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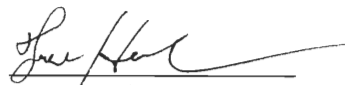
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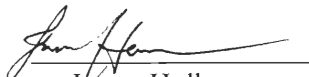
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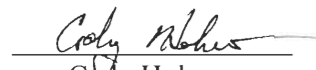

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Executive Summary

Most nations of Southeast Asia are experiencing population changes allowing them to enjoy extraordinary potential for economic growth. Decreasing birth and death rates in these countries cause an increasing percentage of their populations to be of working age. This type of demographic transition can affect economic growth in the region now and for several decades to come. Potential benefits include the development of lucrative industries, the accumulation of capital which can be available for social safety nets, and the increase of competitiveness in the global economy. The case of Singapore in the 1970s and 1980s is an example of marked economic growth during a demographic transition. Conversely, the demographic transition could yield negative consequences such as mass unemployment and subsequent population loss due to emigration.

In many nations in Southeast Asia, the skill competency and educational attainment of the workforce is below the level needed in the competitive world economy. A highly skilled and productive workforce is necessary in order for these countries to advance economically and attract business prospects from abroad. This project focuses on the potential for collaboration among Southeast Asian nations in attaining a regional labor pool and increasing the productivity of the workforce to advance economic growth. The following report contains a compilation and analysis of data concerning possible improvements in human capital through education and training programs, regional cooperation, and government policy.

Member nations of the regional organization ASEAN, the Association of Southeast Asian Nations, plan to coordinate their individual efforts to obtain a region-wide demographic dividend. This project recommends ways and means for Thailand and the other ASEAN member nations to improve the quality of their human capital and resources by opening up a freer flow of natural persons and information.

We explored methods of improving human capital through analysis of archival and statistical data received from the College of Population Studies and the Institute of Asian Studies at Chulalongkorn University. The primary resource for our recommendations on improving human capital was the information we obtained through interviewing human resource personnel from six local and multi-national businesses in Thailand. The purpose

of these interviews was to evaluate the business environment and human capital in Thailand. The company representatives identified strength and weaknesses pertaining to four categories: business environment, human resources, human resource development, and regional cooperation. We considered the perspectives of Thai businesses to be representative of the private sector in all of ASEAN.

According to the companies, their main motivations for having corporate branches in Thailand were the liberal government policies and the availability of cheap labor. However, the basic and technical skills of the workforce are largely in need of improvement. Across industries in Thailand, the average level of education of employees is substandard to others in the region. In some cases, workers had only reached grade four since educational reforms only recently lengthened mandatory education to nine years. The government also established skill development centers to increase the basic skills and competencies of the current workforce.

Many businesses in manufacturing make little effort to increase the basic skill level of their employees. The companies we interviewed have training programs to help their employees learn job specific skills rather than basic competencies. Only some of the businesses offer their skilled workers the opportunity for additional training and job advancement.

The general opinion of the businesses we interviewed was that regional human capital pooling would not benefit them. They prefer to focus on employing and training the local workforce rather than recruiting foreign labor. Several companies however supported the concept of regional collaboration in other resource areas, mainly technological and intellectual.

The suggestions of this project strive to aid the successful implementation of human capital development and assess the possibility of labor pooling throughout the nations of ASEAN. The literature and the interviews indicated several key issues that shaped our recommendations, such as curriculum changes throughout basic education, further development of life-long learning programs, and standardized training programs in the private sector. We recommend that ASEAN nations make efforts to advance themselves internationally to become a center of world markets and economy by attracting more

foreign direct investment. They should align their attempts to obtain a demographic dividend rather than proceed independently.

Primary and secondary schools should incorporate work ethics into the education system to foster such values as efficiency, motivation, and entrepreneurship. The current workforce should strive to develop advanced skills to meet the demands of the global economy. Our team concluded that ASEAN should focus on human capital development and resource pooling in Southeast Asia to aid the region's economic growth. The member nations of ASEAN should develop training and schooling standards to improve education levels.

We formed our recommendations and conclusions from information received from the private sector, which may not already have been available to the public. Analysis of our interviews, as well as of relevant literature, helped us to supplement the studies at the College of Population Studies at Chulalongkorn University, Bangkok to support the region in maximizing its demographic dividend.

1 Introduction

In recent years many nations in Southeast Asia have been experiencing a demographic transition, which is a period of time when a notable change of population distribution in a city, region, or country occurs. During this period it is possible for the region to obtain many social and economic benefits. Demographers refer to these benefits as a demographic dividend. Currently, Thailand and the other ASEAN (Association of South East Asian Nations) member nations are in the midst of a demographic transition in which their populations contain a large percentage of working age people. Fewer dependents, or non-working citizens, means more capital is available to spend on the development of social programs that will support the future population.

The governments of Southeast Asian nations must understand and address the change in population if they wish to reap any benefits from it. A demographic transition cannot create a demographic dividend unless the governments make necessary changes to its policies and practices to accommodate the effects. When the government implements policies at certain stages of the transition, benefits occur across a wide spectrum of socioeconomic areas. The quality of human capital throughout ASEAN is one area that has great potential for growth and improvement, and may aid in obtaining substantial dividends.

The human resources of ASEAN member nations consist of a large proportion of unskilled workers. Ideally, the region's population should be balanced with a workforce competitive in all areas of the job market. An increase in skilled workers would attract more high-tech industries to the region. The average skill level of the labor force in most of these nations is lower than the skill level necessary to utilize the technology of the contemporary economy. Thus, the low skill level of human resources available in Southeast Asia has caused the nations' economies to remain underdeveloped.

In an effort to modernize, Asian governments focus on workforce quality and productivity via educational development. For example, the government of Thailand has addressed the low level of education of the workforce since the 1930s by developing programs to elevate the literacy rate (Non-Formal). Despite its continuing efforts, Thailand's population still suffers from low education levels and minimal job training. The

current workforce has an average of only 7.6 years of elementary and secondary education (Rojvithee). Other organizations and governments in ASEAN have instituted policies and programs to increase the quality of the region's human capital. The progress and effect of these efforts remain minimal.

ASEAN strives to promote human capital development by regional resource pooling, but the number of illegal aliens, discrimination against foreign workers, and restrictions on the free flow of natural persons hinder its success (Wongboonsin⁴ 11). The nations of Southeast Asia have yet to evaluate the impact of human capital development programs on the workforce and to develop plans for the future.

The goal of this project was to assess the quality of Thailand's human capital and to help the College of Population Studies at Chulalongkorn University in regional human capital development studies that support the region in maximizing its demographic dividend. Our group accomplished this goal by interviewing human resource personnel of local and regional based companies to assess the training practices they use, and to get their informed opinions on the competitiveness and training levels of the labor force. Using Thailand as a focal point, the team explored human capital pooling and training methods currently used by the private and public sector to improve the human capital in ASEAN.

2 Background

Although Thailand has made progress in becoming a developed nation, further economic expansion is crucial to sustaining its competitiveness in the global market. For this economic growth to occur the country's industries must continue to introduce new technology in manufacturing; however, they do not have the skilled workforce required to manage the equipment. The government and other organizations have been examining this problem and have found that improvements in select areas of the economy can help the country modernize.

The following chapter contains background information on social and economic topics concerning our project. We obtained this information through literature reviews in the United States and Thailand, and it is the foundation for our interview methodology, our analysis, and our conclusions.

2.1 Demographic Dividend

The radical demographic transitions in Southeast Asia have occurred due to health care improvements and socioeconomic changes. The dropping mortality and fertility rates have brought about marked growth of the workforce and relatively smaller dependent age groups. Demographers refer to the ratio of these two population groups, or the number of dependents per non-dependent, as the dependency ratio.

Governments and scholars internationally have studied the prospect of obtaining economic and social dividends resulting from the increase in the population of the labor pool and low dependency ratio. However, a large labor pool and low dependency ratio, exclusive of timely policy implementation and productivity improvements, do not ensure attainment of economic growth. The demographic phenomenon impels the governments to achieve human capital development, educational improvement, accumulation of capital available for social safety nets, and/or economic and technological expansion.

Several factors contribute to the realization of the demographic dividend. The main interconnected conditions that affect a country's ability to attain a dividend are as follows:

- (1) favorable demographics, i.e. decline in mortality, birthrate, and dependency ratio;

- (2) policy development and implementation in the middle phase of a demographic transition;
- (3) quality human capital;
- (4) a policy environment conducive to free trade and an increasingly productive workforce (Wongboonsin₁ 10).

2.1.1 Policies that Facilitated Economic Growth in Singapore

The following case study of Singapore shows appropriate policy implementation during a crucial period in a demographic transition. This country's demographic transition involved significant fluctuation of population size. Singapore's government realized the impact of its demographics on economic and technological expansion, and controlled the increase in population on the island to manageable numbers to attain a demographic dividend.

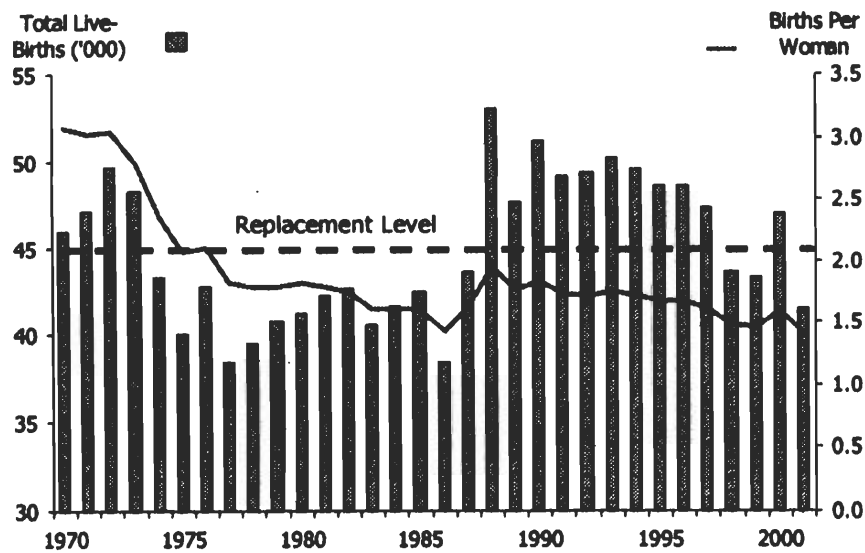
Singapore is a small island that is only 637.5 square miles, and has around four million people (Why 1). High population density puts it at a disadvantage compared to geographically larger countries. Singapore maximized its land area by making the island into a modern metropolis centrally located in the Asia-Pacific region.

Emerging from decades of foreign rule in 1965, Singapore began to create an economy competitive with the members of ASEAN as well as developed countries around the world. The government examined both social and economic growth and development to facilitate the nation's economic advancement. One of Singapore's first focuses concerned the growing population in relation to the number of jobs in the country. The country's dependency ratio was increasing significantly each year.

As Paul Cheung noted, "The need to curb rapid population growth was obvious, and population control was viewed as critical in balancing the available economic resources with the demands of an increasing population" (36). With Singapore's population increasing at a rate of two percent a year in 1966, the government established the Family Planning and Population Board (Singapore 1). This organization aimed to provide social programs such as education on family planning and clinical services. The government developed programs that pushed for two children per family, but the programs were not enforced. To counter this negligence, the country established disincentives for families with

three or more children, which included lower priority on school registration, higher maternity fees, and income tax reductions for the first two children only. By taking advantage of the low fertility rate and promoting smaller families with the motto “Stop at Two,” Singapore was able to stave off population growth until it could build a stable economy (Singapore 1). The sharp decrease in fertility rate and live births in the 1970s is apparent in Figure 1.

Figure 1: Total live births and fertility rates, Singapore

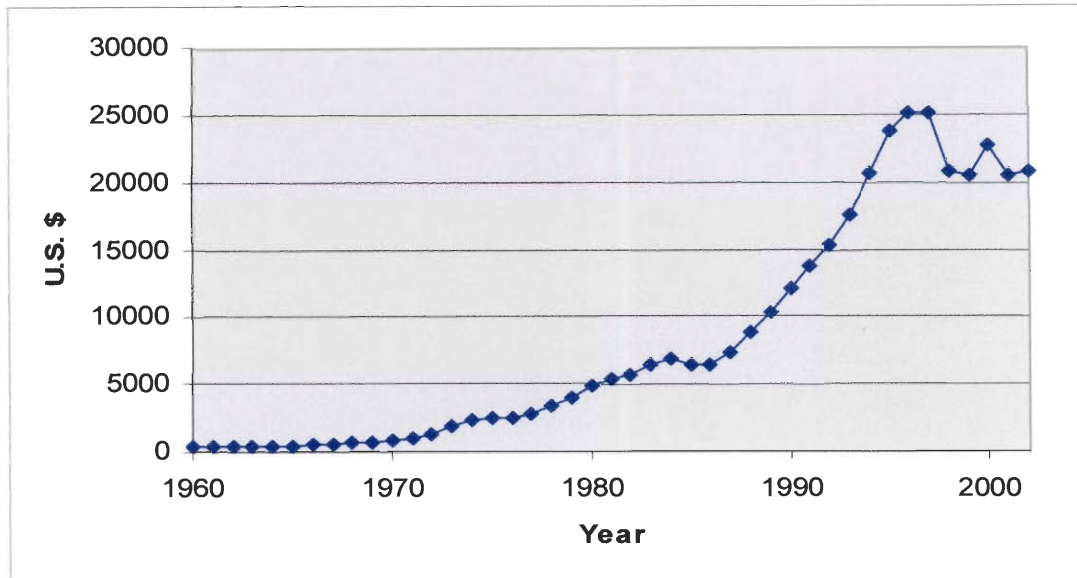


Note : Prior to 1980, rate refers to total live-births and total population.

Source: (Singapore 5) Singapore Department of Statistics

From 1966 through 1986, Singapore improved a multitude of socioeconomic aspects, including transportation, housing, and overall population health (Cheung 36). Figure 2 shows a considerable increase in gross domestic product, or GDP, during this period. The government funded educational development in the 1980s to decrease the dropout rate while increasing competition for higher skilled jobs. However, in 1986 fertility rates dropped to an all-time low of 1.44 children per woman (Singapore 1). This was partially because 1986 was “the year of the tiger” on the Chinese calendar, and traditional beliefs consider this year unfavorable for marriage or bearing children. With the annual fertility rates approaching the annual mortality rates, Singapore’s government intervened and instituted a new policy.

