A methodology for Identification and Development of Border Towns as Centres for Trade and Investment in Thailand

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Abstract

The benefits of globalisation and economic liberalisation, and the acceptance of the importance of trade and investment activities, have increasingly affected the role of border towns. In 1994, the Thai National Plan designated and promoted border towns as centres for trade and investment. However, without formal guidelines for identifying and developing border towns as centres for trade and investment, national grants could be allocated to the wrong border towns. This research therefore is a contribution to understanding the development and action of the Thai government’s decentralisation policy that can also be applied to its neighbours in the Greater Mekong Sub-region.

The three central themes of the research which determined the strategy for empirical research are the theoretical contexts of international economic theories and concepts, regional economic planning theories, and the concepts and causes of urban growth. Five border towns were chosen as the case studies; these were (1) Nong Khai, (2) Mukdahan, and (3) Chong Mek, which all share a border with Laos; (4) Mae Sai which shares a border with Myanmar, and (5) Aranyaprathet which shares a border with Cambodia. Observations, semi-structured interviews and postal questionnaires were the empirical research methods used; these techniques were used to triangulate evidence and validate data. The empirical research exercise was supplemented with documentary information on each border town surveyed.

The findings give confidence that some of the five border towns are capable of developing as regional business centres (trade and investment) for the Greater Mekong Sub-region. The results of this research provide a number of criteria that could be used by policy makers and regional planners to select and rank potential growth centres at border towns, whether singly or as pairs of border towns, as well as helping to meet other government objectives relating to regional income disparity and decentralisation policy.

Further, the research also identifies a number of possible policy responses by government towards the role of border towns, and indicates a number of policy responses that could be implemented on four different planning spatial levels: (1) internationally, (2) supra-nationally, (3) nationally, and (4) regionally (border
towns). This “vertical coordination” which links international to local concerns, will assist in supporting and sustaining the growth of border towns in the best possible way. Successful border towns will be reliant on strong support from the central government, especially in allocating national budgets, in support of investment projects, and in regulating economic planning policies. Success of sustainable economic growth in border towns deals with several influences and involves, amongst other things, the good relations and cooperation of neighbouring countries. Border town planning, therefore, is complex and needs several years, at least 10 years, to succeed, but the overall outcomes from growth will be invaluable in generating growth regionally and nationally.
Acknowledgements

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I wish to thank especially Associate Professor Dr. Nipan Vichiennoi, for encouragement and his company during field surveys at border towns. Additionally, he also responded most helpfully to all my further data requirements located in Thailand (i.e. maps and statistical data) during the time I carried out this research in Oxford.

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Last of all, but most importantly, I wish to thank particularly my parents: Mrs. Kimhiang Thunyahan and Mr. Boo Yee Sae Kuay, as well as my families (Kornkeuwsomneuk and Thunyahan) for all support, encouragement and belief in my work that backed me up to achieve this end point.
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<tr>
<td>NICs</td>
<td>Newly Industrial Countries of Asia</td>
<td></td>
</tr>
<tr>
<td>PAO</td>
<td>Provincial Administrative Organisation</td>
<td></td>
</tr>
<tr>
<td>R&amp;D</td>
<td>Research and Development</td>
<td></td>
</tr>
<tr>
<td>SEZ</td>
<td>Special Economic Zone</td>
<td></td>
</tr>
<tr>
<td>TAO</td>
<td>Tambon Administrative Organisation</td>
<td></td>
</tr>
<tr>
<td>USA</td>
<td>United States of America</td>
<td></td>
</tr>
<tr>
<td>WTO</td>
<td>World Trade Organisation</td>
<td></td>
</tr>
</tbody>
</table>
Part One: Research Foundations
Chapter One: The background to the research

1.1 Introduction

The purpose of this chapter is to provide the background to the research. It is an explanation and problem identification for this study. This chapter introduces the purposes of this study, research questions and conceptualisation of the problem. An overview of the methodology is presented in order to understand the chosen research framework and its conduct. In addition, limitations of the study that impede data analysis are recognised; and anticipated contributions to regional development are defined. Finally, the structure of the research, which outlines this study, is provided.

1.2 The context of the problem

Globalisation pressures

The globalisation concept, which currently is creating a "single" world in which ideas and products are available almost everywhere at the same time, is an important world issue (Axford, 1995: 25-28; Baylis and Smith, 1999: 7-10; Cook and Kirkpatrick, 1997: 55-59; Kiely, 1998: 3). These are not new but the present situation is happening on a wider scale and at a faster pace than in any other period in history (Edwards, 1999: 5-9). The core of the globalisation concept supports the ideas of liberalisation in social, economic and political terms (Axford, 1995: 1-28). This study focuses on a topic of economic impact resulting from the globalisation processes. In terms of economy, the globalisation processes have obviously led to global changes especially in the tendency for greater liberalisation of national, regional and global markets, a rise of supranational economic blocs such as EU\(^1\), NAFTA\(^2\) and AFTA\(^3\), and the creation of borderless economies.

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1 EU: European Union.
2 NAFTA: North American Free Trade Area.
3 AFTA: ASEAN Free Trade Area.
Globalisation is making the world a smaller place in economic and trading terms. The global influences are reflected in increasing national wealth and citizens' welfare, and they also impact particularly on border regions in economic terms through facilitation of crossing national boundaries. Nevertheless national borders or geographic borders still remain.

According to international economic theories, it is broadly accepted that international trade and investment are seen as playing major beneficial roles in national economic growth. Trade and investment can boost other domestic economic activities, in particular service sectors, so that eventually the growth and strengthening of national economies will occur (Edwards, 1999: 5-9; United Nations, 1997: 2-12). It is contended that the globalisation of the economic world offers greater opportunities for the expansion of flows of trade, investment, technology and information across national boundaries. Thus good prospects are presented by globalisation and international economic theories but there is a tendency to ignore accompanying social problems which are the results of accepting these globalisation concepts and more open countries welcoming foreign investment. Adverse problems include the illegal inflows of drugs, smuggling, terrorism, crime, refugees, and excessive migration (Scott, 1999: 605-607) (see Section 2.1). However, based on consideration of economic benefits, it would seem that the people of most countries, especially developing countries, believe the globalisation processes and inflows of international trade and investment will be significant mechanisms that boost their national economic development (United Nations, 1988).

**Globalisation, borders, and border towns**

The widespread acceptance of the globalisation processes and important roles of international trade and investment nationally affect the role and growth of border towns. These theories identify border towns as the particular places of power in the present era of economic liberalisation, which can control entire border movements (i.e. passenger, vehicle, trade, investment and commodities) (Scott, 1999: 605-617). This idea, therefore, induces the new characteristic of border towns that are now gradually changing leading to a more progressive strengthening of border areas with potential to develop in economic terms, namely as centres for trade and investment under various National Plans and Regional Economic Collaboration Plans.
This new feature of border towns is different from the historical situation where border towns were typically left as less developed areas because of their status as buffer zones located far from the central metropolis; as is the case with border towns in the countries of the Greater Mekong Sub-region (National Economic and Social Development Board of Thailand, 2001).

Thailand is one of the developing countries which has accepted the concept of globalisation and international economic theories. Thai economic policy has embraced regional economic blocs such as ASEAN⁴, AFTA and APEC⁵ with the purposes of protecting and developing the Thai economy. Particularly, taking part in the sub-regional economic cooperation (namely the Greater Mekong Sub-regional economic cooperation programme) relates to the issue of border town development. The Greater Mekong Sub-region has received much attention from ASEAN because this sub-region covers the largely less developed areas including Myanmar, Cambodia, Laos, Vietnam, south of China and Thailand (United Nations, 1999: 1-13). In the ASEAN agreement, it is expected that success of economic growth in this sub-region will close the widen gaps in regional incomes (National Economic and Social Development Board of Thailand, 2002: 1-10).

Freer movement of activities across the borders among countries in this sub-region will benefit border economic growth (i.e. trade, investment and employment), as well as provide greater opportunities for inflows of adverse social problems such as crime, smuggling of drugs and weapons, and migration to and through border towns to Thailand's major cities and to Bangkok, its capital, in particular. At present, these adverse effects are seen as significant barriers to Thai national development (Thairath, 2003: 5-7).

For border town development, it is therefore crucial that Thai national policy is reconsidered and adjusted to cope better with the current influx of social problems from neighbouring countries and seek ways to achieve the maximum economic benefit. Since 1994 the Thai government has put emphasis on the economic development in border towns under the National plans and the

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⁴ ASEAN: Association of South East Asian Nations consists of 10 member countries: Thailand, Indonesia, Singapore, Malaysia, Brunei, Philippines, Vietnam, Myanmar, Laos, and Cambodia.
⁵ APEC: Asia-Pacific Economic Co-operation is a regional economic integration for promoting open trade and economic co-operation among 21 member countries around the Pacific Rim.
collaboration plans with countries of the Greater Mekong Sub-region. It is expected that when economic development in border towns succeeds, the current over-urbanisation in the Bangkok Metropolitan Region and the adverse uneven regional growths in physical and economic terms between the Bangkok Metropolitan Region and border towns will be narrowed (and ultimately resolved). A decline in numbers of migrants from border towns moving towards the Bangkok Metropolitan Region is another key objective of national government policy.

Accordingly, the formulation of a methodology to identify and develop border towns as centres for trade and investment in this study will assist in achievement of these aspirations by means of providing a useful, logical guidance for policy makers and regional planners to use in selecting border towns for development within the constraints of national grants and resources.

Thai border town case study areas
For Thai border town development plans, the two sub-regional economic cooperation schemes which are taking place in cooperation with neighbouring countries are as follows (National Economic and Social Development Board of Thailand, 1999: 10-15):

1. The Greater Mekong Sub-regional economic cooperation programme (GMS)
This collaboration scheme covers largely Thai border areas to the west, north, northeast, and east. About 10 border towns are located in this GMS programme, namely (1) Mae Sai, (2) Nong Khai, (3) Mukdahan, (4) Chong Mek, (5) Aranyaprathet, (6) Huay Khon (7) Chiang Saen, (8) Chiang Khong, (9) Mae Sod, and (10) Nakhon Pranom (see Map 1-1). The first five of these border towns were chosen for border town case studies for the present study (see Sections 1.3 and 5.3).

This sub-region includes the developing countries of Thailand, Laos, Cambodia, Myanmar, Vietnam, and south of China (see Map 1-2). This area shares an approximate population of 240 million in 2000 and extends to 2.3 million square kilometres of land (National Economic and Social Development Board of Thailand, 2001). The Mekong River has a major role to play as it is the main linkage in cultural and agricultural terms (i.e. fishery and farming) among countries in this sub-region; furthermore the Mekong River defines each national boundary. This
sub-region is a new development area in the current era of widening economic liberalisation because all countries since 1990 have followed Thailand's long-standing position of welcoming inward foreign investments to their countries (see more discussion in Chapter Three).

2. Indonesia, Malaysia, Thailand Growth Triangular Organisation (IMT-GT)
This sub-regional organisation consists of two Thai border towns which are located in the south of Thailand: Sadao (Song Kha province) and Suhai Kholok (Nara Thiwat province) (see Map 1-1) and share a border with Malaysia. Compared to the first sub-regional economic cooperation programme (namely the GMS), the IMT-GT scheme has not been a high priority for the Thai government.

Map 1-1: Border towns which were designated for border development in the National Plans (1994-2006)
Source: National Economic and Social Development Board of Thailand, 1996
Consequently, this research decided to study the border towns in the first programme, the Greater Mekong Sub-regional economic cooperation programme (GMS). This is because firstly the development in this sub-regional cooperation scheme covers 10 border towns located in the northern and northeastern regions which are the poorest regions in Thailand (see Table 1-1). Secondly, in this border town co-operation project, a larger number of neighbouring countries (namely Laos, Myanmar and Cambodia) are involved (see more discussion Sections 1-3 and 5-3). Results of the study on border town economies might therefore be applied in regional planning more quickly and more widely.
Chapter 1: The background to the research

Each country in the Greater Mekong Sub-region believes that its border towns are capable of being developed as centres for trade and investment for this sub-region. Up to now, there has been no methodology to identify which border towns in countries of this sub-region are most suitable. As a result, the understanding, evaluation and development of criteria for a methodology, which are investigated and formulated in this study, will be useful in guiding regional development in both Thailand and countries of this large sub-region because of close culture, economic structure and geographical feature.

1.3 The definition of the problem

Thai regional development policy in border towns has become increasingly important for three reasons: first, widening regional disparities in the domestic economy; second, the broad spread of the globalisation concept; and third, that global changes have occurred which involve the international economic bloc for border town development, in the form of the Greater Mekong Sub-regional economic cooperation programme which is an important example of international economic cooperation in ASEAN (National Economic and Social Development Board of Thailand, 2001).

Table 1-1 shows that the 10 border towns in this sub-regional economic cooperation programme are located in the poorest developed regions: the northern and northeastern regions.

The data in Table 1-1 shows unbalanced regional development in Thailand in terms of distribution of population and per capita income. The Bangkok Metropolitan Region including Bangkok and the adjacent five provinces: (1) Nonthaburi, (2) Prathum Thani, (3) Nakorn Prathom, (4) Samut Prakarn, and (5) Samut Sakorn (see Map 1-3), possess the highest density of population and per capita income.

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Chapter 1: The background to the research

Table 1-1: Number and density of population, and per capita income by region, 1998-2000

<table>
<thead>
<tr>
<th>Year</th>
<th>Whole Kingdom of Thailand</th>
<th>Bangkok Metropolitan Region</th>
<th>Central Region</th>
<th>Northern Region</th>
<th>Northeastern Region</th>
<th>Southern Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>60.0</td>
<td>10.4</td>
<td>10.0</td>
<td>11.2</td>
<td>20.5</td>
<td>7.9</td>
</tr>
<tr>
<td>1999</td>
<td>60.6</td>
<td>10.7</td>
<td>10.1</td>
<td>11.2</td>
<td>20.6</td>
<td>8.0</td>
</tr>
<tr>
<td>2000</td>
<td>61.2</td>
<td>10.9</td>
<td>10.2</td>
<td>11.2</td>
<td>20.7</td>
<td>8.2</td>
</tr>
<tr>
<td>2000</td>
<td>119</td>
<td>4,029</td>
<td>138</td>
<td>68</td>
<td>123</td>
<td>114</td>
</tr>
<tr>
<td>1998</td>
<td>864</td>
<td>2,543</td>
<td>2,996</td>
<td>418</td>
<td>286</td>
<td>565</td>
</tr>
<tr>
<td>1999</td>
<td>841</td>
<td>2,414</td>
<td>3,043</td>
<td>403</td>
<td>275</td>
<td>556</td>
</tr>
<tr>
<td>2000</td>
<td>748</td>
<td>2,053</td>
<td>2,740</td>
<td>379</td>
<td>251</td>
<td>526</td>
</tr>
</tbody>
</table>

Sources: 1. National Economic and Social Development Board of Thailand, 2002

The northeastern and northern regions share the highest populations but with much smaller per capita incomes. Poverty is largely located in the northeastern and northern regions; consequently development of border towns in these two poor regions is of interest for the central government. This research seeks to investigate ways to distribute economic growth from the Bangkok Metropolitan Region and the Central Region to local and grow in these two poorest of regions.

Map 1-3 shows that proportionally the area of the Bangkok Metropolitan Region is small compared with the whole country. The Bangkok Metropolitan Region now suffers from over-congestion and it is crucial to implement a decentralisation policy (see also Table 1-1).

The root of over-urbanisation in the Bangkok Metropolitan Region results from the development in previous National Plans during 1961-1981 (i.e. the first to the fourth National Plans) which put emphasis on supporting development of the economy and physical infrastructure only in Bangkok.
At present the government is attempting to resolve these accumulated problems in the Bangkok Metropolitan Region (such as population, pollution, intensive economic activities, poor housing and rising crime) with several decentralisation policies. This study argues that the border town development policy could contribute to reducing regional disparities as well as reduce some of the negative effects of over-urbanisation. The following is a brief explanation of the Thai National Plans (National Economic and Social Development Board of Thailand, 2001, 2002, 2003, 2004):
Chapter 1: The background to the research

- The First National Economic Development Plan (1961-1966) focused on achieving intensively developed economic areas and providing increased construction of infrastructure and facilities, in particular roads, airports, ports, water supply, communication systems and electricity in order to support investment, largely in Bangkok. This period employed “top down” policy and believed that growth of the national economy was the main aim of the whole development. Results of development in this period caused physical infrastructure and economic growth only in Bangkok.

- The Second National Economic Development Plan (1967-1971) continued to construct and develop the network of infrastructure and facilities, remaining focused largely on Bangkok, in order to promote investment. It was confident that the owned number of investment activities would lead to enhanced national economic growth. It was in this period that the government began to establish economic sector plans for agriculture, services, and others sectors for development. The plan focused on growth towards the northeastern region which had the poorest people and possessed the highest number of population (see Table 1-1) but results of development led to a greater growth only in Bangkok in economic and physical infrastructure terms. The government had faith that increasing economic activities would be a mechanism that would drive the whole of its national growth. However, after implementing this National Plan, there were an increasing number of social problems, in particular excessively high birth rates and rising poverty.

- The Third National Economic and Social Development Plan (1972-1976) focused on exports and took into account social development, and especially on restricting the size of the population and reducing income disparities. In this period, the government had striven to extend income distribution and social services towards the less developed regions and even supported development of the regional economies. It is only in this period that the National Plan started to consider seriously the topic of social development whereas the first two former National Plans only focused on economic growth.
The Fourth National Economic and Social Development Plan (1977-1981) began to set up regional development plans and was more concerned with environmental problems, especially environmental degradation. After 16 years of promoting increasing economic activities, especially in industry during 1961-1977, there were major problems of environmental pollution. Bangkok was the scene of intense economic activity (namely industrial and service sectors) and population growth, while other regions were ignored as less developed areas. Population moved towards Bangkok with the purpose of getting a better life. This National Plan started considering the concepts of regional development and decentralisation policy which were to be put into the next National Plan.

The Fifth National Economic and Social Development Plan (1982-1986) further promoted intensive national economic growth and established the Eastern Sea Board Programme located in the eastern region (Chon Buri province) to be developed as a Special Economic Zone. This National Plan designated seven growth centres located in all regions with the main aims of reducing the over-urbanisation of Bangkok and narrowing regional incomes (See Maps 1-4 and 1-5). Map 1-4 shows the regions in Thailand and locates the border towns that are to be studied for this research. Regional areas in the northern and northeastern regions are large but these two regions are relatively less developed areas in per capita income terms (see also Table 1-1). A main concept in this plan was the attempt to establish a development network through a hierarchy including Bangkok, growth centres, and small towns. Criteria for selecting areas to develop as growth centres were based on location advantages, with easy access and links with other growth centres and Bangkok. The growth centres included (1) Chiang Mai (in the north), (2) Phisulok (in the centre), (3) Khon Khen, (4) Nakorn Ratcha Sima and (5) Ubon Ratcha Thani (in the northeast), (6) Chon Buri (in the east) and (7) Song Kha (in the south). Map 1-5 shows the distribution of growth centres in all regions. In addition, a seaport area (namely the Eastern Sea Board programme), located in Chon Buri province was promoted for development as an export zone or Special Economic Zone, supported with a range of incentives (e.g. tax exemptions) (see more discussion in Chapter Three).
The National Economic and Social Development Board of Thailand defines the regions in Thailand based on geography and culture.

Map 1-4: The division of regions in Thailand

Source: National Economic and Social Development Board of Thailand, 2000

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7 The National Economic and Social Development Board of Thailand defines the regions in Thailand based on geography and culture.
Chapter 1: The background to the research

Map 1-5: The growth centres in Thailand
Source: National Economic and Social Development Board of Thailand, 1999

The Sixth National Economic and Social Development Plan (1987-1991) developed a “bottom up” approach. This plan designated the next five second-order growth centres as: (1) Udon Thani (in the northeast), (2) Nakorn Sawan (in the centre), (3) Rayong (in the east), (4) Surat Thani and (5) Nakorn Sri Thammarat (in the south). These secondary growth centres were established close to the first order growth centres in order to support their development which were formulated in the Fifth National Plan, and from Bangkok (see Map 1-5). At present the second order of growth centres are classified as the main cities for Thai regional development.
Chapter 1: The background to the research

- The Seventh National Economic and Social Development Plan (1992-1996) in 1994 designated a number of border towns for development as centres for trade and investment (see Map 1-1). This National Plan commented Thailand to participation in the Greater Mekong Sub-regional economic cooperation programme with its neighbours in order to obtain benefits of border town development. Border towns were considered as significant development areas in this National Plan. Near the end of this plan, issues of sustainable development along with economic development were raised.

- The Eighth National Economic and Social Development Plan (1997-2001) concentrated on human resource development and made even greater use of the “bottom up” approach. In this National Plan the government attempted to implement a “bottom up” approach to promote decentralisation by setting up a new local government organisation, namely The Tambon Administrative Organisation (TAO) located group of villages (see Section 3-5) which are administered by local people; as part of their role, public participation in government development policies is being promoted locally. This National Plan also continued to designate border towns as centres for trade and investment and supported the border town development policy. Due to the economic crisis in Thailand in this period, the concept of promotion of economic growth came to a halt. As a consequence, this plan attempted to resolve the economic crisis, through its promotion of human resources as a basis for development, improvements to the national environment, and also its support for sustainable development.

- The Ninth National Economic and Social Development Plan (2002-2006) concentrates on sustainable development and is intended to cope with the current global changes. The participation in international trade blocs, especially in the countries in ASEAN, is crucial with the purpose of obtaining economic negotiating power in global markets and the economic benefits from being a member nation. This plan continues to promote the border town development programme because the Thai government sees that economic development in cooperation with neighbouring countries is an alternative choice for regional economic growth.
To summarise, it is obvious that the previous eight National Plans, over 40 years, stressed economic and physical planning. In the first half of the period (1961-1981), Thai development plans put emphasis on the support of physical and economic growth in Bangkok; consequently, Bangkok at present has grown and accumulated numerous problems resulting from agglomeration economies and diseconomies. Large inflows of economic activities and population have concentrated in Bangkok. Bangkok’s urban sprawl has now spread to impart on its adjacent (five) provinces (See Map 1-3). It is now called the Bangkok Metropolitan Region. In the following 20 years (1982-2002), National Plans reconsidered social planning largely as a result of the unbalanced development between Bangkok and other regions. A mixture of economic and social planning measures were implemented, including decentralisation strategies by means of designating a number of growth centres, special economic zones, border towns, and social improvements (i.e. the issues of sustainable development and human resources, as well as protection of natural environment) have been highlighted.

The National Economic and Social Development Board of Thailand (2002) reported that overall economic growth over 40 years, during 1961-2002, has high; for example:

1. Economic growth rate has risen by 7 per cent annually;
2. Income per capita increased from £35 shared in 1961 to £1,417 in 2002;
3. The percentage of poor population declined from 57% in 1961 to 11.4% in 2002; and

Although economic growth has increased, there is still much unbalanced development. Wide regional disparities have remained. Growth is concentrated in the Bangkok Metropolitan Region whilst other regions are still very much less developed. There is little doubt that the government is searching to resolve regional disparities through decentralisation policy in terms of the border town development programme and in cooperation with its neighbours.

\[\text{The National Economic and Social Development Board of Thailand (2002) defined poverty line in terms of poor social welfare, standard of living and income. United Nations (2002) defines poverty line as the population living on less than US$ 1 a day.}\]
Chapter 1: The background to the research

Border town development policy is part of the growth centre strategy however it has been implemented within the constraints of available national resources. Identifying the appropriate location for border town development is the focus and purpose of this research. It is envisaged that the research will provide guidance to assist in allocating national resources for investment in the most appropriate border towns.

1.4 The research purposes

So far the Ninth National Economic and Social Plan (2002-2006) has continued to promote the growth of border towns and designated border towns as Special Economic Zone by offering investment incentives with the main aim attracting investment to border towns (see Section 3.5.2). Border towns currently, therefore, are seen as important development areas by the Thai government.

According to border town development policy, government asserts that the reasons to develop border towns are to cope with the current global changes and the worldwide globalisation concept (National Economic and Social Development Board of Thailand, 2001; Thairath, 2003). Although border towns were designated as centres for trade and investment, up to now, no particular methodology has been devised to identify and select the most appropriate border towns for future development. Those chosen as border towns in the National Plans were based on their existing roles as trading gateways servicing neighbouring countries (National Economic and Social Development Board of Thailand, 1997).

As a result, a methodology for selecting border towns for development as centres for trade and investment in this study will provide the planning guidance for assisting in resolving the present problems for regional planning policy on border towns. The study will concentrate on the need for success of border town development and the need for reducing wasteful use of national resources that might be allocated to the weak border towns with poor capacity of development. Success or failure in regional development policy largely relies upon the choice of border towns.

