importance but still in importance level.

#### Investment incentive

Full import duty exemption (mean=1.8000, S.D=0.40684) is considered the very importance level. Corporate income tax (mean=1.9667, S.D=0.18257) and reinvest of earning (mean=2.2333, S.D=0.43018) represent the importance level to special economic zone performance in Cambodia as represented in Table 5.1 of the respondent' opinions on the importance of investment incentive factors to the special economic zone performance in Cambodia. All three variables are considered the very importance and importance to special economic zone performance in Cambodia.

So, all three variables of investment incentive factors, full import duty exemption are very importance factors to special economic zone performance in Cambodia, while corporate income tax and reinvest of earning appear to be importance level.

#### Infrastructure

The respondent' opinions on the importance of infrastructure factors to the special economic zone performance in Cambodia as shown in Table 5.1 indicates all eight variables that are considered the very importance and importance to special economic zone performance in Cambodia. Electricity cost (mean=1.2667, S.D=0.44978) is considered the very importance level. Other seven variables with an importance level consist of electricity available (mean=1.8667, S.D=0.50742) , water supply available (mean=2.1000, S.D=0.30513) communication available (mean=2.0333, S.D=0.41384), transportation available (mean=2.0333, S.D=0.61495), water supply cost (mean=2.0000, S.D=0.52523), communication cost (1.9333, S.D=0.36515) and

transportation cost (1.9667, S.D=0.18257) represent the importance determinants of special economic zone performance.

Therefore, all eight variables of infrastructure factors, only electricity cost is very importance factors to special economic zone performance in Cambodia, as electricity available, water supply available, communication available, transportation available, water supply cost, communication cost and transportation cost appear to be only importance level.

#### Raw material

Respondents' opinions on the importance of raw material factors to the special economic zone performance in Cambodia in Table 5.1 show that all five variables that are considered the importance and medium to special economic zone performance in Cambodia. Low technology of machine (mean=2.3667, S.D=0.66868) No local supplier (mean=2.2000, S.D=0.66436) and unsatisfied quality (mean=2.4333, S.D=0.67891) are considered the importance level. High price (mean=2.6667, S.D=0.60648) and no adequate supply (mean=2.7000, S.D=0.53498) represent the medium importance level to special economic zone performance in Cambodia.

In conclusion, all four variables of raw material factors, low technology of machine, no local supplier and unsatisfied quality are importance factors to special economic zone performance in Cambodia, while high price and no adequate supply just only appear to be medium importance level.

#### Labor performance factors

As shown in Table 5.1, the respondent' opinions on the importance of labor performance factors to the special economic zone performance in Cambodia. All three variables are considered the very importance, importance and medium to special economic zone performance in Cambodia. Cheap labor cost (mean=1.3000, S.D=0.53498) is considered the very importance level. Unskilled worker (mean=2.1667, S.D=0.64772) is presented the importance level and skilled worker (mean=2.7333, S.D=0.73968) represent the medium level to special economic zone performance in Cambodia.

We can conclude that all three variables of labor performance factors that cheap labor cost is very importance factors to special economic zone performance in Cambodia, while

unskilled worker not very importance but still in importance level and followed by skilled worker with a medium level.

#### Regional and global integration factors

Table 5.1 represents the respondent' opinions of the importance level of regional and global integration factors to the special economic zone performance in Cambodia. It indicates all five variables that are considered the importance and medium to special economic zone performance. GSP granted by old ASEAN member (mean=2.2667, S.D=0.63968), bilateral agreement (mean=2.4000, S.D=0.62146), MFN granted by USA (mean=2.4667, S.D=0.62881) and EBA granted by EU (mean=2.0000, S.D=0.58722), are considered the important factor. Quota free (mean=2.8333, S.D=0.53067) represent the medium importance level.

All five variables of regional and global integration factors, GSP granted by old ASEAN member, bilateral agreement, MFN granted by USA and EBA granted by EU are important factors to special economic zone performance, while quota free just only appear to be medium importance level.

#### 5.3.1 Statistic Results of Model 1

The model 1 comprises four main variables such as Government Regulation Policy, Investment incentive, Infrastructure and Raw material. The results of model 1 are followings:  
Government Regulation Policy

As the regression result of model 1 in Table 5.2 indicates that government regulation policy is a factor which effect to zone development.

The t-value of government regulation policy is 7.043. It means that t-value is greater than 1.5, which is at 1% significant level. While the adjusted R<sup>2</sup> for regression of government regulation policy=0.949 is close to 1 and 94% of the development in the zone. Moreover, the significant of government regulation policy is at  $\rho=0.000$ . This results show that government regulation policy is an important factor to zone performance.

#### Investment Incentive

As the regression result of model 1 in Table 5.2 indicates that government regulation policy is one of factors which effect to zone development.

The t-value of investment incentive is 3.154. It means that t-value is greater than 1.5, which is at 1% significant level. While the adjusted R<sup>2</sup> for regression of investment incentive

=0.949 is close to 1 and 94% of the development in the zone. Moreover, the significant of investment incentive is at  $\rho=0.004$ , which is close to zero. This results show that investment incentive is the one of important factors to zone development.

#### Infrastructure

As the regression result of model 1 in Table 5.2 is indicates that government regulation policy is a factor which effect to zone development.

The t-value of infrastructure is 7.212. It means that t-value is greater than 1.5, which is at 1% significant level. While the adjusted  $R^2$  for regression of infrastructure =0.949 is close to 1 and 94% of the development in the zone. Moreover, the significant of infrastructure is at  $\rho=0.000$ . This results show that infrastructure is the factor which affect to zone development.

#### Raw Material

As the regression result of model 1 in Table 5.2 indicates that Raw material is a factor which effect to zone development.

The t-value of Raw material is 9.336. It means that t-value is greater than 1.5, which is at 1% significant level. While the adjusted  $R^2$  for regression of Raw material=0.949 is close to 1 and 94% of the development in the zone. Moreover, the significant of Raw material is at  $\rho=0.000$ . This results show that raw material is a factor to zone performance.

In model 1 the VIF of all variables are less than 10 when the tolerance are close to 1. So the model 1 is not face multi co linearity problem (See appendix D)

**Table 5.2** Regression Result of Model 1

<b>Variable</b>	<b>Model 1</b>
	0.325
Government Regulation Policy	(7.043)
	0.143
Investment Incentive	(3.154)
	0.389
Infrastructure	(7.212)
	0.478
Raw material	(9.336)
Number of Observation	30
Degree of freedom	4
R-squared	0.956
Adjust R-squared	0.949
F-statistic	134.903

*Note:* -t-values are presented in the parenthesis.

## 5.3.2 Statistic Results of Model 2

**Table 5.3** Regression Result of Model 2

Variable	Model 2
Infrastructure	0.340 (6.584)
Raw material	0.263 (5.510)
Labor performance	0.232 (3.971)
Region and global Integration	0.370 (8.8021)
Number of Observation	30
Degree of freedom	4
R-squared	0.970
Adjust R-squared	0.965
F-statistic	203.491

*Note:* -t-values are presented in the parenthesis.

The model 2 comprises four main variables such as Infrastructure, Raw material, Labor performance and Region and global integration.

The results of model 2 are followings:

Infrastructure

As the regression result of model 1 in Table 5.3 indicates that infrastructure is a factor which effects to zone development.

The t-value of infrastructure is 6.584. It means that t-value is greater than 1.5, which is at 1% significant level. While the adjusted  $R^2$  for regression of infrastructure =0.965 is close to 1 and 96% of the development in the zone. Moreover, the significant of government regulation policy is at  $\rho=0.000$ . This results show that infrastructure is the important factor effect to the zone performance

#### Raw Material

As the regression result of model 2 in Table 5.3 indicates that raw material is a factor which effect to zone development.