Figure 2: GDP per capita, Singapore: 1960-2002



Source: Singapore Department of Statistics, 2003 <<http://www.singstat.gov.sg/keystats/hist/gdp.html>>

It was apparent that Singapore's growing economy would need a working age population large enough to satisfy the job market. To promote population growth the government instituted pro-natal policies with the new slogan, "Have Three, and More if You Can Afford It" (Singapore 1). Overturning the norm of two children per family that the country had become accustomed to required government incentive for having larger families. These incentives included income tax rebates, priority in housing and school registration, and child healthcare benefits (Cheung 44). It was almost the opposite of what the people of Singapore had known as the norm for the previous twenty years.

Singapore took advantage of the entire period of demographic transition by exploiting the dependency ratio of its population. The high number of children born in the post-World War II era became the country's new labor force. To contend with this influx of employable people, the government began construction efforts, building hotels, warehouses, and high-rise offices. The labor-intensive projects helped to keep the populace employed. In order to fill these buildings with new industries, the government established the Economic Planning Board (EPB) in the early 1960s to promote industrial growth.

A large portion of this growth came from foreign corporations and investors. Singapore profited from the rise of multinational industry, and the government encouraged

more development by reducing trade barriers and regulations. Because of its open and flexible economy, foreign direct investment (FDI) in Singapore rose. Even though the nation is one of the smallest in the world, it soon became an economic hub in Southeast Asia. The physical size of Singapore became almost inconsequential because it used its geographic location to its advantage. The nation made use of two of the most abundant natural resources, the sea and the air.

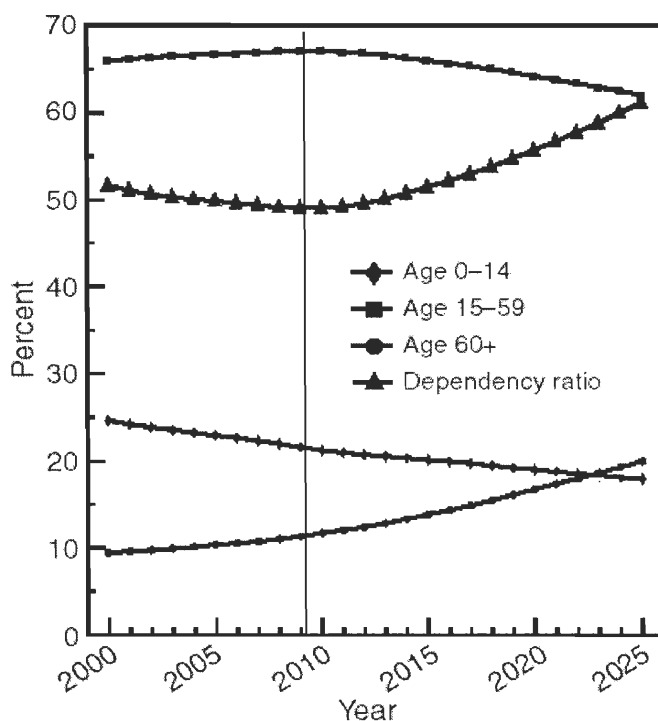
With the construction efforts of the 1970s and 1980s, there also came the upgrading of both the seaport and airline industry. Not only did this improve the national import and export business, but also, one out of eighty-nine Singaporeans were working in the airline industry alone. The GDP per capita after 1986 began to increase dramatically with the new influx of labor and entrepreneurial opportunities, as seen in Figure 3. In 2002, Singapore's Changi Airport saw 29 million airline passengers, of which half were on connecting flights to other Asian countries (Why 1). Thus, Singapore has become a giant switchyard, transferring goods and people all over the world.

Decisive action by the government of Singapore in its formative years allowed the economy to reap many benefits from its demographic transition. Anti-natal policies in the newly formed country gave the economy time to develop. Singapore was able to find a firm footing in the world economy as well as organize many social programs that would benefit its people. As the population grew into the 1990s, the careful planning by the government was effective and the Singaporeans enjoyed full employment and a per capita gross national product, or GNP, of over US \$10,000 (Why 1). Singapore's government enacted the right policies during key periods in its demographic transition, which allowed it to achieve a demographic dividend.

2.1.2 A Possible Demographic Dividend in Thailand

Thailand is among the group of ASEAN member nations with the least time left to prepare for its optimal dividend conditions. Over the last 30 years, Thailand has experienced notable decreases in birth and death rates. Census information suggests that the transition will peak by 2009, as indicated by the solid line in Figure 3. In that year, approximately 67 percent of the Thai population will be between ages 15 and 65, and eligible for the workforce (Wongboonsin₁ 8).

Figure 3: Thailand's projected dependency ratio and age distribution

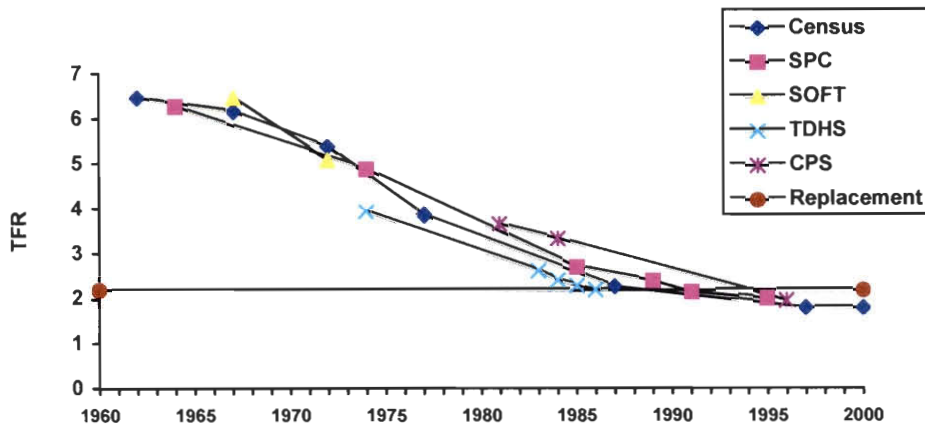


Source: Wongboonsin, Kua, Philip Guest, and Vipap Prachuabmoh. Demographic Change and the Demographic Dividend in Thailand. 2003. 7.

Thailand has the opportunity to take advantage of the effects of its low dependency ratio only in the decades around this peak and, to some extent, for another quarter century, after which time the average age of people in Thailand will increase. Profiting from the demographic dividend is a pressing issue because members of the current workforce will someday join the dependent population.

Future decades will not have as large a proportion of the population in the labor pool. Birth rates, represented in Figure 4, have been at or below replacement level since the late 1990s. Thus, there is a narrow window of opportunity around the year 2009 to take advantage of the small dependent population in conjunction with the large workforce. The economic productivity attained will provide capital to support the growing elderly population.

Figure 4: Estimated total fertility rate (TFR) of Thailand from 1960 to 2000

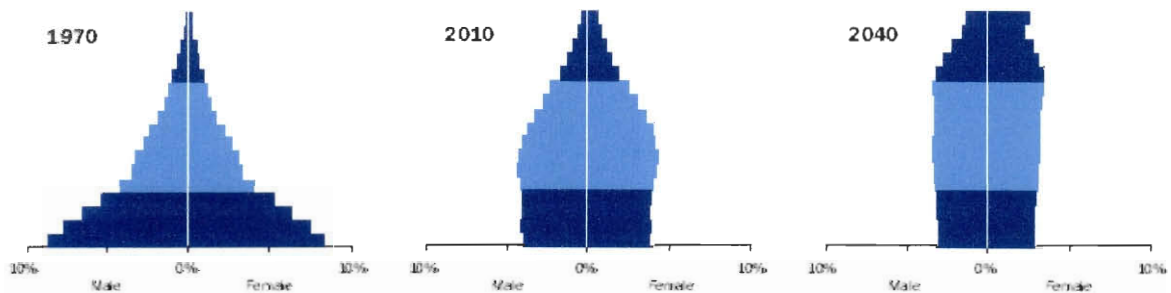


Sources: Wongboonsin, Kua, Philip Guest, and Vipan Prachuabmoh. Demographic Change and the Demographic Dividend in Thailand. 2003. 4

Census – Population and Housing Census, SPC – Survey of Population Change, SOFT – Survey of Fertility in Thailand, TDHS – Thailand Demographic and Health Survey, CPS – Contraceptive Prevalence Surveys

A changing age structure characterizes the population trend in Thailand, resulting in the growth of the workforce. Figure 5 shows the changing structure of the country’s population since 1970, and projections to year 2040. This graphical representation effectively shows the population distribution that may prove beneficial to Thailand’s economy.

Figure 5: Thailand's demographic transition age pyramids for 1970, 2010, and 2040



Key: Lighter region signifies working age group; darker region is the dependent population

Source: Dupriez, Olivier. “Adapting Education the Global Economy.” Asian Development Bank. 2003.

2.2 Human Capital Development in Thailand

One of the ways Thailand can attain a demographic dividend is by upgrading the quality of existing human resources. Several areas of their human capital are substandard with respect to current regional averages, so the country must address these deficiencies by making the necessary improvements. High quality of human resources, along with increased productivity, allows a nation to sustain or improve its position in the global market. A clear method of upgrading human resources is the development of better education and training programs during the demographic transition period. Effective upgrades at a national or regional level require investment and economic and social policy reform.

Competitiveness of both labor and economy is a vital element for Thailand to focus on, especially given the impact globalization has had on the world economy. In recent years globalization and growing technology have created numerous opportunities for economic expansion. Nevertheless, the skill levels required to reap these benefits have risen dramatically. The factors that contribute to competitiveness in a global economy include 1) quality of education, 2) productivity of the workforce, 3) capacity of technological infrastructure, and 4) efficiency of government administration (Wattana 5). A highly skilled labor force has an advantage over a pool of uneducated workers in its increased ability to adapt to changing technologies. High levels of education promote the productivity of employees in the labor pool. Along with the obvious benefits of greater efficiency, the creation of a highly productive workforce will help attract foreign direct investments to the country. These investments can provide capital for further human resource development.

The government is another possible source of financing for educational improvements. The Thai government has the opportunity to free up resources caused by the low dependency ratio that the country will continue to enjoy for the next six years. In the case of Thailand, resource areas that need improvement are education, training, and human capital pooling.

2.2.1 Education

Education is the area of human capital in Thailand that is most in need of development. It is not a question of quantity but of quality. In 2002, Thailand had a functional literacy rate, defined as the proportion of population aged 15 years and over that completed primary education, of 56.6 percent (Wattana 6). This percentage has continuously been rising, but it remains lower than that of most countries. Another important statistic is the average number of years Thai people complete in school, which reached approximately 7.6 in the year 2000 (Rojvithee). This number also seems relatively low when compared to countries in East Asia whose average is ten to twelve years. Urban areas have some advantages over rural areas (Wattana 7). For example, in Bangkok the functional literacy rate is 73.7 percent, and the population averages about ten years of schooling per person. Since these numbers are still below those of other Southeast Asian countries, Thailand has addressed the issue of developing education at all levels.

2.2.1.1 Thai Educational Policies

The key contributor to having a productive workforce is a knowledge-intensive education system, which provides people with the skills needed to meet the demands of a growing economy. Thailand has focused on educational development for several decades, especially since the creation of the National Economic and Social Development Board (NESDB) in 1961 that arose from the First National Economic and Social Development Plan (Public 1). Recently the government launched the Eighth Plan along with the 1997 Constitution. Both of these plans focused on education and on efforts to keep pace with globalization. In addition to these educational reform attempts, the 1999 National Education Act paid attention to the idea of student-centered development (Wattana 7). The NESDB is currently implementing the Ninth Plan, covering 2002 to 2006, which also focuses on providing the future workforce, today's students, with the higher skills needed in the future job market

The 1999 National Education Act has led to improvements in enrollment rates at all levels of education, as shown in Table 1. In Section 10 the Act states that:

In the provision of education, all individuals shall have equal rights and opportunities to receive basic education provided by the State for the duration of at

least 12 years. Such education, provided on a nationwide basis, shall be of quality and free of charge. (IRCE sec. 10)

The twelve years of subsidized schooling consists of six years each of primary and secondary education. This provision is a first in the history of Thailand's educational system. All citizens aged six to 17 are required to enroll in nine years of compulsory education, covering six years of primary school and three years of lower secondary school (Wattana 7). Though the recent education reform in Thailand has resulted in improvements such as growing enrollment and completion rates, the nation still needs to concentrate on quality of education.

Table 1: Gross and net enrollment rates of the Thai population aged 3-24

Level of Education	Gross Enrollment Rate			Net Enrollment Rate	
	1992	1997	2002	1992	1997
Pre-School	38.1	61.1	79.8	14.4	35.7
Primary	100.1	105.8	104.3	77.0	84.8
Lower Secondary	59.3	91.7	89.1	36.5	55.1
Upper Secondary	20.1	36.2	45.8	13.8	24.0
Higher Education	11.3	20.6	22.9	8.5	15.1

Source: Wattana, Paranee. Demographic Dividend: An Opportunity for Accelerating Investments in Human Capital. 2003. 7.

Section 8 of the National Education Act gives further details about efforts to increase the quality of education. It states that the government should follow these three basic principles:

- (1) Lifelong education for all;
- (2) All segments of society participating in the provision of education;
- (3) Continuous development of the bodies of knowledge and learning processes (IRCE sec. 8).

The National Education Act classifies three types of education spanning all levels: formal, non-formal, and informal education. Formal education consists of government provided schooling as well as college. Non-formal education has more flexibility than formal and addresses the needs of specific groups. Both public and private institutions

provide non-formal education to citizens outside of the school system. The last type of education is informal, which means individuals learn by themselves through various sources such as libraries, museums, and their own interests (ASEM 17-23).

2.2.1.2 Lifelong Learning

The promotion of lifelong learning is an attempt to raise the skill level of all ages within Thailand. The National Education Act defines this term as “education resulting from integration of formal, non-formal and informal education so as to create [the] ability for continuous lifelong development” (IRCE sec. 4). The main point behind this education reform is to give Thai citizens the opportunity to increase their knowledge and help Thailand in the transition to a knowledge-based economy.

Lifelong learning begins with formal education. One of Thailand’s focuses is teaching basic skills and competencies to the future workforce starting from primary education. The nation’s objective is “to make sure that no individual finishes primary school without learning the basic skills needed to live and work in today’s changing world” (ASEM 1). The education experts who attended the Asia Europe Meeting (ASEM) on lifelong learning have identified five areas of basic skills for students: language literacy (reading, writing, speaking), math literacy, learning skills, computer skills, and ethics. Thai primary and secondary schools are beginning to incorporate these areas into their educational curriculum.