This study seeks to understand the principles and criteria to set up a methodology for identifying and developing border towns as centres for trade and investment.
It identifies principles for policy makers and regional planners to use in selecting the best border towns for regional development in both Thailand and its neighbours with the Greater Mekong Sub-region. The methodology is directly derived from research findings of the five-selected border towns out of twelve border towns in the National Plans (see Map 1-1). The five border town case studies are Nong Khai, Mukdahan, Chong Mek, Mae Sai and Aranyaprathet (see Map 1-6).
The key criteria for selecting these border towns to be case studies were as follows:

1. It should be possible to study them as well as their neighbours in Laos, Myanmar, and Cambodia.
2. Their locations should be able to grow and link with countries in the Greater Mekong Sub-region as follows: (see Map 1-2)
   - Mukdahan: which extends to the central region of Laos (Suwannakhet) and Vietnam, accessing global markets through Danang port in Vietnam, which is a distance of 370 kilometres. Whilst the distance between Mukdahan and Bangkok international seaport is 550 kilometres and has been the usual route to the global market.
   - Chong Mek: which extends to the northernmost region of Cambodia and to the southernmost region of Vietnam.
   - Aranyaprathet: accesses to Cambodia and Vietnam.
   - Mae Sai: which serves the northern regions of Myanmar and Laos as well as Yunnan in south China.
   - Only Nong Khai: which accesses Vientiane, which is the capital of Laos, though it does not serve other areas of this sub-region.
3. These five-selected border towns are permanent border checkpoints and are the main border trading gateways for neighbouring countries.
4. They are provincial centres (i.e. Mukdahan and Nong Khai); or are located close to a major city. For instance, Mae Sai is close to Chiang Mai; Chong Mek is located in Ubon Ratcha Thani; and Aranyaprathet is close to Bangkok.
5. They have good accessibility to the Bangkok Metropolitan Region and other big cities.

The choice of case studies is discussed further in Chapter Five in Section 5.3.
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1.5 Research questions

The following are the main aims of this research.

1. To develop and establish a methodology for the identification of border towns as centres for trade and investment for the Thai development; and
2. To develop a methodology to assist in development and implementation of the Thai government's decentralisation policies.

To achieve these two research aims, the following three research questions have been developed.

1. What principles should guide the selection of border towns as centres for trade and investment?
2. Which border towns have the potential to become trade and investment centres?
3. What conditions are needed if border towns are to be developed as centres for trade and investment in the Greater Mekong Sub-region?

1.6 Conceptualisation of the problem

The related theories and concepts in this study were divided into four parts as follows:

1. The international economic theories which are concerned with globalisation, international trade and investment, and international economic integration;
2. Inter-regional planning, particularly relating to economic base theory;
3. Intra-regional planning theories and techniques involving growth pole, central place and location theories; and
4. The concepts of the causes of urban growth, including the competitive city, innovation and the quality of life.

These relevant theories provide a background to the research problem. The international economic theories are used to understand the present situation of border towns such as the increasing openness of borders, the increasing role of
Chapter 1: The background to the research

border towns and greater economic cooperation between countries of the Greater Mekong Sub-region resulting from global changes. Additionally, these theories are also used to provide understanding about trends and impacts of border town development in the present era of economic liberalisation.

In the light of the regional planning theories and techniques, economic base theory is used to seek which border towns' economic sectors will support and sustain local economies. Location theory provides explanations of why economic activities, especially industry, are clustered and what categories of firm should be located in border towns. Growth pole theory and central place theory are used to examine the extent to which growth occurs in border towns and whether border towns are able to grow as the new growth centres in terms of centres for trade and investment to serve goods and services towards surrounding hinterlands. Also they may explain why some cities grow faster than others. Further, growth pole theory contributes to an explanation of the spread of growth from urban centre to surrounding areas.

Concerning the concepts that explain the causes of urban growth, the concept of innovation may offer an understanding of how to promote border towns as investment centres so as to attract firms to locate to them. The concepts of competitive city and quality of life give suggestions as to it might be possible to how support and sustain growth, investment and in people in border towns.

It could be argued that international economic theories and economic base concept help to explain the situation of border economies, while the theories of growth pole, central place and location theory explain border towns in physical planning terms. In addition, the concepts of competitive city, innovation and quality of life may be helpful in the support and maintenance of growth of cities. Such theories may help in establishing a methodology to identify and develop border towns as centres for trade and investment.

1.7 An overview of the methodology

The empirical research was essential for this study because it generated new and secondary data on border towns through field surveys; observations and semi-structured interviews conducted in border towns; and postal questionnaires
surveys throughout the country (see Chapter Five). These research tools were used in triangulating evidence and validating data.

Observations were carried out in the five case study border towns and in other border towns in the Greater Mekong Sub-region during September 1999-2001 with the aim of obtaining factual information in and on border towns. Data from field observations assisted in supplementing and cross checking data from interviews and questionnaires (see Section 5.5.1).

Semi-structured interviews were conducted in five case study border towns. Interview data involved local government officials, border town investors and tourists, which generated facts about the border economy, border infrastructure and services, and their perceptions on possible trends in border development (see Section 5.5.2).

Postal questionnaires were used to survey three types of industry: Thai-owned firms, foreign-owned firms located in Thailand, and foreign-owned firms intending to locate to Thailand. It is assumed that all three kinds of firms may want locate in border towns. When firms that are clustered in the Bangkok Metropolitan Region relocate to border towns, this will help to relieve over-urbanisation in the capital and also boost border economies. Postal questionnaires were mailed to firms who were located throughout the country. Data from questionnaires generated information about these firms’ decisions on whether to relocate to border towns and their needs for investment support in these border towns (see Section 5.5.3).

Because the results from the surveys involved large data sets, SPSS computer programme was used to analyse the data from postal questionnaires and semi-structured interviews, while findings from field observations were used to supplement this information. The results are presented in tabulated form in Chapter Six.

1.8 Limitations of the methodology

The study area (The Greater Mekong Sub-region) is an in itself limiting factor on the research because it produces incomplete analysis in some research contexts.
Firstly, the countries in this sub-region (i.e. Laos, Myanmar, Cambodia, Vietnam, and south of China) have only implemented trade and investment liberalisation policy since 1990. There is no doubt that security and poor transportation are the main obstacles to access toward economies of these areas. Secondly, local languages are in general spoken in each country which leads to difficult communication with local people, especially at interviews and in the field observations. These and other limitations are discussed further in Chapter Seven in Section 7.5.1

1.9 Anticipated contribution to regional development

The benefits of this research are likely to be several. The study was conducted independently of government; the results of the investigation are based on verifiable evidence obtained from a number of sources and methods. This study is one of the first pieces of primary research conducted on border town development in Thailand, and also it is possible to extend these results to border towns in the Greater Mekong Sub-regional countries in order to achieve a more targeted, yet balanced regional growth. In anticipation, this research will be of use to policy planners when the question “where should the new projects be located?” is asked. It should also assist in indicating which border towns should get priority in the allocation of grants; it thus enhances the quality of national planning and public policy and the efficiency of employment of the national resources. This study is also expected to make important contributions to progress in the nation’s capacity, to be the principal methodology on border town development for national planning, and provide a contribution to decentralisation policy. Other benefits of this research might explain some of the necessary conditions for sustainable growth of border towns.

1.10 The structure of the study

This study is organised into seven chapters and brief details of each chapter are given below:

The first chapter provides the background to the research as presented here.
Chapter Two presents the theoretical context on border towns. This chapter is divided into four parts. The first part provides a brief review and evaluation of international economic theories including globalisation, international trade and investment theories and the concept of international economic integration. The second and the third parts review and evaluate existing theories and techniques of regional growth. These cover the intra-regional theories and techniques including location theory, central place theory and growth pole theory, while the economic base is inter-regional planning theory. The fourth part is concerned with the relevant concepts that explain causes of urban growth including: the competitive city, innovation and quality of life. In brief, this chapter provides an understanding of the context of border towns that should contribute to formulating a methodology for identification and development of border towns as trade and investment centres.

Chapter Three examines and evaluates current trade and investment policies of Thailand and its neighbours with regard to border towns. It explains, compares and discusses trade and investment policies of Laos, Myanmar and Cambodia in relation to Thai policy. The main aims of chapter are to better understand and evaluate current implementation of trade and investment policies, particularly in relation to the Thai government's support for investment and decentralisation policy.

Chapter Four defines and evaluates the profiles of the five-selected border towns in Thailand (i.e. Nong Khai, Mukdahan, Chong Mek, Mae Sai and Aranyaprathet). Analysis of the current border towns' situations by means of a SWOT\(^\text{10}\) analysis is presented. In addition, comparative study is used in this chapter to compare the five border town case studies and between these Thai border towns and its neighbouring countries' border towns.

Chapter Five sets out the design and implementation of the empirical research. This details the research methods used, the selection of border towns for the case studies, the design of questions and target sample, the choice of sampling methods, survey techniques and empirical results.

\(^{10}\) S = Strengths; W = Weaknesses; O = Opportunities; T = Threats
Chapter Six presents the data analysis. This chapter analyses and evaluates the survey findings; then a method for analysing border towns for trade and investment centres is formulated, proposed and devised.

Chapter Seven provides conclusions, discussion and recommendations for the research and future research. Summary of findings from this research include: (1) the need for border town development, (2) learning from international economic theories and regional economic planning theories in developing policy guidelines, (3) economic profile of the countries in the Greater Mekong Sub-region, and (4) current status of border towns based on these surveys. Also the Thai Government's decentralisation policy objectives for all the border towns are discussed. In addition, identifying border towns as centres for trade and investment: formulating principles and criteria for guidelines on four planning spatial levels: regional, national, supra-national (the Greater Mekong Sub-region), and international scales are provided. Finally, suggestions for research issues and future research are proposed and close this research.
Part Two: Theoretical Framework
Chapter Two: The border town and theoretical context

2.1 Introduction

The primary purpose of this chapter is to critically review and evaluate the literature on the conceptual contexts of the border town. This chapter is organised into four parts. First, international economic theories are explained, which include the concept of globalisation, theories of international trade and investment, and the concept of international economic integration. Second, inter-regional planning theory is explained focusing principally on economic base theory. Third, intra-regional planning theories and techniques are explained, which mainly involve location theory, central place theory and growth pole theory. Fourth, the relevant concepts of the causes of urban growth are reviewed including the competitive city, innovation and quality of life.

The globalisation concept and international economic theories provide the background on current border towns’ situations and how border towns are coping with global economic changes. Economic base concept is used to assert in which of the border towns’ economic sectors will be promoted so as to stimulate local economies. Location theory is used to clarify why economic activities tend to concentrate. This theory provides explanations on what categories of firm should move to border towns and what are the towns’ locational advantages. Growth pole and central place theories explain why some cities grow faster than others and what is the relation between the city and surrounding areas. Further the concepts of the causes of urban growth, including competitive city, innovation and quality of life, contribute to explanation of the causes of urban growth and how to sustain and intensify border towns to succeed as the competitive cities in the Greater Mekong Sub-region.

In reviewing these relevant theories, it is expected that this would lead to the foundation of an appropriate analytical framework for Thailand’s regional growth and border town economic research.
Chapter 2: The border town and theoretical context

2.2 Part One: International economic theories

This part reviews international economic theories including globalisation, international trade theory, international investment theory and international economic integration concept. These selected theories and concepts are expected to contribute to national and border town developments, which are closely tied to the present era of economic liberalisation.

2.2.1 Globalisation concept

Background of globalisation concept

Globalisation is not a new phenomenon or a new idea, it was broadly mentioned in the fifteenth century in free trade policy terms, and after the collapse of the Soviet Union or the end of the cold war (1945-1989); since 1990 the concept of globalisation is back to being widely discussed again (Freedman, 1990: 1-5, Opello Jr. and Rosow, 1999: 44-94; Valaskakis, 1999: 153-164: ). Globalisation is a term that refers to a world in which, in some senses, societies, cultures, politics and economies have come close together. In other words, it means the world is a global shopping hall in which ideas and products are available everywhere at the same time as well as allowing innovation (i.e. advanced technology) to expand worldwide (Baylis and Smith, 1999: 7-10; Scholte, 2000; Hall, 1996: 15-23).

The current emergence of globalisation processes is more widely spread than in the previous periods due to advanced technology and information (Thompson, 1999: 139-152). Therefore, the process of globalisation from an academic view is thus creating a more single world which is seen to be increasingly borderless in economic terms, but geographical boundaries of states still remain. It is evidently seen an economic awakening, in particular the rise of trade blocs such as the European Union (EU), North American Free Trade Association (NAFTA), and ASEAN Free Trade Area (AFTA), and the stimulation of international trade and investment across national boundaries. These three main trade blocs will assist member countries to benefit from the intensive economic competition in global markets (see Section 2.2.3). Globalisation is seen as a function of greater liberalisation and interdependence.
Globalisation concept and border town's view

The globalisation concept can be typically conceived of as having three dimensions: social or cultural, economic, and political. But this research puts most-emphasis on its economic impacts on regional growth because this should provide a basis to understand and evaluate the knowledge of the border towns' economy.

In history, border areas in the Greater Mekong Sub-region were typically seen as the less developed and most sensitive places due to being the state buffer zones before the end of the cold war and the collapse of communism (1990). The sovereignty of the state at the borders was more important than the growth of economic activities across national boundaries (Cheong: 1999; 215-230). The study of border towns or borders is regularly conceived of as belonging to the political and anthropological sciences; areas of study are mainly in international relations, conflict at national boundaries, problems of racism, minorities and refugees, and awakening cultures between nations. The study of border towns or borders is thus very sensitive, difficult, and more prove dangerous for some scholars (Prescott, 1978: 13).

Conversely, and to date, the characteristics of border towns have gradually changed as a result of accepting globalisation. Borders and border towns in the present era of economic liberalisation are conceived as the particular places of power because border zones could control cross border movements involving passengers, commodities, technologies and information (Donnan and Wilson, 1999: 1-15; Anderson and Dowd, 1999: 593-604). Border zones in the Greater Mekong Sub-region have been seen as the new economic development areas by their state governments; these former battlefield zones have been gradually turning into market places for trade between countries (e.g. The Economists, 2004: 42-43). This border town research conceives border regions as symbols of economic power, replacing them as places or zones of conflict between nations.

Globalisation, some economists view, is a benign concept (The World Bank, 2000: 1-26; Scholte, 1999: 429-447). The World Bank (2000: 1-26) advocates that the openness of an economy to the world economy for free flow of foreign firms between nations is increasingly being viewed as a crucial mechanism for sustainable economic growth in developing countries in the long term. Especially...
after the successful experience of the East and Southeast Asian regions the last over 10 years. Since 1990 there has been a 10 percent annual expansion of trade and investment from industrial countries, and a 12 percent annual increase in intra-regional trade and investment. The reasons for foreign firms investing in developing countries, including the countries in the Greater Mekong Sub-region include lower investment costs; higher profits through the exploitation of lower wages, raw materials and goods; the presence of government taxation and investment incentives and growing market size (see Sections 2.2.2 and 2.2.3).

The effects of globalisation processes have stimulated Thailand and countries in the Greater Mekong Sub-region to open up their national frontiers more and set up the Greater Mekong Sub-regional economic cooperation programme under the ASEAN agreements for the freer flow of international trade and investment (i.e. commodities, services, capitals, labours and technologies). The resultant growth from accepting economic globalisation is expected to stimulate national economies, enhance standard of living for their citizens as well as reduce poverty (Scholte, 1999: 429-447; National Economic and Social Development Board of Thailand, 1996: 1-10).

**Globalisation processes debate**

Even though economists’ optimistic views see globalisation’s effects as an overwhelmingly good phenomenon, arguments also arise that the globalisation process causes other impacts for global economies including: division of regional trade blocs, increasing inflows of social problems, generating intensive economic competition, and also widening the gap in economic development between developed countries and developing countries.

Globalisation generated the emergence of three main trade blocs, namely EU, NAFTA and AFTA, and may cause a division of the world into three large regions which is contrary to the fundamental globalisation concept of creating a single world (Lipsey and Chrystal, 1999: 572-595). Globalisation also challenges the role of border towns in both creating border towns to be the centres of power in economic terms and also being the more porous gateways for transferring adverse social problems. In turn, each state government needs to re-manage and rethink ways of developing border towns to achieve economic benefits whilst preventing any loss of state sovereignty and minimising unexpected social problems from
more open borders (Oman, 1994: 9-27, National Economic and Social Development Board of Thailand, 2000: 1-5).

Furthermore, globalisation processes induce intensive economic competition amongst the countries in the Greater Mekong Sub-region. Each country attempts to attract a number of foreign firms to invest in its country through similar strategies of providing investment incentives, lower labour costs, cheaper and good supplies of agricultural products and natural resources, as well as removing restrictive and out-dated investment regulations, so that each country can develop its own border towns and as nodal centres (see Chapter Three). However, it is seen that by firms operating in world markets, countries in the Greater Mekong Sub-region are typically regarded as an opportunity for them to reduce their labour costs, cut environmental standards and promote flexible working (Edwards, 1999: 5-9) (see Chapter Three). However, by enhancing the number of foreign firms in countries of this sub-region in this way, it is thought that this will further degenerate the environment (i.e. fisheries and forests) and undermine human rights (i.e. child abuse and female labour) (Kiely and Marflect, 1998; 2-26).

Academics (e.g. Gomanee, 2003; United Nations, 1997: 2-12; 1999: 1-13; Bhatla, 1998: 1-10) also argue that globalisation also create losers and winners from this global economic competition. Because of lack of skilled capacity, developing countries, including countries of the Greater Mekong Sub-region, find it hard to replicate the advanced technology of developed countries. Transferring technology from the developed countries to developing countries through foreign investments is problematical. In the world economy, developing countries are always assumed to be the losers. Globalisation, therefore, may lead to further widening the gap in economic growth and income terms between developing countries and developed countries, while diffusion of economic growth, information and advanced technology clusters in developed countries.

In order to gain economic benefits from global economic competition, developing countries need to participate in regional economic groups and trade blocs with their close neighbouring countries (see Section 2.2.4). As a consequence, countries of the Greater Mekong Sub-region take part in ASEAN, AFTA, APEC and the Greater Mekong Sub-regional economic cooperation programme, with the main purposes, of protecting their countries' economies, benefiting from
increased negotiated power in global markets and increasing the volumes of trade and investment between member countries, as well as developing closer economic and political linkages. (The World Bank, 2000: 1-43).

Paradoxically, from the above discussion, reactions to globalisation have seen economic benefits, worsening economic competition, and an increase in adverse social problems relating to in drugs, smuggling goods, illegal migrations, crimes, and pollution. As such the globalisation concept cannot wholly explain whether globalisation generates economic liberalisation and induces benefits or creates increasingly intensive competition and management problems.

Globalisation concept and border town development

The Thai government's view of globalisation is an optimistic one, advocating current global changes. Thai development policy seeks to concentrate on supporting future sustainable economic growth with the hopes that successful border towns will improve: (1) the prospects for trade and investment in and between towns, (2) restore good relations with its neighbours, and (3) narrow the gap in regional incomes, social welfare and physical growth, especially between the Bangkok Metropolitan Region and border towns, and amongst the countries in the Greater Mekong Sub-region. Thus, successful border towns may be reliant on a process of intensive as well as integrated sub-regional economic cooperation (National Economic and Social Development Board of Thailand, 2002: 1-10).

2.2.2 International trade theory

International trade theory explains why nations trade with each other. In general, development of foreign trade occurs because each nation may focus on the production of different goods based on the concept of comparative advantage; it then exchanges surpluses with others in order to obtain the benefits and wealth of specialisation (Moon, 1998: 81-97; Wall and Rees, 2001: 46-74). With rising national living standards, domestic consumers have an increasing tendency to buy foreign products that are better or cheaper than domestically produced ones. At the same time, producers will seek to trade their products for a higher price or in greater quantities abroad, which increases their profits and their nation's revenues. Nations, therefore, expect to gain economic benefits from international
exchange through improvements in productivity, profit, wealth, and its welfare of citizens.

The four main concepts in international trade theory, which may be used to explain border town economy include mercantilism, specialisation, free trade policy and comparative advantage.

(1) Mercantilism
Mercantilism seeks to expand exports and reduce imports in order to generate higher national revenues and improve economic conditions. Exports are supported by subsidies whereas imports are restricted by imposing tariffs, quotas, exchange controls or subsidies (Chacholiades, 1990: 28-35; Begg and others, 2000: 574-594). Mercantilism promotes the use of trade barriers in seeking to protect and support national economies.

Up to now, these trade restrictions have been implemented in each country so as to restrict degree of imports into home markets, increase national revenues from imports and develop home industries which distort the principles of free trade policy and economic liberalisation in global economy terms. For instance, the current Thai exports to the United States and European markets have been hit by tariffs and quotas on exports, under the Generalised System of Preferences (GSP). This is because Thailand is classified as an advanced developing country, not a developing country like Cambodia, Laos or Myanmar. The implementation of this policy by these two regional markets adversely affects Thai exports because of their higher prices compared with other developing countries (Thairath, 2003: 5-7).

(2) Specialisation
Specialisation advocates that each nation would specialise in production of goods, dependent upon comparative advantage, which one nation holds over other nations, and import goods in which it possesses the least comparative advantage (Moon, 1998: 81-97; Baumol and Blinder, 1998: 799-801). When nations trade and produce goods and services following the principles of comparative advantage and specialisation, nations will benefit from economies of large-scale production. Large-scale production should normally lead to lower unit costs. It is envisaged that nations will eventually achieve competitiveness in global markets.
Even though specialisation is conceived as a good economic tool for national economic growth -for developing countries, including countries in the Greater Mekong Sub-region- economic diversity seems to be a better engine to drive economic growth because of the lack of skilled capacity and lack of advanced technology (Gomanee, 2003).

(3) Free Trade policy
Free trade policy is closely associated with economic liberalisation which supports the free flows of goods and services across national boundaries. Free trade policy today is used to achieve globalisation. Chichilinsky and Heal (1986: 2-46) advocate free trade between countries as a way to assist in cementing their national, fragile, political relations. They argue that when each nation implements free trade policy eventually, overall, the world economy will benefit too.

But, in practice, nations are likely to prefer the free trade policy for their exports while governments regularly place trade barriers so as to protect their home economies. This is not free trade (Donnelly, 1987: 2-33; Beardshaw, 1984: 564-575). As a result of setting up trade barriers in each country, the World Trade Organisation (WTO) was established in order to reduce and resolve conflicts in international trade. Economic benefits from the implementation of free trade policy are sought by numbers of trade blocs. However, trade blocs continually place trade barriers on non-member countries (see Section 2.2.3). Thus, at the level of the world economy, free trade policy remains an ideal.

(4) Comparative advantage
Comparative advantage in international trade refers to the ability of a country to produce a good at a lower opportunity cost than other countries; and that it should import those goods for which it is relatively high cost producer (Mulhearn and Vane, 1999: 270-348). In theory, when each country specialises in those goods in which they have comparative advantage and economies of scale, they will produce and trade efficiently with others and lead them to specialise further. The concept of comparative advantage is an important guide for national trade policy and trade patterns based on benefits of opportunity costs and efficient use of national availability of resources, including capital, labour and other productive inputs.
Adams (1979: 6-18) argues that relying upon comparative advantage and specialisation divides countries into developing and developed countries; with developing countries being the losers in the world economy. This is because the comparative advantage of developing countries is mainly in primary products which are not permanent and rely on natural conditions, and the value of products is relatively low, whereas imports from developed countries are higher valued, especially in manufacturing goods and services.

Even though developing countries, including countries of the Greater Mekong Sub-region, have believed the inflow of foreign firms will transfer advanced technologies, developing countries have continued to rely on high technology from developed countries. This has resulted in a lack of skills, know-how, and information while technology being concentrated in developed countries (Gomanee, 2003). Developing countries thus fear that free trade policy will force them to specialise in production with low incomes as low value added. Implementation of free trade policy and comparative advantage thus cause a widening of the gap between developed and developing countries. Diversification is, therefore, viewed as a key to future sustainable economic growth, rather than specialisation, especially for countries of the Greater Mekong Sub-region.

International trade theory and border town development
For future sustainable economic development, economic diversity seems to be a better approach for Thailand and border town development rather than specialisation. This is because national revenues will not rely on only a few exports based on the traditional comparative advantages of selling low valued agricultural products (i.e. rice, fishery and seafood) or on low wage economy. Meanwhile, the main imports of manufacturing products (e.g. vehicles, software products, computers and machinery) have higher value-added, which is a similar position for all countries of the Greater Mekong Sub-region (see Chapter Three). Thai economic policy has attempted to upgrade and develop national industries in high-technology and an export-led strategy aiming to increase national prosperity through transferring information and advanced technology from foreign investments. But it has been found to be difficult, risky and expensive for Thailand, including border towns, to replicate and integrate these high technologies.
Chapter 2: The border town and theoretical context

Participation in regional economic blocs (namely ASEAN, AFTA and the Greater Mekong Sub-regional economic cooperation programme) is undertaken with the hope of advancing free trade policy between member countries, generating economies of scale, efficiency in the use of national resources, transferring technology and skilled labour, and also restoring international relations. In particular, part of the Greater Mekong Sub-regional economic cooperation programme will stimulate growth in border towns, improve relations between countries, and extend the new markets in countries of this sub-region (National Economic and Social Development Board of Thailand, 2002: 1-10).