The t-value of raw material is 5.510. It s means that t-value are greater than 1.5, which is at 1% significant level. While the adjusted  $R^2$  for regression of raw material =0.965 is close to 1 and 96% of the development in the zone. Moreover, the significant of raw material is at  $\rho=0.000$ . This results show that government regulation policy is also important factor for zone development.

#### Labor Performance

As the regression result of model 2 in Table 5.3 indicates that labor performance is a factor which effect to zone development.

The t-value of labor performance is 3.971. It s means that t-value are greater than 1.5, which is at 1% significant level. While the adjusted  $R^2$  for regression of labor performance =0.965 is close to 1 and 96% of the development in the zone. Moreover, the significant of government regulation policy is at  $\rho=0.001$ , which is close to zero. This results show that labor performance is one of factors is effect to zone development.

#### Regional and Global Integration

As the regression result of model 2 in Table 5.3 indicates that regional and global integration is a factor which effect to zone development.

The t-value of regional and global integration is 8.802. It s means that t-value are greater than 1.5, which is at 1% significant level. While the adjusted  $R^2$  for regression of regional and global integration =0.965 is close to 1 and 96% of the development in the zone. Moreover, the

significant of regional and global integration is at  $\rho=0.000$ . This results show that regional and global integration is an important factor for zone development.

In model 2 the VIF of all variables are less than 10 when the tolerance are close to 1. So the model 2 is not face multi co linearity problem (See appendix B).

In conclusion most importance factor for zone development is government policy followed by investment incentive, infrastructure, labor performance are medium importance factor to special economic zone performance in Cambodia while raw material and region and global integration factors are not so importance factors. But demonstration by the workers and electricity cost are the most problems faced by foreign firms in special economic zone in Cambodia as the time of investment application, company registration, and take long time for document process and high informal expense for import/export document appear to be the medium problem level.

#### **5.4 Problems faced by firms in special economic zone**

Four problems were tested in this research study are shown in Table 5.4 Questionnaires in this research are consisting of four parts of problems with 23 questions.

##### **Labor performance problems**

Table 5.4 shows that the respondent' opinions on the problems of labor performance faced by foreign firms in special economic zone. It indicates all four variables that are considered the most, high and less problem faced by the foreign firms in special economic zone Cambodia. Demonstration (mean=1.5333, S.D=0.68145) is considered the most problem level. Low qualification job (mean=1.9333, S.D=0.25371) and unskilled worker (mean=2.0667, S.D=0.44978) are considered the high problem level. Labor cost (mean=3.8000, S.D=0.55086) represent the less problem level faced by foreign firms in special economic zone performance in Cambodia.

So, all four variables of labor performance, Demonstration is the most problem level, while low qualification job and unskilled worker are considered the high problem and labor cost represent the less problem level faced by foreign firms in special economic zone in Cambodia.

#### Labor performance problems

Table 5.4 shows that the respondent' opinions on the problems of labor performance faced by foreign firms in special economic zone. It indicates all four variables that are considered the most, high and less problem faced by the foreign firms in special economic zone Cambodia. Demonstration (mean=1.5333, S.D=0.68145) is considered the most problem level. Low qualification job (mean=1.9333, S.D=0.25371) and unskilled worker (mean=2.0667, S.D=0.44978) are considered the high problem level. Labor cost (mean=3.8000, S.D=0.55086) represent the less problem level faced by foreign firms in special economic zone performance in Cambodia.

#### Raw material problems

As shown in Table 5.4, the respondent' opinions on the problems of raw material faced by the foreign firms in special economic zone, all five variables are considered the high and medium problems faced by foreign firms in special economic zone Cambodia. Low technology of machine (mean=2.3667, S.D=0.66868) No local supplier (mean=2.2333, S.D=0.67891), unsatisfied quality (mean=2.6000, S.D=0.49827) and no adequate supply (mean=2.5667, S.D=0.50401) are considered the high problem level. High price (mean=2.6667, S.D=0.47946) represent the medium problem level faced by foreign firms in special economic zone in Cambodia.

In summary, all five variables of raw material factors, low technology of machine, no local supplier, unsatisfied quality and no adequate supply are high faced by foreign firms in special economic zone in Cambodia, while high price just only appear to be medium problem level.

**Table 5.4** Statistic respondents' on level of problems

<b>Problems</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Problem level</b>
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<b>1. Labor performance</b>			
Low qualification job	1.9333	0.25371	High problem
Labor cost	3.8000	0.55086	Less problem
Unskilled worker	2.0667	0.44978	High problem
Demonstration	1.5333	0.68145	Most problem
<b>2. Raw material</b>			
Low technology of machine	2.3667	0.66868	High problem
High price	2.6667	0.47946	Med. problem
No local supplier	2.2333	0.67891	High problem
Unsatisfied quality	2.6000	0.49827	High problem
No adequate supply	2.5667	0.50401	High problem
<b>3. Infrastructure</b>			
Electricity available	2.2333	0.67891	High problem
Water supply available	2.5000	0.57235	High problem
Communication available	2.1333	0.34575	High problem
Transportation available	2.2333	0.50401	High problem
Electricity cost	1.3333	0.47946	Most problem
Water supply cost	2.1000	0.40258	High problem
Communication cost	1.9667	0.41384	High problem
Transportation cost	2.2000	0.40684	High problem
<b>4. Government service for foreign investors</b>			
Time of investment application	2.9667	0.61495	Med. problem
Company registration	3.0333	0.55605	Med. problem
Import clearance	2.4333	0.56832	High problem
Export clearance	2.4333	0.56832	High problem
Take long time for document process	3.1333	0.73030	Med. problem

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Infrastructure problems

Electricity cost (mean=1.3333, S.D=0.47946) is considered the most problem level.

Other seven variables with an importance level consist of electricity available (mean=2.2333,

S.D=0.67891), water supply available (mean=2.5000, S.D=0.57235) communication available (mean=2.1333, S.D=0.34575), transportation available (mean=1.9667, S.D=0.41384), water supply cost (mean=2.1000, S.D=0.40258), communication cost (1.9333, S.D=0.36515) and transportation cost (2.2000, S.D=0.40684) represent the high problem level. All these are shown in Table 5.4 It indicates all eight variables that are considered the most and high problem faced by foreign firms in special economic zone in Cambodia.

In summary, all eight variables of infrastructure problems, only electricity cost is the most problems faced by foreign firms in special economic zone in Cambodia, while electricity available, water supply available, communication available, transportation available, water supply cost, communication cost and transportation cost appear to be high problem level.

#### Government service for foreign investor's problems

The respondent' opinions on the level of government service for foreign investors problems in Table 5.4 indicates all six variables that are considered the high and medium problem. Import and export clearance (mean=2.4333, S.D=0.56832) and high informal cost for import and export clearance (mean=3.1000, S.D=0.92289) is considered the high problem level. Time of investment application (mean=2.9667, S.D=0.61495), company registration (mean=3.0333, S.D=0.55605), take long time for document process (mean=3.1333, S.D=0.73030) and high informal expense for import/export document represent the medium problem level.

In conclusion, the most problem faced by foreign firms are demonstration of labor performance problems and electricity cost of infrastructure problems, and only import and export clearance is still the high problems faced by the foreign firms in special economic zone in Cambodia, while the time of investment application, company registration, take long time for document process and high informal expense for import/export document appear to be the medium problem level.

## CHAPTER 6

### CONCLUSION

There are two parts in this chapter. Part 1 is findings of the research and part 2 is recommendations.