Basic competency, or “the ability to combine and use skills (personal experience, knowledge) which will allow an individual to be able to perform a task well,” is another focus of educational standards (ASEM 4). In general, these competencies are the real life and practical work skills needed for creative thought and competitiveness in the job market. Thailand has instituted policies designed to provide the basic skills and competencies throughout compulsory education. However, the goal of basic competency extends beyond these crucial years and continues to be a focus in the non-formal and informal sectors of education. These sectors of education provide expansion on the skills and help improve lifelong learning. Training programs develop the skills necessary for employability and offer another opportunity for skill advancement. Both non-formal and informal education are helpful ways to increase the knowledge of the population beyond basic education.

2.2.1.3 Education of the Thai Labor Force

Education bureaus currently study the educational accomplishments of the labor force to identify areas in need of improvement. A recent investigation by the International Labor Office (ILO) found that a one-year increase in average schooling for a country's workforce raises output per worker by approximately five to 15 percent (Wattana 4). This study was based on output per worker and educational attainment data for 111 countries over a 30-year period (1960-90) and supports the thesis that increasing the quality of the workforce will in turn raise labor productivity. Numerous factors affect the productivity of the workforce in Thailand, such as education level, underemployment, and unemployment.

Low education levels are problematic as they affect the productivity and global competitiveness of the Thai workforce. As seen in Table 2, an estimated 80 percent of people employed in 2002 had an education level of lower secondary or below. With such a large proportion of the workforce having little education, it is obvious why the nation's focus is on lifelong learning designed to improve the competency of those out of reach of the school system.

Table 2: Employed and unemployed persons by level of educational attainment for Thailand: 2002

(In thousands)

Level of Education Attainment	2002 – Employed				2002 – Unemployed			
	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Quarter 1	Quarter 2	Quarter 3	Quarter 4
	(Jan. – Mar.)	(Apr. – Jun.)	(Jul. – Sep.)	(Oct. – Dec.)	(Jan. – Mar.)	(Apr. – Jun.)	(Jul. – Sep.)	(Oct. – Dec.)
TOTAL	31,767.9	32,352.3	34,262.4	33,860.8	1,083.4	975.8	616.1	616.0
None	1,203.1	1,185.5	1,151.0	1,168.3	27.0	20.4	10.7	14.5
Less than Elementary	12,492.9	12,612.4	13,489.8	12,979.1	181.8	135.9	68.4	93.9
Elementary	7,003.2	7,213.5	7,825.4	7,853.4	368.2	251.4	133.1	150.6
Lower Secondary	4,051.8	4,209.8	4,436.9	4,511.1	198.6	182.5	129.1	110.1
Upper Secondary	3,114.1	3,324.1	3,437.2	3,324.0	147.7	170.6	111.3	91.0
- General Type	2,055.6	2,281.3	2,341.5	2,255.4	101.2	120.6	79.0	53.2
- Vocational Type	1,041.9	1,029.4	1,078.9	1,052.6	46.2	49.5	32.3	37.8
- Educational Type	16.6	13.4	16.8	16.1	0.4	0.5	-	-
Higher Level	3,791.8	3,705.1	3,826.5	3,923.1	160.0	212.7	162.9	154.6
- General Type	1,844.7	1,800.3	1,866.0	1,940.7	80.3	89.7	88.2	94.3
- Vocational Type	1,169.7	1,154.8	1,224.8	1,222.5	71.3	102.9	63.3	46.6
- Educational Type	777.5	750.0	735.7	759.9	8.5	20.1	11.4	13.7
Others	9.9	17.1	21.8	17.0	-	0.1	-	0.8
Unknown	101.2	84.9	73.8	84.9	0.1	2.4	0.6	0.5

Source: Labor Force Survey: National Statistical Office Thailand Social Statistics Division. 2002.

The unemployment rate at the end of 2003 in Thailand was about 1.8 percent. The Ministry of Labor expects this level to drop to 0.6 percent over the next year (Rojvithee), which is much lower than other Southeast Asian countries, which average 4.6 percent (International Table 3.2). Having such a low rate is beneficial to the country because it means there are available jobs, but on the other hand, Table 2 shows the impact of underemployment. Employment rates of working age people who have already obtained higher-level education are another concern of the government and an area in need of improvement.

About 40 percent of the unemployed have an education of upper secondary and above. Employment below one's skill level is typically a problem for students graduating from college and trying to find a job that matches their qualifications. Between 1996 and 2000, the underemployment rate for college graduates rose from 22.7 to 28.5 percent (Wattana 3).

Since Thailand is in the midst of a demographic transition, the government presently focuses on the future workforce. The country is developing plans for the future through establishing educational policies to upgrade the workforce based on statistical projections.

Dr. Kua Wongboonsin recently studied one of these projections. Table 3 shows the percentage of the labor force until 2025 by level of educational attainment. Dr. Kua Wongboonsin's projections show slight increases in all levels from primary and above. The largest increase is at the upper secondary level and this is a positive indication for the future economy of Thailand. A halt to this increase in higher education could arise if the economic expansion creates inadequate employment, causing unemployment amongst highly educated workers (Wattana 11). The projections for education within the labor force show how the implementation of education reform will increase the knowledge base of the labor force such that more workers will obtain a higher education.

Table 3: Proportion of projected labor force by educational attainment

Level of educational attainment	2003	2005	2010	2015	2020	2025
None	3.4	3.0	2.5	1.9	1.4	0.8
Less than primary	37.9	34.7	26.9	19.0	11.1	3.3
Primary	22.9	23.3	24.4	25.5	26.6	27.7
Lower Secondary	13.3	13.8	15.2	16.6	17.9	19.3
Upper Secondary						
General	7.4	8.7	11.8	15.0	18.1	21.3
Vocational	3.3	3.4	3.7	4.0	4.3	4.6
Tertiary	12.0	12.9	15.5	18.0	20.5	23.0
Others	0.1	0.1	0.1	0.1	0.1	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Wongboonsin, Kua. *National Strategies of Research on Labour*. 2003.

2.2.2 Training

Attempts to upgrade the quality of a country's human resources through education alone will not yield the desired results of improving the skills and knowledge of the labor pool. By improving basic education, only the new employees that enter the workforce are affected. This may not influence the cumulative human capital for 50 or more years, which is the approximate turnover period for the current labor pool population to exit the

workforce. Therefore, alternatives to education are necessary to augment the gradual improvement and expansion of Thailand's current human resources.

The Thai government is establishing methods for skill development in Thailand's current workforce. For this purpose, it formed the Ministry of Labour and Social Welfare (MOLSW). There are several other governmental organizations and policies in place to help further the training of the workforce. Governmental programs instituted by the MOLSW and other organizations promote training in modern technologies. These programs follow the advancements in technology that force private enterprises in Thailand to train their employees to increase productivity.

2.2.2.1 Government-Organized Training Programs

Developing out of a policy dating back to 1932 the MOLSW has grown into a major department whose main functions are, "administering labour affairs, employment services, public welfare, labour skill development, labour protection and welfare, and social security" (Ministry 1).

The MOLSW has multiple divisions, one of which is the Department of Skill Development (DSD). The goal of the DSD is to promote training and skill enhancement in the workforce. Its mission states, "The development of [the] Thai economy is now characterized by rapid growth of industry, commerce, and services. Such [a] development draws the country into an intense competition in the world market. As a result, the sufficient supply of [a] skilled workforce is greatly needed in order to meet the demand of enterprises and to enhance the country's international competitiveness" (Department 1).

The DSD employs multiple strategies to fulfill this mission statement (see Appendix A for an overview of these strategies). The department works on two different levels: initiating programs to benefit employees, and instituting policies that give private enterprises incentives to train their employees or to supply capital for a general training fund.

Working in conjunction with the Department of Vocational Education at the Ministry of Education, the DSD introduced its most recent and influential program, Dual Vocational Training (DVT). This program, launched in 1995, provides "students/trainees [with] comprehensive vocational education for an occupation" (Dual 1). Driven

completely by company demand for more specialized and skilled workers, DVT allows students the option of entering the workforce rather than enrolling in post-compulsory education. In this program, companies work with colleges to provide students with training in a specific field prior to their entering the company's workforce. Students spend approximately three years in the program with more than half of that time spent acquiring on-the-job training, and the remainder spent in the classroom (Dual 1). The company can pick the curriculum that prepares the students for their future employment. At the same time, the college determines a standard curriculum that provides the trainees with a general background to increase job flexibility. Upon completion of the program, each trainee earns a certificate similar to a diploma (Dual 1).

The program offers two types of certificates to its trainees. One is a Certificate of Vocational Education, which qualifies the employee as a skilled worker having completed the three-year program. The second is a Diploma, only offered if the trainee has earned the Certificate of Vocational Education and has completed a two-year training program that includes college courses (Dual 1). Both of these programs increase the productivity and quality of a company's human capital.

The government also devised a plan to provide students with training prior to the age of employment. The Skills Development Promotion Act (renamed from Vocational Training Promotion Act) was a plan devised to obtain capital from companies to fund better educational and training programs. Companies that contribute money to the Skills Development Fund receive tax deductions. If a company facilitates this program by providing skills training to employees, the company can also apply for other tax deductions (Program 3).

2.2.2.2 Training Programs of the Private Sector

Even though the government has many programs and policies instituted to promote workforce training, productivity and competitiveness remain top priorities for most companies. Private enterprises have it in their best interest to train their employees to increase the quality of their workforce, which should enhance capital earnings. "The best known approach to quality management systems in training are the ISO 9000 series of standard[s] developed by the International Organization for Standardization (ISO)"

(Wattana 22). The ISO 9000 “can be used by senior management as a framework to guide their organizations towards improved performance” (Quality 1). These guidelines provide a template for training employees that are more productive.

Several problems have arisen with private sector training, however. The government cannot be sure that employees are receiving the correct training according to the ISO outline (Wattana 22). Accrediting the businesses’ programs and trainers will allow the government to ensure that the employees are receiving high-quality training. Also, smaller enterprises can have trouble keeping up with ISO 9000 standards because they are costly to maintain. The government is investigating possible ways to alleviate these problems.

2.2.3 Human Capital Pooling

The member nations of ASEAN require new employment opportunities to adjust to the recent growth and participation rates of the workforce resulting from their demographic transitions. Without cooperation in human resource development and labor markets, economic competition between the nations of Southeast Asia may prevent their success in maximizing their regional demographic dividend.

The policies concerning education, health and nutrition, and immigration in the different nations have caused uneven levels of human capital development in the region. While many of the countries have workforces strong in the area of agriculture, as will be discussed in a following section, few labor pools consist of large numbers of highly trained and competent workers (Overview 1).

2.2.3.1 ASEAN Collaboration

ASEAN is an organization established to coordinate the efforts of ten nations in Southeast Asia in promoting regional development. Since all ASEAN member nations have the opportunity to experience or have already experienced a demographic dividend, they have established regional goals for the future. These countries differ in their levels of productivity, quality of human resources, and other natural and intellectual capital; however, collaboration among them can facilitate the human resource development and productivity improvements that promote a dividend (ASEAN 1).

Currently, ASEAN collaboration in human development consists of four main topic areas: health, education, population, and women and youth. Population and education have the most direct affect on human resources and productivity gains across the region (Wongboonsin₄ 7).

Quality of health and medical care promote well-functioning populations in ASEAN member countries. ASEAN cooperation in healthcare has focused on regional training programs, the exchange of information, and migrant health screening (Wongboonsin₄ 8). Frequent epidemics in the region led to the development of the ASEAN Expert Group on Communicable Diseases, or AEGCD. Social service programs for community-based care for the elderly are in place in many nations of ASEAN and pharmaceutical research and drug safety laws are standard across the region.

Via ASEAN programs, officials of Southeast Asia attempted to improve population and scientific research through regional flow of information. One of the aims and purposes of ASEAN since 1967 has been for the nations of Southeast Asia “to provide assistance to each other in the form of training and research facilities in the educational, professional, technical and administrative spheres” (Wongboonsin₄ 7). Initiatives to collaborate have taken place on an individual country and regional level.

ASEAN leaders currently focus many of their initiatives on labor collaboration. The leaders developed international labor management and wage regulations, as well as employee safety and industrial training programs (Wongboonsin₄ 9). Some intra-regional mobility exists to facilitate skill transfers from country to country. However, this mobility is more a result of the efforts of individual governments to increase intra-regional trade and knowledge and skill mobility than of ASEAN policies.

Regional labor market pooling is a promising way of mending the gaps in economic productivity and resources among the Southeast Asian countries. ASEAN considers the free flow of natural persons, or citizens of regional nations, to be the most essential aspect of regional integration (Wongboonsin₄ 11). However, migration of unskilled workers has caused instability and placed a strain on the resources of countries. Goals for future human development in Southeast Asia are free and documented migration of more highly trained citizens, free trade in services, and “natural persons supplying services” (Wongboonsin₄ 10). These liberal plans are outlined in the ASEAN Framework Agreement on Services

(AFAS), created in 1995. Though this document recognizes the potential benefits of removing restrictions on labor migration in the region, ASEAN does not have the power to change the immigration policies of the individual countries. The extent to which ASEAN can affect program development and implementation is restricted due to financial limitations and the independent motivations of the member nations.

2.2.3.2 Labor Migration

Thailand established laws regarding the emigration and immigration of people into and out of the country. In an attempt to relieve unemployment the government of Thailand developed regulations on admitting and employing foreign workers. There are currently over 400,000 illegal and 90,000 legal foreign workers in Thailand (Rojvithee). To promote the use of Thai workers, the Thai government created a list of 39 jobs and occupations in which foreigners cannot be employed (Chalamwond 13). The government justified the regulations by the fact that Thai nationals already filled these areas of employment.

Thailand currently faces human capital shortages in the telecommunications, banking, electronics and information technology sectors. Often businesses in Thailand must look abroad and hire expatriates to fill engineering, science, medical, and management positions (Pacific 1). In order to fill the surplus jobs, the Investment Promotion Act grants the Board of Investment (BOI) jurisdiction to provide work permits to foreigners who desire to work in Thailand temporarily. Most of the aliens who receive work permits under the Investment Promotion Act come from industrialized countries such as the United States, Europe, Japan, Taiwan, and Hong Kong and are skilled or highly skilled in the fields of medium to high technology and manufacturing (Chalamwond 14).