2.2.3 International investment theory

Accepting that international trade could stimulate national economic growth, international investment will play an important role in promoting national economic wealth. Trade and investment activities are interdependent in that they support each other. International trade is a process of production of goods and services in a nation and selling surpluses to a purchaser in another nation in order to gain profits. To reach maximum profit but pay minimum investment cost, firms would cross national boundaries to gain access to customs and markets and exploit comparative advantages. International investment is, therefore, a pre-requisite.

Reviewing international investment theory will provide an understanding of those factors affecting the flow of foreign investment into Thailand and the other countries of this sub-region.

One global change is the rapid growth in international investment crossing national boundaries. The United Nations (1988: 73-99) criticises foreign firms, who have invested in Southeast Asian countries since 1980, because of the ease of accessing and exploiting large market sizes and low wages (e.g. Thailand, Malaysia and Indonesia). And since 1990 after the end of communism in the countries of the Greater Mekong Sub-region, excluding Thailand, these countries have welcomed inward foreign investment with the expectation that this will increase employment and higher the transfer of information and advanced technology, and also improve diversity of local economies. Nevertheless, the effects of opening up national boundaries to foreign firms in the Greater Mekong Sub-region is likely to
generate intense economic competition between the countries in this sub-region. This should not be unexpected.

Factors affecting decisions of foreign firms to invest and locate abroad

Table 2-1 additionally presents the most significant factors affecting decisions by foreign firms to invest abroad, drawn from a number of sources.

Table 2-1: Summary of factors affecting decisions of foreign firms to invest abroad

<table>
<thead>
<tr>
<th>Pull factors (Host country)</th>
<th>Push factors (Home country)</th>
<th>Factors impeding foreign investment</th>
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<tbody>
<tr>
<td>1. Investment incentives</td>
<td>1. Legal and institutional restrictions at home</td>
<td>1. Language barrier</td>
</tr>
<tr>
<td>2. Financial incentives</td>
<td>2. Capturing market shares</td>
<td>2. Incompatibility of management style</td>
</tr>
<tr>
<td>4. Advantage of better knowledge of consumer and factor market</td>
<td></td>
<td>4. Distinctive bureaucratic organisation</td>
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<tr>
<td>5. Favourable government policy</td>
<td></td>
<td>5. Long time needed to negotiating a contact</td>
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<tr>
<td>6. Location advantage to access world markets and home markets</td>
<td></td>
<td>6. Problems with meeting production deadlines and quality control</td>
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<tr>
<td>7. Low wages</td>
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<td>7. Inadequacy of the legal framework</td>
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<tr>
<td>8. Adequate business services</td>
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<td>8. Problems of labour productivity and management</td>
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<tr>
<td>9. Availability of labour</td>
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<td></td>
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<td>10. Being security area, no political risk</td>
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<td></td>
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<tr>
<td>11. Good access transports</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Large quantity of raw materials</td>
<td></td>
<td></td>
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<tr>
<td>13. Culture and language</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Business environment or quality of life</td>
<td></td>
<td></td>
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<tr>
<td>15. Being security area, no political risk</td>
<td></td>
<td></td>
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<tr>
<td>16. Good access transports</td>
<td></td>
<td></td>
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<tr>
<td>17. Large quantity of raw materials</td>
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<tr>
<td>18. Culture and language</td>
<td></td>
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</tr>
<tr>
<td>19. Business environment or quality of life</td>
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</tr>
</tbody>
</table>

Christodoulou (1996: 59-61)
Yu and Chao (1998: 139-151)
Kirk (1998: 5-8)
Smart (1999: 169-200)
Harrison and others (2000: 246-267)
Ho (2000: 2337-2356)
Yeung and others (2001: 157-183)

From Table 2-1, it could be concluded that the determinants of foreign firms' investment in developing countries as being mainly: an easy access to growing market size; supportive government policies; lower wages; good quality of business services; and other economic or political considerations. These factors
affecting location decisions of firms will be used to examine the findings of border town fieldwork, together with information drawn from location theory, in the next section, so as to establish a methodology for identifying and developing border towns as centres for trade and investment. It is assumed that to develop border towns in Thailand as the new growth centres, the Thai government will need to ensure that each border town possess these attractions and the market is responsive to business and local needs.

Inward foreign investment in developing countries’ debate
Donnellan (2002: 9-27) argues that although inward foreign investment helps developing countries by creating jobs, transferring higher technology and information, and also stimulating local economies by factory workers spending their earnings in local services, competition between developing countries to attract foreign firms is likely to be fierce. To offer the best deal to foreign firms, developing countries are sometimes forced to ignore human rights, especially regarding the abuse of child and female labour.

In addition, Lipsey and Chrystal (1999: 572-595) are adamant that the transfer of high-technology from developed countries to developing countries does not emerge as envisaged. Developing countries remain reliant upon developed countries, largely because they lack skilled capacity; whilst advanced technology remains cluster in developed countries. In turn, the question emerges as to whether increasing the volumes of foreign firms results in boosting national economies or causes nations to rely more on advanced technology from abroad.

Foreign investment and border town development
Though there is much suspicion of international investment theory, countries of the Greater Mekong Sub-region are likely to accept foreign investment as a significant economic engine, which in turn are expected to generate technology transfers and increasing number of jobs. Being aware of the potential benefits, these countries have attempted to attract foreign firms to locate to their countries which is leading to more intense competition between countries in this sub-region (see Chapter Three). For Thailand, international investment has had an influence on Thai economic development. Thai National Plans (1994-2006) have put emphasis on strategies to attract foreign inward investments nationally and to
border towns as the new growth centres, which also involves cooperating with its neighbours.

2.2.4 International economic integration concept

Resulting from globalisation, global changes are evident in the appearance of regional economic trade blocs (i.e. EU, NAFTA, and AFTA). Thailand and countries of the Greater Mekong Sub-region take part in closer regional economic groups in order to gain stronger negotiating powers in the intense economic competition of global markets through larger supplies and markets, technology transfer and economies of scale (Edwards, 1999). Growth of regional economic agreements is one of the outcomes of better international relations.

Regional economic cooperation groups

Regional economic cooperation groups operate at two spatial levels: global and regional. Each country regularly joins more than one regional economic cooperation group in order to gain benefits from membership. Basically, most regional economic agreements possess common objectives of reducing barriers to trade between member countries which support free trade policy. But they may restrict trade with the other nations outside of the cooperation group. There are typically two stages of implementation: simple and deep. At the simplest stage, regional economic agreements simply remove tariffs on intra trade bloc in goods, services, investments, ideas and labours. Yet they may go beyond to cover non-tariff barriers and to extend liberalisation to trade and investment in the future (such as AFTA). At their deepest phase, they have objectives of economic union, and involve the construction of shared executive, judicial and legislative institutions (i.e. European Union)(Jovanovic, 1989: 1-14; Jones and Darkenwald, 1979).

Economists (e.g. Lipsey and Chrystal, 1999: 572-595; Jovanovic, 1989: 1-14; Terpstra and Sarathy, 2000: 51-60) argue that regional economic integration seems to be a good strategy for economic assistance for participant countries to benefit from strong economic negotiation in challenging the intense global market competition, especially for small countries. Additionally, a major benefit required through regional economic integration is faster economic growth in member nations because of clustering and the transfer of larger resources (i.e. labour
pools, technologies and raw materials), larger markets and economies of scale for their industries from member countries. Nations eventually will achieve greater wealth and progress; but regional economic groups and trade blocs operate contrary to the backdrop of the globalisation concept in terms of liberalisation of trade movement according to WTO rules (Lipsey and Chrystal, 1999). Regional economic blocs also make worse the divisions of the world as their existence is based towards their own member countries.

There are several degrees of regional economic cooperation, which are based on commonality of interests among nations, political systems, cultures and geography (Harrison and others, 2000: 159-169). International collaboration takes place at two levels: the global and the regional levels. Regional economic groups may appear as either: a free trade area, a customs union, a common market, an economic union, a complete economic integration or a political union (Harrison and others, 2000: 159-169; Hill, 2000: 231-259; Cateora and Graham, 2002: 279-317).

- Global Level: global agreements are mainly conducted through the WTO: World Trade Organisation (formerly GATT) under the auspices of tariff negotiations held or removing trade restrictions. The prime objectives of the WTO are to liberalise world trade and to contribute to economic growth and development.

- Regional level: regional economic integration is distinguished from global economic collaboration in terms of the limited number of countries involved. Standard forms of regional economic integration, ranking from least integrated to most integrated, are as follows:

1. **A Free Trade Area (FTA)** The main goal of a FTA is to facilitate trade within member nations. Members agree to remove tariffs on trade among each other, but allow each country to impose whatever tariffs it wishes on imports from outside countries in the rest of the world. Regional unions include the European Free Trade Area (EFTA), the Asian Free Trade Area (AFTA) and the North America Free Trade Area (NAFTA).
2. A Customs Union This is similar to a free trade area in that it has no tariffs on trade among members, plus it agrees to progressively remove trade obstacles. However, it also has a wall of tariffs against imports from countries outside the union. Members need neither customs controls on goods moving among themselves nor original rules. Good examples of Customs unions are the Andean Pact (between Bolivia, Columbia, Ecuador and Peru) and the Customs Union between France and Monaco.

3. A Common Market This primarily aims to eliminate tariffs and other trade constraints, and remove other restrictions on the flow of capital, labour and technology between the member nations. The principles are a closer arrangement than a customs union; there are no restrictions of the movement of factors of production among union members. Currently, the Central American Common Market, the Southern Cone Common Market (or MERCOSUR), and the Southern American grouping of Argentina, Brazil, Paraguay and Uruguay, hope eventually to become a common market.

4. An Economic Union The rules go beyond a common market. It includes the harmonisation of economic policy amongst its members including currency, tax, policy and patents. An example is the European Union.

5. A Complete Economic Integration or Political Union This is the most fully integrated form of regional cooperation. It involves complete political and economic integration. This means an economic union with, additionally, co-ordinating social policies and supranational authorities including executive, judiciary and legislative functions, which involves binding authority over member countries.

Economists (e.g. The World Bank, 2000: 1-43; Wall and Rees, 2001: 67-68) argue that even though the regional economic bloc is likely to be a good economic policy with provision of a range benefits from membership, occurrence of regional economic trade blocs also leads to reduce national trade taxes which are an important source of government revenues under the rule of regional economic
Chapter 2: The border town and theoretical context

International economic integration concept and border town development

According to international economic integration concept, this concept can be valuable for border town development. Thailand is one of the main ASEAN and AFTA national members and regards such integration and co-operation as a means of maintaining national security and attaining greater expansion of trade and investment at home and in the region.

Apart from participating in the WTO, ASEAN, AFTA, and APEC, Thailand also participates in the Greater Mekong Sub-regional economic cooperation programme, which is an economic development project within ASEAN agreements, for stimulating border towns' economies with cooperation from neighbouring countries. The Greater Mekong Sub-region now receives much attention from ASEAN because this is a largely undeveloped area (United Nations, 1999: 1-13). Success in economic growth in this sub-region is expected to close the regional income gaps between these countries in ASEAN.

2.3 Part Two: Inter-regional planning theory: Economic base theory

Economic base theory seeks to explain which economic activities exist in and underpin the growth of urban areas and this theory can be used to analyse how regions grow. Economic base theory also has value in helping to estimate the future economic structure and population of towns and cities.

In theory, the structure of an urban economy is composed of two main categories: (1) basic activities, which produce and distribute goods and services for export and influence the existence and growth of a city, these are: manufacturing, wholesale and retail trade, finance and banking, political, educational and social institutions, tourism, amusement and entertainments; and (2) non-basic activities, whose goods and services are consumed within the city or by local services, these are: local stores, doctors, lawyers, banks, schools, government services and other professional and financial services. This is a crude classification of a city's economy according to George (1999: 109-125), Richardson (1969: 165-170, 1973: 19-37) and Clark (2003: 38-44). They agree that it is hard to define categories of
economic activities because these products and services could provide both international and local markets.

According to economic base theory, the growth and existence of an urban area depends upon its ability to export goods and services to pay for its import needs. Expansion in the base activities is expected to induce flows of income, employment and growth in service activities in the city, which should extend to the city's whole economy.

**Economic base theory debate**

Economic base theory is valuable in forecasting future impacts of growth or decline in a region or urban area; the economic base multiplier can be employed by calculating the ratio of total employment to basic employment. Yet, criticism is levied at economic base theory which mainly concerns how basic and non-basic activities are classified. Most economic base studies have used employment or number of jobs as the unit of measurement to resolve this criticism because this data is easily accessible. Questions arise as whether economic diversity should replace specialisation, and whether there is sufficient explanation of a city's economic base for urban growth processes to be accurately characterised.

Glasson (1978: 80-101) identifies that a major problem of economic base theory is the identification of the boundaries of basic and non-basic activities where employment tends or numbers of jobs seems to be a common measure. Yet, an expansion in a high wage industry will have greater multiplier impacts than a similar expensive in a low-wage industry and this will not be picked up by the employment data.

Richardson (1969: 165-170, 1973: 19-37) and Nourse (1972: 162-163) also argue that urban economic base theory is deficient as a predictor of urban growth because it is difficult to distinguish between basic and service activities; and these determinants of urban growth offer the process of agglomeration. In terms of applications of theory of economic base, it is suggested that economic base is suitable for short-term projections of the growth of a city. Apart from using income to classify the basic and non-basic activities, Richardson suggests that due to scarcity of regional income data, it is possible also to employ some measurements to classify the basic and non-basic activities including employment,
wage bills, net outputs, gross outputs, income and expenditure accounts. But these further suggested sources of data also cannot easily be obtained especially if being used to research towns or cities in developing countries, where data availability is usually a major constraint. In this respect, Hansen (1975) states that the appropriate method for identifying basic and service components is the direct method of using market surveys.

Further, George (1999: 109-125) supplements various units of measure in analysing basic and non-basic activities by including data on employment, pay, valued added, value of production, physical production, income and expenditure. However, employment still remains the most common unit of data used. George supports economic base approach as a very useful tool for regional planning that can be applied to explain urban growth potential and economic linkages between towns.

Batchin and others (2000: 48-55), Pacione (2001: 47-55) and Harvey (2000: 248-250) argue urban base theory is unlike central place theory, which stresses the distribution of goods and services from an urban centre to its surrounding areas, whereas urban base theories are concerned with a consideration of demand from outside toward an urban area. They additionally claim that the more a city specialises, the more it loses its self-sufficiency. They contend non-basic industries rely on basic sectors, but both economic base and non-economic base provide support for the existence of a town. These scholars criticise services which generally are assumed to be non-economic activities, now some cities’ service sectors are turning into the basic activities and may themselves stimulate the growth and changes of a city. The reverse is that when they are well-developed, local services will attract basic activities. For instance, London’s banking, finance and insurance sectors have developed as international exports. They additionally note economic base theory ignores the explanation of imports, though there is interdependence between basic and non-basic sectors.

Goodall (1974: 237-247) Hartshorn and others (1992: 119-120) argue that economic base can explain the existence of smaller towns without a complicated economic structure. But as the city becomes larger and more diverse, the non-basic sector increases in importance. Thus the service sector is important reason for the existence and growth of a city. Export industries cannot solely be used to
determine the level of economic activity, especially in large spatial units such as nations. Urban base methodology is a crude tool for analysis of the urban economy and predictions based on the shape of basic activities in the total urban output economic base might be true in part, but not true for the whole or for forecasting long-term urban growth. This theory does not provide an explanation of the process of urban growth such as when and why export activities change and which factors affect population growth of an urban area.

Another point worth repeating is that these scholars believe in the concept of specialisation; if a city creates a specialisation in services (telecommunications, television commercials, tourism or higher education) or manufacturing goods these are likely to generate capital flows which in town should influence the growth rate of the city.

Economic diversity
Even though there are such criticisms of economic base, it is widely accepted that the use of basic activities and service sectors are good indicators of urban growth. For border town development, it is debatable whether it is useful to replace economic diversity with specialisation to sustain and support urban growth. From the above discussion on the economic base theory, though some academics (e.g. Hartshorn and others, 1992: 119-120) support the specialisation of the city others (e.g. Balchin and others; 2000: 48-55; Pacione, 2001: 47-55; Harvey, 2000: 248-250; Williams and others, 1983: 2-41) advocate economic diversity because they argue that sustainable growth of cities require a number and variety of economic structures and services.

Economic base theory and border town development
Despite some problems, economic base theory is a valuable approach for border town development. This is because it is possible to apply economic base theory to identify which economic activities stimulate border economic growth; it will be these economic activities that should be promoted as part of border town development plans. Industries that largely employ local goods and labour are the key to assisting border towns in achieving more self-sufficient growth. However, border town economies ought not to rely on single economic activities which have the greatest comparative advantage as economic diversity is considered for achieving sustainable growth. In addition, it is believed that inward investment
will assist in stimulating more the growth of local service sectors. Eventually, overall additional employment opportunities and regional change is expected.

2.4 Part Three: Intra-regional planning theories and techniques

The primary purpose of this section is to examine the related intra-regional planning theories and techniques including: location theory, central place theory and growth pole theory. It is envisaged that these theories will contribute to an understanding of the phenomenon of why some urban areas and regions grow faster than others.

2.4.1 Location theory

Explanations of location decisions will be used to clarify why economic activities spread over space and to analyse how urban and regional growth occurs. Location theory has largely been developed to explain location of industry, putting emphasis on explanation of why industry is located and where it is suitable. This section presents location theory under two topics: explanation of general location decisions to answer why some areas are attractive to industry; and secondly, explaining how specific location decisions of firms reveal why some industries are attracted to particular areas. It is hoped that this will generate a better understanding of location advantages in border towns and how to create border towns as attractive places, and also seek to point out which firms or economic activities could be as attracted to locate in border towns. This is part of the understanding necessary to establish a methodology for identifying and developing border towns as centres for trade and investment.

(1) The general location decisions of firm

The explanation of why some areas are more attractive to industry is explained by location theory. Traditional industrial location analysis derives from the original work of Weber (1929) focusing on an area with the least costs of transport and input factors (i.e. raw materials, labour and natural resources). Classic location theory puts emphasis on transport costs that have an influence on location decisions of firm and types of firm. The location with the lowest transportation cost is the most attractive location. In a weight-losing manufacturing process such as iron and copper smelting, fruit and vegetable canning or freezing, firms are
likely to locate near their raw material sources; whereas in a weight-gaining industry such as bakeries and drinks, a market location or urban area is more attractive. Classic location theory assumes that input factors (i.e. raw materials, labour, land and capital) are largely immobile and are found only in particular sites. Firms are, therefore, likely to locate close to these resources or a place incurring the least transport costs (Knowles and Wareing, 1979: 200-206).

The debate about general location decisions of firms
To date, advanced technology and economic liberalisation resulting from globalisation have had an influential effect on traditional key factors affecting industrial location decisions. Criticisms emerge that stress influential factors of a social and environmental consideration affect location choices, instead of only economic factors.

Ball and others (1998: 78-88) argue that, to date, labour, enterprise and capital are becoming increasingly mobile between nations due to advanced technology and economic liberalisation. Technology processes have reduced the significance of resource-input location and transport costs especially in developed countries. Thereby a new feature of industrial location decisions depends on factors of markets, agglomeration economies, labour force, communication, infrastructure, transport networks, government incentives and environment; whereas the factor of natural resource is now less important. But the factor of natural resources is still a critical location choice for specialist firms (e.g. iron and furniture). In terms of transport costs, the transport factor continues to affect location decisions of firms; as they tend to locate where there is easy access to major transport nodes (i.e. motorways and airports). Firms may cluster in the city centre to gain agglomeration advantages or at the edge of the city to avoid traffic and over-congestion of the urban core, but the location of firms do not obviously form with an industrial zone.

Knowles and Wareing (1979: 200-206) and Goodall (1974: 85-125) criticise profit-maximizing criterion as location decisions of firms may be made on the basis of satisfactory rather than the maximum level of profits. There are no strict determinants of location but a firm's location choices are also based on personal grounds and preferences. Likewise consideration of business environment or quality of life is becoming a critical locational criterion of firms.
Tidswell (1984: 142-145) and Stamp (1975) consider the location decisions of firms. They give the reasons why an industry happens to occur in a particular place; this is because these areas can offer the following attractions:

1. Availability of raw materials;
2. Availability of labour;
3. Land;
4. Financial supports and investment incentives offered by government;
5. Availability of telecommunications network;
6. Low transport costs;
7. Good transport node(s);
8. Adequate infrastructure and facilities;
9. Growing market size;
10. Quality of life or business environment; and
11. Reliable and cheap electricity and water supplies.

Explicitly, industrial location decisions do not only include physical factors (i.e. availability of natural resources, power, infrastructure and business services); but the availability of investment incentives and quality of life are now critical location factors. Firms may first consider to locate in regions that offer a better quality and condition of business services such as a university, a higher educational institution, a good environment and landscape, security and also entertainment facilities. In turn the region is stimulated by the growth of other economic activities that in time may enable the area to develop as a new growth centre. Thereby the new (perspective of) location theory contends that firms are more likely to locate within areas where they can obtain an optimum balance between satisfactory and minimum profit requirements.

(2) The special location decisions of firms
This section presents an explanation of why some industries are attracted to particular areas. Particular firms may rely on special factors, as a result, in order to attract these certain firms to locate in a region, including border towns, development plans need to meet firms' special requirements. Table 2-2 shows the factors that are (rationally) taken into account by firms in making decisions relating to their location.
Table 2-2: Key location requirements for different type of investments

<table>
<thead>
<tr>
<th>Firm type</th>
<th>Requirements, ranked in order of importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Regional administrative</td>
<td>1. International transport</td>
</tr>
<tr>
<td>headquarters</td>
<td>2. Telecommunication links</td>
</tr>
<tr>
<td></td>
<td>3. Educated labour force</td>
</tr>
<tr>
<td></td>
<td>4. Investment incentives</td>
</tr>
<tr>
<td></td>
<td>5. Need for face-to-face contact</td>
</tr>
<tr>
<td></td>
<td>6. Close to business services</td>
</tr>
<tr>
<td></td>
<td>7. Close to government agencies</td>
</tr>
<tr>
<td></td>
<td>8. Quality of life or business environment</td>
</tr>
<tr>
<td>2. Service centres</td>
<td>1. As for distribution centres</td>
</tr>
<tr>
<td></td>
<td>2. Skilled labour force</td>
</tr>
<tr>
<td></td>
<td>3. Financial incentives</td>
</tr>
<tr>
<td>3. Distribution centres</td>
<td>1. Proximity to markets</td>
</tr>
<tr>
<td></td>
<td>2. Good access to transport links</td>
</tr>
<tr>
<td>4. Assembly plants</td>
<td>1. Lower wages</td>
</tr>
<tr>
<td></td>
<td>2. Lower taxes</td>
</tr>
<tr>
<td>5. High-tech manufacturing</td>
<td>1. Skilled labour force</td>
</tr>
<tr>
<td></td>
<td>2. Good access to transport links</td>
</tr>
<tr>
<td></td>
<td>3. Access to growing markets</td>
</tr>
<tr>
<td>6. Research and Development</td>
<td>1. Research and Development centre, and</td>
</tr>
<tr>
<td>centres</td>
<td>university</td>
</tr>
<tr>
<td></td>
<td>2. High-tech skills</td>
</tr>
<tr>
<td></td>
<td>3. Graduate labour force</td>
</tr>
<tr>
<td></td>
<td>4. International and telecommunication links</td>
</tr>
<tr>
<td></td>
<td>5. Good environment to attract workers</td>
</tr>
<tr>
<td></td>
<td>6. Lower taxes</td>
</tr>
</tbody>
</table>

Short (1999: 82-83)
Ho (2000: 2337-2356)
Yeung and others (2001: 157-183)

In considering Table 2-2, this study argues that when the above facilities are located in border towns, they will assist in promoting border towns as centres for trade and investment in the Greater Mekong Sub-region. Ranking from the highest to least important activities to locate in border towns are: regional administrative headquarters, service centres, distribution centres, assembly plants, high-tech manufacturing and research and development centres. It is possible for border towns first to become regional business centres in particular service and investment centres for export (assembly firms). Even though the activity of research and development (R&D) and high-tech manufacturing are significant for border town development, these two activities are considered as the lowest order...
to be located at border towns because border towns are typically small towns and short of professional labour.

As part of a move to decentralisation it became Thai government policy in 1994 to develop border towns as new growth centres. However, the literature review shows that to achieve this it must be necessary to:

1. Establish a new university to provide graduate or skilled labour. To date, there are no universities in the border towns, but universities are now located in bigger cities, for example Khon Khen, Ubon Ratcha Thani, and Chiang Mai (see Maps 1-5 and 4-1).
2. Improve transport networks (in terms of roads, ports and railways) and linkages to cities in both Thailand and the sub-region by cooperating with its neighbours.
3. Establish an international airport in border towns as part of promoting them as new regional business centres. An international airport will assist in trade and tourism and people and force closer linkages between border towns, countries in the sub-region and with global markets.
4. Offer financial and investment government incentives for attracting firms to locate to border towns.
5. Improve the business environment and quality of city life so as to attract and retain firms locating to border towns.