#### 6.1. Findings

##### 6.1.1 Factors to improve the zone development

This study has demonstrated six main factors influencing zone development for Manhattan and also for SEZ in Cambodia in term of export. Each factor consists of the variables that can explain the importance of special economic zone development. They are Government Regulation Policy, Investment Incentive, Infrastructure, Raw Material, Labor and Regional and Global Integration.

On the basis of the results in chapter 5 in point 5.3, we can conclude that the most importance factor for zone development is government policy and follow by investment incentive, infrastructure labor performance are medium importance factor to special economic zone performance in Cambodia while raw material and region and global integration factors are not so importance factors.

##### 6.1.2 Problems faced by the foreign firms in the Zone

Even the government has already adopted the new policy and law to attract the foreign investor to Cambodia specially to special economic zone, but the problems which faced by foreign investors still remain some which need all sites to resolve that problems for improving and develop

the zone performance in the future. The most problem that need to resolve are electricity cost are the most problems faced by foreign firms in special economic zone in Cambodia because electricity cost lead to the high cost of products cannot compete with neighbor countries and demonstration is affect to the production it will delay to the time of export to market.

More problems mentioned by interviewees in the zone stated that Cambodia's legal system is not favor enough for their business because of Cambodia not set up the commercial court. Electricity cost is also still very high compared with neighbor countries. Most of raw material are imported it will lead the cost of product is high cannot compete with other countries. Moreover, skilled labor still very lack which need the time to train them after they are qualified to work in the factory.

## **6.2 Recommendation**

Having recognized some of the factors that affect the special economic zone performance in Cambodia, the Royal Government should start to take steps and develop a plan of action aimed at reducing the cost of doing business in Cambodia and made some improvements, particularly industrial and infrastructural development, to attract FDIs. The areas in the manufacturing business being developed in Cambodia are extremely limited. Thus, the followings recommendations are asserted.:

### **6.2.1. Promote industrial development**

To promote industrial development, the following are thus recommended:

1. Overcome negative issues that existing investors and manufacturers have to contend with;
2. Diversify market by expanding Cambodia's export market to Japan, Russia, the Middle East, and other Asian countries. There should be a training course on quality control, which should be particularly designed to enhance export competitiveness in the U.S. and the EU, and ultimately, Japan.

3. Enhance the quality of labor with a view to increasing productivity. Ensure that guidance, mainly in production process analyses and standardization, is provided to guarantee the optimum arrangement of machinery and productivity management and realize improvements on productivity;

4. Simplify import-export procedures;

5. Introduce additional measures to cut lead time with a view to enhancing Cambodian competitiveness vis-à-vis its neighboring countries;

6. Encourage both foreign and domestic investments for the development of backward linkages and supporting industries. This will further shorten the lead time and will result in a higher level of competitiveness;

7. The SEZ will have to clearly establish the standard for EPZ functions and other elements of the management scheme as well as industrial infrastructural elements, such as electrical power, water, and wastewater treatment;

8. Provide the major infrastructure required for industrial development and FDI promotion, including development of SEZs, electricity, telecommunications, roads, aviation, railways, seaports and water resource infrastructure; and,

9. Develop and carry out Human Resource Development (HRD) and technical training.

10. Continued survey of emerging industries in order to establish cooperation or create linkages in the ASEAN area

11. Build Linkages-Capacity Programs (trainings, workshops)

#### 6.2.2 Promotion of infrastructure linkages to countries in the region

The focus for transport infrastructure for the rehabilitation of high-priority trunk and feeder roads and bridges, especially the regional highways linking countries in the region, should remain to realize the potential of agriculture, tourism, and trade in the rural areas. There is also a need to develop a comprehensive transport policy framework, addressing issues such as development of a balanced construction and maintenance program, increased involvement of the private sector, and financing of road maintenance and cost recovery mechanisms. Major investments now have to

improve the physical transport infrastructure linking Cambodia with Thailand and Vietnam, as well as to improve sea and air access to international destinations, especially China. Energy, port, and airport should be promoted to meet the increasing demand of production and trade. These developments could greatly reduce transport costs and increase the competitiveness of Cambodian products on export markets. However, the full benefits of such developments will only be realized if people and goods can move across borders at minimal cost.

#### Technology transfer

Cambodia cannot move fast enough to catch up with its neighbors in the region if the level of technology and science will remain low. Technology transfer should fit the overall strategy of the government's priority. Investment encouragement to succeed would have to take emphasis on job creation, research and development (R&D), and effective knowledge and technology transfer.

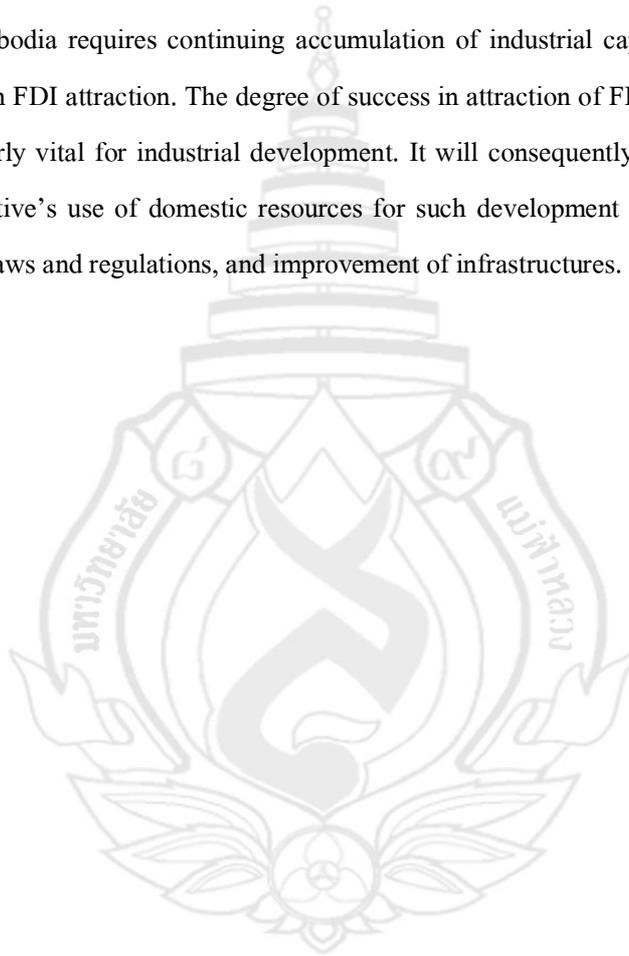
The government may wish to consider the following measures:

1. Ensure assessment of local needs in technology as well as the social impacts of technology
2. Expand R&D programs in technology development including adaptation to local needs
3. Create awareness on technology transfer
4. Improve transfer of technology among developing countries including joint R&D and opening of markets
5. Improve macroeconomic stability for transfer of technology to maximize the benefits of FDI through enhancing technology transfers and spillovers, Cambodia should make sure that interventions based on anticipated trends of comparative advantage will be effective, but this would require careful industry-specific analysis and broad-based consultation with the private sector and other stakeholders. Cambodia should rely more on comparative advantage, and keep in mind that FDI that responds to global market forces holds promise, particularly FDI in export sectors.

### Industry diversification

So far, in the zone there are only four main types of products for export. Diversification of industry is very important to promote local production. National standard for local products must be strengthened to meet international benchmark, especially for food and processed products because Cambodia is based on agriculture.

Cambodia requires continuing accumulation of industrial capital through infrastructural conditioning with FDI attraction. The degree of success in attraction of FDI and exports by their sites will be particularly vital for industrial development. It will consequently be important to encourage sitting and effective's use of domestic resources for such development by proper conditioning and enforcement of laws and regulations, and improvement of infrastructures.