2.3 Thai Business Focus and Economic Advancement

The government of Thailand currently strives to make the nation's economy globally competitive by concentrating on five areas of the economy:

- Electronics and information technologies production
- Automobile and spare parts manufacturing
- Production of food for export
- Establishment in the fashion world to expand the textile industry

- High value-added services (BOI 7)

Our group chose to focus the interviews for this project on three industries in which there will soon be an increased need for skilled labor: automotive, textile, and electronics and information technology.

2.3.1 Automotive Industry

The automotive industry is the third largest industry in Thailand, producing approximately one million automobiles and 2.2 million motorcycles per year. This production rate exceeds that of all other ASEAN member countries (Thailand on Course 1). Most factories are not currently producing at maximum output and the industry hopes to more than double production by 2010.

The automotive industry is also the largest investment category in the Thai economy. In recent years, the industry has grown from small import substitution to an increasingly productive export orientation (Thailand's Automotive 1). Improvements in the skill levels of the workforce allowed for the integration of additional technologies and thus increased the competitiveness of the industry (Thailand on Course 1). Thailand's automotive industry employed an estimated 200,000 workers in 2002 and as the industry grows and production increases the industry's demand for workers will increase.

2.3.2 Textile Industry

The textile industry employed over one million people in 2001. This number accounts for 21.2 percent of all industrial workers and establishes the industry as the top employer of workers in the manufacturing sector (Vidtayasuk 3). Cheap labor is the foundation of the Thai textile industry; most of its workers have fewer than the current mandatory years of education and are categorized as unskilled or low skilled.

Several developments emphasized the need for more skilled labor. Thailand's economic crisis in the late 1990s led to a decrease in the country's industrial growth and world ranking in textile production. An increase in labor costs has stifled Thailand's competitiveness and forced the industry to change its focus from labor-intensive quantity production to the more skilled areas of quality production (Choosri 1). The global increase in technology has also required the industry to employ people with the technical skills necessary to operate sophisticated machinery. In order for the Thai textile industry to

remain competitive as technology increases, it will require fewer low-skilled laborers and more workers with technology based training.

2.3.3 Electronics and Information Technology Industry

The areas of electronics and information technology encompass a wide array of product manufacturing, including computer hardware and software, appliances, circuitry, telecommunications, and internet commerce. The collective exports of this industry account for approximately 35 percent of Thailand's total export value and it is the largest export industry in the country (Wanapha 23). The industries collectively employ more than 300,000 people, most of whom are skilled or highly skilled workers (Mahajchariyawong 2).

According to the Thailand Board of Investment, advancing the electronic and information technology industry is "important as it will form the basis for Thailand's transition to a knowledge-based economy" (BOI 11). To attract foreign businesses the government hopes to promote the transfer of technology and knowledge to its domestic workforce (Wanapha 11).

3 Methodology

The goal of our project was to supplement the work of our liaisons at the College of Population Studies at Chulalongkorn University, Bangkok, in their analysis of human capital in Thailand and Southeast Asia. Our contributions were analyses and recommendations that ASEAN member countries could use in designing policies to maximize their demographic dividend through regional cooperation in education, training, and human capital pooling. The purpose of these policies is to stimulate economic growth and competitiveness across the region through increases in human capital productivity.

The goals of our project are expressed in the following objectives:

- 1. Identify limitations of ASEAN human capital that prevent ASEAN member countries from achieving a demographic dividend;**
- 2. Recognize the strengths and weaknesses of ASEAN regional cooperation in the development of ASEAN human capital;**
- 3. Assess the problems and possibilities for human capital pooling in ASEAN member countries through a freer flow of natural persons.**

We completed this project from October 2003 to March 2004. During the first three months, our group studied background information to gain an understanding of the project material proposed by our sponsors. During our stay in Thailand, starting in January 2004, we compiled additional background information and conducted interviews. We then developed our recommendations through the analysis of this information.

3.1 Literature Review

The group utilized published literature while in the United States, in the form of printed texts and web-based sources. We informed ourselves about demographic transitions and dividends, and the political systems of nations in East and Southeast Asia. While in Thailand, we gained an understanding of labor productivity and competitiveness and their connection to educational systems and training programs. The purpose of this research was to identify areas of human capital in Southeast Asia that are inadequate and need improvement. We also gathered information on the current efforts of ASEAN member nations to pool regional resources. This information was the foundation on which we based our interview questions.

3.2 Interviews

The primary means by which we obtained information concerning our objectives was through interviews. To help us arrange meetings with Thai companies, our sponsor introduced us to Khun Areeya Rojvithee, the senior expert on skill development at the Thai Ministry of Labor. She arranged for us to interview human resource department (HRD) representatives of regional and local businesses. Our interviews spanned three of the region's main export industries: automotive, textile, and electronics and information technology. We interviewed two companies in each industry that have export interests, a corporate base in Thailand, and plants in other ASEAN member countries. Table 4 contains the names of and information about the six companies we interviewed.

Table 4: Companies interviewed

<u>Company</u>	<u>Industry</u>	<u>Nature of Business</u>
Somboon Group	Automotive	All areas of business
Toyota Motor Thailand Co., Ltd.	Automotive	All areas of business
First Apparel (Thailand) Co., Ltd.	Textile	Production, Export
Top Form Brassiere Co., Ltd.	Textile	Production, Export
Pioneer (Thailand) Co., Ltd.	Electronics	Production, Export
SANYO Semiconductor Co., Ltd.	Electronics	Production, Export

The interviews identified the problems these companies have encountered in improving productivity, training the local workforce, and bringing in highly skilled foreign employees. By interviewing private corporations and businesses in Thailand, we gathered information about the business sector that may not have been publicly available previously, nor obtainable through literature reviews.

The team used two different interviewing methods for the six appointments. The first was a questionnaire designed for quantitative data collection (see Appendix B). To obtain meaningful and thoughtful feedback concerning human capital development, our group designed oral interview questions as well (see Appendix C). We sent the questionnaire and interview questions to the businesses prior to our appointments.

3.2.1 Short Answer Survey

We developed short answer and objective questions in the form of a survey to provide our group with background data about the companies' workforces. By using this tool, we were able to forgo routine questioning during the actual interview. The survey consisted of 16 questions that were multiple choice, short answer, and numerical. The group structured these surveys to provide concise and controlled responses concerning the previously mentioned objectives. The business representatives received the questionnaires before the interview, which allowed better use of time during appointments (see Appendix D for completed surveys).

3.2.2 Qualitative Interview Questions

Complementary to the objective data we obtained are the outlooks and informed opinions that we gathered during visits to companies. Two members of our team attended each interview. We used a systematic method of taking notes to ensure that each interview was productive and to record all information in an organized fashion. Keeping our interviews organized allowed for an efficient process of obtaining results and further analyzing them. We obtained qualitative information from our open-ended interview questions (see Appendix E for interview notes).

3.3 Methods of Analysis

Using the concise data from our surveys, we established a framework of knowledge for each of the three industries. While we realized our sample size was not large enough to be representative of all businesses in each industry, the data helped us to understand the business environment in ASEAN on a basic level. We could identify similarities and differences between the companies and industries based on their objective responses to the survey questions. Standard questions administered to each business representative enabled us to gain a fundamental understanding of the private businesses, as well as their needs and opinions regarding human capital. After the interviews, we compiled the notes we took with the tape-recorded conversations and categorized the results into four areas: business environment, human resources, regional cooperation, and human capital development programs. We used comparisons of company responses to justify arguments presented in our results and analysis and our recommendations and conclusions chapters.

4 Results and Analysis

With the aid of literature review from our background, we evaluated the qualitative and quantitative data contained in this chapter, which we divided into the same four major topic sections as our interview questions. (Notes from the interviews and results from the questionnaire are available in Appendices E and F, respectively.) After analyzing the data, we were able to draw conclusions and create recommendations, which we present in Chapter 5 of this report.

The quantitative data cannot be used as a basis to form opinions or generalizations about Thai or ASEAN businesses because we interviewed only six companies. We utilized this information purely to back up our recommendations, which we derived from the facts and opinions that the companies presented. Therefore, one should assume that the data are not statistically significant.

4.1 Business Environment

Thailand has economic and foreign policies that favor business development and foreign direct investment. The representatives from First Apparel, Pioneer Manufacturing, SANYO Semiconductor, Somboon Group, and Toyota believe that Thailand's support of foreign business, specifically its low taxes and trade tariffs, makes it profitable for them to establish a manufacturing base here. The Thai government offers tax reductions and exemptions to certain foreign companies, and gives tax breaks to any company that provides certain levels of employee training.

Several additional factors contribute to Thailand's attractive business environment. First Apparel, a multinational textile manufacturer, acknowledged that one reason for setting up business in Thailand is that government politics generally do not interfere with industry. The auto-parts producer, Somboon Group, reported that the availability and ease of importing of raw materials help manufacturing businesses thrive in Thailand, and low minimum wages provide businesses with a large supply of cheap labor. These factors lower the cost of production, drawing foreign companies to establish divisions in Thailand.

All of the companies except Top Form Brassiere obtained at least ISO9001 certification from the International Standards Organization (ISO). Well-known

international organizations, such as ISO, focus on developing businesses by setting standards and guidelines regarding production, quality, and management systems. The larger companies we visited, such as SANYO, Somboon Group, and Pioneer, had a few more certifications than the smaller textile companies including quality, environmental, and other management systems. The main reason behind acquiring these certifications is to ensure the high quality demanded by the electronics industry (Pinthong). In addition, these companies are more technologically advanced and have the necessary resources to acquire such certifications. After asking the representatives at SANYO about changes observed from the implementation of ISO systems, they described noticeable increases in customer acceptance, employee efficiency, and employee development. From responses across the industries, it was clear that following standards yielded improvements in training, productivity, and consumer confidence.

According to Top Form Brassiere, one of the factors that limit economic growth is that Thailand does not have its own brands to sell. Most of the businesses we interviewed operate in synergy with large brand name corporations, and depend upon contracts with foreign businesses to sell their products. Companies in Thailand mainly act as production and manufacturing bases for these businesses.

4.2 Human Resources

The different industries we contacted expressed various views on the quality of labor in Thailand. This is presumably due to each industry's unique employee requirements. The availability of cheap labor is one of the reasons that all the companies we interviewed gave for doing business in Thailand and Southeast Asia. According to First Apparel, Somboon Group, and Pioneer Manufacturing, Thailand does not have the cheapest labor in the region, but the workers are comparatively more skilled.

Table 5: Strengths and weaknesses of the Thai human capital

<u>Strengths</u>	<u>Weaknesses</u>
<ul style="list-style-type: none">• plentiful, cheap low-skilled workers• easy to train/ learn quickly• respectful and non-confrontational• loyal	<ul style="list-style-type: none">• limited high-skilled workers• untrained• unmotivated and lack work ethic• unconcerned with deadlines and punctuality

Table 5 shows the strengths and weaknesses of Thai workers as reported by the companies. Most of the business representatives agree that people from Thailand are respectful and accommodating, but they classify Thai workers as having a lack of motivation and poor work ethic. The representative of Top Form Brassiere reported that Thai workers often continue doing the same task year after year with no advancement in their skills. According to our survey, entry-level employees do not sufficiently meet the demands of industry. A common response to our question about weakness of the labor pool was the need for additional skills including a greater proficiency in English. In general, the Thai workforce lacks management, leadership, and technical skills.

Pioneer, SANYO, and Toyota all high-technology manufacturing operations, rated their employee productivity as high due to effective on-the-job training and high-quality standards for production. However, both the textile businesses we interviewed rated their productivity as only average. They explained that this was due to elevated worker turnover rates that result in frequent hiring and training of new employees. First Apparel and Top Form Brassiere noted a shortage in available labor due to the large number of textile manufacturing operations near Bangkok. All the businesses found it necessary to increase the skill and productivity of their workers through on-the-job training.

Modern industries require workers trained in modern techniques and capable of technological innovation. Due to the shortage of Thai people with relevant skills, the government of Thailand provides visas and work permits to specialists from other countries that come to train Thai workers. Each company we interviewed required expert assistance from foreigners. Since several of the businesses have corporate bases outside Thailand, they often bring their own specialists into the country. The government allows companies to bring in a limited number of top management employees via a somewhat complicated

application process. Thailand ensures the use of Thai labor by restricting the number and occupational areas of lower level workers.

The companies we interviewed only employed expatriates in upper management and specialized skill areas. In each company, the number of foreign experts was less than ten percent. Most of the companies found the process of obtaining work permits for these people to be simple. However, they stated that it is nearly impossible to bring in regular workers. Toyota found all aspects of the process difficult enough to be avoided by recruiting Japanese speaking Thai citizens.

Five out of the six businesses maintain divisions in Southeast Asian countries other than Thailand. SANYO, when comparing its branches in the Philippines and Singapore to its Thai branch, stated that in the Philippines and Singapore the company experiences more cross-cultural problems. According to Top Form Brassiere, the quality of the work done at their factory in the Philippines is higher than that done in Thailand.

Even though the Thai citizens are on average low or semi-skilled, low wages make operating in Thailand profitable for businesses in the three industries that we investigated. However, this does not help the country's human resource development since cost-effectiveness is sustained by limiting the amount of on-job-training employees receive.

4.3 Human Resource Development Programs

Training programs, whether provided by companies or government, are essential to business in any industry. These programs provide employees with the skills and the knowledge required to take part and define their status in the workforce. Since the average education level of Thai people is substandard to the region, the government, as well as the private sector has begun designing programs to upgrade the skills and competency of the labor force.

4.3.1 Governmental Training Programs

In Thailand, the source of government training programs is the DSD Skill Development Centers. The centers provide programs to the different industries that teach basic skills. For example, Pioneer utilizes the training offered by the DSD to improve its employees' writing and electronics skills. The company, in cooperation with the Ministry

of Education, also developed a training program for potential employees, which allows ten vocational students to come train at the factory for one to two years (Pinthong). However, SANYO, the second electronics company we interviewed, does not utilize government training as it has its own training center in Japan (Kokoed).

The textile industry also uses the DSD centers but according to both textile companies, the two-week long program only teaches basic skills and needs to offer industry-specific skills to the employees. The textile companies are concerned that the program does not suit the needs of the industry; and for this reason, Top Form Brassiere opts not to utilize the training services of the DSD (Pholyangnok).

4.3.2 On-the-Job Training Programs

As we have observed from companies in the textile industry, not everyone benefits from government training facilities. Consequently, almost all companies administer their own form of training program, which allows them to receive incentives from the government. All the companies we interviewed were production oriented and design their training programs to teach the employee specific skills, such as operating machinery at the facility.