From the above discussion of location theory, a central theme in the development of industrial location theory has been the concept of optimum location. The best location is taken into account as that which gives the highest preferences and net revenues. Success of border towns is reliant on support from the central government to allocate national grants in the form of (big) public investment projects to create border towns as new and attractive investment places.

**Location theory and border town development**

Location theory is a useful tool for understanding how to create border towns, to attract firms and identify which category of firms should be persuaded to relocate in border towns. It is seen that so far the factors affecting location decisions of firms are not sharply defined; the choice of location of a firm is open; they may
be located in city core, at the urban edge, is on industrial parks so long as they obtain the highest preference and maximise profits.

Based on the location theory, in order to induce firms to relocate to border towns, it is essential to search out locational advantages of border towns which will provide important motivations for firms locating at border towns. Such locational advantages in border towns may include: geographical location which gives opportunity and access to take advantage of neighbouring countries (i.e. cheaper labour, agricultural goods and growing market size); availability of local agricultural products; low wages; and political stability. Consequently, these factors suggest the kinds of firms which should be promoted in border towns at least initially, namely assembly plants and food processing (see Chapter Four). This observation will be examined as part of the research fieldwork.

Moreover, in order to increase the number of firms in border towns, especially to convince the targeted investment or firms in Table 2-2 to locate in border towns, central government will need to support improvements in urban services, establish higher educational institutions and offer other supports for inward investment. The availability of government incentives also need to be part of future border town development plans.

2.4.2 Central place theory

Central place theory, which was introduced by Christaller (1933), seeks to provide an explanation of the order of hierarchy in urban settlements. A town acts as a central place to serve goods and services for its surrounding areas. In theory, service areas can be ranked from higher to lower orders based on demand thresholds and product market range; these two factors determine the number and size of central places (Carter 1995: 27-61). Threshold is defined as the minimum population necessary to support the service activities whereas market range means the maximum distance over which people are willing to travel to purchase goods and derive services offered at a central place.

Luxuries or high order goods and services, such as banks, theatres, barber shops and jewellery shops, are provided in a high order centre with a large population thresholds and market range; those products and services will tend to locate in
big cities. For the more frequently demanded goods, every-day needs or cheaper goods such as groceries or petrol, market range and demand threshold are lower; these goods and services are provided in smaller towns. Regularly, the larger urban places are larger market areas. Each central place performs all the functions of lower order places. Accordingly, central places form a nested pattern or hexagon (Short, 1999: 36-67) and as such central place theory provides a simplification of the urban hierarchy.

Central place theory debate
Even though central place theory is a valuable tool for providing a simple understanding of the urban hierarchy and the relation between centre places and surrounding areas, it has been subject to numerous criticisms mainly because it is seen as an idealistic model. This is because the notion of central place is drawn from unrealistic assumptions about uniform distribution of population and natural resources.

Carter (1995: 88-91) and King (1984: 28-46) argue that central place theory does not provide a complete explanation of distribution. Central place theory is appropriate for the study of small towns. The growth of a city results from the agglomeration economies (i.e. large availability of labour, markets and business services) rather than the provisions of goods and services in a city. Spatial distribution of urban centres would be influenced by the structure of the transport network. The present technology process and improved transport distorts the distribution and pattern of urban. Moreover, industries, services and goods in a city can provide for national and regional markets, not only for local markets. Therefore, Carter and King argue that growth of urban centres may be predicted more precisely by a concept of urban economic base rather than by a central place model.

Nagle (1998: 7-8) and Balchin and others (2000: 48-55) argue that the causes of urban growth are explained by combining urban economic base and central place theory. Central place theory is useful for rural planning or small communities, but this theory does not take into account speciality towns such as tourist or manufacturing towns. Central place theory emphasises only aspects of market range and threshold population for explaining the existence and distribution of cities. But other contexts of a city's functions (i.e. social activities and
manufacturing requirements), local specialisation, impact of large migration of labour and different topography are all left out of consideration; these topics also affect the model of central place. Thereby, central place theory offers an insufficient explanation of the process of urban growth and how urban pattern changes.

Williams and others (1983: 2-41) argue that central place theory supports the concept of specialisation of cities. This means that a city plays a particular role as a trade centre, offering goods and services including retail, wholesale, administrative, social and financial for peripheral regions. The city, thus performs and relies on a primary economic function. As explained earlier, economic diversification may be more suitable for sustainable city growth rather than specialisation. Thus, a city can perform being a centre for trade, investment, service, administration and tourism simultaneously.

Central place theory and border town development

According to central place theory, the theory can be applied to explain regional planning in Thailand because it provides an understanding of the framework of urban growth hierarchy, market range, and economic linkages between urban centres and their surrounding regions. A hierarchic system offers an explanation of how to create an efficient allocation point for a region because a major central place regularly becomes the regional nodal centre which in turn contributes to the degree of economic development over a region as a whole. It also suggests that the existence of a central place also results from support from surrounding areas. Furthermore, central place theory supports the explanation of location theory that firms tend to locate in large urban centres due to agglomeration economies. Thereby, a city grows and becomes prosperous by the presence of these firms.

In this light, central place hierarchy is helpful in explaining the level of city development and is used to suggest that border towns could possibly develop as third hierarchy centres after Bangkok and other bigger cities (see Map 1-5). With greater support in the form of public investment from the central government, firms might locate to border towns with the highest potential growth, so transforming border towns into nodal centres that supply goods and services for their surrounding regions in both Thailand and its neighbours in this sub-region.
Understanding the task of selecting border towns with the future highest potential development is a major aim in this research.

2.4.3 *Growth pole theory*

Growth pole theory explains or gives the reasons for urban or regional growth in particular locations and in turn is used in the allocation of public investment for the development of growth centres becoming meaningful economic entities. It is expected that when such areas are developed as growth centres, people will migrate to them. Eventually, the spread effects and expansion of growth occurs over surrounding areas (Higgins and Savoie, 1997; Hall, 1975; Richardson, 1969: 415-428).

Growth pole theory, which was originated articulated by Perroux, points out that growth does not appear everywhere or all at once; yet it appears in particular areas with variable intensity, and then spreads its effects over the whole economy (Lavrov and Sdasyuk, 1982: 57-65). The main ideas in growth pole theory deal with and explain the phenomenon of economic development and the clustering of economic activities and growth in particular areas, and also provide an understanding of how economic growth deviates from a state of equilibrium.

**Growth pole theory debate**

Even though growth pole theory is believed to be a valuable theory for regional economic planning to spread growth to its surrounding areas, other arguments on growth pole theory have emerged. Richardson (1978: 164-178) and Darwent (1975: 539-561) point out that occurrence of a growth pole results from the sitting of export industries. Export industries are key industries stimulating regional economic growth as a whole through interaction of input and output factors between the leading industries. There are two related terms in this theory: growth pole and growth centre. Growth pole refers to an industry or a sector activity; while growth centre means the urban concentration where these economic activities are localised and which may generate regional growth.
In terms of key industries, Alden and Morgan (1974: 58-66) suggest that the main factor in explaining regional development is the interaction and communication between key industries, which form the nucleus of the development pole. These key industries require the presence of certain characteristics, namely:

- A high degree of concentration;
- High-income elasticity of demand for their products;
- Sale to national markets;
- Large spill-over and multiplier effects on other segments of the economy;
- Strong inter-industry linkage with other sectors, both forward linkages and backward linkages; and
- A high ability to innovate and generate significant growth impulses into its environment.

Richardson (1978: 164-178) and Darwent (1974: 539-561) further recommend that the bigger the key industry, the larger will be the field of dominance over other industries. In turn, the concept of spread effects is used to explain regional growth. Spread effects refer to the propulsive qualities of growth pole spread over hinterlands. Spread effects occur when the richer region starts to invest in the poorer region which favours the backwash region including the need of the developed region to access growing markets and the spread of innovation. Backwash effects involve the migration of working population and trade and capital movement from less developed regions towards the pole. Consequently, growth centre develops, incomes and demand increase again, resulting in yet another round of induced and beneficial investment (Hansen, 1975: 566-587).

Glasson (1978: 171-191) identifies growth pole theory as a valuable policy tool for regional planning. Even though a successful growth pole will happen gradually, the spread effects of the growth pole will assist in solving problems of regional disparities. In general, central policy seems not to be concerned with the choice of related industries, but rather concentrates on support in allocating public investment in the selected growth points so as to create them attractive areas for industries. It is assumed that when industries are located in a growth centre they will generate further agglomeration economies.
Richardson (1969: 415-428) states that firms tend to locate in or around growth centres because of agglomeration economies. The greater the number of firms that cluster in a growth centre will result in higher regional economic expansion in the zone of influence. These induce employment in the zone and provide industry benefits in growing markets and demand for input factors (i.e. labour forces, raw materials and demand for natural resources) from the growth centre. Richardson argues that a growth point can be created almost anywhere when policy makers invest in public investment projects (i.e. infrastructure and inducements), but a rational choice of a growth pole will be based on a comparison of possible locations as centres using an estimation of their future potential and for diffusing growth impacts to surrounding areas.

Compared with central place theory, Richardson argues that causes of growth of a pole will be sustained by its surroundings, being similar to central place theory. However, growth pole theory largely concerns the impacts from a growth centre to stimulate activities in its hinterlands. And in a region, central places will be very numerous although arranged in an urban hierarchy, while growth centres will be a single or located to a few in each region.

Further, Hansen (1975: 566-587) criticises growth theory in that it does not provide specific criteria for identifying the location of relevant urban centres, how big they should be, or what kinds of investment should be made. A common theme in growth centre strategies deals with the notion of a balanced distribution of economic opportunities from the growth point outwards into less-developed regions. Hence a main task in this research is to seek out a methodology for identifying the location of new growth centres in terms of trade and investment in border towns, which will aid the definition and refine the links between growth pole theory and border towns.

**Growth pole theory and the border town development**

So far growth pole theory has a number of criticisms as described above. Primarily, growth pole theory is insufficient to define where the best location is for a growth centre; and apart from the growth of leading industries, it does not fully explain the process of urban growth. However, growth pole theory has been a worthy policy instrument for regional planning in Thailand, integrating economic and physical planning policies (i.e. trade and investment policies and border town
development plan). Indeed, the Thai government has implemented a growth pole strategy since 1982 (see Section 1.2), by selecting such areas to allocate national resources to be promoted as growth centres, which focuses on border towns as new growth centres.

It is hoped that successful growth of border towns as new growth centres could generate growth outwards to their hinterlands in both Thai territory and its neighbours in this sub-region. This study, therefore, agrees with the central theme of growth pole theory that the growth will not appear everywhere but it will occur only in particular areas. To choose potential border towns to be supported as growth centres is a central task of border town development. This study proposes that border towns are capable of developing as the new growth centres in this sub-region based on their own locational advantages and support from the government in physical planning, policy and investment.

2.5 Part Four: The concepts of the causes on urban growth

This part discusses the relevance of concepts on the causes of urban growth consisting of the competitive city, innovation and quality of life. These three related concepts are developed from the traditional international economic theory and regional economic planning theories. Reviewing these related concepts should help in gaining an understanding of how to create border towns as competitive towns and make border towns better places for working and living.

2.5.1 Competitive city concept

The concept of the competitive city is drawn from Porter’s work Porter (1996: 33-34; 1998; 2003: 549-578), and is concerned with business competition, location of firms and growth pole theory. This concept can be applied to the study of regional planning and gives an explanation of how to create border towns as nodal centres in the region and sustain the growth of these cities in the longer term.

Porter (1996: 33-34; 1998; 2003: 549-578) introduces a concept of competitive advantage, based on his empirical study in 10 major countries. He reveals that the key determinants of national competitive advantages include:
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1. Local factor conditions: skilled labour or infrastructure.
2. Demand conditions: high-income elasticity of demand.
3. Related and supporting industries
4. Firm strategy, structure and rivalry

Porter asserts that competitive advantage can assist to create and sustain the success of a city through a complex mixture of specialisation and diversification, information technology, institutions, histories, clusters of innovation (e.g. knowledge, an airport, and high demand from customers) and competitiveness. Firms are likely to locate in a large city which offers the advantages of a cluster or innovation systems. It is claimed that these advantages will assist firms in obtaining communication economies, degree of demand and rivals, and also encourage firms to produce creative and sophisticated products to overcome intensely competitive global markets. In turn, such a concentration of firms will sustain successful growth of the city.

Further, Simmie (2004) defines the main drivers of city growth as:

1. Innovation systems;
2. Quality of the workforce;
3. Economic diversity and specialisation;
4. Connectivity;
5. Strategic decision-making capacity; and
6. Quality of life.

Simmie suggests that the combination of all these factors would drive the growth of a city through to high competitiveness. This is because innovation systems and high labour quality, combined with creative ideas, specialised skills, technical and professional skills or high educational attainment will improve the sophisticated products. Connectivity is concerned with better transport linkages or transport nodes; as especially airports will link a firm's products to international markets. Strategic decision-making capacity of firms which is effective, will also support a city's growth. Additionally, the quality of city life is a critical factor for creating a city as an attractive place for investment, working and living. This study judges that the Simmie "main drivers" are very relevant to the border town
development. These main drivers will be investigated in further research fieldwork.

Duffy (1995) and Gomanee (2003) develop Porter’s concept of the competitive city by stating that competitiveness will support cities to sustain a successful economy based on the innovation system, skilled labour and local factor conditions. Clusters of innovative firms will, therefore, cause a city to become the competitive city in a region; and at the same time, quality of life is, therefore, a pre-requisite for maintaining a city’s growth.

**Competitive city concept and border town development**

It could be concluded that a competitive city will increase the capacity of the urban economy and create a city that is a more attractive place in all respects. The concept of competitive city is a very relevant and useful one for border town development because it provides guidance on how to increase and sustain border town growth. The strategy to create a border town as a competitive city is made up of a complex mix of physical, economic and social resources. A successful economic sector is only one element resulting from good local conditions and high educational attainment of human resources. Physical planning will help a city to attract firms to it whilst social requirements, especially quality of life, will sustain the growth of city.

Again, therefore, in order to promote and sustain the growth of border towns as regional business centres for such a large sub-region as the Greater Mekong Sub-region, improvements in infrastructure and business services will need to be a key requirement of government policy and investment. Although these public investments may be very expensive, when border towns turn out to be successful, the pay-off should be worth it in terms of more balanced regional growth; adornment of decentralisation objective and relief of over-urbanisation.

**2.5.2 Innovation concept**

The innovation concept is drawn from traditional regional economic theories (i.e. agglomeration economies, economies of scales, industrial location theory and growth pole theory).
Simmie (1998: 35-51; 2000, 2002: 47-64) points out the causes of urban growth result from the role of innovation and large-scale firms. He refers to "Innovation as the commercially successful exploitation of new technologies, ideas or methods through the introduction of new products or processes, or through the improvement of existing ones. Innovation is a result of an interactive learning process that involves often several actors from inside and outside the companies". The location decisions of high-tech manufacturing, which stimulate the urban growth, include:

1. An ability to generate regional specialisation;
2. High quality local factor conditions or physical advantages (i.e. a university, an airport and quality of life);
3. High consumer demand;
4. Concentrations of highly qualified professional and technical labour; and
5. Supporting industries and industrial rivals.

These factors will generate firms to create sophisticated products and increase competitiveness. Innovation generally clusters in large cities, because a large city is likely to provide a more encouraging environment for the formation of new high-technology firms. In turn, innovation firms clustered in a city will assist in city growth.

Furthermore, some academics (e.g. Alden and Morgan, 1974: 58-66; Lasuen, 1972: 23; Fujita, 1989: 133-173; Hart and others 1999; and Capello, 2000) also advocate that innovation or technological advantage in production and consumption is the single most significant mechanism in generating development in a region, which is similar point made by Simmie (1998: 35-51; 2000, 2002: 47-64). They suggest that diffusion of growth from innovation processes will enable a region to grow faster. Characteristic sources of technological advantage (innovation) is generated by the presence of:

1. High research and development expenditure;
2. Good transport linkages;
3. Economies of scale and skilled labour pools;
4. Input-output linkages, encouraging firms to transfer technology;
5. Variety in production and consumption; and
6. Ease of access to infrastructure and social services.
The innovation concept and border town development

From the above discussion on innovation, it is seen that the innovation concept deals with the context of regional or urban growth, knowledge and innovation. Even though innovation is believed to be an important engine of long-term competitiveness, growth and employment in economic terms, advanced technology firms and large-scale firms are unlikely to relocate to border towns due to the need for substantial public investment and shortages in professional labour. Border towns are only small settlements in population and area terms. In addition, specialisation is likely to be unsuitable for border town growth because that will lead border town economies to rely on advanced technology investment and information which is supplied by foreign firms. Economic diversification based on local advantages is likely to be a better planning approach for border town development (see Chapter Four).

The innovation concept is, however, a useful instrument on basing the development of border towns as international nodal centres which is required the establishment of universities, research and development institutions, international airports and improvements in quality of life (i.e. local transport, and entertainment and leisure facilities). Because these proposed projects involve large amount of investment, in Thailand the central government has the major responsibility in border town development. Further educational and vocational institutions are needed first in border towns so as to provide more skilled and technical labour pools which would serve the needs of local and domestic businesses better than spending money on universities (at least in the short term).

2.5.3 The quality of life concept

In order to achieve sustainable economic growth in terms of increasing firms and liveability within the city, the quality of life must be taken into account. Quality of life is a concept being considered in the fields of economic and social planning policies because it is believed that it is central in sustaining cities as places to work and live. One problem with the concept is that it is notoriously hard to adequately define indicators the quality of life (Department for Environment, Food and Rural Affairs, 2002: 17-21).
As a result, to create a better quality of city life, policy makers need to make a city that provides the basic needs for its residents such as health, access to facilities, work, freedom from crime and involvement in the community. A city also requires a robust economy to create wealth and allow needs of study to be satisfied, and provide a better quality of life for its residents. Quality of life is thus seen as an integral part of sustainable development and which will assist in cities becoming competitive cities. Economic, environmental and social-well being are interdependent in supporting the growth of cities (and border towns).

2.6 Summary

This chapter has provided a review of related theories and concepts in the area of international economic theories, inter-regional and intra-regional planning theories, as well as concepts on the causes of urban growth. All of these have been shown that they provide a rationale for growing border towns and contribute to an in-depth perception of regional growth and a framework for border town development, which could be used to set up criteria to investigate and refine border town research fieldwork.

International economic theories and concepts have been used to argue for the worldwide spread of globalisation and a greater acceptance of and importance for international trade and investment impact on the border town development and growth. The countries of the Greater Mekong Sub-region have taken part in regional economic blocs and formulated the Greater Mekong Sub-regional economic cooperation programme with the purpose of promoting development of border towns and to increase trade and investment activities for their countries and for this large sub-region. Trade and investment are conceived as significant mechanisms for driving national economic growth. Furthermore, participating in this sub-regional economic bloc is likely to member nations benefiting grow larger markets, labour forces and commodities. Such developments and investments in cooperate will directly affect the Thai economy and should increase border towns’ roles. Particularly, as they are conceived by the Thai government as special economic development areas.
For the related regional economic planning theories, economic base theory, which is the inter-regional economic theory, suggests that economic diversification replaces specialisation, and this will assist border towns to become more self-sufficient being based on local skills and advantages. For intra-regional economic planning theories, location theory sets out those factors affecting the location decisions of firms, which can be applied to promote border town development. It was found that it is essential to support physical planning and economic policy, by improving business services and offering investment incentives to firms to locate to border towns, especially if such towns are to become attractive centres for trade and investment. Central place theory and growth pole theory have been used to suggest contention that border towns can develop as new growth centres or as regional centres.

Additionally, related concepts of the causes of urban growth include (1) competitive city, (2) innovation, and (3) quality of life. These concepts provide suggestions for supporting and maintaining border towns’ growth as regional centres for the sub-region. Provision of better transport linkages and transport nodes (connectivity), business services, a university, higher educational institution, and an airport located in border towns with the highest growth potential are key requirements of policy. In this respect, Simmie’s main drivers can be applied to promote border town development to become the competitive cities for the Greater Mekong Sub-region. Although, in terms of the innovation concept, it is hard for border towns to grow as high-tech technology investment centres because border towns are small towns and lack skilled capacity, the implications of the innovation concept may still be a useful planning tool for creating border towns to become attractive investment centres. Finally, the concept of quality of life may be used to generate a better quality of city life so as to support and maintain border towns’ growth in the long term. To create border towns as new business centres with high employment and as attractive places for working and living, this quality of life is likely to become a critical consideration for border town planning.

International economic theories and concepts are useful tools for this research because they are used to shape the research framework by outlining the scope of investigation or inform the questions posed in fieldwork surveys (i.e. observations, interviews and questionnaire surveys) as presented in Chapter Five. These
theories and concepts are also used to provide a basis for understanding the strengths and weaknesses of border town development at the spatial level of border towns themselves (locally), nationally (i.e. Thailand) and supra-nationally (the Greater Mekong Sub-region) which are presented in Chapters Three and Four. The survey evidence, together with these theories and concepts are expected to contribute to the development and formulation of guidelines for selecting border towns as possible new business centres. It is envisaged that border towns can be promoted singularly or in pairs depending upon the degree of co-operation with its neighbours. The developments of border towns in Thailand are seen as a key government objective of its decentralisation policy by attracting businesses and retaining local people in border towns. The Thai government’s decentralisation policy is presented in detail in Chapters Six and Seven.
Part Three: Empirical Research
3.1 Introduction

It is generally accepted that trade and investment activities play an important role in enhancing a nation’s economic growth and welfare. In particular, a number of schemes to tackle regional economic problems have been developed by the Thai government in terms of trade and investment policies. This chapter provides an overview of the economy in the Greater Mekong Sub-region, and also of the recent trade and investment policies as well as National Plans prepared by the Thai and its neighbouring countries’ government including: Laos, Myanmar and Cambodia, with regard to the border town development (see Map 3-1 p. 78). The purposes of these analyses are to generate a better understanding of border town development contexts and also to provide the reasons for the proposition that Thai border towns be developed as centres for trade and investment in the Greater Mekong Sub-region. Further, a review of the two well known examples of border regional economic development, Hong Kong-Shenzhen (China) and San Diego-Tijuana (The USA-Mexico), is presented in order to draw lessons from them and to inform Thai border town policy its potential extension in the Greater Mekong Sub-region.

3.2 Economy in the Greater Mekong Sub-region

The economy of the Greater Mekong Sub-region is discussed under the following sub-headings:

(1) Economy between the Greater Mekong Sub-region and the Newly Industrialised Countries of Asia (the NICs).
(2) Economy between Thailand and the NICs.
(3) Economy between Thailand and countries in the Greater Mekong Sub-region.
The data analysis will show that countries of the sub-region are poor countries based on standard economic indicators, compared to Thailand and the Newly Industrialised Countries of Asia (the NICs).

Table 3-1: Economic indicators in the Greater Mekong Sub-regional countries in 2002

<table>
<thead>
<tr>
<th>Indicators</th>
<th>The Greater Mekong Sub-Region Countries (the GMS)</th>
<th>The Newly Industrialised Countries of Asia (the NICs)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Thailand</td>
<td>Laos</td>
</tr>
<tr>
<td>1. Population (million)</td>
<td>64</td>
<td>5.4</td>
</tr>
<tr>
<td>2. Population growth (%)</td>
<td>1.2</td>
<td>2.6</td>
</tr>
<tr>
<td>3. GDP (US $ billion)</td>
<td>184</td>
<td>1.8</td>
</tr>
<tr>
<td>4. GDP per capita (US $)</td>
<td>3,100</td>
<td>390</td>
</tr>
<tr>
<td>5. GDP growth (%)</td>
<td>6.7</td>
<td>7.5</td>
</tr>
<tr>
<td>6. Investment Growth (%)</td>
<td>42.8</td>
<td>30.3</td>
</tr>
<tr>
<td>7. Inflation Rate (%)</td>
<td>5.9</td>
<td>12.8</td>
</tr>
<tr>
<td>8. Export Growth (%)</td>
<td>-0.1</td>
<td>-9.5</td>
</tr>
<tr>
<td>9. Import Growth (%)</td>
<td>3.3</td>
<td>15.1</td>
</tr>
</tbody>
</table>

Note: - The growth data present the percentage changes during 2001-2002.  
- GDP refers to Gross Domestic Product

Sources:  
Bank of Thailand, 2002  
National Economic and Social Development Board of Thailand, 2002  
United Nations, 2002

Table 3-1 shows a series of economic indicators for the countries in the Greater Mekong Sub-region in comparison with the New Industrialised Countries in Asia (NICs), which include Singapore, Hong Kong, Taiwan and South Korea. These countries of the NICs are classified as the manufacturing countries in Asia because of their relatively high economic growth rate.
Chapter 3: Trade and investment policies of Thai and adjacent governments with regard to border towns

(1) Economy between the Greater Mekong Sub-region (the GMS) and the Newly Industrialised Countries of Asia (the NICs)

The data in Table 3-1 shows that there is a wide gap between countries in the Greater Mekong Sub-region (the GMS) and the Newly Industrialised Countries of Asia (the NICs), in terms of this respective GDP and GDP per capita indicators. Low GDP values in countries in the GMS, (excluding Thailand) are Laos (1.8), Cambodia (3.1) and Myanmar (10), compared to Thailand (184) and South Korea (406) (billion US dollar). For GDP per capita, these are: Myanmar ($ 250), Cambodia ($ 295) and Laos ($ 390), compared to Thailand ($ 3,100) and Singapore ($ 23,094). These GDP and GDP per capita clearly show that the Greater Mekong Sub-region is currently a relatively poor region with significant with in differences. Increasing the sub-region’s economic growth and ensuring that those with less GDP and GDP per capita benefits should be in and of priority of these nations.