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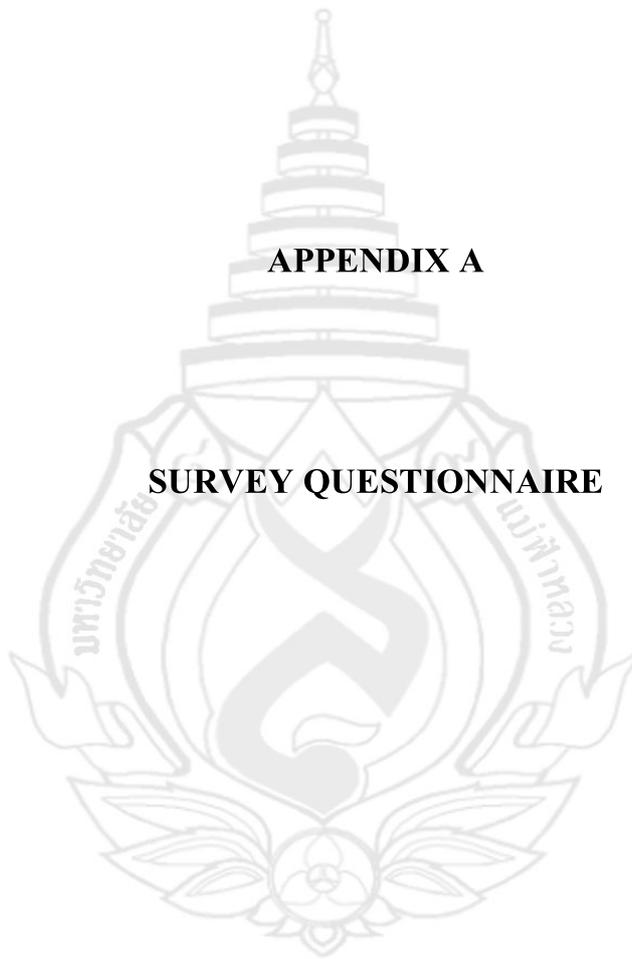
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**APPENDIX A**

**SURVEY QUESTIONNAIRE**





.....

3. Registered Capital .....Riel, .....US Dollar

4. What is your main product?

	Percentage
<input type="checkbox"/> Textile	.....
<input type="checkbox"/> Garment	.....
<input type="checkbox"/> Footwear	.....
<input type="checkbox"/> Bicycle	.....
<input type="checkbox"/> Screw	.....
<input type="checkbox"/> Other (please specify) .....	.....

5. Where is your main market?

Name	Percentage
<input type="checkbox"/> EU	.....
<input type="checkbox"/> USA	.....
<input type="checkbox"/> ASEAN members countries	.....
<input type="checkbox"/> Other (Please specify).....	.....

6. Why did you decide to invest in Cambodia as Manhattan SEZ?

Because of

- Politic stability in host country
- Investment incentive as investment law
- Cheap labour cost
- Regional and global integration of host country
- Anti-dumping penalties of EU for other countries in the region
- Other (Please specify).....

7. How can you export?

- By yourself Since.....
- Through joint-venture partner Since.....
- Through Trading Company Since.....
- Others (Please specify)..... Since.....

7. Please indicate the reported sales volume per year of your company in US\$ below:

Year	Sales Volume per Year (in US\$)
2006	
2007	
2008	

## I.2. Experiences with foreign investors.

1. Before entering in to a joint venture. Did you have any business contact with local investor or any information from host country?

- Yes, we have as a
- Agent in Cambodia
  - Raw material supplier
  - Internet
  - others (please specify) .....
- No we have not

2. Without the cooperation from foreign partner, do you think the present company have been established?

- Yes.
- No, foreign partner have important role in

	Much	Some	Equal	Little	Nil
<b>*Finance</b>					
Equity	<input type="checkbox"/>				
Share holding	<input type="checkbox"/>				
Loan	<input type="checkbox"/>				
Others (Please specify)	<input type="checkbox"/>				
<b>*Technology</b>					
Marketing know-how	<input type="checkbox"/>				
Market channel	<input type="checkbox"/>				
Management know-how	<input type="checkbox"/>				
Procurement of necessary factors of production	<input type="checkbox"/>				

Sharing of risks	<input type="checkbox"/>				
Others (Please specify).....	<input type="checkbox"/>				

3. Do your foreign-joint venture partner have any other investment in Asian?

Yes, they have.

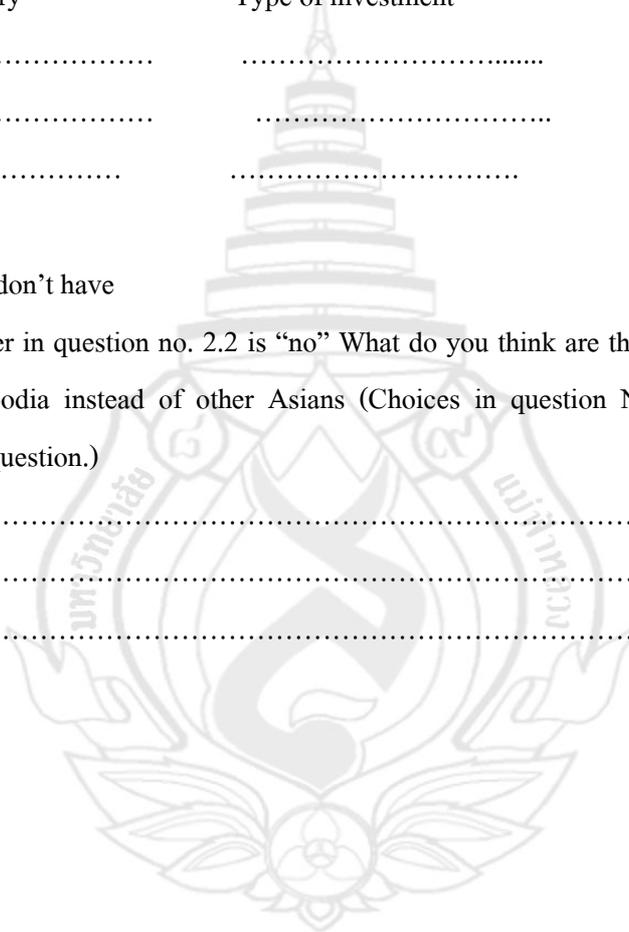
Please specify the type of investment in each country

Country	Type of investment	larger	smaller	equal
.....	.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.....	.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.....	.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No, they don't have

4. If your answer in question no. 2.2 is “no” What do you think are the main reason for them to invest in Cambodia instead of other Asians (Choices in question No. II may be useful for answering this question.)

1. ....
2. ....
3. ....



### I.3. Employment performance

3.1. Please specify the numbers of workers (both Cambodian and foreigner)

Function	2006		2007		2008	
	Cambodian	Foreigner	Cambodian	Foreigner	Cambodian	Foreigner
Management						
Production						
Shipping						
Marketing						
Finance						
Engineer						
Skilled worker						
Unskilled worker						
Total						

#### I.4. Production and raw material

1. Where do you acquire your technology from?

- Technical assistance agreements
- Purchase order by buyer
- Others (Please specify).....

2. Where do you import raw materials from?

- ASEAN members
- Other (Please specify) .....

#### II. Factors effect to SEZ performance.

From the list below please indicate the degree of importance of the various factors in Cambodia which are essential for attracting FDI in Manhattan SEZ.