Within each industry, we recognized similarities and differences between training programs. The electronics and automotive companies had a much higher level of training, mainly due to the technical nature of the industries. Pioneer, SANYO, Somboon Group, and Toyota require new employees to go through an orientation program to teach them the company's regulations, quality standards, and basics of production. Similarly, these companies send employees to training facilities in Japan to learn skills. The training programs in Japan consist of one to two years of technical training that helps transfer knowledge to the facility in Thailand. After completing the training, employees usually receive incentives such as promotion and/or wage increases. Both of the textile companies required new employees to complete only a brief one to two week training program. The amount of initial training provided varies by worker experience.

Experienced supervisors and managers are generally a main source of knowledge in a company. We observed that all companies transferred knowledge from higher skilled employees to their lower skilled ones. It is easy for any company to implement this type of

hierarchical training system. The companies we visited stated that this method was effective in increasing the knowledge and productivity of the workforce. For example, the marketing manager at First Apparel passes down better patterns or production processes to the supervisor, who then trains his or her subordinates. Since the companies we visited dealt with manufacturing, the workforce required up to date training with the introduction of new products or machinery. Overall, the different methods to teach employees show effort by the company to increase its output as well as the productivity of its employees.

4.4 Regional Cooperation

The potential for ASEAN nations to achieve a regional demographic dividend relies on their ability to pool their resources. Economic cooperation in Southeast Asia has begun to develop as a result of ASEAN and APEC free trade agreements. Throughout the private sector however, there is little knowledge of the benefits of regional cooperation.

The skill levels and competencies of the human capital in ASEAN vary between member nations. Different policy environments and education systems across Southeast Asia hinder collaboration among them. Cooperation by the organization in human resource development is limited to areas that do not involve standards for training and educating citizens. The nations do not have an established system of pooling workers and labor markets across the region.

Textile manufacturers are somewhat interested in labor pooling because their industry depends on the availability of cheap labor. Top Form Brassiere wants to hire foreign labor from Laos or other countries in Southeast Asia that have a surplus of low-wage, low-skilled laborers. All other companies we interviewed have no desire to use non-expert foreign labor because Thailand meets their needs. They do not feel that their business would benefit specifically from human capital pooling among ASEAN countries.

Three of the companies we interviewed proposed collaborative training methods and exchange programs within Southeast Asia. They agree with the concept of sharing knowledge and technology throughout the region. However, the automotive parts producers in Thailand are more advanced than those in the other Southeast Asian countries. Therefore, they feel that knowledge exchange with ASEAN member nations would not benefit their business directly.

The representatives of all the manufacturers we visited were interested in future ASEAN collaboration in terms of efforts to raise the skill level of the regional labor force. They acknowledge possible advantages of regional collaboration involving ease of obtaining raw materials, information and technology pooling, and some regional human resource development research. Fewer trade barriers and additional support of business by regional organizations and governments would also benefit their companies.

5 Conclusions and Recommendations

The goal of this report was to assess the strengths and weaknesses of human capital in ASEAN and to discover means by which ASEAN member nations could assist each other with human capital improvements. Our team used Thailand's economy and businesses in the private sector for a perspective base. After we compiled published information and interview findings, our group analyzed the data to help us form conclusions and recommendations for governmental and international policies in the ASEAN region and the country of Thailand.

We formulated our research around the current training practices in Thai businesses as well as their Human Resource Departments' opinions about Thai governmental policies and regional cooperation in human capital improvements. This topic has become important since the introduction of Thailand's Eighth National Economic and Social Development Plan in 1999, which focused on improving the quality of Thailand's human resources. The following sections contain conclusions and recommendations for economic improvement in attaining a demographic dividend through human capital growth.

5.1 Recommendations for ASEAN

The objectives of this report examined ASEAN human capital and ways and means to improve it. ASEAN has many obstacles to overcome if it wishes to make substantial progress in improving its human capital. For the most part, the responses that our group received during the interviews confirmed that ASEAN regional collaboration in human capital pooling is either absent or unwanted in the private sector. Therefore, we designed recommendations to help the growth of skills in the region's human capital as well as promote the possibility of future ASEAN cooperation in human capital pooling.

ASEAN is a regional organization, not a governing body. This fact creates limitations regarding authority over member nations. It can formulate and suggest policies within the region, but each country's government remains sovereign. Thus, the realization of the following recommendations is restricted to the acceptance by all nations.

- ASEAN should grow economically as a single entity instead of as independent nations.

ASEAN nations have an opportunity to maximize their demographic dividends if they work collaboratively instead of individually. Economic growth and development are not easy to attain. However, cooperating by sharing ideas, reducing regulations, tariffs, and taxes, and supplying basic needs to people will relieve social strains to augment each nation's growth. Even though a few countries have already reached a demographic dividend, the entire region could profit from low regional competitiveness and economic assistance.

- ASEAN nations should combine their efforts in attaining a regional demographic dividend through human resource development.

The members of ASEAN must realize that in their current demographic condition they could benefit enormously from the use of regional cooperation in resource pooling and training efforts. Large scale pooling of human capital is not currently feasible because of varying educational standards and levels of training across the region but it may be possible in the future. Also, there is a lack of demand for foreign workers in countries that need to provide work for their own people. Therefore, our group concluded that the pooling of resources, for example training methods, educational curricula, and fundamental knowledge across the region, will aid the efforts of creating future human capital pooling in the region. By pooling resources, ASEAN can create a higher quality of human capital that will be consistent across the nation. To make resource pooling possible, ASEAN should form a department that deals solely with improving human capital within the Association.

- ASEAN should evaluate the human capital skills and training practices in each country and make the results available to the private sector.

If ASEAN wants the human capital in the region to increase in quality then the member nations must share information on the status of each country's human capital. Our

group recommends that every country examine its human capital from the perspective of the private sector. The nations should do this with respect to educational curriculum and training programs. Once ASEAN compiles the results, it needs to assess the strengths of each nation's workforce and make the data available to the public. The companies can use the information to become more aware of and likely to participate in human capital pooling programs in the future. To promote foreign direct investment (FDI), ASEAN can use the information to advertise the strengths of its workforce in the global market.

This assessment would also provide a better understanding of the quality of each country's human capital and can then aid in decisions regarding levels of schooling and training each should strive to achieve.

- ASEAN should create a regional standard for educational curriculum and training levels.

Each country should adhere to a regional standard outlined and initiated by ASEAN. The standard should be designed around the results of the previous recommendation. Also, ASEAN should analyze education and training methods in other Asian nations that are stronger competitors in the world market. Countries like Japan, China, and India can provide alternate methods of human capital development that the members of ASEAN do not currently utilize. If the labor force in the region possesses a uniform level of schooling it will aid ASEAN in advancing human capital pooling in the region.

- For the freer flow of natural persons between nations to increase in the future, ASEAN should agree upon immigration regulations within the region.

The enterprises we interviewed did not feel that the freer flow of natural persons was essential to helping their companies expand. Our group's recommendation aims to help companies realize the future potential in human capital pooling. Through the ease of border regulations, the countries can enjoy a more competitive labor pool and companies can fill their positions with more qualified personnel. This may cause discontent among countries

who feel that they are losing jobs to people from other countries. However, the government can place a restriction on each industry and how many people are allowed to migrate from each country to work in it. This will stop a company from hiring an entire workforce of cheap labor from one country while benefiting from the business environment in another. An example of immigration policy exists in Thailand that limits the size of the foreign labor population and specifies that companies can only hire specialist workers. One drawback to this policy expressed during our interviews was that the process to obtain a work permit for migrant labor is complicated and lengthy. Thus, our team concluded that to compete cooperatively in the world market, ASEAN should establish a regional immigration policy with a simple and concise process to obtain work permits

5.2 Recommendations for Thailand

Ideas the group received from the private sector in Thailand frame this report. We designed reform plans specific to Thailand's business and economy. Many of these recommendations have the potential to aid other countries in ASEAN as well, but our research limits us to Thailand alone.

5.2.1 Governmental Policy

The five-year plan in Thailand's Ninth Economic and Social Development Plan of 2002 has a major focus on the development of human capital. Currently, Thailand's government is in the input and processing stages of creating policy reform to pursue the objectives of the five-year plan. The government intends to begin the output phase of implementing policies by 2007.

- The DSD should make a database of the training programs that companies in the private sector use within Thailand.

A database of human capital development programs will not only help companies learn different techniques of training, it will also allow the DSD to identify and promote effective methods of training. Methods that are not effective can then be reshaped and modeled after successful procedures. The DSD currently sends out questionnaires to

companies concerning industry demands and training in the general school system. Our group suggests that the DSD includes a section on training methods within the workplace to create the database. After analyzing the methods the DSD can devise a national standard for the level of training employees should receive in each industry and level of employment.

- The Thai government should concentrate more of its resources on small and medium enterprises (SMEs) in the private sector.

One of the problems with current government training programs is that they are not cost effective for smaller businesses. The purpose of the programs is to encourage more training, but on the whole, larger enterprises already have training programs in place that allow them to collect government incentives. Thus, companies receive incentives for programs without making further developments.

We recommend that the Thai government devise a plan to help SMEs benefit from governmental training programs. There has not been published research pertaining to this topic and SMEs could benefit greatly from more research. A study on the topic of SMEs, their training programs, and expectations of government policies would be very helpful.

- The Thai government should promote the growth of industrial research and development (R&D) instead of manufacturing.

The country has recently put an emphasis on technical schooling. Unfortunately, the students leaving school are finding underemployment a problem due to the limited demand for technical personnel. The country has to promote FDI specific to R&D. Multinational companies are not using Thailand for their R&D departments but rather for manufacturing. The country can promote R&D in the economy through educational improvements and training developments to create a higher skilled labor force within the nation.

5.2.2 Education Reform

A few common responses that we received during our interviews were that the Thai workers were “lazy,” have a “bad work ethic,” possess deficient “teamwork skills,” and do not take “responsibility.” These typical traits that affect productivity are due in part to the culture of the Thai people and the “may pen rai” way of life, also known as a loose society. On average, employees are more concerned about quality of life than career enhancement (Maneesrikrajang, Kokoed, and Cherdkeattikul). A solution to this problem that our group recommends is to develop and initiate curricular changes in the education system. The changes would concentrate on increasing motivation and ambition within the Thai workforce.

- Work ethic should be included within the education curriculum.

Thai businesses are observing poor work ethic; therefore, in order to create a productive workforce the education curriculum should incorporate the values of work ethic. Our group concluded that the Thai way of life and educational curriculum are partially the cause of this. To solve this problem, we recommend that work ethic becomes part of the curriculum in Thailand’s schools, from primary education through secondary education, and beyond. Teaching students about the benefits of a conscientious work ethic will enhance the Thai workforce’s motivation and ambition.

- Education of every age group should be a priority.

Currently Thailand’s five-year plan recognizes the importance of lifelong learning but the country should make this a realization. Building an educated and skilled workforce will allow the nation to accommodate economic growth and future FDI opportunities. Incentives play an important role in encouraging employees to participate in lifelong learning programs. A focus on critical thinking skills and the ability to apply them in the workplace should be central topics. Basic knowledge is sufficient for a foundation but applied knowledge is needed to increase the quality of human capital. Also, the business should give incentives to employees who improve productivity in the workplace.

- The government should encourage companies to sponsor projects with local schools.

The integration of schooling and business-sponsored projects could create an advanced learning environment for students, either within or outside the classroom. Our team concludes that companies should devise challenging problem solving projects that pertain to their industry. Students should have to use critical thinking skills to complete these projects and they would have the opportunity to receive informal training within that industry. Instituting these programs within companies will also help students learn about businesses and future job opportunities in their area. In addition, companies could have a chance to start training the older students before they leave school.

5.2.3 Training Improvements

Thailand has several problems with its training programs. The DSD has been assisting Thai companies in improving their workforce through training programs; however, corporate initiative in training is also necessary. With the cooperation of both the DSD and the private sector, the current Thai workforce can increase its proficiency and productivity.

- Encourage private enterprises to take part in Dual Vocational Training (DVT).

Corporate demand alone drives DVT because participation is voluntary on the part of the business. The business assumes all costs associated with this program, which often deters companies from participating in DVT. We recommend that the government should offer tax incentives or another form of financial benefit for companies participating in DVT. This could help promote participation and the younger workforce will become more skilled. Participation in DVT should not have a single tax incentive attached to it, but rather, the more students that a company has enrolled in the program, the higher the incentive should be.

- The government should sponsor seminars at companies to teach the current labor force the definition and benefits of having a good work ethic.

Once a year, companies should host a government subsidized motivational speaker to talk with their employees about work ethic. This would be part of a lifelong learning program included in Thailand's five-year plan. The Thai government should also produce a set of videos that teach employees in a step-by-step manner about the work ethic. These two measures, in conjunction with salary increases, will help to raise interest in skill advancement and corporate promotion.

- Promote teamwork and group dynamic training within companies.

Along with educational reform should be the promotion of teamwork and group dynamic competencies. Thai workers have insufficient teamwork skills, which lowers productivity in the workplace. We recommend that companies solve this problem by arranging team-building exercises within the company. The DSD should be the organization in charge of creating the team building exercises and group solving problems with the intention of increasing communication, leadership, and organizational skills.

ASEAN nations only have a limited time to act upon the proposed recommendations due to changing demographic conditions and globalization. It is imperative that these suggested actions become a priority in the ASEAN agenda. The research within our report was derived from the Thai business perspective. However, this does not limit it from being applicable to other nations within ASEAN. It is our hope that both ASEAN and Thailand institute these policies as they will be beneficial to attaining a demographic dividend in human capital improvements, both locally and regionally. With the assistance of Dr. Kua Wongboonsin, our results, arguments, and recommendations could be presented to authoritative bodies in ASEAN and Thailand. The condition of ASEAN's human capital has much potential in the coming years, but ASEAN will only be successful in reaching that potential if recommendations such as ours are accepted and implemented.