For investment growth and export growth, the data in Table 3-1 shows that percentages of both investment growth and export growth per annum in the countries of the GMS were higher than the NICs. These figures indicate that the Greater Mekong Sub-region is a new economic development area (i.e. growing rapidly from a low base) with clear investment achievement and potential and could become an attractive area for inward investment.

In respect of inflation rates and import growth, which impede national growth, the data in Table 3-1 shows that high inflation and import growth is an important feature of the GMS, especially in Laos, Myanmar and Cambodia. These figures additionally support the view that the GMS is a poor region with particular structural weaknesses (e.g. poor transport links, infrastructure and business services) which are the main barriers for business in these countries.

(2) Economy between Thailand and the NICs

The data in Table 3-1 also shows that only the rate of investment growth and inflation rate of Thailand were higher than the NICs with investment growth in Thailand rising by 42.8% compared to Singapore’s (32.4%). This figure highlights an improvement in the economic situation in Thailand with a high volume of investment, being similar to countries in the GMS, though this is from a lower
base. Other Thai economic indicators, namely GDP, GDP per capita and export growth rates, were lower than NICs and whilst Thailand's inflation rate was higher. These figures indicate so far that Thailand's real economic growth is substantially below that of the NICs.

(3) Economy between Thailand and countries in the Greater Mekong Sub-region

The data in Table 3-1 shows that among countries in the GMS, the Thai economy is the healthiest one with the highest GDP (184 billion US dollar), GDP per capita ($3,100) and investment growth (42.8%) and regarding the lowest rate of import growth (3.3%) and inflation (5.9%). However, export growth rates is highest in Cambodia (13.6%) and GDP growth is highest in Laos (7.5%).

In the absence of trend data and the analysis relying on data for 2001-2002, the countries in this sub-region are poor countries though they are becoming newly growing economic development areas, as indicated by their higher rates of investment and export growth. It is expected that as the sub-regional economy grows, each nation is expected to benefit. As Thai economy is strongest in the sub-region, the development of Thai border towns as centres for trade and investment are seen as an important component of the Thai government's objective to compete and co-operate with its neighbours.

3.3 Review of border regional development

In order to identify strategies for and an understanding of the border town development as centres for trade and investment, a review of border regional development in Hong Kong-Shenzhen (China) and San Diego-Tijuana (the USA-Mexico) have been studied.

3.3.1 Hong Kong-Shenzhen (China)

Shen and others (2001: 125-151) discuss the Shenzhen Special Economic Zone (SEZ). Shenzhen is located in Guangdong province in the south China. Strong economic linkages between Hong Kong and Shenzhen have developed since 1980, resulting from a more liberalised economic policy being pursued by China, especially in attracting foreign firms which began in 1978 and the development of
Chapter 3: Trade and investment policies of Thai and adjacent governments with regard to border towns

better transport links (e.g. roads and railways) between Hong Kong and Guangzhou, the latter is the capital of Guangdong province. These academics identified that good quality and infrastructure is a main generator of economic growth in this border economic region, and believe that improvements in local capital, supply and quality of labour, and the transfer of advanced technology (through foreign investment) will give greater support to economic growth in this Hong Kong-Shenzhen region.

In the light of Hong Kong’s industrial development, Yeh (1992: 87-114), Yeh and others (1989: 1-9) and Sit (1989: 103-115) reveal that since 1990 the Hong Kong government’s industrial policy has been basically non-interventionist and is aptly described as being “Minimum intervention, Maximum industrial policy support”. The government’s role in industrial development is, therefore, mainly through provision of infrastructure development and the supportive investment policy. They identify that the significant factors which has enabled Hong Kong to become one of the Newly Industrialised Countries of Asia (the NICs), are:

1. A legal and judicial system based on English common law;
2. Supportive investment and trade policies (i.e. taxation policy);
3. Availability of financial or banking services;
4. Better transportation (i.e. international airport, container terminal and railway system) and advanced telecommunication systems;
5. High quality of human resources (i.e. a well-educated and highly adaptable working population);
6. Availability of university or research capacity; and
7. Reliable market information.

Hong Kong, at present, has attempted to develop as the region’s high technology investment centre, and stemming from growing economic links between Hong Kong and Shenzhen, Hong Kong’s investors have shifted and relocated to Shenzhen to take advantage of lower wages and cheaper land in China. Hong Kong’s traditional industries such as garments, textiles, electronics, toy and shoe-making are mainly labour-intensive and low value-added and these assembly firms have relocated to Shenzhen. Further, better transport links and good quality telecommunications are also important factors affecting the decisions of firms locating to this border region; but shortage of electricity is a major impediment
Chapter 3: Trade and investment policies of Thai and adjacent governments with regard to border towns

for business here. Yeh (1992) and others also suggest that environmental protection is a key requirement in industrial policy alongside economic development, and growth of this border region is reliant on consistent support from central government.

Zheng (1989: 89-102) suggests that if the Chinese government wishes to support and sustain border regional economic development, the industrial policy for Shenzhen should include:

1. A more liberalised economic policy from the Chinese central government
2. The formulation of economic policies in accordance with common international practice and laws;
3. Improvements in transport links, economic links and business services; and
4. Higher environmental protection, particularly those relating to natural resources.

Additionally, Wu (1989: 71-89) reveals that based on his research, investment incentives (e.g. tax exemptions), growing domestic markets, and lower wages are significant factors in attracting and inducing foreign investment to relocate to the Hong Kong-Shenzhen border region.

3.3.2 San Diego-Tijuana (the USA-Mexico)

In the case of San Diego-Tijuana (the USA-Mexico), Clifford and others (1994) have shown that the Mexican government has encouraged American firms to locate through the provision of cheap land, low wages, and generous tax exemptions (i.e. importing raw materials free of duty as long as the finished products are re-exported back to the United States). Increasing economic linkages between the United States and Mexico has resulted with Americans crossing the border to Mexico for business and buying of lower priced goods and entertainment. Whereas Mexicans cross the border to the United States to work and buy higher value goods and services (e.g. meals in restaurants; tuition for school; medical and dental services). However, there are problems related to illegal labour activities and smuggling of goods across the border from Tijuana to San Diego. Mexicans legally crossing the border to shop account for an estimated 2.8 billion US dollars spent annually in the United States; this has benefited San Diego's economy in a number
of ways especially in encouraging local businesses (e.g. trade, investment and tourism) resulting from investment ease accessing cheap labours and raw materials as well as government incentives in Mexican border.

From the Mexican border point of view, Stepner and Fiske (2000: 80-94), Clifford and others (1994), and Arreola and Curtis (1993) argue that maquiladora manufacturing and border tourist attractions are the main economic activities in this border region. The maquiladora has been successful in increasing earnings from foreign revenues for Mexico and creating around 1.5 million jobs in Tijuana, achieving about 7 per cent economic growth annually.

Maquiladora manufacturing refers to a Mexican foreign firm which assembles products for exports to the United States or other foreign countries. At present, there are approximately 3,500 maquiladora plants employing 1.5 millions jobs in Mexico. Maquiladora was designed in 1965 under the Mexican Border Industrial Programme with the purposes of generating employment, increasing the number and value of foreign investment and stimulating local economies. Under the maquiladora system, firms, equipment and processing inputs pass duty free into Mexico. Maquiladora products are exported back into the United States subject only to the duties on the value-added created by Mexican manufacture. Typically, maquiladora works best for labour-intensive manufacturing such as the production of toys, electronics, and medical equipment. For American firms and investors, the maquiladora system generates higher profits because of lower wages, the import tariffs under GATT system given to developing countries, and duty free treatment of imports under NAFTA system.

Based on these two well-known examples of border regional economic development, it would seem that a range of investment measures offered by central government, namely special taxation and investment incentives, are part of a common strategy to substantially increase the volume and value of investment in border zones. Better transport links and quality of business services also helps to make border regions attractive investment areas and exploit the good supply of “cheaper” labour. Special import tariffs given to developing
countries, namely the Generalised System of Preferences (GSP) 11, is also an important factor to induce foreign firms to relocate to developing countries, including the countries of the Greater Mekong Sub-region. These other factors will be considered in the field-based investigations.

3.4 Trade and investment policies in countries of the Greater Mekong-Sub region

The discussion of trade and investment policies, and National Plans in the Greater Mekong Sub-regional countries, will provide some insights on the circumstances affecting investment and possible strategies that might be used to increase the number and value of foreign investment into this region. Further, evidence shows the Thai economy is the healthiest in the Greater Mekong Sub-region and that Thai trade and investment policies intend to support Thai border towns more vigorously. In time, it is envisaged that Thai border towns should become regional business centres for this large sub-region.

The data in Table 3-2 shows that countries in the Greater Mekong Sub-region have implemented similar strategies of trade and investment policies in terms of agricultural products, lower wages and natural resources so as to attract foreign firms to locate in their countries. In turn, increasing job opportunities and stimulation of national economic growth are expected as a result of multiplier and accelerator effects.

11 The Generalised System of Preferences (GSP) has been granted to 178 developing countries including Thailand by 26 developed countries consisting of the European Union, the United States, Japan, Canada, Scandinavia and Austria. This economic tool aims to assist developing countries in increasing their export earnings, in promoting their industrialisation, and in accelerating their rates of economic growth. Imports in beneficiary countries therefore are eligible for duty-free entry developed countries' markets.
Table 3.2: A view of trade and investment policies in countries of the Greater Mekong Sub-region

<table>
<thead>
<tr>
<th>Plan and policy</th>
<th>Thailand</th>
<th>Laos</th>
<th>Myanmar</th>
<th>Cambodia</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Trade policy</strong></td>
<td></td>
<td></td>
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<tr>
<td>1. Objectives:</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- To expand exports</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>- To increase negotiation power in global markets</td>
<td>/</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>- To avoid frictions with trading partners</td>
<td>/</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>2. Implementation:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- The number of regional trade blocs (i.e. WTO, AFTA, APEC)</td>
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<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>- Emphasis on agricultural and industrial sectors</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>- Encouraging private sector participation</td>
<td>/</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>- Encouraging investment decentralisation</td>
<td>/</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td><strong>Investment policy</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1. Objectives:</td>
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<tr>
<td>- To increase the number of employments</td>
<td>/</td>
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<tr>
<td>- To promote exports</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>- To close widening gap of regional disparities</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>x</td>
</tr>
<tr>
<td>- To exploit natural resources</td>
<td>x</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>2. Implementation:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Promoting exports and industrial sectors</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>- Establishing industrial estates</td>
<td>/</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>- Designating Special Economic Zones</td>
<td>/</td>
<td>/</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>- Offer of tax exemptions (up to years)</td>
<td>B</td>
<td>4</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>- Designating priority investment projects:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Agricultural sectors</td>
<td>/</td>
<td>/</td>
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<tr>
<td>2. Advanced technology</td>
<td>/</td>
<td>/</td>
<td>x</td>
<td>/</td>
</tr>
<tr>
<td>3. Human resources development</td>
<td>/</td>
<td>/</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>4. Public utility and infrastructure</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>5. Energy</td>
<td>x</td>
<td>/</td>
<td>x</td>
<td>/</td>
</tr>
<tr>
<td>6. Environmental protections</td>
<td>/</td>
<td>/</td>
<td>x</td>
<td>/</td>
</tr>
<tr>
<td>7. Tourism</td>
<td>x</td>
<td>/</td>
<td>x</td>
<td>/</td>
</tr>
<tr>
<td>- Exploiting natural resources</td>
<td>x</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td><strong>National Plan</strong></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Goals:</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>1. To enhance economic development in border towns and other less developed areas</td>
<td>/</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>2. To achieve sustainable economic growth</td>
<td>/</td>
<td>/</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>3. To develop human resources</td>
<td>/</td>
<td>/</td>
<td>x</td>
<td>/</td>
</tr>
<tr>
<td>4. To encourage decentralisation to less developed areas</td>
<td>/</td>
<td>/</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>5. To encourage the role of the private sector</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>6. To safeguard social stability and security</td>
<td>x</td>
<td>x</td>
<td>/</td>
<td>/</td>
</tr>
</tbody>
</table>

Note: The key: / is presence and X is absence

Sources: Author's own surveys (interview), conducted 1999-2001.  
Bank of Thailand (2001) Business Opportunities in Laos  
Board of Investment of Thailand (2001) Thai Investment Promotion Policy  
Board of Investment of Thailand (2002) Foreign Investment Law  
Ministry of Commerce (2001) Thai Trend of Trade and Investment in Cambodia  
Ministry of Commerce (2001) Thai Trend of Trade and Investment in Laos  
Ministry of Commerce (2001) Thai Trend of Trade and Investment in Myanmar
Trade policy
In terms of trade policy, each country has implemented similar trade policies by joining regional trade blocs, expanding exports and promoting agricultural and industrial sectors. However, based on the data in Table 3-2, countries in this sub-region (except Thailand) are unwilling to promote a bigger role for the private sector in their economies on the basis of low capital. Attracting inward foreign investment is a key policy objective in stimulating the local economy of countries in the Greater Mekong Sub-region.

Investment policy
All countries in this sub-region have striven to increase the volume of foreign investment. The investment policy of countries in this sub-region, except Thailand, encourages foreign firms to invest in priority investment projects involving; the exploitation of natural resources; energy and the construction of basic infrastructure (e.g. roads and bridges). Their first aim is for foreign investment to improve their nation’s basic infrastructure and then to transfer advanced technology for national growth. In contrast, Thai investment policy expects inward investment by foreign firms to generate employment in Thailand and at border towns.

It is seen that countries in this sub-region, except Thailand, are new economic development areas, which seek to promote investment policies shown in Table 3-2, but their developments do not always respect the natural environment. Although environmental protection is a priority investment project, the exploitation of natural resources is also promoted. Trading natural resources is a source of government revenues for these countries of the Greater Mekong Sub-region; economic development in this sub-region places an extra demand on natural resources. For instance, the construction of hydro-power electricity in Laos is aimed at providing low-cost electricity to attract an increasing number of foreign firms. Such projects, however, have adversely affected forests and damaged fisheries on the Mekong River, in addition to degrading the environment in adjacent countries in this sub-region (The Economist, 2004: 42-43; Cheong, 1999: 215-230). There is a need for better environmental protection policies to work alongside economic development and growth, and integrating environmental protection as part of economic collaborative planning between countries in this sub-region.
Chapter 3: Trade and Investment policies of Thai and adjacent governments with regard to border towns

National Plan

Regarding National Plans, only the Thai National Plan has particular devices to promote economic activities of trade and investment for export and to support its border towns' growth. Neighbouring governments of Laos, Myanmar and Cambodia state that, based on the Greater Mekong Sub-regional economic cooperation programme, their border towns too have the potential to become centres for trade and investment in this sub-region, not only Thai border towns. But so far border town development in these countries has not been planned to the same degree as in Thailand. The Laotian National Plan has attempted to promote and liberalise trade and investment; meanwhile Myanmese and Cambodian National Plans have put a stress on protecting social stability and security. Although the Thai National Plan and economic policies have striven to promote border towns' growth, success of border towns continues to rely on improving security in neighbouring countries, especially in Myanmar and Cambodia. The next section will discuss in detail these trade and investment policies, as well as National Plans in Thailand and its neighbours in the sub-region.

3.5 Thailand

Thailand is located at the heart of the Southeast Asia mainland and is situated in a gateway to Indo-China (see Map 3-1). It is the only country in Southeast Asia that was not colonised by the western powers. Countries for example that were colonised by the western powers are: Cambodia, Laos and Vietnam were colonised by France; Myanmar and Malaysia were colonised by United Kingdom. Thailand shares borders with Laos to the northeast for 1,835 kilometres; Myanmar to the west for about 1,800 kilometres; Cambodia to the east for about 803 kilometres and Malaysia to the south for 510 kilometres (Bank of Thailand, 2002: 1-3). It had a population of 64 million in 2002 and has a land area of 513,115 square kilometres. Bangkok is its capital with a population of 10.5 million in 2002 (Bangkok Metropolitan Administration, 2002).

The country is divided into 76 provinces; an appointed governor administers each province under the Ministry of the Interior. Provincial funding is available from the central government. The provinces are further sub-divided into districts (744

districts) headed by district officials appointed by the Ministry of the Interior, through tambons (groups of villages) down to villages (Ministry of Interior, 2002). In addition, the government officials, which are the representatives from the central government from individual ministries, are located in each province. Hence the development of cities in Thailand, including border towns, is primarily dependent on the central government.

For local administration, local government is organised on 2 levels: urban and rural areas. Local governors are elected by the local population every 4 years. Urban-based forms of local government include:

1. The **Bangkok Metropolitan Administration (BMA)**, an executive form of local government specific to Bangkok.
2. The **municipality**, this governs in urban areas in the provinces.
3. The **City of Pattaya**, a local government form of a city-manager specific to Pattaya.

Rural-based forms of local government in rank order include:

1. The **Provincial Administrative Organisation (PAO)**, this constitutes local government at a provincial level.
2. The **Tambon Administrative Organisation (TAO)**, this administers at sub-district level of the tambon.
3. The **Sanitary Committee (Sukkhaphiban)**, this governs a community district in rural areas.

The implication for border town development of these different municipal structures is that Nong Khai, Mukdahan, Aranyaprathet and Mae Sai are classified as Tambons (e.g. groups of villages). Whist border towns located in forest areas, such as Chong Mek and Huay Khon are administrated by Sanitary Committees (Sukkhaphiban) which is the rural-based form of local government and, as such, these border towns are classified as villages, which is lowest political unit in Thailand. All development at border towns heavily relies on the support, funds and regulations administrated by the Thai government.
Chapter 3: Trade and investment policies of Thai and adjacent governments with regard to border towns

Map 3-1: Countries in the Greater Mekong Sub-region and case study border towns

Map 3-1 shows the location of Thailand which is situated at the heart of the Greater Mekong Sub-region, which has the potential to redistribute growth from Thai border towns and through to the other countries in the sub-region. But the success of border towns in becoming the centres for trade and investment will depend upon having better accessibility and transport links in this sub-region. Incomplete transport links is currently a major barrier to sub-regional development particularly as the sub-region is a newly established economic development area.

Labour force

The Thai labour force comprises of 33 million people (out of a total of 64 million) with most of the work force being under 30 years of age. Each year, about 800,000 people are added to the labour force with a literacy rate of about 90%. A
large labour force with good literacy skills is one of the factors attracting investment into Thailand compared with lower literacy rates in neighbouring countries: Laos (78%) Cambodia (70%) and Myanmar (65%) (Bank of Thailand, 2000). Higher educational attainment has been a consistent goal in all of Thailand’s National Plans. At present, the Ninth National Economic and Social Development Plan (2002-2006) has designated the development of the nation’s human resources as its highest priority. Table 3-3 shows the number of population by level of educational attainment.

Table 3-3: Number of population aged 13 years and over by level of educational attainment, 2001-2002

<table>
<thead>
<tr>
<th>Level of educational attainment</th>
<th>2001 ('000's)</th>
<th>2002 ('000's)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>1,259 (3%)</td>
<td>1,129 (3%)</td>
</tr>
<tr>
<td>Elementary</td>
<td>21,097 (60%)</td>
<td>21,449 (59%)</td>
</tr>
<tr>
<td>Secondary</td>
<td>5,445 (15%)</td>
<td>6,028 (16%)</td>
</tr>
<tr>
<td>Vocational</td>
<td>1,754 (5%)</td>
<td>1,879 (5%)</td>
</tr>
<tr>
<td>University</td>
<td>6,013 (17%)</td>
<td>6,274 (17%)</td>
</tr>
<tr>
<td>Total</td>
<td>35,568</td>
<td>36,759</td>
</tr>
</tbody>
</table>

Source: National Statistical Office, Thailand, 2002

Data in Table 3-3 shows that the majority of Thais achieves an elementary level which stems from Thai compulsory education policy (i.e. attending school during 7-13 years). Without support from government, higher education for Thais is largely dependent on one's family background. However, currently Thai educational policy has attempted to extend education to a further 3 years (attending in school until 15 years) in order to improve social welfare and to encourage and support higher education.

As the largest number of Thais receives only elementary education, Thai labour force is largely low-skilled, which also includes the population in border towns. For higher educational attainment, Thais graduating from vocational and university courses are classified as skilled labour, which are mainly concentrated
in the Bangkok Metropolitan Region and other bigger cities. These factors suggest that in order to develop border towns as centres for trade and investment, establishing vocational institutions may need to be promoted in border towns as part of improving the quality of labour force. Not only will this increase the volume of semi-skilled and skilled labours, it will help to retain local population in terms of getting them to study at an advanced level as well as encouraging them to work in their hometowns (i.e. border towns).

### 3.5.1 Trade policy

Thai trade policy is aimed at expanding exports and new markets, promoting economic co-operation in regional trade blocs and avoiding friction with trading partners. In respect of their implementation, the Thai government has actively joined regional economic blocs such as the WTO, AFTA, APEC, and the Greater Mekong Sub-region (GMS) economic programme. However, membership of trade blocs, not only generates benefits for each nation, it affects government tax revenues under rules of trade blocs. For instance, as a result of being a member of AFTA, the government’s revenue from taxes on alcoholic drinks has been substantially cut following free trade among ASEAN member countries (Thairath, 2003: 5-7; Ministry of Commerce, 2002).

The objectives of Thai trade policy (National Economic and Social Development Board of Thailand, 2004) are to:

1. enhance Thai exports;
2. increase the bargaining or negotiation power of Thai firms in global markets;
3. diversify Thai exports and create new export markets; and
4. promote the domestic growth of agricultural and industrial sectors for exports.

To expand trade in global markets is a main objective of Thai trade policy which is similar to all countries of this sub-region.
3.5.2 Investment policy

Export growth has been a major driver of the Thai economy and has contributed to the diversification of the nation’s industrial structure. Thailand is now a major exporter of computers and allied parts, textiles, gems and jewellery, electrical and automotive products, agricultural products and fisheries whereas the main imports are mainly in fuels and materials for assemble in Thailand (see Tables 3-4 and 3-5) (Board of Investment, 2002; The Customs Department, 2003).