Degree of importance

A. Very important    B. Important    C. Equal    D. Not so important    E. Not important at all

##### 1. Government regulation policy

- |   | A                        | B                        | C                        | D                        | E                        |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1.1. Political stability                          | <input type="checkbox"/> |
| 1.2. Free market                                  | <input type="checkbox"/> |
| 1.3. Regional arrangement under ASEAN and ASEAN+3 | <input type="checkbox"/> |
| 1.4. Market access                                | <input type="checkbox"/> |
| 1.5. One-stop-service                             | <input type="checkbox"/> |

##### 2. Investment incentive

- |                                 |                          |                          |                          |                          |                          |
|---------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 2.1. Corporate income tax       | <input type="checkbox"/> |
| 2.2. Full import duty exemption | <input type="checkbox"/> |
| 2.3. Reinvestment of earning    | <input type="checkbox"/> |

##### 3. Infrastructure

- |                               |                          |                          |                          |                          |                          |
|-------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 3.1. Infrastructure available |                          |                          |                          |                          |                          |
| 3.1.1. Electricity            | <input type="checkbox"/> |

3.1.2. Water supply	<input type="checkbox"/>				
3.1.3. Communication	<input type="checkbox"/>				
3.1.4. Transportation	<input type="checkbox"/>				
3.2. Infrastructure cost					
3.2.1. Electricity	<input type="checkbox"/>				
3.2.2. Water supply	<input type="checkbox"/>				
3.2.3. Communication	<input type="checkbox"/>				
3.2.4. Transportation	<input type="checkbox"/>				
<b>4. Raw material</b>					
4.1. Low technology of machine	<input type="checkbox"/>				
4.2. High price	<input type="checkbox"/>				
4.3. No local supplier	<input type="checkbox"/>				
4.4. Unsatisfied quality	<input type="checkbox"/>				
4.5. No adequate supply	<input type="checkbox"/>				
<b>5. Labour performance</b>					
5.1. Skilled worker	<input type="checkbox"/>				
5.2. Unskilled worker	<input type="checkbox"/>				
5.3. Cheap labour cost	<input type="checkbox"/>				
<b>6. Region and global integration (ASEAN, WTO)</b>					
6.1. GSP granted by old ASEAN member	<input type="checkbox"/>				
6.2. Quota free	<input type="checkbox"/>				
6.3. Bilateral agreement	<input type="checkbox"/>				
6.4. MFN granted by USA	<input type="checkbox"/>				
6.5. EBA granted by EU	<input type="checkbox"/>				

### III. Problems

In this section, please indicate the degree of importance of problems which you think that are the obstacle for the investor exportation.

Degree of importance



4.3. Import clearance	<input type="checkbox"/>				
4.4. Export clearance	<input type="checkbox"/>				
4.5. Take a long time for documentation process	<input type="checkbox"/>				
4.6. High informal expense for import/export document	<input type="checkbox"/>				

#### IV. Future perspective

1. Please indicate degree of your expectation for your company will improve in the future.

Degree of expectation

A: Strongly Expect B: Expect C: Equal D: Little E: Not expect

	A	B	C	D	E
Investment size	<input type="checkbox"/>				
Labor	<input type="checkbox"/>				
Raw material	<input type="checkbox"/>				
Production technology	<input type="checkbox"/>				
Expand market	<input type="checkbox"/>				

#### V. Suggestion and recommendation

1. Which supporting industries below should be promoted for remain factories in Manhattan SEZ?

1. For garment industry  Textile  Fabric  Knitted  
 Other.
2. For footwear industry  Leather  Processed Rubber  Other
3. For bicycle industry  Spare part  Tyre  Screw  Other
4. For screw industry  Steel  Other

2. Which new industries should be promoted for Manhattan SEZ?

Textile,  Garment,  Agro-industry,  Electronic, ,  Other.....

3. Suggestion for industrial development to compete with foreign market in term of export for:

1) Government

- Infrastructure reform
- Reduce time of export documentation
- Other .....

2) Foreign investors

- Enlarge the investment size
- Find local partner to joint-venture
- Develop new product with high technology
- Other.....

3) Local investors

- Invest in the zone
- Joint-venture with foreign investor
- Other .....

4) Is government policy should providing on vocational skill to worker ?

- Yes ,     No

5) Others (Please specify) .....

.....

.....

.....

**4. Recommendation for improvement the Special Economic Zone development in the future.**

.....

.....

.....

.....

.....

Thanks for your kindness

Mr. Batith SY

H /P: 855 12 948 484,

e-mail address: batithsy@yahoo.com

### Survey of Assessment of Manhattan Special Economic Zone (For Government sector)

#### **Instruction**

Please make a checkmark  $\checkmark$  in the relevant box  or fill in the blank provided in each question. Leave blank to questions not applicable to your organization. The information acquired from this survey will be used for thesis by **Mr. Batith SY**, official of Foreign Trade Department, Ministry of Commerce, Kingdom of Cambodia and a graduate student, School of Management, Mae Fah Luang University, Chiang Rai, Thailand. Individual sector detail will be treated as strictly confidential and helpful for complete the research topic of **Assessment of Manhattan Special Economic Zone**

#### **Development in Cambodia.**

Name of the organization.....

Name of interviewee.....

#### Your Position

- Chairman     Vice Chairman
- Secretary General     Deputy Secretary General
- Director     Deputy Director
- Chief office     Deputy Chief office
- Head of Section     Under Head of Section
- Other (Please specify) .....

Address:.....

Tel:.....Fax:.....e-mail:.....

#### **I. General information**

1. What is your responsibility for?

- Investment Application
- Company registration
- Dispute Settlement
- Import/Export Clearance
- Export document (C/O, license)

Other (please specify).....

Do you think the investor decided to invest in Cambodia as Manhattan SEZ because of

- Politic stability in host country?
- Investment incentive as investment law?
- Cheap labour cost ?
- Regional and global integration of host country?
- Anti-dumping penalties by EU for other countries in the region?
- Other (Please specify).....?
- Yes
- No

## II. Factors effect to SEZ performance.

From the list below please indicate the degree of importance of the various factors in Cambodia which are essential for attracting FDI in Manhattan SEZ.

Degree of importance

A. Very important    B. Important    C. Equal    D. Not so important    E. Not important at all

	A	B	C	D	E
<b>1. Government regulation policy</b>					
1.1. Political stability	<input type="checkbox"/>				
1.2. Free market	<input type="checkbox"/>				
1.3. Regional arrangement under ASEAN and ASEAN+3	<input type="checkbox"/>				
1.4. Market access	<input type="checkbox"/>				
1.5. One-stop-service	<input type="checkbox"/>				
<b>2. Investment incentive</b>					
2.1. Corporate income tax	<input type="checkbox"/>				
2.2. Full import duty exemption	<input type="checkbox"/>				
2.3. Reinvestment of earning	<input type="checkbox"/>				
<b>3. Infrastructure</b>					
3.1. Infrastructure available					

3.1.1. Electricity	<input type="checkbox"/>				
3.1.2. Water supply	<input type="checkbox"/>				
3.1.3. Communication	<input type="checkbox"/>				
3.1.4. Transportation	<input type="checkbox"/>				
3.2. Infrastructure cost					
3.2.1. Electricity	<input type="checkbox"/>				
3.2.2. Water supply	<input type="checkbox"/>				
3.2.3. Communication	<input type="checkbox"/>				
3.2.4. Transportation	<input type="checkbox"/>				
<b>4. Raw material</b>					
4.1. Low technology of machine	<input type="checkbox"/>				
4.2. High price	<input type="checkbox"/>				
4.3. No local supplier	<input type="checkbox"/>				
4.4. Unsatisfied quality	<input type="checkbox"/>				
4.5. No adequate supply	<input type="checkbox"/>				
<b>5. Labour performance</b>					
5.1. Skilled worker	<input type="checkbox"/>				
5.2. Unskilled worker	<input type="checkbox"/>				
5.3. Cheap labour cost	<input type="checkbox"/>				
<b>6. Region and global integration (ASEAN, WTO)</b>					
6.1. GSP granted by old ASEAN members/EU	<input type="checkbox"/>				
6.2. Quota free	<input type="checkbox"/>				
6.3. Bilateral agreement	<input type="checkbox"/>				
6.4. MFN granted by USA	<input type="checkbox"/>				
6.5. EBA granted by EU	<input type="checkbox"/>				

### III. Problems

In this section, please indicate the degree of importance of problems which you think that are the obstacle for the investor exportation.