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Appendix A: The DSD Strategy

The Department of Skill Development's Strategy to Enhance the Thai Workforce's International Competitiveness

"The DSD has formulated its strategy as follows:

1. Increase education in the labour force
DSD has co-operated with the Ministry of education to increase the level of education in the labour force. At present, three quarters of the thirty three(33) million labour force are unskill[ed] labour since they have received an average of 5.1 years of education. This situation is limitation in improving the productivity of the labour force and raising the quality of products so as to compete in the world market. DSS has provided profession training while the Ministry of Education provides basic education to 2 major groups namely Matayom three for labour aged 13 - 15 years who have completed pratom 6 and did not have the opportunity to continue their education and certificate level(Certificate of Vocational Education : CVE) for labour which have less than 12 years of Education.
2. Emphasize skill development so as to increase productivity. Produce goods of high quality in order to raise competitiveness. DSD is responsible for national man power planning and providing training to increase the [potential] of the labour force to correspond to the industrial restructuring plan.
3. Profession training system which emphasize actual impl[e]mentation so as to ensure that the labour can perform the job. At the same time to be able to classify the knowledge and experience in each level into educational levels. For instant labour with primary skill level is equivalent to matayom 3; Semi-skilled labour is equivalent to matayom 6 or certificate level (Certificate of Vocational Education : CVE) etc. This has already been impl[e]mented.
4. Emphasize the co-operation between the public and private sectors through the m[e]chanism of the tripartite committees at the national and provincial level (comprising representative of the private sector both employer and employee and representative of the public sector.) This is to create a co-operative skill development plan, co-operate in resources and information which will result in saving of budget, time and man power.
5. Stimulating the private sector to play a bigger role in skill development than before by:
 - Registering as a profession trainer under the Vocational Training Promotion Act 1994 will be exempted from labour law, private institution law and be allowed to deduct additional expense from income tax.
 - Providing training for employees in the work place will entitle the employer to deduct additional expense from taxes.

-Support the private sector in establishing Skill Standard Testing Centers with the DSD controlling the standard and issuing licenses.[]DSD is currently considering other incentives to encourage the private sector to become more interested in skill development by improving the law under the Act Promoting Profession Training 1994. In 2 main areas ie.

- Forcing employers to develop skill of their employees in s proportion to be determined later. If the employer does not do so, the employer must contribute funds to the Skill Development Fund at a rate to be determined later.
- Places of business can seek loans from the Skill Development Fund in order to provide skill development for their employees.

6. Improve the efficiency of skill development under the ADB loan project;

- Increase the number of those receiving training at every center and emphasize training which must has national standard and develop further to meet international standards.
- Replace machinery and equipment which utilizes new technology which correspond to the industrial development structure.
- Accelerate the training of trainers and personnel in order to be prepared to receive and tran[s]fer new technology.
- Utilize computer technology in preparing text books(Storing in CD-ROM) as a teaching aid called Computer Base Training : CBT. This will help the Trainees understand the course substance easier and can study by themselves.

7. Emphasize skill development in courses which are desired by the market such as computer personnel, service and tourism profession, nurse-aides etc.

8. Establish a skill development monitoring and evaluation system by preparing a skill development efficiency index through the establishment of a working group comprising representatives from the Budget Bureau, the Civil Service Commission and the office of the National Economic and Social Development Board etc.”

Source: Department of Skill Development (2003)
<<http://www.dsd.go.th/eng/kom03.htm>>

Appendix B: Short Answer Survey

GENERAL INFORMATION

COMPANY: _____

INDUSTRY: _____

YOUR NAME: _____

YOUR POSITION: _____

Circle the primary role of this branch of the company:

Administration

Distribution

Production

Research

ALL

1) In what ASEAN member countries do you have a base of operations?

Brunei Darussalam

Cambodia

Indonesia

Lao PDR

Malaysia

Myanmar

The Philippines

Singapore

Thailand

Vietnam

2) What is the total number of employees in your company?

Total _____

Approximately what percentage is in each of these areas:

High Skilled _____

Low Skilled _____

Foreign

Workers _____

Thai Workers _____

3) What is the average educational attainment of your employees?

In high level positions?

Primary

Secondary

Tertiary

Post - Graduate

In low level positions?

Primary

Secondary

Tertiary

Post - Graduate

4) Overall, how well do entry level employees meet the demands of the industry?

Very Well

Acceptably

Poorly

Not at all

5) In which skill area do recent graduates need the most improvement:

Basic

Technical

Management

Work Ethic

6) To obtain higher level employees, which does your company mostly do?

Train Thai Workers

Hire Foreign Workers

7) In which of the following countries does your company recruit most of its employees?

Brunei Darussalam

Cambodia

Indonesia

Lao PDR

Malaysia

Myanmar

The Philippines

Singapore

Thailand

Vietnam

OTHER _____

8) In what areas are non-Thais employed and approximately what percentage are in the specified areas?

Management _____ Semi-Skilled _____
Technological _____ Low-Skilled _____

9) Is it difficult to obtain work permits or visas for the foreign workers? YES NO

If Yes, Please explain why it is difficult:

10) Does your company offer on the job training programs? YES NO

If Yes, Please describe them and how effective they are:

If No, do you plan to provide this in the near future? YES NO

11) Are incentives provided to complete training programs or continue education? YES NO

If Yes, which of the following are provided:

Wage Increase Vacation Time Promotion Reimbursement
Other _____

12) What is the priority level for training and upgrading the staff at your company?

Very High High Average Low Very Low

13) To the best of your knowledge rate the productivity of the employees in your company?

Very High High Average Low Very Low

14) Does your company sponsor projects with local schools to help educate the future population? YES NO

15) What would be the most effective way to increase human capital among ASEAN?

- a) Increase the quality of traditional education
- b) Individual companies provide on the job training
- c) Government sponsors training programs
- d) Allow for a freer flow of workers between ASEAN member countries

16) If you would like, please provide us with any information or comments regarding ways of improving human capital and regional cooperation throughout ASEAN member countries.

Appendix C: Interview Questions

Background Information

1. In what countries does this company currently have a base of operations?
2. How many Thai people work in high skilled or management positions?

Business Environment in ASEAN Member Countries

3. What are the advantages and disadvantages of having a base of operations in Thailand? In other ASEAN member countries?

Human Resources of ASEAN Member Countries

4. Are there employment positions in this company that are hard to fill by the local workforce and require foreign workers?
5. How does this company measure employee productivity?
6. If possible, compare the productivity rates of the different workers in ASEAN member countries.

Human Resource Development Programs

7. What does this company do to improve its human capital and productivity levels?
8. How do the company's training methods differ in the different regional headquarters?
9. How does this company provide training for higher skilled positions?
10. What aspects of the training programs of this company are aimed towards upgrading productivity and competitiveness?
11. Does this company offer incentives for knowledge advancement and continuing education? What are they?
12. Does this company implement Total Quality Management? Why or why not? If so, with what results?

Regional Cooperation

13. Is it difficult to hire people from outside the country in knowledge intensive positions as opposed to labor intensive? Why?
14. Would the freer flow of international human capital be beneficial to this company?
15. Would a freer flow of labor within ASEAN member countries be beneficial to this company?

Appendix D: Completed Surveys

- **First Apparel: Short Answer Survey**

GENERAL INFORMATION

COMPANY: First Apparel (Thailand) Co.,Ltd.

INDUSTRY: Textile

YOUR NAME: Kedmanee Maneesrikrajang

YOUR POSITON: Administration Manager,
Human Resource Manager

Circle the primary role of this branch of the company:

Administration Distribution Production Research ALL

1) **In what ASEAN member countries do you have a base of operations?**

Brunei Darussalam Cambodia Indonesia Lao PDR Malaysia
Myanmar The Philippines Singapore Thailand Vietnam

2) **What is the total number of employees in your company?**

Total 700

Approximately what percentage is in each of these areas:

High Skilled _____

Low Skilled _____

Foreign Workers 0-3

Thai Workers 100%

3) **What is the average educational attainment of your employees?**

In high level positions? Primary Secondary Tertiary Post - Graduate

In low level positions? Primary Secondary Tertiary Post - Graduate

4) **Overall, how well do entry level employees meet the demands of the industry?**

Very Well Acceptably Poorly Not at all

5) **In which skill area do recent graduates need the most improvement:**

Basic Technical Management Work Ethic

6) **To obtain higher level employees, which does your company mostly do?**

Train Thai Workers Hire Foreign Workers

7) **In which of the following countries does your company recruit most of its employees?**

Brunei Darussalam Cambodia Indonesia Lao PDR Malaysia
Myanmar The Philippines Singapore Thailand Vietnam

OTHER _____

8) **In what areas are non-Thais employed and approximately what percentage are in the specified areas?**

Management _____ Semi-Skilled _____
 Technological _____ Low-Skilled _____

- 9) **Is it difficult to obtain work permits or visas for the foreign workers?** YES NO

If Yes, Please explain why it is difficult:

- 10) **Does your company offer on the job training programs?** YES NO

If Yes, Please describe them and how effective they are:

If No, do you plan to provide this in the near future? YES NO

- 11) **Are incentives provided to complete training programs or continue education?** YES NO

If Yes, which of the following are provided:

Wage Increase Vacation Time Promotion Reimbursement
 Other _____

- 12) **What is the priority level for training and upgrading the staff at your company?**

Very High High Average Low Very Low

- 13) **To the best of your knowledge rate the productivity of the employees in your company?**

Very High High Average Low Very Low

- 14) **Does your company sponsor projects with local schools to help educate the future population?** YES NO

- 15) **What would be the most effective way to increase human capital among ASEAN?**

- a) Increase the quality of traditional education
- b) Individual companies provide on the job training
- c) Government sponsors training programs
- d) Allow for a freer flow of workers between ASEAN member countries

- 16) **If you would like, please provide us with any information or comments regarding ways of improving human capital and regional cooperation throughout ASEAN member countries.** Thai workers have the skills necessary. New products and equipment, and more training is needed.

• **Pioneer Manufacturing: Short Answer Survey**
GENERAL INFORMATION

COMPANY: Pioneer Manufacturing (Thailand) Co., Ltd
 INDUSTRY: Electronics
 YOUR NAME: Komkid Pinthong
 YOUR POSITON: Senior Manager, Administration Division
 Circle the primary role of this branch of the company:

Administration Distribution Production Research ALL

1) **In what ASEAN member countries do you have a base of operations?**

Brunei Darussalam Cambodia Indonesia Lao PDR Malaysia
 Myanmar The Philippines Singapore Thailand Vietnam

2) **What is the total number of employees in your company?**

Total 2,400

Approximately what percentage is in each of these areas:

High Skilled	<u> </u>	Foreign Workers	<u>22-23</u>
Low Skilled	<u> </u>	Thai Workers	<u>2,377</u>

3) **What is the average educational attainment of your employees?**

In high level positions? Primary Secondary Tertiary Post - Graduate
 In low level positions? Primary Secondary Tertiary Post - Graduate

4) **Overall, how well do entry level employees meet the demands of the industry?**

Very Well Acceptably Poorly Not at all

5) **In which skill area do recent graduates need the most improvement:**

Basic Technical Management Work Ethic

6) **To obtain higher level employees, which does your company mostly do?**

Train Thai Workers Hire Foreign Workers

7) **In which of the following countries does your company recruit most of its employees?**

Brunei Darussalam Cambodia Indonesia Lao PDR Malaysia
 Myanmar The Philippines Singapore Thailand Vietnam
 OTHER Specialists are recruited from Japan

8) **In what areas are non-Thais employed and approximately what percentage are in the specified areas?**

Management _____ Semi-Skilled _____
 Technological _____ Low-Skilled _____

- 9) **Is it difficult to obtain work permits or visas for the foreign workers?** YES NO

If Yes, Please explain why it is difficult: The company must provide time schedules and justification for the immigration of specialists.

- 10) **Does your company offer on the job training programs?** YES NO

If Yes, Please describe them and how effective they are:

If No, do you plan to provide this in the near future? YES NO

- 11) **Are incentives provided to complete training programs or continue education?** YES NO

If Yes, which of the following are provided:

Wage Increase Vacation Time Promotion Reimbursement
 Other _____

- 12) **What is the priority level for training and upgrading the staff at your company?**

Very High High Average Low Very Low

- 13) **To the best of your knowledge rate the productivity of the employees in your company?**

Very High High Average Low Very Low

- 14) **Does your company sponsor projects with local schools to help educate the future population?** YES NO

- 15) **What would be the most effective way to increase human capital among ASEAN?**

- a) Increase the quality of traditional education
- b) Individual companies provide on the job training
- c) Government sponsors training programs
- d) Allow for a freer flow of workers between ASEAN member countries

- 16) **If you would like, please provide us with any information or comments regarding ways of improving human capital and regional cooperation throughout ASEAN member countries.**

• **SANYO: Short Answer Survey**

GENERAL INFORMATION

COMPANY: SANYO Semiconductor (Thailand) Co.,Ltd

INDUSTRY: Electronics

YOUR NAME: Surapol Kokoed

YOUR POSITON: Department Manager,
Human Resource Department

Circle the primary role of this branch of the company:

Administration Distribution Production Research ALL

1) In what ASEAN member countries do you have a base of operations?

Brunei Darussalam Cambodia Indonesia Lao PDR Malaysia
Myanmar The Philippines Singapore Thailand Vietnam

2) What is the total number of employees in your company?

Total 1,739

Approximately what percentage is in each of these areas:

High Skilled 570
Low Skilled 1,169

Foreign Workers 13
Thai Workers 1,726

3) What is the average educational attainment of your employees?

In high level positions? Primary Secondary Tertiary Post - Graduate
In low level positions? Primary Secondary Tertiary Post - Graduate

4) Overall, how well do entry level employees meet the demands of the industry?

Very Well Acceptably Poorly Not at all

5) In which skill area do recent graduates need the most improvement:

Basic Technical Management Work Ethic

6) To obtain higher level employees, which does your company mostly do?

Train Thai Workers Hire Foreign Workers

7) In which of the following countries does your company recruit most of its employees?

Brunei Darussalam Cambodia Indonesia Lao PDR Malaysia
Myanmar The Philippines Singapore Thailand Vietnam
OTHER Japan

8) In what areas are non-Thais employed and approximately what percentage are in the specified areas?

Management	100	Semi-Skilled	_____
Technological	_____	Low-Skilled	_____

9) Is it difficult to obtain work permits or visas for the foreign workers?

YES NO

If Yes, Please explain why it is difficult:

10) Does your company offer on the job training programs?

YES NO

If Yes, Please describe them and how effective they are:

The company arranges an orientation program for all new employees to learn about company culture, rules, regulations, and quality improvement activities. The workers will then join on-the-job training programs where they will learn what their responsibilities are and then they are evaluated by supervisors within ninety days.

If No, do you plan to provide this in the near future?

YES NO

11) Are incentives provided to complete training programs or continue education?

YES NO

If Yes, which of the following are provided:

Wage Increase Vacation Time Promotion Reimbursement

Other _____

12) What is the priority level for training and upgrading the staff at your company?

Very High High Average Low Very Low

13) To the best of your knowledge rate the productivity of the employees in your company?