Table 3-4: Top 20 Thai major exports, 1999-2002

<table>
<thead>
<tr>
<th>Commodity</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Computers and parts</td>
<td>8,122</td>
<td>8,734</td>
<td>7,948</td>
<td>7,464</td>
</tr>
<tr>
<td>2. Automotive products</td>
<td>1,902</td>
<td>2,419</td>
<td>2,655</td>
<td>2,920</td>
</tr>
<tr>
<td>3. Electric products</td>
<td>2,945</td>
<td>4,484</td>
<td>3,512</td>
<td>3,453</td>
</tr>
<tr>
<td>4. Textiles</td>
<td>2,916</td>
<td>3,133</td>
<td>2,914</td>
<td>2,724</td>
</tr>
<tr>
<td>5. Natural rubber</td>
<td>1,160</td>
<td>1,525</td>
<td>1,326</td>
<td>1,740</td>
</tr>
<tr>
<td>6. Gem and jewellery</td>
<td>1,766</td>
<td>1,742</td>
<td>1,837</td>
<td>2,170</td>
</tr>
<tr>
<td>7. Seafood products</td>
<td>2,010</td>
<td>2,067</td>
<td>2,015</td>
<td>2,016</td>
</tr>
<tr>
<td>8. Plastics</td>
<td>1,215</td>
<td>1,866</td>
<td>1,615</td>
<td>1,798</td>
</tr>
<tr>
<td>9. Electrical machinery and equipment</td>
<td>1,347</td>
<td>1,965</td>
<td>2,102</td>
<td></td>
</tr>
<tr>
<td>10. Rice</td>
<td>1,949</td>
<td>1,641</td>
<td>1,583</td>
<td>1,632</td>
</tr>
<tr>
<td>11. Iron and steel</td>
<td>954</td>
<td>1,399</td>
<td>1,091</td>
<td>1,282</td>
</tr>
<tr>
<td>12. Chemicals</td>
<td>908</td>
<td>1,248</td>
<td>1,015</td>
<td>1,195</td>
</tr>
<tr>
<td>13. Rubber products</td>
<td>875</td>
<td>1,064</td>
<td>1,095</td>
<td>1,268</td>
</tr>
<tr>
<td>14. Insulated wire and cable IC</td>
<td>764</td>
<td>1,025</td>
<td>867</td>
<td>1,454</td>
</tr>
<tr>
<td>15. Animal and vegetable fats and oils</td>
<td>657</td>
<td>1,295</td>
<td>1,145</td>
<td>1,047</td>
</tr>
<tr>
<td>16. Refrigerators and parts</td>
<td>896</td>
<td>1,080</td>
<td>1,161</td>
<td>1,114</td>
</tr>
<tr>
<td>17. Polymers</td>
<td>758</td>
<td>894</td>
<td>860</td>
<td>1,019</td>
</tr>
<tr>
<td>18. Electric motors and generators</td>
<td>614</td>
<td>801</td>
<td>861</td>
<td>939</td>
</tr>
<tr>
<td>19. Furniture and parts</td>
<td>795</td>
<td>923</td>
<td>868</td>
<td>962</td>
</tr>
<tr>
<td>20. Video recording and parts</td>
<td>729</td>
<td>855</td>
<td>799</td>
<td>1,071</td>
</tr>
<tr>
<td>Total top 20 exports</td>
<td>33,281</td>
<td>40,166</td>
<td>36,860</td>
<td>39,370</td>
</tr>
<tr>
<td>Total other exports</td>
<td>25,183</td>
<td>29,463</td>
<td>28,303</td>
<td>29,532</td>
</tr>
<tr>
<td>Total exports</td>
<td>58,464</td>
<td>69,629</td>
<td>65,163</td>
<td>68,902</td>
</tr>
</tbody>
</table>

Source: The Customs Department, 2003

Data in Table 3-4 suggests that businesses in Thailand largely employ semi-skilled workers and in agriculture, which is similar to other developing countries in the region.
### Table 3-5: Top 20 Thai major imports, 1999-2002

<table>
<thead>
<tr>
<th>Commodity</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Petroleum oils, crude</td>
<td>3,856</td>
<td>6,1056</td>
<td>5,756</td>
<td>5,749</td>
</tr>
<tr>
<td>2. Electrical machinery</td>
<td>5,406</td>
<td>6,860</td>
<td>7,281</td>
<td>7,550</td>
</tr>
<tr>
<td>3. Machinery and mechanical appliances</td>
<td>3,966</td>
<td>5,546</td>
<td>6,051</td>
<td>6,395</td>
</tr>
<tr>
<td>4. Chemicals</td>
<td>3,940</td>
<td>5,175</td>
<td>4,816</td>
<td>5,236</td>
</tr>
<tr>
<td>5. Electrical parts</td>
<td>4,413</td>
<td>6,442</td>
<td>5,419</td>
<td>5,450</td>
</tr>
<tr>
<td>6. Parts and accessories of computers</td>
<td>2,417</td>
<td>3,668</td>
<td>3,760</td>
<td>3,662</td>
</tr>
<tr>
<td>7. Iron and steel</td>
<td>2,465</td>
<td>2,615</td>
<td>2,368</td>
<td>3,017</td>
</tr>
<tr>
<td>8. Articles of iron or steel</td>
<td>2,466</td>
<td>2,001</td>
<td>1,906</td>
<td>1,925</td>
</tr>
<tr>
<td>9. Iron and steel ferrous waste and scrap</td>
<td>1,216</td>
<td>1,598</td>
<td>1,617</td>
<td>1,627</td>
</tr>
<tr>
<td>10. Parts, bodies and accessories of the motor vehicles</td>
<td>717</td>
<td>1,454</td>
<td>1,585</td>
<td>1,792</td>
</tr>
<tr>
<td>11. Pharmaceutical products</td>
<td>1,248</td>
<td>1,547</td>
<td>1,462</td>
<td>1,518</td>
</tr>
<tr>
<td>12. Precious stone and gold</td>
<td>1,218</td>
<td>1,715</td>
<td>1,913</td>
<td>2,081</td>
</tr>
<tr>
<td>13. Electricity</td>
<td>808</td>
<td>903</td>
<td>821</td>
<td>1,018</td>
</tr>
<tr>
<td>14. Plastics abs articles thereof</td>
<td>759</td>
<td>947</td>
<td>862</td>
<td>969</td>
</tr>
<tr>
<td>15. Clothes</td>
<td>826</td>
<td>998</td>
<td>920</td>
<td>942</td>
</tr>
<tr>
<td>16. Television parts</td>
<td>938</td>
<td>1,197</td>
<td>764</td>
<td>834</td>
</tr>
<tr>
<td>17. Aircraft, spacecraft and parts</td>
<td>1,822</td>
<td>773</td>
<td>1,364</td>
<td>640</td>
</tr>
<tr>
<td>18. Textiles</td>
<td>505</td>
<td>603</td>
<td>606</td>
<td>585</td>
</tr>
<tr>
<td>19. Passenger car</td>
<td>430</td>
<td>288</td>
<td>191</td>
<td>183</td>
</tr>
<tr>
<td>20. Fish frozen</td>
<td>378</td>
<td>273</td>
<td>427</td>
<td>435</td>
</tr>
</tbody>
</table>

| Total top 20 imports               | 39,799 | 50,709 | 49,889 | 51,609 |
| Total other imports                | 10,118 | 11,472 | 11,906 | 12,706 |
| Total imports                      | 49,917 | 62,181 | 61,795 | 64,315 |

Source: The Customs Department, 2003

Meanwhile, Table 3-5 shows that in 2002 Thai’s major imports, in order of rank, are electrical machinery, machinery and mechanical appliances, petroleum oils, electrical parts, chemicals, iron and steel, and precious stones and gold. Imports mostly were raw materials used in assembly processing in Thailand, which are based on low wages and where low import tariffs (under the GATT rule) benefit Thailand as a nation for such business. Semi-finished or finished products are re-exported globally. From the figures on imports and exports, it is seen that so far Thailand is the same as other developing countries in that foreign firms locate to assemble products by using low wages and low import tariffs. At the same time, Thailand’s own products are mainly mass produced agricultural goods or food processing products that do not generate high national revenues. Hence, to change the status of Thailand to a developed country, and to transfer high
technology through foreign investments, is difficult in that Thailand is traditionally seen as a place for assembling products by foreign investment.

With regard to the GATT system, Thailand is classified as a developing country so that foreign firms locating in Thailand pay lower tariffs on their exports to global markets. However, trade blocs of Europe and the United States markets classify Thailand as an advanced developing country, and as such these two markets have cut tariff privileges (under the aegis of Generalised Systems of Preference (GSP)), while continuing to offer special tariffs to Laos, Myanmar and Cambodia (Bank of Thailand, 2002). As a result, to avoid the higher prices of Thai exports, firms in Thailand would benefit if they relocate to neighbouring countries rather than to its border towns. This is a matter which will be considered as part of field-based investigation.

3.5.2.1 Investment strategy and planning

According to international investment theory (see Chapter Two), investment is conceived as an important mechanism to drive national economic growth and to generate higher per capita income. In order to narrow regional incomes and to increase investment in less developed areas, since 1990 the Thai government has offered tax exemptions or investment incentives to promote investment, especially to firms locating to border towns and remote areas. In addition, government has heavily invested and improved infrastructure and business services which widely support business investment in future growth (Board of Investment, 2001). Such supportive policies are key government instruments for encouraging the economy and tackling regional disparities.

As in most countries, foreign investors may invest in Thailand by establishing joint ventures or as wholly foreign-owned enterprises. Joint ventures have been the most popular form of investment to date, which reflect similar experiences in other countries in this sub-region: Laos, Myanmar and Cambodia (Board of Investment, 2001: 5-10).

Three government agencies which are involved and have responsibility for investment affairs are the Ministry of Industry, Industrial Estate Authority and the
Board of Investment (BOI). Their primary aim is to promote and increase the number of firms investing in Thailand.

(1) Ministry of Industry This has responsibility for registering, supporting and providing the (industrial) environment to assist firms in operating business successfully through implementation of industrial regulations (e.g. Factory Acts) which govern factory construction, operations and pollution-control requirements.

(2) Industrial Estate Authority The responsibilities of the Industrial Estate Authority are to formulate and facilitate the planning and construction of industrial estates. The Industry Estate Authority has striven to attract firms to locate on industrial estates as a means of controlling environmental pollution and tackling urban land use problems. This is done through collaborative industrial plans between the Industrial Estate Authority and the Board of Investment. The Board of Investment provides a range of investment incentives for firms locating in industrial estates.

(3) The Board of Investment The main aims of the Board of Investment are to administer investment promotion and laws and to support the government’s policy to draw firms from the Bangkok Metropolitan Region to the remote areas through the provision of investment incentives or tax exemptions for qualifying firms willing to locate. Targeted areas under the industrial promotion policy of the Board of Investment are industrial estates, in Special Economic Zones and in less-developed areas, which include border towns. Further, firms that are in receipt of targeted investment projects are also offered investment incentives. The level of incentives gained from the Board of Investment is based on them locating to these remote locations far from Bangkok or to an industrial estate. Firms which are located furthest from Bangkok and on industrial estates are given the highest incentives. To date, however, no industrial estates have been established in border towns.

Currently, firms which are located on industrial estates and in the Special Economic Zones (e.g. Eastern Sea Board, Chon Buri province) within 200 kilometres of Bangkok, not only obtain the highest investment incentives from the government but agglomeration advantages from being closer to Bangkok. As a result of investment promotion, economic growth in Thailand is now clustered in
the eastern region and along the main road route from Bangkok to the East (see Map 3-2, p. 87). Specially offered investment incentives for firms located in border towns need to be promoted in future investment policy and in a national plan of border town development policy if border towns are to become successful centres for trade and investment. Suggestions for such special investment incentives which might stem from this study’s findings will be presented in Chapter Seven.

To summarise, the work of the Ministry of Industry is to register and set up the Factory Act; the Industrial Estate Authority deals with the establishment of industrial estates; while the responsibility of the Board of Investment is to provide investment incentives to firms (domestic and foreign). Because of this complexity of government authorities, as well as registering at the Ministry of Industry, if firms wish to obtain the investment incentives, they need to register at the Board of Investment and agree to produce in accordance with targeted investment projects or locate far from Bangkok. And if firms wish to get extra incentives, they have additionally to register at the Industrial Estate Authority in order to locate on an industrial estate.

3.5.2.2 Industrial estates

Industrial estates have been formed since the 1980s aiming to resolve industrial location decisions and to control industrial pollution. Industrial estate works are classified into three categories with the cooperation of the Industrial Estate Authority and Board of Investment (Industrial Estate Authority, 2002). These are:

1. Industrial estates owned and managed by the Industrial Estate Authority. These are mostly located in general industrial zones.
2. Industrial estates as joint ventures between the Industrial Estate Authority and private developers. These include estates located in export industrial zones.
3. Industrial estates developed, wholly-managed and owned by private developers. Typically these tend to be small and mostly in cities (i.e. Bangkok).
Table 3-6: List of industrial estates in Thailand.

<table>
<thead>
<tr>
<th>Industrial Estates</th>
<th>Year of Completion</th>
<th>Location (city/region)</th>
<th>Industrial zone areas (hectares)</th>
<th>Available Areas (hectares)</th>
<th>Types of Industrial Estates</th>
<th>IEAT</th>
<th>Joint venture between IEAT</th>
<th>Private developers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Bangchan</td>
<td>1971</td>
<td>Bangkok</td>
<td>271</td>
<td>0</td>
<td>/</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>2. Lardkrabang</td>
<td>1989</td>
<td>Bangkok</td>
<td>684</td>
<td>0</td>
<td>/</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>3. Anyathani</td>
<td>1995</td>
<td>Bangkok</td>
<td>260</td>
<td>147</td>
<td>x</td>
<td>x</td>
<td></td>
<td>/</td>
</tr>
<tr>
<td>4. Bangprain</td>
<td>1994</td>
<td>Centre</td>
<td>496</td>
<td>20</td>
<td>/</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>5. Bangpu</td>
<td>2002</td>
<td>Centre</td>
<td>2,140</td>
<td>56</td>
<td>/</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>6. Bangpre</td>
<td>1989</td>
<td>Centre</td>
<td>402</td>
<td>0</td>
<td>/</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>7. Samut Prakarn</td>
<td>1999</td>
<td>Centre</td>
<td>400</td>
<td>0</td>
<td>/</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>8. Bangwa</td>
<td>1995</td>
<td>Centre</td>
<td>252</td>
<td>214</td>
<td>/</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>9. Saha Rattana Nakorn</td>
<td>1994</td>
<td>Centre</td>
<td>332</td>
<td>147</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>/</td>
</tr>
<tr>
<td>10. Nong Kae</td>
<td>1996</td>
<td>Centre</td>
<td>535</td>
<td>284</td>
<td>x</td>
<td>/</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>11. Phijit</td>
<td>1991</td>
<td>Centre</td>
<td>280</td>
<td>0</td>
<td>/</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>12. Kheang Khoi</td>
<td>1993</td>
<td>Centre</td>
<td>430</td>
<td>309</td>
<td>x</td>
<td>/</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>13. Maptaput</td>
<td>1989</td>
<td>East</td>
<td>2,400</td>
<td>0</td>
<td>/</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>14. Weligo</td>
<td>1995</td>
<td>East</td>
<td>880</td>
<td>160</td>
<td>/</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>15. Bangpakhong</td>
<td>1999</td>
<td>East</td>
<td>560</td>
<td>302</td>
<td>/</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>16. Leamchabang</td>
<td>1993</td>
<td>East</td>
<td>1,370</td>
<td>0</td>
<td>/</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>17. Chonburi</td>
<td>1995</td>
<td>East</td>
<td>1,300</td>
<td>588</td>
<td>/</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>18. East</td>
<td>1995</td>
<td>East</td>
<td>994</td>
<td>0</td>
<td>x</td>
<td>/</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>19. Gateway city</td>
<td>1993</td>
<td>East</td>
<td>1,778</td>
<td>334</td>
<td>x</td>
<td>x</td>
<td>/</td>
<td>x</td>
</tr>
<tr>
<td>20. Phadaeng</td>
<td>1995</td>
<td>East</td>
<td>200</td>
<td>0</td>
<td>x</td>
<td>/</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>21. Eastern Sea Board</td>
<td>1995</td>
<td>East</td>
<td>3,800</td>
<td>1,092</td>
<td>x</td>
<td>/</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>22. Pin thong</td>
<td>1996</td>
<td>East</td>
<td>83</td>
<td>54</td>
<td>x</td>
<td>x</td>
<td>/</td>
<td>x</td>
</tr>
<tr>
<td>23. Ammata City</td>
<td>1995</td>
<td>East</td>
<td>2,000</td>
<td>157</td>
<td>x</td>
<td>/</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>24. Lampoon</td>
<td>1985</td>
<td>North</td>
<td>642</td>
<td>0</td>
<td>/</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>25. South</td>
<td>1999</td>
<td>South</td>
<td>174</td>
<td>120</td>
<td>/</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

Note: - IEAT refers to Industrial Estate Authority of Thailand
- The key: / is presence and X is absence

Sources: 1. Industrial Estate Authority, 2002
2. Board of Investment, 2002
Chapter 3: Trade and investment policies of Thai and adjacent governments with regard to border towns

Map 3-2: Location of Industrial Estates in Thailand
Sources: Industrial Estate Authority, 2002
Board of Investment, 2002

According to Table 3-6 and Map 3-2, industrial estates are clustered in three regions: the Centre, Bangkok and the East. Only one industrial estate is located in the North and another in the South. The vast majority (60%) of industrial estates are clustered in the Bangkok Metropolitan Region (including Bangkok and the Centre) and in the Eastern region because of good accessibility and better transport links, whether this is by road, expressway system, railway, international seaport, or airports (Industrial Estate Authority, 2002). This concentration of transport connections between the Bangkok Metropolitan Region and the East stem directly from National Plans implemented since 1977 (see Section 1.2); over-
congestion in Bangkok and regional income disparities has resulted. So far no industrial estates are located in a border town. It is intended that establishing industrial estates in border towns could become a feasible and alternative regional strategy for drawing firms to border towns through the provision of special investment incentives and better quality of business services in industrial estates. It is envisaged that industrial estates would help in controlling urban sprawl and stimulating the local economy in border towns.

Conceptually, each industrial estate resembles an industrial town providing the necessary infrastructure for industrial operations such as electricity, water supply, flood protection, wastewater treatment, and solid waste disposal. Better transport links and access to seaports, airports and other transportation nodes are an important infrastructure of these provisions. Additionally, an industrial estate also contains business services including a customs office, commercial bank, post office, school, hospital, shopping centre and other facilities. Hence, it can be a self-contained community.

In Thailand industrial estates are classified into two zones: GIZ and EPZ 13

- A General Industrial Zone (GIZ) is an area reserved for the location of industries manufacturing for domestic and/or export consumption.
- An Export Processing Zone (EPZ) is an area reserved for location of industries manufacturing for export only; there are government customs offices located in this zone for fast clearance of the exports.

Even though industrial estates do provide good conditions for businesses to operate, some industrial estates have not been that successful. Some industrial estates have large areas of empty lease land mainly due to high land rents (see Table 3-6). Foreign firms are likely to locate in industrial estates rather than Thai-owned firms. 14 Adopting tactics such as reducing rent, suspending rent for few years or the offer of additional incentives are expected to increase the volume of firms locating to industrial estates.

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13 Industrial Estate Authority of Thailand, 2002
14 Information were derived from the list of firms of Industrial Estate Authority (2002) and research observations in some industrial estates in the eastern region, July-September 2000.
3.5.2.3 Investment promotion from the Board of Investment

The Board of Investment has designated a range of selected investment categories for providing tax exemptions or investment incentives under the Investment Promotion Act of 1997. This should encourage firms to locate in the targeted development areas and induce firms to invest in a range of priority investment projects.

The Board of Investment has identified the following four areas to be priority investment projects:

1. agriculture and agricultural products
2. direct involvement in technological and human resource development
3. public utilities and infrastructure
4. environmental protection and conservation

Investment in these four areas benefit from special investment incentives, which are in addition to the basic privileges based on the distant location from Bangkok. This is because the government judges these targeted projects will assist the nation's economy, for instance the targeted foreign firms are expected to transfer advanced technology and improve local skilled labours which will give greater support to Thai development in the long term. The basic investment incentives being offered include corporate income tax exemptions for 3 years and exemption from import duty on machinery depending on location. Granting privileges based on location aims to directly meet the government's decentralisation policy; firms locating the further distance from Bangkok will gain the highest benefits (in value terms).

The Board of Investment formulated three investment promotion zones based on economic factors, including the level of income and the availability of infrastructure in each area (see Map 3-3).
Map 3-3: Investment Promotion Zones in Thailand
Source: Board of Investment (2001)

3.5.2.4 Investment zones

From Map 3-3, the investment zones are:

Zone 1: includes Bangkok and its adjacent five provinces or the Bangkok Metropolitan Region with high income and good condition of infrastructure.

Projects in Zone 1 are granted basic privileges which involves

- a 50 per cent reduction of import duty;
- Corporate income tax exemption for 3 year for projects located within industrial estates or promoted industrial zones, provided that such a project has a capital investment of up to £167,000; otherwise the corporate income tax exemptions will be reduced by 1 year; and
- Exemption from import duty on raw or essential materials used in the manufacturing of export products for 1 year.
Chapter 3: Trade and investment policies of Thai and adjacent governments with regard to border towns

Zone 2: includes 12 provinces next to Zone 1. Projects in Zone 2 will be additionally granted corporate income tax exemptions of up to 5 years for projects located within industrial estates or industrial promoted zones.

Zone 3: encompasses the remaining 58 provinces with the lowest income and least developed infrastructure. Projects in Zone 3 get the highest benefits:
- Exemption from import duty on machinery; corporate income tax exemption for 8 years provided that projects have a capital investment of up to £167,000; and
- Exemption of import duty on raw or essential materials used in the manufacturing of export products for 5 years.

From the above investment strategies, it is apparent that government makes a great effort to support investments in three ways: (1) to induce firms to locate to industrial estates in order to facilitate control of industrial pollution and urban sprawl, and also to control land use planning; (2) to support targeted investment projects which are expected to stimulate national economic growth; and (3) to encourage firms to relocate to investment Zone 3 resulting in distribution of growth towards the less developed areas. Projects locating in Zone 3 will therefore receive the highest investment benefits. All border towns are situated in Zone 3. A project involving either a Thai or a foreign firm when it is located in border towns will gain from such incentives and support.

This study suggests that a tactic of offering investment incentives from the Board of Investment is useful. It shall induce firms to relocate to border towns, assist in decentralisation policy and boost border economies in the long term when the future investment strategy provides such an attractive range of incentives for firms locating to border towns. Currently, however, firms continue to locate in areas close to the Bangkok Metropolitan Region, the other big cities or in the Special Economic Zone (in the Eastern region) in the region rather than settling in border towns. An option to offer different investment incentives and relief of taxation to encourage firms to relocate to border towns will be investigated as part of the fieldwork and interviews with business.
3.5.3 National plans

At present, globalisation which facilitates mobility of production factors, foreign investment and technology and information, have beneficially affected Thai economic development. Globalisation offers both economic opportunity to grow and challenges Thai development (see Section 2.2.1). A National Plan is seen as the best way by the Thai government to prudently formulate economic policy and social planning, and to re-evaluate international relations, especially with its neighbours. Beyond considering economic growth, social welfare aspects need to be taken into account, in particular human, social and environmental dimensions of supporting longer-term growth. The Thai government has accepted that increasing the amount of trade and investment has played a significant role in simulating national economies and increasing job opportunities in twelve border towns (National Economic and Social Development Board of Thailand, 2002).

As discussed in Section 1.2, since 1961 the Thai government has implemented 9 National Plans. The current Ninth National Economic and Social Development Plan (2002-2006) was formulated to follow the globalisation concept. Major goals of the Ninth National Plan are to: 15

1. enhance regional development, especially in border towns and other remote or less developed areas;
2. achieve sustainable economic growth;
3. develop human resources;
4. encourage the role of communities and people participation for local development; and
5. raise employment opportunities in the regions.

The current Ninth National Plan aims to remedy regional income disparities and to redistribute growth regionally to border towns; meanwhile issues of development of human resources and people participation for local development are also of concern. Government, however, has attempted to implement a “bottom-up” planning approach. That is a good perspective, but people participation for local planning needs is a long term aim as Thais, especially in local areas, have low

educational attainment levels (see Table 3-2). This study suggests that for border town development, the views of local people should contribute more to the plans of border towns in response to local needs. This and other factors which might assist successful border town development are covered and explained in Chapter Six.

3.6 Laos

The Lao Peoples' Democratic Republic (Laos) is a largely mountainous and landlocked country on the Indo-China peninsula with its capital in Vientiane. It shares a border with Thailand to the west, Myanmar and China to the north, Vietnam to the east, and Cambodia to the south. With a land area of 237,000 square kilometres, 47 per cent of the total area is forest cover. Agricultural cultivation is a main occupation for the majority of citizens. Government administration is divided into 18 provinces.

Laos had a population of 5.4 million in 2002 (see Table 3-1) and population density is around 20 persons per square kilometre, which is very low. Population growth rate is roughly 2.6 per cent per annum. Literacy rate is about 78 per cent; the proportion of persons attaining high-level education is relatively small (Bank of Thailand, 2001: 15-20). Large numbers of low-skilled workers with illiteracy is a significant barrier for business in Laos. Laos is now classified as one of the world's poorest and least-developed countries, with estimated income per capita of about 390 US dollars annually, and remains highly dependent on external financial assistance from the World Bank, Asian Development Bank and other international organisations (Ministry of Commerce, 2001). Therefore, Laotian economic growth is a key objective for government and its people.

3.6.1 Trade policy

60 per cent of the Laotian economy is based on selling its natural resources: agricultural products, minerals, forests, and hydro-electricity (Bank of Thailand, 2001). At present, Laos is gradually moving towards manufacturing and tourism. Laotian economies are largely dependent on Thailand as the largest source of investment and imports: 85 per cent of total Laotian imports or over 340 million US Dollars in 2001 from Thailand (Ministry of Commerce, 2001).
The Laotian economy rises and falls with the Thai economy, a relationship which became most apparent during the Thai economic crisis in 1997 (Bank of Thailand, 2000). For instance, Thai language and currency dominates business in Laos and about 85 per cent of imports are commodities from Thailand. These are mainly consumer goods, clothing, cosmetics, food and drink. The Thai products' share of the Laotian market is 60 per cent and other countries' goods passing through Thailand represent a further 25 per cent. A similar situation exits for Myanmar and Cambodia whose economies are heavily dependent on the Thai economy (Ministry of Commerce, 2001).