Degree of importance

A. Too high B. high C. Medium D. Low E. Too low

	A	B	C	D	E
<b>1. Labor performance</b>					
1.1. Low-qualification jobs without investment					
in human capital	<input type="checkbox"/>				
1.2. Labor cost	<input type="checkbox"/>				
1.3. Unskilled worker	<input type="checkbox"/>				
1.4. Demonstration	<input type="checkbox"/>				
<b>2. Raw material</b>					
2.1. Low technology of machine	<input type="checkbox"/>				
2.2. High price	<input type="checkbox"/>				
2.3. No local supplier	<input type="checkbox"/>				
2.4. Unsatisfied quality	<input type="checkbox"/>				
2.5. No adequate supply	<input type="checkbox"/>				
<b>3. Infrastructure</b>					
3.1. Infrastructure available					
3.1.1. Electricity	<input type="checkbox"/>				
3.1.2. Water supply	<input type="checkbox"/>				
3.1.3. Communication	<input type="checkbox"/>				
3.1.4. Transportation	<input type="checkbox"/>				
3.2. Infrastructure cost					
3.2.1. Electricity	<input type="checkbox"/>				
3.2.2. Water supply	<input type="checkbox"/>				

- 3.2.3. Communication
- 3.2.4. Transportation

#### 4. Government service for foreign investors

- 4.1. Time Investment application
- 4.2. Company registration
- 4.3. Import clearance
- 4.4. Export clearance
- 4.5. Take a long time for documentation process
- 4.6. High informal expense for import/export document

#### IV. Future perspective

1. Please indicate degree of your expectation in your opinion for the future of Manhattan SEZ.

Degree of expectation

A: Too high B: High C: Medium D: Low E: Too low

- |                                       | A                        | B                        | C                        | D                        | E                        |
|---------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Larger of investment size             | <input type="checkbox"/> |
| Skilled Labour                        | <input type="checkbox"/> |
| Develop domestic raw material         | <input type="checkbox"/> |
| Production and technology development | <input type="checkbox"/> |
| Expand market                         | <input type="checkbox"/> |

#### V. Suggestion and recommendation

1. Which supporting industries below should be promoted for remain factories in Manhattan SEZ?

1. For garment industry  Textile  Fabric  Knitted
- Other.
2. For footwear industry  Leather  Processed Rubber  Other

- 3. For bicycle industry                     Spare part     Tyre                     Screw     Other
- 4. For screw industry                     Steel             Other

**2. Which new industries should be promoted for Manhattan SEZ?**

- Textile,    Garment,    Agro-industry,    Electronic, ,    Other.....

**3. Suggestion for industrial development to compete with foreign market in term of export for:**

1) Government

- Infrastructure reform
- Reduce time of export documentation
- Other .....

2) Foreign investors

- Enlarge the investment size
- Find local partner to joint-venture
- Develop new product with high technology
- Other.....

3) Local investors

- Invest in the zone
- Joint-venture with foreign investor
- Other .....

4) Is government policy should providing on vocational skill to worker ?

- Yes ,     No

5) Others (Please specify)

.....

.....

.....

**4. Recommendation for improvement the Special Economic Zone development in the future.**

.....

.....

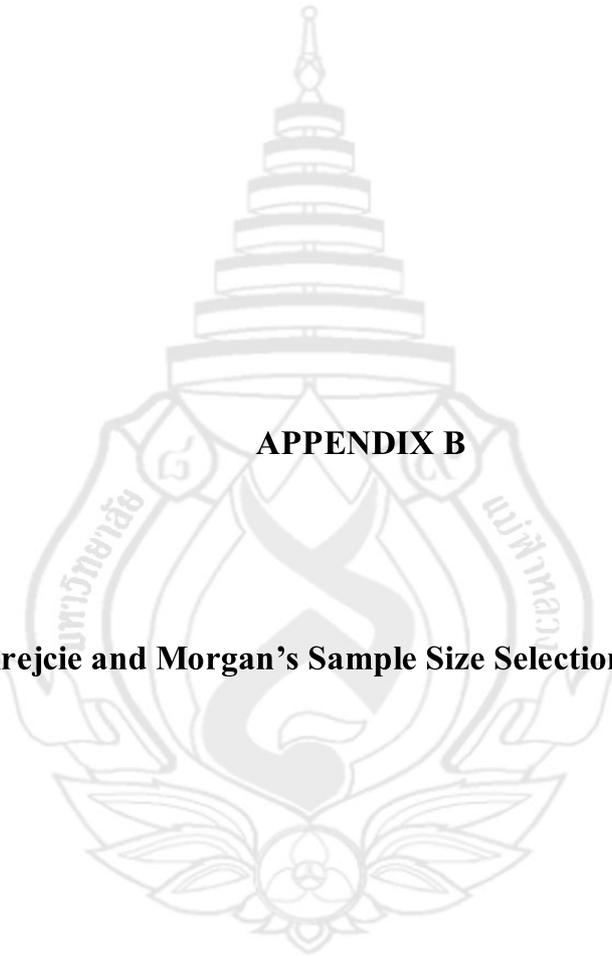
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Thanks for your kindness

Mr. Batith SY

H /P: 855 12 948 484,

e-mail address: [batithsy@yahoo.com](mailto:batithsy@yahoo.com)