Very High High Average Low Very Low

14) Does your company sponsor projects with local schools to help educate the future population?

YES NO

Students come to train at the company.

15) What would be the most effective way to increase human capital among ASEAN?

- a) Increase the quality of traditional education
- b) Individual companies provide on the job training
- c) Government sponsors training programs
- d) Allow for a freer flow of workers between ASEAN member countries

16) If you would like, please provide us with any information or comments regarding ways of improving human capital and regional cooperation throughout ASEAN member countries.

• **Somboon Group: Short Answer Survey**
GENERAL INFORMATION

COMPANY: Somboon Group

INDUSTRY: Automotive

YOUR NAME: Suppachart Cherdkeattikul

YOUR POSITON: HRD Training Manager

Circle the primary role of this branch of the company:

Administration Distribution Production Research ALL

1) **In what ASEAN member countries do you have a base of operations?**

Brunei Darussalam Cambodia Indonesia Lao PDR Malaysia
 Myanmar The Philippines Singapore Thailand Vietnam

2) **What is the total number of employees in your company?**

Total 1300

Approximately what percentage is in each of these areas:

High Skilled	<u>70%</u>	Foreign Workers	<u>2</u>
Low Skilled	<u>30%</u>	Thai Workers	<u>1298</u>

3) **What is the average educational attainment of your employees?**

In high level positions? Primary Secondary Tertiary Post - Graduate
 In low level positions? Primary Secondary Tertiary Post - Graduate

4) **Overall, how well do entry level employees meet the demands of the industry?**

Very Well Acceptably Poorly Not at all

5) **In which skill area do recent graduates need the most improvement:**

Basic Technical Management Work Ethic

6) **To obtain higher level employees, which does your company mostly do?**

Train Thai Workers Hire Foreign Workers

7) **In which of the following countries does your company recruit most of its employees?**

Brunei Darussalam Cambodia Indonesia Lao PDR Malaysia
 Myanmar The Philippines Singapore Thailand Vietnam
 OTHER _____

8) **In what areas are non-Thais employed and approximately what percentage are in the specified areas?**

Management	_____	Semi-Skilled	_____
Technological	.15%	Low-Skilled	_____

- 9) **Is it difficult to obtain work permits or visas for the foreign workers?** YES NO

If Yes, Please explain why it is difficult:

It is only possible to obtain work permits for experts and top management.

- 10) **Does your company offer on the job training programs?** YES NO

If Yes, Please describe them and how effective they are:

Identify task list to be trained and train them prior start working.

Last two years, 2% OJT (from total man hours) was strictly adhered to.

- If No, do you plan to provide this in the near future? YES NO

- 11) **Are incentives provided to complete training programs or continue education?** YES NO

If Yes, which of the following are provided:

Wage Increase Vacation Time Promotion Reimbursement

Other _____

- 12) **What is the priority level for training and upgrading the staff at your company?**

Very High High Average Low Very Low

- 13) **To the best of your knowledge rate the productivity of the employees in your company?**

Very High High Average Low Very Low

- 14) **Does your company sponsor projects with local schools to help educate the future population?** YES NO

- 15) **What would be the most effective way to increase human capital among ASEAN?**

- a) Increase the quality of traditional education
- b) Individual companies provide on the job training
- c) Government sponsors training programs
- d) Allow for a freer flow of workers between ASEAN member countries

- 16) **If you would like, please provide us with any information or comments regarding ways of improving human capital and regional cooperation throughout ASEAN member countries.**

Cross training /exchange program, knowledge sharing

• **Top Form: Short Answer Survey**
GENERAL INFORMATION

COMPANY: Top Form Brassiere CO., LTD

INDUSTRY: Textile

YOUR NAME: Surasit Pholyangnok

YOUR POSITION: Senior Administrative Officer

Circle the primary role of this branch of the company:

Administration Distribution Production Research ALL

1) In what ASEAN member countries do you have a base of operations?

Brunei Darussalam Cambodia Indonesia Lao PDR Malaysia

Myanmar The Philippines Singapore Thailand Vietnam

2) What is the total number of employees in your company?

Total 1500

Approximately what percentage is in each of these areas:

High Skilled _____ Foreign Workers 32
Low Skilled _____ Thai Workers 1468

3) What is the average educational attainment of your employees?

In high level positions? Primary Secondary Tertiary Post - Graduate

In low level positions? Primary Secondary Tertiary Post - Graduate

4) Overall, how well do entry level employees meet the demands of the industry?

Very Well Acceptably Poorly Not at all

5) In which skill area do recent graduates need the most improvement:

Basic Technical Management Work Ethic

6) To obtain higher level employees, which does your company mostly do?

Train Thai Workers Hire Foreign Workers

7) In which of the following countries does your company recruit most of its employees?

Brunei Darussalam Cambodia Indonesia Lao PDR Malaysia

Myanmar The Philippines Singapore Thailand Vietnam

OTHER _____

8) In what areas are non-Thais employed and approximately what percentage are in the specified areas?

Management	<u>X</u>	Semi-Skilled	_____
Technological	_____	Low-Skilled	_____

- 9) **Is it difficult to obtain work permits or visas for the foreign workers?** YES NO

If Yes, Please explain why it is difficult:

It is only possible to obtain work permits for experts and top management.

- 10) **Does your company offer on the job training programs?** YES NO

If Yes, Please describe them and how effective they are:

Week long job specific training

- If No, do you plan to provide this in the near future? YES NO

- 11) **Are incentives provided to complete training programs or continue education?** YES NO

If Yes, which of the following are provided:

Wage Increase Vacation Time Promotion Reimbursement

Other _____

- 12) **What is the priority level for training and upgrading the staff at your company?**

Very High High Average Low Very Low

- 13) **To the best of your knowledge rate the productivity of the employees in your company?**

Very High High Average Low Very Low

- 14) **Does your company sponsor projects with local schools to help educate the future population?** YES NO

- 15) **What would be the most effective way to increase human capital among ASEAN?**

a) Increase the quality of traditional education

b) Individual companies provide on the job training

c) Government sponsors training programs

d) Allow for a freer flow of workers between ASEAN member countries

- 16) **If you would like, please provide us with any information or comments regarding ways of improving human capital and regional cooperation throughout ASEAN member countries.**

• **Toyota: Short Answer Survey**
GENERAL INFORMATION

COMPANY: Toyota Motor Thailand Co., Ltd.

INDUSTRY: Automotive

YOUR NAME: Sutin Henprasert

YOUR POSITION: Deputy General Manager, HRD

Circle the primary role of this branch of the company:

Administration Distribution Production Research ALL

1) **In what ASEAN member countries do you have a base of operations?**

Brunei Darussalam Cambodia Indonesia Lao PDR Malaysia
 Myanmar The Philippines Singapore Thailand Vietnam

2) **What is the total number of employees in your company?**

Total 7,400

Approximately what percentage is in each of these areas:

High Skilled	<u>2,900</u>	Foreign Workers	<u>50</u>
Low Skilled	<u>4,500</u>	Thai Workers	<u>7,350</u>

3) **What is the average educational attainment of your employees?**

In high level positions? Primary Secondary Tertiary Post - Graduate
 In low level positions? Primary Secondary Tertiary Post - Graduate

4) **Overall, how well do entry level employees meet the demands of the industry?**

Very Well Acceptably Poorly Not at all

5) **In which skill area do recent graduates need the most improvement:**

Basic Technical Management Work Ethic

6) **To obtain higher level employees, which does your company mostly do?**

Train Thai Workers Hire Foreign Workers

7) **In which of the following countries does your company recruit most of its employees?**

Brunei Darussalam Cambodia Indonesia Lao PDR Malaysia
 Myanmar The Philippines Singapore Thailand Vietnam

OTHER _____

8) **In what areas are non-Thais employed and approximately what percentage are in the specified areas?**

Management	X	Semi-Skilled	_____
Technological	X	Low-Skilled	_____

9) **Is it difficult to obtain work permits or visas for the foreign workers?** YES NO

If Yes, Please explain why it is difficult:

You must go to many different government branches to get approval.

The company must have specific project or purpose to bring in an employee.

10) **Does your company offer on the job training programs?** YES NO

If Yes, Please describe them and how effective they are:

If No, do you plan to provide this in the near future? YES NO

11) **Are incentives provided to complete training programs or continue education?** YES NO

If Yes, which of the following are provided:

Wage Increase Vacation Time Promotion Reimbursement

Other _____

12) **What is the priority level for training and upgrading the staff at your company?**

Very High High Average Low Very Low

13) **To the best of your knowledge rate the productivity of the employees in your company?**

Very High High Average Low Very Low

14) **Does your company sponsor projects with local schools to help educate the future population?** YES NO

15) **What would be the most effective way to increase human capital among ASEAN?**

a) Increase the quality of traditional education

b) Individual companies provide on the job training

c) Government sponsors training programs

d) Allow for a freer flow of workers between ASEAN member countries

16) **If you would like, please provide us with any information or comments regarding ways of improving human capital and regional cooperation throughout ASEAN member countries.**

Appendix E: Interview Summaries

First Apparel (Thailand) Co., Ltd.

Thursday February 19, 2004 10:00 AM

111/1 Saha Rattana Nakorn Industrial Estate, Moo 4 Tambol Bang Phrakru

Amphur Nakorn Luang, Ayutthaya 13260, Thailand

Kedmanee Maneesrikrajang - Administrative Manager, Human Resource Manager

Background Information:

- Textile company
- 13 years old
- Company moved here 3 years ago from Bangkok
- Only Thai workers (700)
- ISO 9001:2000 certified
- Have quality control in every step (sewing, cutting, dying...etc.) and one to finalize everything
- Loss of only 1% because of all of the quality control
- Sometime customers come to inspect the goods as well
- Import machines
- 100% exporting company

Business Environment:

- Thailand BOI trying to help FDI in the country
- Governmental laws and regulations are not complicated
- Standards for labor force are set by Thai government (similar to ISO 9000)
- Labor is more expensive in Thailand but are better workers and more skilled than the other ASEAN countries
- Thailand is good place to have base of operations.
 - Taxes and customs are not hard like in other countries.
 - Politics do not play a large factor.
- Government trying to pass a policy making no tax on textile exporting

Human Resources:

- Only 3 foreign workers
 - One Quality Assurance Manager- Sri Lanka
 - A Merchandiser and a Marketing Manager- Hong Kong
 - Use a Hong Kong manager because more skilled than Thais
- Experience is enough for low skilled workers, don't need more training than compulsory schooling
- Productivity only at 70% because fairly new workers, only 3 years
- Worker turnover of 5-10% per month, still lack of workers in this area
- To measure employee productivity they use multiple systems:
 - Quality Assurance
 - An evaluation form every three months on employees and they get an A,B, or C
 - Good grades on evaluation form mean increased wage

- The number of garments that they produce. Rated on design and pattern (easy, medium, hard)
- Responsibility and work ethic.
- Productivity was higher when company was in Bangkok because more experienced workers (10 years)
- Most employees come from local vocational school
- Thai workers need to mature more, have a better work ethic, and have more ambition
- Higher level completed anywhere from vocational to bachelors degrees
- Low level employees on average have primary education and also have experience

Human Resource Development Programs:

- New employees go through two weeks of training unless experienced, then only a few days
- Paid more if they are more productive each day
- Only train more when they make a new product or get new equipment
- Don't sponsor school projects but sometimes donate money or computers to schools
- Skill Development Center comes to help train but only on the basics; non-specialized. Need to help train and specialize employees.
- Trainer is a supervisor and trains from experience, also gets instruction from customer
- Marketing Manager tells supervisor better ways and that is passed onto training employees
- Company contacts school so employees can study on Sunday if they wish to increase education because Monday through Saturday is the work week
 - Combine employees who want more schooling with similar companies in the area so there is more incentive for a school to teach the larger class

Regional Cooperation:

- Easy to get work permit
- Does not want freer flow because Thai workers are more skilled than other ASEAN member nations. Not necessary.

Rojana Industrial Park, 1/31 Moo 5 Tambol Kanham, Amphur U-Thai
Pranakornsri Ayutthaya 13210 Thailand
Komkid Pinthong - Senior Manager: Administrative Division

Background Information:

- ISO14001 and 9001 certified
 - Standards and quality assurance make training a very high priority
 - electronics cannot have mistakes (necessitates high responsibility)
 - ISO is checking all the time
- Investment has come solely from Japan
 - Normally, Khun Komkid speaks Japanese to his boss. He also speaks English.
- Managing Directors are all Japanese
 - General Managers are also all Japanese
 - Department Managers are Thai and Japanese
 - Regional managers are Thai (their policy is to “let Thais manage” themselves)
- There are 2400 employees at this facility and only 23 are Japanese.
- Asian hub, or product center, for this company is in Singapore
- Company has operated in Thailand since 1996
- They recently started R&D at Thai factory in addition to manufacturing

Business Environment:

- Pioneer has bases in Indonesia, Thailand, Malaysia, and Singapore. (China)
- Thai government is supportive of their business
 - Thailand has low taxes and tariffs (5-7 year exemption on certain taxes).
- It is easy and cheap for them to obtain materials of production
- The characteristics of the Thai people are the main reason to do business there.
- BOI, or Board of Investment, decides how many foreign experts are needed and for how long. It approves their applications for visas and work permits for foreign experts.

Human Resources:

- Thai human resources are “okay”
 - approximately 80 percent have good training
 - some need more training and education
- Thai people are passive and “easy to control”.
- Most of Pioneer’s Thai “daily operators” in the manufacturing plant have high school education or above, and should know some English.
- Technicians have attended some technical or vocational school
- The company currently has 22 experts from Japan working with them in Thailand.
- Productivity at Pioneer is >100 percent (100 percent being normal)
 - may be due to Pioneer’s training programs and TQM

Human Resource Development Programs:

- Pioneer sends some employees to train for one to two years in Japan to transfer technological innovations to plant in Thailand.
- All new employees go through initial five-day orientation programs.
 - These programs differ by nation due to cultural factors.
 - All employees learn the company's regulations, about quality standards, and the basics of production.
 - New operators train on the job and work on probation for the first four months.
- Pioneer applies the four-month compulsory probation period that is standard in Thailand.
- Employees submit an evaluation every three months, and possibly receive more training
 - The evaluations identify problems and strengths of workers and of production.
 - Pioneer awards bonuses every year based on performance evaluations.
- Government: Department of Skill Development centers in Ayuthaya
 - give workers training in particular areas, for example basics of writing and electronics
- Private/community: Honda has a local tech school.
 - Pioneer awards scholarships to students
- Pioneer lets ten vocation students come for "raw" training leading to potential employment.
 - They come to the factory to train for one to two years.
 - coordinated through the Ministry of Education
- Pioneer invites groups of students from primary, secondary, and vocational schools.
- Environmentalism: Pioneer tries to give back to the community through cleaning of public spaces and running environmental programs for schoolchildren.
- Universities, colleges, and technical schools inform students about promising career opportunities.
 - get to visit the factory to sample working environment/get experience
 - sometimes receive course credit for training programs at Pioneer

Regional Cooperation:

- It is common and easy for experts from other countries to be brought in to introduce new technologies but businesses cannot bring in non-specialist workers.
- Human capital pooling and immigrating foreign workers are not good ideas.