These neighbouring countries (Laos, Myanmar and Cambodia) also import cheap Chinese goods which are mainly fruit, vegetables and low quality electrical devices (e.g. watches, toys and small audio products). However, these cheap Chinese goods are conveyed and pass to global markets through international seaports on the Eastern Sea Board in Thailand and Danang in Vietnam under agreements of the Greater Mekong Sub-region. Some Chinese products also serve Thai markets. Laotian, Myanmese and Cambodian economies seem not to rely on China, this is because Chinese products are not of interest to their consumers; while these neighbouring countries are more dependent upon Thai consumer goods. 16

Laos, like Myanmar and Cambodia, has implemented liberalised trade policies and has participated in regional economic blocs (namely the WTO and ASEAN) and the Greater Mekong Sub-region economic cooperation programme since 1997.

3.6.2 Investment policy

Since 1985, Laos has liberalised trade and investment under the New Economic Mechanism Programme with the purpose of enhancing national economic growth. Structural reforms have put emphasis on creating an investment environment, privatisation, liberalisation and decentralisation. As a result of the New Economic Mechanism Programme being implemented, inflation has been reduced, the exchange rate has become stable, and the amount of foreign investment has

16 Interviews with government officials and businessmen, as well as observation surveys at neighbouring countries' border towns namely Laos, Myanmar and Cambodia during 1999-2001 (see also Chapter Four).
increased. In turn, in 1995 the Laotian government sought to encourage foreign investors and promulgated the Law on the Promotion and Management of Foreign Investment under the Laotian Chamber of Commerce.

The government hopes that foreign inward investments will aid the nation to shift its economy from subsistence to commodity production, to transfer advanced technology to industrial sectors, to create jobs, to expand exports, and also to generate national revenues. The targeted investment projects which the Laotian government supports include: 17

1. the import substitution industry for consumer goods and construction materials, instead of importing from Thailand;
2. export-oriented production;
3. advanced technology firms;
4. investment involving infrastructure development, especially roads, bridges and hydro-electricity;
5. industry operating with mostly local raw materials or industry offering value-added agricultural products (i.e. wood processing and mineral processing); and
6. tourism industry;

If a firm qualifies for these priority investment projects it will get tax exemptions for up to 4 years under the Laotian Investment Law 1995. In addition, Laotian investment policy has also designated three Special Economic Zones: the northern zone focused on the development of livestock, tourism and hydro-electricity; the central and the southern zones aim to be promoted as zones for agriculture, trading and tourism. Foreign investors may invest in two ways: either through a joint venture or a wholly foreign-owned enterprise. The investment incentives being offered are for only 4 years' tax exemptions (see Table 3-2), which is shorter than those being offered by Thailand.

Thai Ministry of Commerce (2001) analysed the strengths of Laos which would attract foreign firms to invest:

17 Ministry of Commerce (2001) Thai Trend of Trade and Investment in Laos
appearance of possible political stability when compared to Cambodia and Myanmar;
availability of natural resources including: forests, minerals, coal and hydro-
power;
low wages; and
the low import tariffs given by developed countries (i.e. the United States, 
European Union, Canada and Japan), which is similar to Myanmar and Cambodia.

The main export industries exploit natural resources, import substitution from 
Thailand and assembly plants. The main sectors involve tin and gypsum mining, 
timber, electric power, agricultural processing, coffee, garments and 
construction, which is similar to Myanmar and Cambodia. Imports are mainly in 
consumer goods, clothing, machinery and equipment, vehicles and fuel which are 
imported through Thai border towns. Shortages of skilled labour and inadequate 
infrastructure and business services are the significant barriers to business in 
Laos. 18 19

3.6.3 National plans

The progression of the Laotian National Plans is as follows:

1975-1985, the Laotian government implemented the liberalised economic 
planning policy which welcomed foreign investments.
1985-1993, the government continued to promote the liberalised economic 
policy and made changes in Laotian economic policy; the market mechanism 
was the principal focus of economic development.
1993-2000, the National Plan (1993-2000) planned for long-term economic 
development. Goals in this National Plan were to: 20

1. maintain the economic expansion rate at about 8 per cent per annum;
2. promote development in agricultural sectors;
3. conserve the country's forest resources;

18 Interviews with Laotian businessmen in the Chamber of Commerce in Vientiane, 
Suwannakhet and Khuang Kam Muan, Laos, April, August and November 2000.
19 Interviews with government officials in Vientiane and Suwannakhet, Laos, August, 2000
20 Ministry of Commerce (2001) Thai Trend of Trade and Investment in Laos
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4. promote the development of local, small and medium industries, and also welcome foreign investment;
5. promote the development of energy, especially hydro-electricity for exports;
6. improve and expand the transportation system;
7. promote rural development by establishing an organisation exclusively for planning and operating rural development; and
8. promote human resource development.

It can be concluded that Laos, at present, makes a great effort to join world markets through implementing a liberalised trade system, participating with regional economic blocs and formulating a range of benefits for attracting foreign inward investments. It is intended that the Greater Mekong Sub-regional economic cooperate programme should become one of the strategies to develop the Laotian economy in collaboration with countries in this sub-region.

3.7 Myanmar

In the Union of Myanmar, or Myanmar, the government is controlled by a military group with its capital in Rangoon. Myanmar, which is the largest country on the mainland of Southeast Asia, had a population of 48 millions in 2002 and a total land areas of 680,000 square kilometres (see Map 3-1, p. 78). It shares a border with Thailand on the west and northwest for about 1,800 kilometres; Myanmar shares a border with Laos on the north for 235 kilometres; and south China on the north for 2,200 kilometres (Bank of Thailand, 2002: ). Major industries are agricultural processing (e.g. rice, corn, sugar cane and rubber), wood products, textiles, footwear construction materials, and precious stones (Ministry of Commerce, 2001). The Myanmese economy relies on primary products that gain relatively low national revenues. The main imports are machinery, transport equipment, construction materials, food products and consumer goods which are mainly imported from Thailand.

3.7.1 Trade policy

Since 1988, the government has announced a new economic system to implement the liberalised economic policy or market mechanism along the lines of
restructuring the economy, opening up the country for foreign investment, increasing international trade, and encouraging the development of the private sector. The current Myanmese trade policy, being similar to other countries in this sub-region, aims for international trade liberalisation and taking part in regional economic blocs such as the WTO, ASEAN, AFTA and also the Greater Mekong Sub-regional economic cooperation scheme.

3.7.2 Investment policy

Since 1988, Myanmar has striven to drive the state to join global markets and attract foreign firms to locate to its country. The government believes that increasing the amount of trade and investment will combat national poverty. Objectives of the Myanmar foreign investment law are to: 21

1. promote and expand exports;
2. exploit natural resources, which require heavy investments;
3. transfer advanced technology;
4. support and assist productions and services for import substitutions;
5. increase employment opportunities; and
6. support regional development.

Foreign investors can establish their business either in the form of a wholly foreign-owned company or a joint venture with other partners. Firms dealing with exports, import substitution and development of basic infrastructure are offered tax exemptions of up to 3 years, which is similar to Laotian and Cambodian investment incentive policies.

3.7.3 National plan

The Five-year plan (1997-2001) was formulated under the guidance of the State Law and Order Restoration Council. Objectives of national economic development were to:

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21 Ministry of Commerce (2001) Thai Trend of Trade and Investment in Myanmar
Chapter 3: Trade and investment policies of Thai and adjacent governments with regard to border towns

1. promote agricultural sectors;
2. access world markets;
3. promote advanced technology investments; and
4. reform national economy by participating between state and citizens.

At present, the Myanmar government is striving to move the national economy to join the world economy; however, achieving economic growth for Myanmar is not at all easy. This is because of the unstable political situation and political conflicts between the state military, various minority groups and democratic countries, especially affecting borders. To create a more peaceful and democratic country, alongside increasing national economic growth is a key requirement of policy (Ministry of Commerce, 2001). An absence of security in Myanmar affects growth and development of Thai border towns because firms especially foreign ones, will not relocate to areas adjacent to Myanmar (e.g. Mae Sai). Insecurity will be investigated as part of the fieldwork and in interviews with business.

3.8 Cambodia

The Kingdom of Cambodia or Cambodia has an area of 181,000 square kilometres and had a population of 11.6 million people in 2002. Cambodia shares a border with Thailand on the east. Phnom Penh is its capital city. Major industries are agricultural products (e.g. rice and fishery), which are primary products and involve light industrial activities with small amounts of capital which are import substitutions or for domestic needs (e.g. garments, food processing, consumer goods and drinks). Its main exports are timber, garments, rubber, soybeans and sesame; whereas its main imports are cigarettes, construction materials, petroleum products, machinery and vehicles (Ministry of Commerce, 2001). The Cambodian economy relies on Thailand for its consumer goods that are imported through Thai border towns, which is similar to Laos and Myanmar in this respect.

3.8.1 Trade policy

Trade policy is based in the framework of international trade liberalisation and membership of regional economic blocs; the WTO, ASEAN, AFTA, and the Greater Mekong Sub-regional economic cooperation programme with the hope of combatting state poverty and increasing the welfare for its citizens.
3.8.2 Investment policy

Since 1994, the government has promulgated the Cambodian New Investment Law with the purposes of attracting foreign inward investment and expanding exports. The government supports priority investment projects through provision of 5 years of tax exemptions to encourage investment in such important fields as:

1. advanced technology industry;
2. employment creation;
3. export-oriented industry;
4. tourism industry;
5. agricultural industry;
6. construction of infrastructure and energy;
7. regional and rural development;
8. exploit natural resource investment; and
9. environment protection.

Firms in Cambodia gain tax exemptions for up to 5 years, compared to up to 8 years in Thailand (see Table 3-2, p. 74). Foreign investors may invest in Cambodia in the form of either joint venture or wholly foreign-owned enterprise (Cambodian Investment Board, 1998). Main areas of investment include textiles, construction, tourism, production of import substitutes and exploiting natural resources. So far the government has not yet supported heavy industries on the basis of lack of national capital, shortage of skilled workers, and also inadequate infrastructure and business services.

3.8.3 National plan

Increasing the amount of trade and investment and creating a peaceful country are the main goals of the Cambodian National Plan. The goals of the Five-Year Socio-Economic Development Plan (1998-2003) are to:

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22 Ministry of Commerce (2001) Thai Trend of Trade and Investment in Cambodia
23 Ministry of Commerce (2001) Thai Trend of Trade and Investment in Cambodia
Chapter 3: Trade and investment policies of Thai and adjacent governments with regard to border towns

1. safeguard social stability and security;
2. improve human capacity;
3. strengthen infrastructure and foster an environment for private investment;
4. protect and preserve natural environment;
5. enhance national revenues; and
6. encourage the role of the private sector.

To generate a peaceful and tranquil nation is the priority objective in the National Plan alongside increasing the number of economic activities, especially trade and investment. However, domestic and political conflicts in Cambodia continue to be major barriers to achieving national growth.

3.9 Summary

Resulting from acceptance of the importance of globalisation and international trade and investment, countries of the Greater Mekong Sub-region implement reasonably similarly National Plans and trade and investment policies so as to increase their national economic development and prosperity. This has involved tactics such as trade and investment liberalisations, membership of regional economic trade blocs, and inducing foreign investment by offering a range of investment incentives or tax exemptions and the promotion of the countries’ advantages (e.g. lower wages, low import tariffs to global markets given by developed countries, natural resources and agricultural products).

However, all the countries in this sub-region, except Thailand, are finding it more difficult to achieve the objective of economic development because of inadequate basic infrastructure and business services, shortage of skilled workers, scarcity of national capital, and domestic political conflicts. All of these are significant barriers to business. Only low import tariffs given by developed countries and lower wages are the major attractions for inducing foreign firms to locate in this sub-region. Although investment policies of these adjacent countries are designed to protect natural resources, investment projects related to the exploitation of natural resources are also priority investment projects in Myanmese, Laotian and Cambodian investment policies. The protection of natural resources therefore needs to be linked to economic collaboration between countries in this sub-
region. It is hoped that in time, this will lead this sub-region to achieve sustainable economic development.

Laotian, Myanmese and Cambodian economies are currently dependent upon the Thai economy in terms of largely importing consumer goods for domestic needs; additionally, Thai language and currency dominate business in this sub-region. Evidence and business data shows that the Thai economy is the strongest in the Greater Mekong Sub-region. Better investment incentives are available to firms locating to Thailand; good quality and condition of transport links (connectivity) and business services; consistent support from the central government policy and plan; and that Thailand is a peaceful country, are important factors in attracting inward investment to Thailand. Based on such good economic conditions nationally, Thai border towns would seem to have the potential to develop as centres for trade and investment for this sub-region. The evidence drawn from two examples of border regional development in Hong Kong-Shenzhen and San Diego-Tijuana, where low wages, the provision of special tax exemptions for foreign firms, better transport links and business services, confirm that such strategies might be effective as part of developing border towns in Thailand.

It is clear that international economic theories are a helpful tool for this research; they are used to explain the countries’ and the Greater Mekong Sub-region’s economies and guide development and growth. International trade and investment theories point out strengths and weaknesses in attracting foreign investment to relocate in this case to Thailand and its neighbours. Insecurity is the main barrier to business in Myanmar and Cambodia. As international relations strongly influence foreign investment, business is unlikely to trade in or within Myanmar (i.e. Mae Sai). The Thai national budgets, therefore, would be wasted if government promotes Mae Sai (at least in the short term). This study reveals that Thailand possesses a greater number of advantages compared to other countries in this sub-region but successful border towns greatly rely on their neighbours’ situation and cooperation, as well as having strong support from central government. Moreover, this chapter argues that the future Thai investment policy would be more helpful for border town development when government provides investment incentives or support in a response to firms’ requirements; this latter matter will be investigated further as a part of research surveys in Sections 6.4 and 6.5. Supra-nationally, if the state governments wish to set up the Greater
Mekong Sub-region to become a new trade bloc, the "international integration concepts" suggest the need for strong cooperation and relations amongst its members in setting up standard border laws and regulations and a common currency, as well as better transport links in Myanmar, Cambodia and Laos for facilitating border businesses.
Chapter Four: Profile of the border towns chosen for the case studies

4.1 Introduction

This chapter provides details on five Thai border towns which will be selected for study so as to gain a better understanding of their potential as centres for growth in trade and investment. The criteria for selecting these border towns as case studies are discussed in Sections 1.3 and 5.3.
Map 4-1 shows the location of the five border towns selected for case studies. Nong Khai and Mukdahan are provincial centres, Chong Mek is located in Ubon Ratcha Thani province, Mae Sai is in Chiang Rai province, and Aranyaprathet is located in Sa Kaew province.

Concerning the location of border towns in relation to major cities, Chong Mek is located near to the major city of Ubon Ratcha Thani; Nong Khai is located 200 kilometres from Khon Khen; Mae Sai is located 180 kilometres from Chiang Mai; and Aranyaprathet 300 kilometres from Bangkok (see Map 4-1).

All of these Thai border towns are located opposite major cities in neighbouring countries: 24

1. Nong Khai has access to Vientiane, capital of Laos
2. Mukdahan faces Suwannakhet, the second largest city of Laos
3. Chong Mek has access to Champasak, a major town of Laos
4. Mae Sai is close to Tha Khi Lek, a major town of Myanmar
5. Aranyaphathet is near Poi Pet, the third largest city of Cambodia

This study proposes that when the transport linkages (connectivity) and accessibility are improved substantially between these pairs of border towns in this sub-region, trade and businesses would benefit and would extend to other countries of the Greater Sub-region (e.g. Vietnam and South of China) (see also Section 1.3). Successful border town development will assist in expanding exports to countries in this large sub-region and redistributing growth to both Thai border towns and their counterparts in the rest of the sub-region.

24 National Economic and Social Development Board of Thailand (1998: 7-8) Border Town Development Project
Figure 4-1 Kun Ming, (Yunnan) south China
Figure 4-1 shows Kun Ming, which is a main city of Yunnan province (south China) is part of the Greater Mekong Sub-regional economic development programme and most importantly is aiming to distribute goods from Yunnan to join global markets through the Eastern Sea Board (international) seaport in Thailand and the Danang seaport in Vietnam (National Economic and Social Development Board of Thailand, 1999). Kun Ming is a big city with good urban services (i.e. shopping centres and housing), and good transport, (i.e. international airport and roads) infrastructure and services.

Figure 4-2: Ho Chi Minh city, Vietnam
Figure 4.2 shows Ho Chi Minh city in Vietnam also participates in this Sub-regional economic cooperation development programme. Even though Ho Chi Minh city is a major city in the south of Vietnam, it is a city with a large volume of foreign investment because of the presence of low wages, low import tariffs given by developed countries and international seaport. The city is still in a poor condition in terms of urban infrastructure and facilities. In this respect, bicycles and motorbikes are the main forms of the transport in the city; lorries access the city centre; and businesses are scattered around the centre. It seems that urban planning has been weak in this city.

Two important towns whose development is being promoted in neighbouring countries are Kun Ming in China and Ho Chi Minh in Vietnam, although these are not border town in themselves, will be significant for the development of border towns. This is because they are:

1. important two-way outlets for border town products;
2. on transport links to the Eastern Sea Board (the Thai Special Economic Zone); and
3. being promoted by the Greater Mekong Sub-regional countries (see Map 1-2).

These two important towns, therefore, were surveyed as part of fieldwork.

4.2 An overview of border towns

This section is organised as follows:

(1) SWOT analysis of border towns;
(2) Border town development potential; and
(3) Indicators of geography, quality of labour and border town economy.

These analyses will provide a comparison of the five border towns selected as case studies with details on each border town being presented in Sections 4.4 to 4.8.


4.2.1 SWOT analysis

A SWOT analysis was used to evaluate the border towns’ strengths, weaknesses, opportunities and threats. This analysis will be used to consider the border towns’ relative potential at the present and in the future focusing on the different key factors of internal and external conditions. Strengths and weaknesses are defined as the current conditions in border towns, whereas opportunities and threats are the future factors. In turn the analysis will help to generate recommendations for border town development, which will be presented in Chapter Seven.

Table 4-1 shows the results of a SWOT five Thai border towns. The data in Table 4-1 is derived from a variety of sources including: official published documents, observation surveys, and interview surveys with local governors and local government officials at border towns.

Data in Table 4-1 points out that strengths of border towns are locational and accessibility advantages to support business and trade especially in agricultural goods and in circumstances which there is growing markets and lower wages with neighbouring countries. All these strengths should help these towns in becoming border trading gateways, as well as tourist attractions in their own right. Weak local administration and finances, and inadequate border facilities (e.g. small immigration offices) are the main weaknesses that limit development in these border towns. In Thailand, border towns receive financial support from the central government but are administered by provincial governors who are appointed by the central government. To a large extent this means that border towns are heavily dependent upon support from the central government through its National Plans, respective border town development plans, and the government’s trade and investment incentive and tax policies (see Section 3.5.1).
Table 4-1: SWOT Analysis of border towns

<table>
<thead>
<tr>
<th>SWOT</th>
<th>Nong Khai</th>
<th>Mukdahan</th>
<th>Chong Mek</th>
<th>Mae Sai</th>
<th>Aranyaphathet</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strengths:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Having government support</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>2. Playing a role as border trading gateway</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>3. Site linking to other countries, beyond neighbouring country</td>
<td>x</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>4. Being a provincial centre</td>
<td>/</td>
<td>/</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>5. Location linking with capital of neighbouring country</td>
<td>/</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>6. Being a border shopping attraction</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>7. Being a tourist destination for gambling</td>
<td>x</td>
<td>/</td>
<td>x</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>8. Being a tourist destination for nature and culture</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>x</td>
<td>/</td>
</tr>
<tr>
<td>9. Having a secure border zone in neighbouring country</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td><strong>Total (+)</strong></td>
<td>7</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td><strong>Weaknesses:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Located in National Park</td>
<td>x</td>
<td>x</td>
<td>/</td>
<td>/</td>
<td>x</td>
</tr>
<tr>
<td>2. Weak local administration and finances</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>3. Poor accessibility</td>
<td>x</td>
<td>/</td>
<td>/</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>4. Insufficiencies of customs and immigration facilities</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>5. Weak implementation on urban planning</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>6. Frequency of closure border checkpoint</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>7. Low educational attainment levels</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td><strong>Total (-)</strong></td>
<td>(-4)</td>
<td>(-5)</td>
<td>(-6)</td>
<td>(-5)</td>
<td>(-5)</td>
</tr>
<tr>
<td><strong>Opportunities:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Developmental cooperation with neighbouring country</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>x</td>
</tr>
<tr>
<td>2. Linking to the Eastern Sea Board international seaport</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>3. Improvements in roads in neighbouring country</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>4. Increased numbers of tourists</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>5. Increased numbers of private sector developments</td>
<td>/</td>
<td>/</td>
<td>x</td>
<td>x</td>
<td>/</td>
</tr>
<tr>
<td><strong>Total (+)</strong></td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td><strong>Threats:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Delays in sub-regional transport linkages</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>2. Delays in sub-regional cooperation</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>3. No forthcoming support from provincial or central government</td>
<td>x</td>
<td>/</td>
<td>/</td>
<td>x</td>
<td>/</td>
</tr>
<tr>
<td>4. Uncertain future economy of neighbouring country</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>5. Unstable neighbouring country</td>
<td>x</td>
<td>x</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>6. Weak management of municipality</td>
<td>x</td>
<td>/</td>
<td>x</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td><strong>Total (-)</strong></td>
<td>(-1)</td>
<td>(-2)</td>
<td>(-4)</td>
<td>(-5)</td>
<td>(-4)</td>
</tr>
<tr>
<td><strong>All total</strong></td>
<td>+7</td>
<td>-5</td>
<td>0</td>
<td>-2</td>
<td>-1</td>
</tr>
</tbody>
</table>

Note: The key: / is presence and X is absence

Sources: Author's own survey (observation), 1999-2001
   Interview surveys with local governors and local government officials for the five border towns, 1999-2001
   National Economic and Social Development Board of Thailand (1998) The Border Town Urban Development Project
   National Economic and Social Development Board of Thailand (2000) The First International Seminar for the Twin Project
   Board of Laotian Information Project Centre (2000) Interesting in Trade and Investment of Laos
   Ministry of Commerce (2001) Thai Trend of Trade and Investment in Laos
   Ministry of Commerce (2001) Thai Trend of trade and Investment in Myanmar
   Ministry of Commerce (2001) Thai Trend of Trade and Investment in Cambodia

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Chapter 4: Profile of the border towns chosen for the case studies

The relative balance of opportunities and threats might help to predict future trends in border town development; importantly border town growth relies on cooperation with neighbouring countries, their political and economic stability and policies, especially in Myanmar and Cambodia. For these reasons, border towns sharing a border with Laos (i.e. Nong Khai, Mukdahan, and Chong Mek) are locally to have a greater opportunity to grow through trade and investment. It would see that all Thai border towns are capable of becoming centres for trade and investment, except Chong Mek. This is because Chong Mek is the only border town that is located in a National Park where concerns about the exploitation of natural resources and the need for environmental protection are likely to act as barriers to the growth in economic activities in this border town.

4.2.2 Border town development potential

The SWOT analysis data in Table 4-1 has been used to establish the state of border town development potential. Though this may only be indicative at this stage. These dimensions are made by adding together the number of strengths, weaknesses, opportunities and threats for each border town. Strengths and opportunities are considered as positive factors supporting border town development. Weaknesses and threats are considered as negative factors impeding border town growth. The SWOT scores have been used to rank each border town. The border town with the highest score from the SWOT analysis is assumed to have the highest potential, and should be considered first by central government in its search for new growth centres. Equally, the border town with the lowest score is judged to have the least potential out of the five as a centre for growth in trade and investment.

There are three levels of potential that can be identified for the border towns as follows:

1. High potential: Nong Khai and Mukdahan
2. Moderate potential: Chong Mek
3. Low potential: Aranyaprathet and Mae Sai

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The three classified stage of border town development, based on data in Table 4-1 is crude qualification which can only provide indications and is possible to easily understand border towns’ potential for this study. At this indicative stage of border town development the SWOT suggests that Nong Khai has the highest potential of becoming a centre for trade and investment town. However, this finding will be re-examined by drawing on data from other sources generated as part of this research.

Although the National Plans since 1994 have designated twelve border towns as centres for trade and investment based on their existing roles as border trading gateways (see Section 1.2), the present study found that without a methodology to identify border towns as centres for trade and investment, national resources may have been spent on some of the weaker border towns. Although all twelve border towns designated by National Plans were all surveyed as part of this research, only five of these were found to have adequate infrastructure and business services, and it is for these reasons that these five border towns were chosen as case studies (see also Sections 1.3 and 5.3).

Observation surveys found that many of twelve border towns designated by the National Plans would require large investment to achieve trade and investment centre status. A good example of such a weak border town is Huay Khon (see Map 1-1).

Figure 4-3: Huay Khon, Thailand
Figure 4-3 shows the border situation at Huay Khon which is located on the border with north Laos. Huay Khon is a new development area which lacks infrastructure and facilities, it has poor accessibility and suffers from a lack of economic diversification. Border trading comprises of just 20 stalls which are confined largely to local trade between Thais and Laotians. In addition, as Huay Khon is located in the forest and mountainous area, accessibility by public transport to this border town is difficult. The journey from Bangkok takes about 24 hours by public transport, which is a mix of rail, city buses and local mini buses; local buses run only twice per day. 27 Even though Huay Khon has a low potential rating development, the Government has designated it as a centre for trade and investment (see Section 1.2).