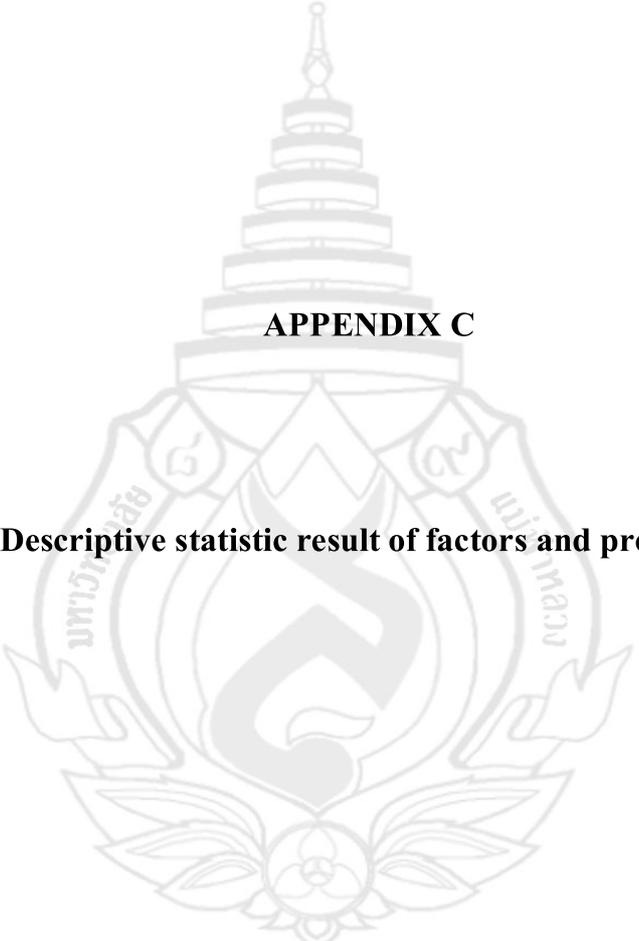


**APPENDIX B**

**Krejcie and Morgan's Sample Size Selection Scheme**

### Krejcie and Morgan's Sample Size Selection Scheme

Population	Sample	Population	Sample	Population	Sample	Population	Sample	Population	Sample
10	10	120	92	340	181	1200	291	8000	367
15	14	130	97	360	186	1300	297	9000	368
20	19	140	103	380	191	1400	302	10000	370
25	24	150	108	400	196	1500	306	15000	375
<b>30</b>	<b>28</b>	160	113	420	201	1600	310	20000	377
35	32	170	118	440	205	1700	313	30000	379
40	36	180	123	460	210	1800	317	40000	380
45	40	190	127	480	214	1900	320	50000	381
50	44	200	132	500	217	2000	322	75000	382
55	48	210	136	550	226	2200	327	100000	384
60	52	220	140	600	234	2400	331		
65	56	230	144	650	242	2600	335		
70	69	240	148	700	248	2800	338		
75	68	250	152	750	254	3000	341		
80	66	260	155	800	260	3500	346		
85	70	270	159	850	265	4000	351		
90	73	280	162	900	269	4500	354		
95	76	290	165	950	274	5000	357		
100	80	300	169	1000	278	6000	361		
110	86	320	175	1100	285	7000	364		



**APPENDIX C**

**Descriptive statistic result of factors and problems**

## Statistic respondents on important factors to zone performance

## Descriptive Statistics

Factors	N	Minimum	Maximum	Mean	Std. Deviation
<b>1. Government policy</b>					
Politic stability	30	1.00	2.00	1.5667	0.50401
Free market	30	1.00	3.00	1.9333	0.36515
Regional arrangement under ASEAN & ASEAN +3	30	1.00	3.00	2.1667	0.64772
Market access	30	1.00	3.00	2.1000	0.60743
One-stop-service	30	1.00	2.00	1.2333	0.43018
<b>2. Investment incentive</b>					
Corporate income tax	30	1.00	2.00	1.9667	0.18257
Full import duty exemption	30	1.00	2.00	1.8000	0.40684
Reinvestment of earning	30	2.00	3.00	2.2333	0.43018
<b>3. Infrastructure</b>					
Electricity available	30	1.00	3.00	1.8667	0.50742
Water supply available	30	2.00	3.00	2.1000	0.30513
Communication available	30	1.00	3.00	2.0333	0.41384
Transportation available	30	1.00	3.00	2.0333	0.61495
Electricity cost	30	1.00	2.00	1.2667	0.44978
Water supply cost	30	2.00	3.00	2.0667	0.25371
Communication cost	30	1.00	3.00	1.9333	0.36515
Transportation available	30	1.00	3.00	2.0000	0.52523
<b>4. Raw material</b>					
Low technology of machine	30	1.00	3.00	2.3667	0.66868
High price	30	1.00	3.00	2.6667	0.60648
No local supplier	30	1.00	4.00	2.2000	0.66436

Unsatisfied quality	30	1.00	3.00	2.4333	0.67891
No adequate supply	30	2.00	4.00	2.7000	0.53498
<b>5.Labor performance</b>					
Skilled worker	30	1.00	4.00	2.7333	0.73968
Unskilled worker	30	1.00	4.00	2.1667	0.64772
Cheap labor cost	30	1.00	3.00	1.3000	0.53498
<b>6. Regional and Global Integration</b>					
GSP granted by old ASEAN Member	30	1.00	3.00	2.2667	0.63968
Quota free	30	1.00	4.00	2.8333	0.53067
Bilateral agreement	30	1.00	3.00	2.4000	0.62146
MFN granted by USA	30	1.00	3.00	2.4667	0.62881
EBA granted by EU	30	1.00	3.00	2.0000	0.58722
Valid N (list wise)	30				

**Statistic respondents on problems level faced by foreign firms in the zone**

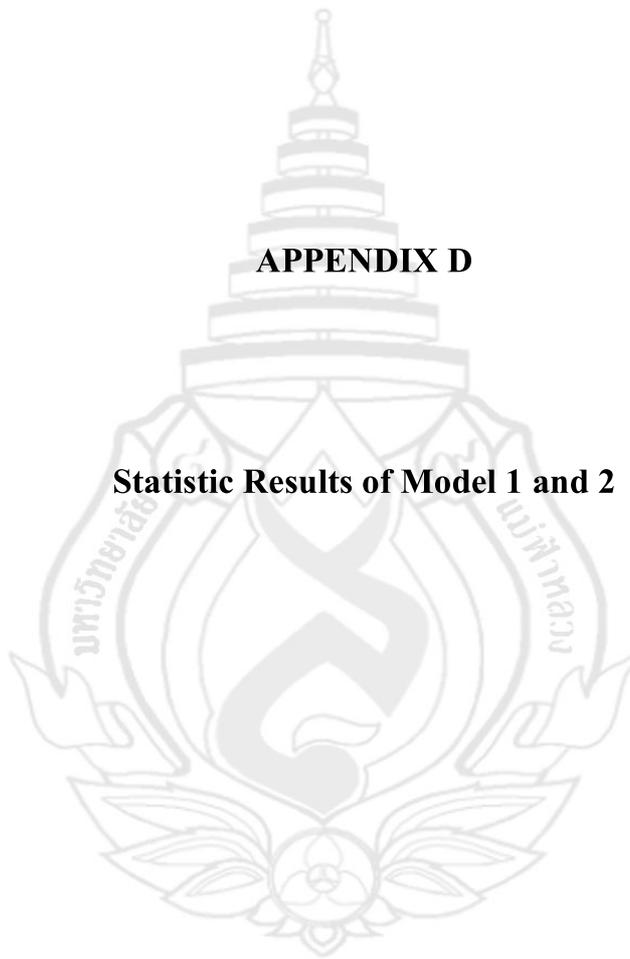
**Descriptive Statistics**

<b>Problems</b>				<b>Mean</b>	<b>Std. Deviation</b>
<b>1. Labor performance</b>					
Low qualification job	30	1.00	2.00	1.9333	0.25371
Labor cost	30	2.00	5.00	3.8000	0.55086
Unskilled worker	30	1.00	4.00	2.0667	0.44978
Demonstration	30	1.00	4.00	1.5333	0.68145
<b>2. Raw material</b>					
Low technology of machine	30	1.00	3.00	2.3667	0.66868
High price	30	2.00	3.00	2.6667	0.47946
No local supplier	30	1.00	5.00	2.2333	0.67891
Unsatisfied quality	30	2.00	3.00	2.6000	0.49827

No adequate supply	30	2.00	3.00	2.5667	0.50401
<b>3. Infrastructure</b>					
Electricity available	30	1.00	4.00	2.2333	0.67891
Water supply available	30	2.00	4.00	2.5000	0.57235
Communication available	30	2.00	3.00	2.1333	0.34575
Transportation available	30	1.00	3.00	2.2333	0.50401
Electricity cost	30	1.00	2.00	1.3333	0.47946
Water supply cost	30	1.00	3.00	2.1000	0.40258
Communication cost	30	1.00	3.00	1.9667	0.41384
Transportation cost	30	2.00	3.00	2.2000	0.40684
<b>4. Government service for foreign investors</b>					
Time of investment application	30	1.00	4.00	2.9667	0.61495
Company registration	30	1.00	4.00	3.0333	0.55605
Import clearance	30	2.00	4.00	2.4333	0.56832
Export clearance	30	2.00	4.00	2.4333	0.56832
Take long time for document process	30	2.00	4.00	3.1333	0.73030
High informal expense for import export document	30	2.00	4.00	3.1000	0.92289
Valid N (list wise)	30				