SANYO Semiconductor (Thailand) Co., Ltd. Thursday, February 19,2004 1:00pm

Rojana Industrial Park, 1/7 Moo 5, T. Karnham, Amphur U-Thai

Pranakornsri Ayutthaya 13210, Thailand

Human Resources Department

Surapol Kokoed - Department Manager:

Background Information:

- This branch of the company deals with production of transistors and IC's
- Total number of employees = 1739 (High Skilled = 570, Low Skilled = 1169)
- Has only 13 foreign workers (Japanese) and the rest are of Thai nationality
- The 13 Japanese people all work in high regional management jobs while the local management within the production facility are Thai.
- Certifications: ISO/TS 16949, ISO9001:2000, ISO 14001, OHSAS 18001, IATF, UKAS Quality Management, UKAS Environmental Management, TIS 18001, QS 9000
- The company receives the specifications for the products and produces.
- Production is 100 percent export.

Business Environment:

- The president of the company decided to start the facility in Thailand because the people are nice and possess a culture similar to other Asian countries, there aren't problems compared to The Philippines and Singapore where they have problems with nationality.
- Thailand has easy to follow regulations, makes it easy for a company to invest, and has lower taxes.
- Sanyo has been in business since 1990 in its current location and governmental policy wasn't important back then because Thailand was very open to Foreign Direct Investment .

Human Resources:

- They don't find any positions to be hard to fill by the Thai workforce because they have Japanese technicians teach the Thai technicians how to use the machinery. The machines come from Japan.
- Evaluation forms are used for the number and quality of chips the employee produces.
 - Employees are given yearly bonuses as well as the opportunity to increase their wages based on the evaluations
- They felt the production at their facility was 100 percent
- The representative didn't know about the productivity in other ASEAN nations.
- The areas of education they thought needed the most improvement were Sanyo culture, working with others and being able to adapt themselves, responsibility, and manners.
- Recent graduates need the most improvement in management and technical skills.
- Workers need to finish high school or if they have only completed 9 years of schooling they require at least 2 years of experience.

- They have also hired higher level Thai employees that have studied at the facility in Japan.

Human Resource Development Programs:

- Sanyo has several training programs separated by positions which determine the courses employees need to complete.
- When employees first enter the company they must go through an Orientation to teach them about the company production, goals, and quality.
- Supervisors and managers also train the employees below them (On-the-job), these also vary by position and amount of training needed. They figure out what is needed and make the appropriate changes to the program.
- The company headquarters in Japan is mainly a center for training.
 - They send workers to all other areas where the company is located.
 - The employee (operator) can go to Japan for technical training (1 year)
 - After completing the training in Japan the employees supervisor will evaluate them and determine how much they have improved and promote them accordingly.
- Managers and supervisors try to teach team development skills to the employees.
- Teamwork is the main focus of the training programs to increase productivity.
- The company provides managers with Japanese Language training because all managers are required to speak Japanese.
 - Once the employee pass the Japanese language test they may get promoted to a higher job.
- Individuals can take training programs outside of the company to further their skills and attempt to obtain a higher job.
- They have noticed many positive results after obtaining these certifications such as becoming more accepted by their customers, increasing customer base, improving efficiency of the employees, and developing the employees.
 - These certifications also provided the company with more guidelines and systems to follow in the work process.
- Students come to work at the company on their vacations as interns.
- Sanyo also has an open house and presentation for 4th year college students to introduce them to the company, its benefits, and other important information including the production line and process and IC's and transistors.
- Old machines are donated to local schools to allow students to use them and learn about them.

Regional Cooperation:

- SANYO is not interested in human capital pooling because they bring in experts, technicians, and technology from Japan and are satisfied with the Thai workforce.

No 112 Moo 2, 15th KM. Bangan-Trad Rd. Bangchalong, Bangplee,
Samutprakarn 10540. Thailand.

Suppachart Cherdkeattikul - Training Manager, Human Resource Development.

Sombat Jiwattayakul - Know-How Innovation and Training Co., Ltd. Managing Director

Background Information:

- Automotive parts company
- Thai-based, Thai-owned family business
- Are made up of five affiliated companies
- Company culture: customer focus, teamwork, discipline, quality, responsibility
 - Developed to meet the needs of the current business plan
- ISO and QM teams check the factory every six months
 - Standards are necessary in the auto business
 - Improve the quality of working life, and customer satisfaction
- Company ranks high on employee satisfaction surveys
 - There are few requests for transfers to affiliated companies

Business Environment:

- Thailand has low tariffs on imports of raw materials, few labor unions, is the “gateway to other countries”: China, Vietnam, Laos, Malaysia, Myanmar
 - Thai labor is relatively inexpensive.
- The government is not very supportive of investment in technology
- Foreign businesses have an advantage in technology and finance capital
 - Not enough in Thailand
- Company pushes for tax reduction on materials from Japan and India
- The auto industry in the region is growing
 - Fear foreign competition
- Thai government should set up national R and D centers, testing at the national auto institute
 - Testing equipment is too expensive to be bought privately

Human Resources:

- Somboon Group requires technical assistance from Japan.
- Population has a general lack of technical training.
- Thai expertise in automotive parts industry is very good compared to other Southeast Asian nations.
- Somboon Group measures productivity based on income/employee, gross profit/employee, and in-line pieces/man-hour.
 - Above average compared to other companies
- Graduates typically do not have the right skills for employment after graduation.
 - Seeks reforms in all areas of education
- Thai workers are hardworking, patient, learning, helpful, loyal
 - Are also slow, passive, unassertive, un-ambitious, followers not leaders.

Human Resource Development Programs:

- The company feels that the vocational system has great potential
 - Needs revamping
- A government Skill Development Center operates out of the Somboon factory
- DSD or University professors are brought to the factory to introduce skills
- Sometimes Japanese experts are also brought in
 - Employees can be sent to Japan for training as well
- Somboon has their own technical training programs
 - Competency based training for the development of skills for specific jobs
 - Adopted competency based training two years ago
 - Supervisor does the on-job training, manager promotes company culture
- Give monetary incentives for earning better competency scores
- Workers are evaluated once a year
- On-the-job training 2 percent of all man-hours
- Three day orientation, employees must pass all tasks on job description before going on the line.
- They allow employees to go back to school for additional degrees or training
 - Given salary, allowance, and opportunity for promotion
- They have a co-op program for university students
- Universities invite Somboon group to participate in committee of government, industry, and university representatives
 - Make decisions about curriculum changes
- Primary school students are involved in company programs to promote environmentalism and problem solving
- Involved in the dual system, vocational-work system, and Bachelors degree work program

Regional Cooperation:

- Knowledge exchange with Asia
- Little to be gained in terms of auto-parts production knowledge from other Southeast Asian nations
- Does not want freer flow because Thai workers are more skilled than other ASEAN member nations. Not necessary.
- Looking forward to cross-country education programs in Southeast Asia

26 Udomsorayuth Rd., Tambol Chiengraknoi, Amphur Bangpa-in,
Pranakornsri Ayutthaya 13180 Thailand
Surasit Pholyangnok - Senior Administrative Officer

Background Information:

- Textile Industry manufacturer of brassieres, 100% export
- ASEAN manufacturing plants in Thailand and the Philippines, their base of operation is in Hong Kong China.
- Investment from Hong Kong, China
- Managing Directors are Chinese, English, Canadian, and American.
- A lot of R&D comes from America
 - hence are a very multi-national company
- No Total Quality Management Certification
 - Worldwide Responsible Apparel Production (WRAP) Certified. Companies set standards together for this type of production regarding workers, wages, customer satisfaction, safety, and work ethics.
 - 100 percent of products are inspected for quality consistency.
 - Occasionally buyers will do spot checks.
- Use a mix of old and new technology such as computer run machinery to cut fabric.

Business Environment:

- Businesses in Thailand are mostly production. They do not have their own brand names.
- The representative categorized the Thai workers as “okay”. It was his opinion that other countries such as the Philippines higher quality workforce. There are skilled workers available from Laos but the government will not let the company hire foreign laborers.
- There are many textile manufacturers in the area, resulting in a shortage of labor with skills.
- Government enforcement agencies check for unregistered foreign workers and underage workers.

Human Capital:

- All their factory workers are Thai, and most have a 4th grade to high school education.
 - People who have attended secondary education often go to work for bigger companies.
- Thai technicians operate and repair the technical machinery.
- The employee turnover rate is 3-5 years, and 10% stay ten years.
 - Employees usually only transfer to similar types of jobs within the company.
 - They often perform the same task their whole lives and never advance their skills.

- In Thailand the human capital lacks basic education and training. The average workers are only trained to do one job.
- Thai people learn to use the equipment quite quickly.
- Top Form has 70 percent worker productivity
 - For a quota of 100 pieces, the average worker only completes 70.
 - This is possibly a result of the high turnover rate of workers and minimal efforts made to train new employees.

Human Capital Development:

- Two sewing managers train workers in every department, and a manager from HK teaches pattern making.
- They do not have a standard training program or formal orientation.
 - the employer is just concerned about output
- New technology is introduced from other countries.
- Manager learns it first then teaches the Thai manager who teaches the technician.
- Due to the intricacy of bra parts, they use highly specialized equipment
 - the workers are taught how use the equipment in one week.
- All workers receive a quota. If a worker fails to meet the set quota, evaluation follows.
- Workers receive pay raises for exceeding their quota.
- Experienced individuals will have a higher starting salary
- No incentives are given for upgrading skills or continuing education.
- The company sends a Thai product manager to Hong Kong to receive training that culminates into some type of *diploma*.
- There are governmental Skill Development programs, but they do not suit the needs of the industry.
 - The Department of Skill Development program is two weeks long, does not teach specific skills, and causes the workers have to leave the factory.
 - Top Form does not utilize these services
- There are technical schools that teach textile courses.
- Most new graduates have no work experience.
- Vocational students come to Top Form to train for technical and office positions.
- More emphasis should be placed on learning English.
- Thai people need to be taught to have more ambition, to establish and achieve goals, and better work ethics.

Regional Cooperation:

- It would be a good for the company to be able to hire people skilled in textile manufacture from other countries due to the shortages in Thailand.
- As is, obtaining work permits for non-experts involves a complicated process.

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Background Information

- Japanese owned
- The Thailand division is the core base of operation for Southeast Asia.
- ISO 9001 and 14001 certified
 - It was not hard to become ISO certified as Toyota had standards comparable to those of ISO, so certification was just documentation and recognition.
- This branch has all operational area: research, production, and administration.
- Export to over 90 countries

Business Environment

- The people, culture, political and economic are all factors why they have a division in Thailand.
- Thailand has only recently begun to view people as capital.

Human Resources

- Toyota has 7400 employees in Thailand. Only 50 are foreigners.
 - Mostly foreigners are from Japan and only two are from the USA.
 - They also recruit Japanese people already in Thailand for non-management and non-expert positions.
- Production workers have secondary education and some vocational training.
- Upper level employees mostly have a college degree.
- Thai students are not so good compared to the rest of the world and Singapore.
- The main weaknesses of the labor force are English and technical skills.
- Overall entry level Thai employees acceptably meet the needs of the industry.
 - Lower skilled employee, especially those from rural areas, rank poorly and have difficulty adapting to the production line.
 - Technical employees are acceptable but need some work in English.
 - Upper level and experienced employees are acceptable.
- In an evaluation of the competency of their workers strengths and were noted.
 - Strengths: ability to maintain low cost and high quality, attention to customer needs, and trust and communication
 - Weaknesses: global perspective, leadership, and the Japanese concept of continuous improvement.

Human Resource Development Programs

- At least 5 days and 10,000 baht per person per year are spent on training.
- Tax incentives are a good way for the government to support training programs.
- Development and training of their employees is the company's top priority.

- Two programs: one for management and one for production workers.
 - Link competency and training
 - Employees are evaluated by supervisor, peers, and themselves.
- The programs are designed to achieve the company goals.
- All employees have the opportunity for job advancement through training.
 - Pay for employees to get their MBA for two years in Thailand.
 - They send three employees per year to study at the top universities in Japan and the USA.
 - Offer management course at UCLA and in Japan.
 - They send about 50 production workers to train in Japan each year.
- Support local schools
 - Provides scholarships to Chula and Thammasat students.
 - Toyota sends ten employees to teach an automotive manufacturing class.
 - Offers cooperative training to 60 university students per year.
 - They donate machinery and part to universities for educational use.
 - Donate used books to rural schools.
 - Students come and visit the plant to see production.
- The purpose of government training centers is overall improvement in skills.
 - The program is new and still needs some improvement but is effective.
- Human capital should be the top priority because without quality people it is difficult to be economically competitive.
 - Quality workers make quality products.
- It is very beneficial to send people to other countries for training.

Regional Cooperation

- It is very difficult to get a work permit. The procedure is complicated and you must have a specific project or clear purpose for this person. You need approval from BOI, the Immigration office, the Labor office, and the local government.
 - It would be easier to go to one office/organization.

Appendix F: Acronym Glossary

AEGCD – ASEAN Expert Group on Communicable Diseases

AFAS – ASEAN Framework Agreement on Services

APEC – Asia-Pacific Economic Cooperation

ASEAN – Association of South East Asian Nations

ASEM – Asia Europe Meeting

BOI – Board of Investment

DSD – Department of Skill Development

DVT – Dual Vocational Training

EPB – Economic Planning Board

FDI – Foreign Direct Investment

GDP – Gross Domestic Product

GNP – Gross National Product

HRD – Human Resource Department

ILO – International Labor Office

IRCE – International Relations and Cooperation Center for Educational Reform

ISO – International Standards Organization TFR – Total Fertility Rate

MOLSW – Ministry of Labor and Social Welfare

NESDB – National Economic and Social Development Board

NSO – National Statistics Office

R&D – Research and Development

SME – Small and Medium Enterprises