**APPENDIX D**

**Statistic Results of Model 1 and 2**



## Statistic Results of Model 1

### Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	Raw Material, Government regulation policy, Investment incentive,		Enter

a All requested variables entered.

b Dependent Variable: YSEZ

### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.978(a)	.956	.949	1.71887

a Predictors: (Constant), Raw Material, Government regulation policy, Investment incentive, Infrastructure

### ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1594.303	5	398.576	134.903	.000(a)
	Residual	73.863	25	2.955		
	Total	1668.167	30			

a Predictors: (Constant), Raw Material, Government regulation policy, Investment incentive, Infrastructure

b Dependent Variable: YSEZ

**Coefficients (a)**

Model		Unstandardized Coefficients		Standardized Coefficients		t	Sig.	Collinearity Statistics
		B	Std. Error	Beta				
<b>1</b>	(Constant)	.426	3.112		.137	.892		
	Government regulation policy	1.685	.239	.325	7.043	.000	.833	1.201
	Investment incentive	1.463	.464	.143	3.154	.004	.858	1.165
	Infrastructure	1.211	.168	.389	7.212	.000	.608	1.644
	Raw Material	1.451	.155	.478	9.336	.000	.676	1.478

a Dependent Variable: YSEZ

**Collinearity Diagnostics (a)**

Model	Dimension	Eigen value	Condition Index	Variance Proportions				
				(Constant)	Government regulation policy	Investment incentive	Infrastructure	Raw Material
	<b>1</b>	4.938	1.000	.00	.00	.00	.00	.00
	<b>2</b>	.028	13.388	.02	.23	.01	.01	.57
	<b>3</b>	.017	17.236	.09	.37	.31	.11	.02
	<b>4</b>	.011	21.243	.00	.33	.00	.87	.39
	<b>5</b>	.007	26.844	.89	.07	.68	.01	.01

a Dependent Variable: YSEZ

## Regression

### Statistic Results of Model 2

#### Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	Region and global integration (ASEAN, WTO), Infrastructure, Raw Material, Labor performance(a)	.	Enter

a All requested variables entered.

b Dependent Variable: YSEZ

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.985(a)	.970	.965	1.41009

a Predictors: (Constant), Region and global integration (ASEAN, WTO), Infrastructure, Raw Material, Labor performance

#### ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1618.458	5	404.614	203.491	.000(a)
	Residual	49.709	25	1.988		
	Total	1668.167	30			

a Predictors: (Constant), Region and global integration (ASEAN, WTO), Infrastructure, Raw Material, Labor performance

**Coefficients(a)**

Model		Unstandardized Coefficients		Standardized Coefficients		t	Sig.	Collinearity Statistics
		B	Std. Error	Beta				
<b>1</b>	(Constant)	6.943	1.943		3.573	.001		
	Infrastructure	1.059	.161	.340	6.584	.000	.446	2.242
	Raw Material	.800	.145	.263	5.510	.000	.521	1.918
	Labor performance	1.832	.461	.232	3.971	.001	.349	2.869
	Region and global integration	1.374	.156	.370	8.802	.000	.675	1.482
	(ASEAN, WTO)							

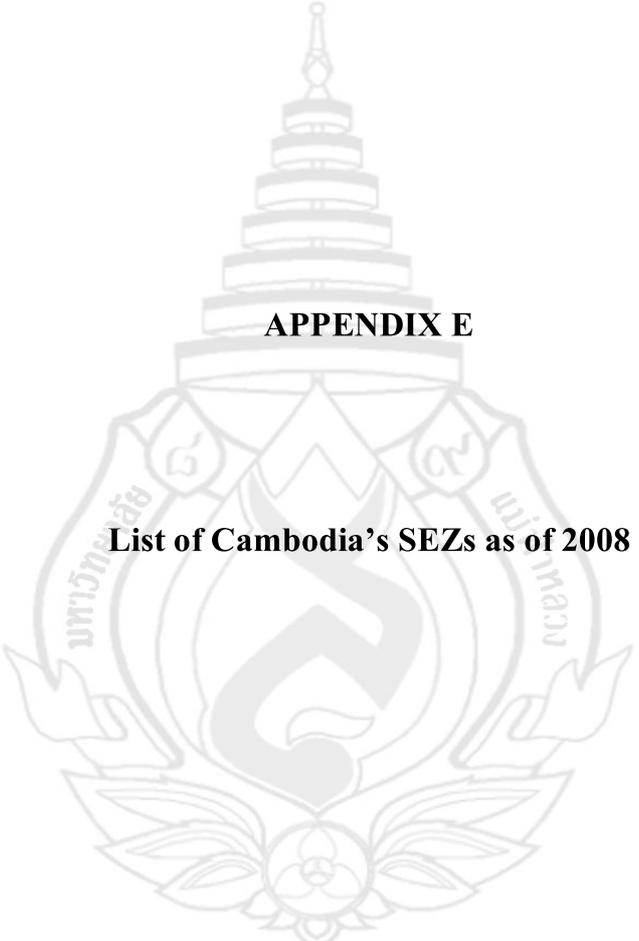
b Dependent Variable: YSEZ



### Collinearity Diagnostics(a)

Model	Dimension	Eigen value	Condition Index	Variance Proportions				
				(Constant)	Infrastructure	Raw Material	Labor performance Region and global integration (ASEAN, WTO)	
		4.948	1.000	.00	.00	.00	.00	.00
		.020	15.880	.32	.00	.61	.00	.02
		.016	17.731	.00	.18	.01	.05	.74
		.011	20.806	.67	.19	.28	.04	.23
		.006	29.787	.00	.63	.10	.91	.00

a Dependent Variable: YSEZ



**APPENDIX E**

**List of Cambodia's SEZs as of 2008**

**List of Cambodia's SEZs as of 2008**

<b>No</b>	<b>Name</b>	<b>Location</b>	<b>Land area</b>
1	<b>Koh kong SEZ</b>	Koh kong (Thai border)	436.24
2	S.N.C SEZ	Sihanoukville Province	108 Ha
3	Stoung Hao SEZ	Sihanoukville Province	200 Ha
4	N.L.C SEZ	Svay Rieng (Vietnam border)	105 Ha
5	Manhattan SEZ	Svay Rieng (Vietnam border)	155 Ha
6	Chhay Chhay SEZ	Poi Pet (Thai border)	386.3 Ha
7	Doung Chhiv SEZ	Phnom Den (Vietnam border)	57 Ha
8	PPSEZ	Phnom Penh	353 Ha
9	Kampot SEZ	Kampot	145 Ha
10	Sihanoukville SEZ	Sihanoukville Province	178.62 Ha
11	TSB SEZ*	Svay Rieng (Vietnam border)	77.19 Ha

*Source:* Project Implementation Sheets prepared by the CDC: <http://www.csezb.gov.kh>

## CURICULUM VITAE

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**Date of birth** 20 April 1975

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Bachelor degree 1996, Business administration major of Marketing, Faculty of Business (Actually National University of Management) Kingdom of Cambodia

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1997-2008, Staff, Export Office of Foreign Trade Department, Ministry of Commerce Kingdom of Cambodia