4.2.3 Geographical indicators, quality of labour and border town economy

In order to understand better the current situation of border towns in terms of strengths and weaknesses in relation to the SWOT analysis shown in Table 4-1, three indicators covering geography, quality of labour and border town economy were considered for analysis.

(1) Geography

Table 4-2: Total area, population and population density of selected border towns in 2001

<table>
<thead>
<tr>
<th>Border towns</th>
<th>Area (sq. km)</th>
<th>Number of population</th>
<th>Population density per sq.km</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nong Khai</td>
<td>35.15</td>
<td>57,000</td>
<td>1,622</td>
</tr>
<tr>
<td>Mukdahan</td>
<td>35.55</td>
<td>35,443</td>
<td>997</td>
</tr>
<tr>
<td>Chong Mek</td>
<td>10.13</td>
<td>3,491</td>
<td>335</td>
</tr>
<tr>
<td>Mae Sai</td>
<td>7.4</td>
<td>20,195</td>
<td>2,730</td>
</tr>
<tr>
<td>Aranyapraphet</td>
<td>5</td>
<td>17,789</td>
<td>3,558</td>
</tr>
</tbody>
</table>

Source: National Statistical Office, Thailand, 2002

27 Observation surveys in Huay Khon, December 1999.
Data in Table 4-2 shows that in terms of land area and numbers of population, Nong Khai and Mukdahan are the largest in population terms and act as provincial centres, as well as being border trading gateways. The other three towns in terms of land area, are small towns. Chong Mek occupies a small land area as well as having the lowest population and population density. It is located in a National Park which prohibits large capital investment projects. The SWOT analysis for Chong Mek, however, shows that it is ranked 3rd of the five border towns in terms of potential as a centre for trade and investment. Although Mae Sai and Aranyaprathet have small land areas, they are characterised by high population and the higher density. They are both active border towns, where Mae Sai is actually affected adversely by the situation in Myanmar, whilst Aranyaprathet is a growing tourist centre.

(2) Quality of labour

Indicators of quality of the labour consist of the number of employed persons by industry and by the level of educational attainment. Data on border town labour forces are based on the provincial level data because of lack of data at border town level. Typically, border towns are small towns and any registered border activities are recorded at the provincial level, by separate government departments. Only the number of goods, passengers and vehicles are recorded at border checkpoints.
### Table 4-3: Number of employed persons aged over 13 years by occupation in 2001, (national and provincial levels)

<table>
<thead>
<tr>
<th>Occupations</th>
<th>Whole Kingdom of Thailand</th>
<th>Nong Khai</th>
<th>Mukdahan</th>
<th>Ubon Ratcha Thani (Mae Sai)</th>
<th>Chiang Rai (Aranya prathet)</th>
<th>Sa Kaew</th>
<th>Thousand persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>31,397</td>
<td>373</td>
<td>147</td>
<td>734</td>
<td>539</td>
<td>160</td>
<td>260</td>
</tr>
<tr>
<td>Farmers and fishermen</td>
<td>14,948 (48%)</td>
<td>214 (57%)</td>
<td>99 (68%)</td>
<td>358 (49%)</td>
<td>283 (53%)</td>
<td>160</td>
<td>160 (62%)</td>
</tr>
<tr>
<td>Craftsmen, production process workers</td>
<td>5,273 (17%)</td>
<td>86 (23%)</td>
<td>11 (8%)</td>
<td>139 (19%)</td>
<td>108 (20%)</td>
<td>38</td>
<td>38 (14%)</td>
</tr>
<tr>
<td>Sales workers</td>
<td>4,370 (14%)</td>
<td>35 (9%)</td>
<td>16 (11%)</td>
<td>119 (17%)</td>
<td>71 (14%)</td>
<td>30</td>
<td>30 (11%)</td>
</tr>
<tr>
<td>Professional and technical workers</td>
<td>1,937 (6%)</td>
<td>12 (3%)</td>
<td>9 (6%)</td>
<td>44 (6%)</td>
<td>21 (4%)</td>
<td>14</td>
<td>14 (5%)</td>
</tr>
<tr>
<td>Service workers</td>
<td>1,542 (5%)</td>
<td>10 (3%)</td>
<td>5 (3%)</td>
<td>34 (5%)</td>
<td>24 (4%)</td>
<td>7</td>
<td>7 (3%)</td>
</tr>
<tr>
<td>Administrative executive and managerial workers</td>
<td>950 (3%)</td>
<td>10 (3%)</td>
<td>3 (2%)</td>
<td>18 (2%)</td>
<td>10 (1%)</td>
<td>1</td>
<td>1 (1%)</td>
</tr>
<tr>
<td>Workers in transport and communication</td>
<td>1,232 (4%)</td>
<td>4 (1%)</td>
<td>2 (1%)</td>
<td>12 (1%)</td>
<td>16 (3%)</td>
<td>6</td>
<td>6 (2%)</td>
</tr>
<tr>
<td>Clerical workers</td>
<td>1,145 (3%)</td>
<td>2 (1%)</td>
<td>2 (1%)</td>
<td>10 (1%)</td>
<td>6 (1%)</td>
<td>4</td>
<td>4 (2%)</td>
</tr>
</tbody>
</table>

Source: National Statistical Office, Thailand, 2002

### Graph 4-1: Percentage of employed persons aged over 13 years by occupation in 2001 (provincial level)
Data in Table 4-3 shows that the majority of Thais, both nationally and at border towns, are employed in agricultural production and industrial sectors and are paid relatively low (see also Graph 4-1 for individual border towns). It could be concluded that such advantage in investing in Thailand, including the border towns, is the availability of agricultural products and its low wage economy. Firms needing to employ large numbers of workers or engaged in agricultural processing could be attracted to locate in border towns, particularly if the government provides investment incentives to do so.

Table 4-4: Number of employed persons aged over 13 years by level of educational attainment in 2001, (national and provincial levels)

<table>
<thead>
<tr>
<th>Level of educational attainment</th>
<th>Whole Kingdom of Thailand</th>
<th>Nong Khai</th>
<th>Mukdahan</th>
<th>Ubon Ratcha Thani (Chong Mek)</th>
<th>Chiang Rai (Mae Sai)</th>
<th>Sa Kaew (Aranya prathet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>35,568</td>
<td>373</td>
<td>152</td>
<td>765</td>
<td>611</td>
<td>282</td>
</tr>
<tr>
<td>None</td>
<td>1,259 (3%)</td>
<td>12 (3%)</td>
<td>5 (3%)</td>
<td>8 (1%)</td>
<td>72 (12%)</td>
<td>12 (4%)</td>
</tr>
<tr>
<td>Elementary</td>
<td>21,097 (60%)</td>
<td>276 (74%)</td>
<td>101 (66%)</td>
<td>560 (73%)</td>
<td>436 (72%)</td>
<td>205 (73%)</td>
</tr>
<tr>
<td>Secondary</td>
<td>5,445 (15%)</td>
<td>60 (16%)</td>
<td>28 (18%)</td>
<td>111 (14%)</td>
<td>66 (10%)</td>
<td>38 (13%)</td>
</tr>
<tr>
<td>Vocational</td>
<td>466 (2%)</td>
<td>6 (2%)</td>
<td>4 (3%)</td>
<td>7 (1%)</td>
<td>7 (1%)</td>
<td>3 (1%)</td>
</tr>
<tr>
<td>University</td>
<td>6,013 (16%)</td>
<td>8 (2%)</td>
<td>3 (2%)</td>
<td>37 (5%)</td>
<td>16 (3%)</td>
<td>10 (3%)</td>
</tr>
<tr>
<td>Academic</td>
<td>843 (2%)</td>
<td>3 (1%)</td>
<td>4 (3%)</td>
<td>22 (3%)</td>
<td>7 (1%)</td>
<td>7 (3%)</td>
</tr>
<tr>
<td>Technical</td>
<td>445 (2%)</td>
<td>8 (2%)</td>
<td>7 (5%)</td>
<td>20 (3%)</td>
<td>7 (1%)</td>
<td>7 (3%)</td>
</tr>
</tbody>
</table>

Source: National Statistical Office, Thailand, 2002
Data in Table 4-4 shows that vast majority of Thais, both nationally and in border towns, only receive elementary education (see also Graph 4-2 for individual border towns). In Thailand, including border towns, there exist a large supply of mainly low-skilled labour, employed in agricultural processing, especially as farmers and fishermen (see Table 4-3). With such low numbers of skilled labour, this weakens Thai border town development, as most potential skilled labour is concentrated in the Bangkok Metropolitan Region and other bigger cities (see Table 1-1). For future border town development, as well as supporting the utilization of the existing border town advantages (i.e. large supply of labour, lower wages, and agricultural products), establishing a university and a vocational institution in each border town would in time assist in increasing the number of skilled workers and support growth at border towns. This study suggests that vocational institutions in particular should be promoted first as they serve the needs of business and industry.

(3) Border town economy

Indicators of the border town economy used for the study are: numbers of industrial establishments and registered commercial establishments, the value of imports and exports, and the number of passenger and vehicle moving across border checkpoints.
Table 4-5: Number of industrial establishments in 2001, (provincial level)

<table>
<thead>
<tr>
<th>Type of industries</th>
<th>Nong Khai</th>
<th>Mukdahan</th>
<th>Ubon Ratcha Thani (Chong Mek)</th>
<th>Chiang Rai (Mae Sai)</th>
<th>Sa Kaew (Aranyapratthet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>1,158</td>
<td>367</td>
<td>3,798</td>
<td>1,743</td>
<td>352</td>
</tr>
<tr>
<td>Agriculture</td>
<td>711 (61%)</td>
<td>176 (48%)</td>
<td>3,102 (81%)</td>
<td>1,236 (71%)</td>
<td>235 (67%)</td>
</tr>
<tr>
<td>Wood manufacture</td>
<td>26 (2%)</td>
<td>45 (13%)</td>
<td>84 (2%)</td>
<td>22 (1%)</td>
<td>32 (9%)</td>
</tr>
<tr>
<td>Construction</td>
<td>194 (17%)</td>
<td>35 (9%)</td>
<td>142 (4%)</td>
<td>101 (6%)</td>
<td>30 (8%)</td>
</tr>
<tr>
<td>Food and beverage</td>
<td>65 (6%)</td>
<td>54 (14%)</td>
<td>81 (2%)</td>
<td>83 (4%)</td>
<td>17 (5%)</td>
</tr>
<tr>
<td>Services</td>
<td>91 (8%)</td>
<td>52 (14%)</td>
<td>333 (8%)</td>
<td>144 (9%)</td>
<td>20 (6%)</td>
</tr>
<tr>
<td>Metal</td>
<td>49 (4%)</td>
<td>4 (1%)</td>
<td>37 (1%)</td>
<td>129 (7%)</td>
<td>6 (2%)</td>
</tr>
<tr>
<td>Textiles</td>
<td>6 (1%)</td>
<td>1 (1%)</td>
<td>8 (1%)</td>
<td>8 (1%)</td>
<td>3 (1%)</td>
</tr>
<tr>
<td>Others</td>
<td>16 (1%)</td>
<td>0</td>
<td>11 (1%)</td>
<td>20 (1%)</td>
<td>9 (2%)</td>
</tr>
</tbody>
</table>

Source: National Statistical Office, Thailand, 2002

Graph 4-3: Percentage of industrial establishments in 2001 (provincial level)

Data in Table 4-5 and Graph 4-3 show that the typical firms in border towns are agricultural producers, and construction and wood manufacturers. Construction firms are boosted in border towns because this industry serves neighbouring countries for building basic infrastructure and facilities (i.e. roads, housing, and bridges). Wood manufacturing is an activity which takes advantage of hardwoods and timbers from neighbouring countries to produce furniture. It is seen that firms located in border towns benefit from neighbouring countries’ growing markets (i.e. constructions, foods and beverages), lower wages (i.e. in textiles and metal firms). As a result, these types of firms should be encouraged to relocate to border towns.
agricultural productions), and raw materials (i.e. wood manufacturing and metal firms). As a result, these types of firm should be encouraged to relocate to border towns. This is because these firms would exploit local advantages and gain benefits followed the international investment theory and location theory (see Sections 2.2.3 and 2.4.1).

Table 4-6: Number of registered commercial establishments between 1997-2001 (provincial level)

<table>
<thead>
<tr>
<th>Border towns</th>
<th>1997</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>5 year growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nong Khai</td>
<td>7,128</td>
<td>7,728</td>
<td>8,036</td>
<td>8,714</td>
<td>9,045</td>
<td>+30%</td>
</tr>
<tr>
<td>Mukdahan</td>
<td>1,290</td>
<td>1,402</td>
<td>1,537</td>
<td>1,729</td>
<td>1,824</td>
<td>+40%</td>
</tr>
<tr>
<td>Ubon Ratcha Thani (Chong Mek)</td>
<td>8,543</td>
<td>9,149</td>
<td>10,317</td>
<td>11,175</td>
<td>11,091</td>
<td>+30%</td>
</tr>
<tr>
<td>Chiang Rai (Mae Sai)</td>
<td>4,442</td>
<td>5,044</td>
<td>5,482</td>
<td>5,820</td>
<td>6,029</td>
<td>+40%</td>
</tr>
<tr>
<td>Sa Kaew (Aranyaprateth)</td>
<td>5,530</td>
<td>6,045</td>
<td>6,482</td>
<td>6,937</td>
<td>7,145</td>
<td>+30%</td>
</tr>
</tbody>
</table>

Source: National Statistical Office, Thailand, 2002

Graph 4-4: Number of registered commercial establishments between 1997-2001 (provincial level)
Data in Table 4-6 and Graph 4-4 show that trade in all border towns has been increasing annually, over the period 1997-2001. For 2000, the number of registered commercial establishments in Ubon Ratcha Thani (Chong Mek) was slightly lower due to political conflicts between Laos and Cambodia and fighting within their national boundaries. This situation resulted in closure of Chong Mek's border checkpoint for about 2 months (February-April 2000) (Manager, 2000: 15) (see Map 4-1).

Table 4-7: Values of imports and exports at border town checkpoints between 1996-2001

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nong Khai</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Imports</td>
<td>11.2</td>
<td>15.7</td>
<td>7.28</td>
<td>12.25</td>
<td>12.68</td>
<td>10.98</td>
</tr>
<tr>
<td>- Exports</td>
<td>112</td>
<td>112.2</td>
<td>108.13</td>
<td>126.4</td>
<td>114.15</td>
<td>139.15</td>
</tr>
<tr>
<td>Mukdahan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Imports</td>
<td>3.09</td>
<td>6.8</td>
<td>6.2</td>
<td>7</td>
<td>5.98</td>
<td>7.15</td>
</tr>
<tr>
<td>- Exports</td>
<td>30.58</td>
<td>36.80</td>
<td>40.48</td>
<td>44.63</td>
<td>44.23</td>
<td>59.43</td>
</tr>
<tr>
<td>Chong Mek</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Imports</td>
<td>3.98</td>
<td>4.38</td>
<td>4.53</td>
<td>10.35</td>
<td>12.78</td>
<td>12.35</td>
</tr>
<tr>
<td>- Exports</td>
<td>3.5</td>
<td>4.73</td>
<td>7.65</td>
<td>13.05</td>
<td>13.65</td>
<td>16.8</td>
</tr>
<tr>
<td>Mae Sal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Imports</td>
<td>3.13</td>
<td>3.85</td>
<td>2.85</td>
<td>4.5</td>
<td>20.75</td>
<td>30.25</td>
</tr>
<tr>
<td>- Exports</td>
<td>5.13</td>
<td>7.48</td>
<td>16.25</td>
<td>35.23</td>
<td>47.2</td>
<td>48.35</td>
</tr>
<tr>
<td>Aranyaprathet</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Imports</td>
<td>5</td>
<td>5.48</td>
<td>9.65</td>
<td>11.75</td>
<td>9.75</td>
<td>18</td>
</tr>
<tr>
<td>- Exports</td>
<td>50.63</td>
<td>63.65</td>
<td>71.55</td>
<td>64.4</td>
<td>77.58</td>
<td>101.69</td>
</tr>
</tbody>
</table>

Source: Bank of Thailand, 2002

In general, border checkpoints in Thailand are of two types: permanent and temporary border checkpoints (Bank of Thailand, 2002: 3-10). Differences between the permanent and temporary border checkpoints are the official opening times and the volume of border crossing activities (i.e. commodities, passengers and vehicles). The temporary border checkpoints are traditionally small operations and only exchange daily needed goods and often close due to poor security in neighbouring countries; they are scattered along the borders. Permanent border checkpoints have been opened since 1989, all have been upgraded from being former temporary border checkpoints. So far, twelve border checkpoints are designated as the official border checkpoints and as centres for trade and investment; this includes the five border towns selected as case studies (National Economic and Social Development Board, 1998) (see Map 1-1, p. 6).
In terms of the value of trade recorded, the Trade Statistics Office of the Ministry of Commerce (2001: 10-21) ranked Sadao, a border checkpoint close to Malaysia (see Map 1-1), as the largest of all land borders in Thailand, followed by Nong Khai, Aranyaprathet, Mukdahan and Mae Sai. The data in Table 4-6 shows that trade growth trends for the five border towns, based on the five year growth of number of registered establishment, is positive. Trade growth of Mukdahan and Mae Sai was +40% and the rest of border towns, was +30% for the five-year period (1997-2001). As a consequence, the finding suggests that businesses and trade are more likely to locate to Mukdahan and Mae Sai rather than the rest of border towns, the central government, therefore, should provide first good quality infrastructure and facilities for creating these two-border towns as new trading centres and attracting as well as retaining firms to relocate there.

Data in Table 4-7 shows the trade values of exports and imports for each of the five-selected border checkpoints over the period 1996-2001. The value of exports from all Thai border towns to neighbouring countries were much higher than the value of imports from neighbouring countries to Thai border towns. The growth of imported and exported goods through the five-selected border checkpoints is quite similar. The goods imported from neighbouring countries include mainly agricultural goods (e.g. garlic, coffee, dried fish and beans) and natural resource products (e.g. hardwoods, timbers and forest products). Products from neighbouring countries were in the primary processing stage and were mostly low-value added in national revenue terms. The main exports from Thailand through the five-selected border checkpoints to neighbouring countries were mainly consumer goods, fuels and building materials, which all had higher value-added (Ministry of Commerce, 2001).

Considering individual border towns, data in Table 4-7 shows that the highest value of trade (exports and imports) is in Nong Khai in that it is a trading gateway to Vientiane, the capital of Laos. It is estimated that 60 percent of all imports originate in Thailand and 25 percent of imports are the goods from other countries pass through Laotian markets via Thai border towns; this situation is repeated for trade for the Myanmese and Cambodian markets (Ministry of Commerce, 2001). Mukdahan records the second highest amount of trade in the northeast region, after Nong Khai. In addition, Aranyaprathet and Mae Sai are significant border trading gateways, which serves neighbouring countries' markets including their
capitals Phnom Penh in Cambodia and Rang Young in Myanmar. The lowest amount of trade was recorded for Chong Mek as this border town is located in a National Park, which constrains economic development and trade.

As a result, the data based on the value of trade suggests that because these border towns are classified as significant border trading gateways towards neighbouring countries, they have potential to become centres for trade and investment for this sub-region, with the except of Chong Mek. However, the wide development gap between Thailand and the rest of the countries in the Greater Mekong Sub-region continues to grow. Thus, Thai border town development and the sub-regional economic growth are unlikely to be achieved quickly.

Table 4-8: Numbers of movements of passengers and vehicles through border checkpoints between 1997-1999

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Border Passengers</th>
<th>Number of Vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nong Khaí</td>
<td>Mukdahan</td>
</tr>
<tr>
<td>1997</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In</td>
<td>304,696</td>
<td>29,701</td>
</tr>
<tr>
<td>Out</td>
<td>299,420</td>
<td>25,370</td>
</tr>
<tr>
<td>1998</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In</td>
<td>216,375</td>
<td>30,076</td>
</tr>
<tr>
<td>Out</td>
<td>213,420</td>
<td>23,655</td>
</tr>
<tr>
<td>1999</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In</td>
<td>222,354</td>
<td>29,966</td>
</tr>
<tr>
<td>Out</td>
<td>221,808</td>
<td>23,917</td>
</tr>
</tbody>
</table>

Sources: Nong Khai Immigration Office, 2000
Mukdahan Immigration Office, 2000
Phibun Mangsahan Immigration Office, 2000
Mae Sai Immigration Office, 2000
Aranyaprathet Immigration Office, 2000

Data in Table 4-8 shows that the highest number of passengers passing through these border checkpoints, over the period of 1997-1999 was through Mae Sai, followed by Aranyaprathet, Nong Khaí, Chong Mek and Mukdahan. Large volumes
of passengers went through Mae Sai and Aranyaphathet’s border checkpoints for the purpose of gambling casinos located in these border towns. However, border towns sharing a border with Laos (Nong Khai, Mukdahan and Chong Mek) had much lower numbers of passengers because tourists at these border towns largely aim to travel and to shop; this is especially for Nong Khai as it is close to Vientiane, the capital of Laos.

Considering the number of vehicles, the vast majority of vehicles crossing the borders are lorries conveying imports and exports, especially Thai consumer goods to neighbouring countries. Nong Khai recorded the highest volume of vehicles crossing a border largely to convey goods to Vientiane, the Laotian capital.

For Mukdahan, to date, small ferries are the only means of transport for transferring imports, exports and passengers between Thailand and Laos. It is expected that when the construction of the Second Friendship (Thai-Laos) Bridge is completed, this bridge will lead to better economic links between Mukdahan and Suwannakhet (Laotian border town), and carry similar trade as at Nong Khai.

4.3 Social problems in the border town debate

Based on the research surveys of both observations and interviews with local government officials during 1999-2001, this study shows that although the freer borders will facilitate the movement of economic items (i.e. commodities, services, passengers, workers and vehicles), liberalising borders also generates more social problems (i.e. illegal immigrants, criminals and smuggling) from neighbouring countries through border towns to their destinations in the Bangkok Metropolitan Region and other bigger cities. Such adverse problems are clustered largely in the Bangkok Metropolitan Region and other large cities, and have tended not to stay in border towns. This is because the number of criminals and level of social problems is based on city size (Flint, 1998: 100). Border towns at present are new development areas and are small towns in population and area terms.

However, the number of illegal migrants is increasing in the border towns, which local people and business view favourably because migrants will work for lower
wages than Thais in agricultural production (i.e. farming and fishery). The problem of drugs is a significant social problem in Thailand, especially in the bigger cities; most of the drugs are conveyed from Myanmar through border towns into Thailand (Thairath, 2002: 5-7). In terms of smuggling, according to the points of view of local people smuggling is not conceived as a barrier to local development but that it leads locally to cheaper products.

With regard to crime, even though border towns have not yet seen a big problem with crime, freer and more open borders may make border towns criminal gateways and passing stolen cars from the Bangkok Metropolitan Region and other bigger cities en-route to neighbouring countries (i.e. Myanmar, Laos and Cambodia). This is adding to an already significant problem of increasing crime and illegal migrants in Bangkok and the other bigger cities.

Considering economic development and cultural conflict, according to the empirical research for this study, local people perceive the development of border towns as trade and investment centres as being a good development which will assist in stimulating local economies. So far, the growth of border towns has not ruined local cultures in that growth and development are clustered in only urban centres whereas local tribes with their traditional cultures are settled in forest areas. However, this study suggests that for the future border town development, preservation of the local heritage (temples) in urban centres, environmental protection in surroundings areas and involvement of local people and cultures in development, all should be taken into account alongside economic growth.

The next sections detail the five-selected border town profiles under the topics of border situation, land use, manufacturing, and perspective of border towns in neighbouring country which are situated opposite Thai border town.

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28 Interviews with local government officials (i.e. Department of Town and Country Planning and City Halls) and local residents in border towns, and observation surveyed, 1999-2001.

29 Interviews with local government officials (i.e. City Halls and Municipality Offices) and local residents in border towns, in addition to observation surveyed, during 1999-2001.
4.4 Border town profile: Nong Khai

Nong Khai municipality has a total area of 35.15 square kilometres; the urban area is formed along the Mekong River. Its location is some 200 kilometres to the north of Khon Khen and is 627 kilometres from Bangkok. It is the growth centre in the northeast (see Map 4-1). The registered population was 57,000 inhabitants in 2001. Yet the actual population numbers is much more since there are large numbers of illegal Laotian migrants who are working on low wages in agriculture. These migrants have replaced Thais employees, a situation which is similar in other border towns. 30

Nong Khai is on a main route to Laos as it is close to the capital Vientiane. In 1994, the First Thai-Laos Friendship Bridge was built at Nong Khai aiming to encourage better social and economic linkages between Thailand and Laos. The building of the First Thai-Laos Friendship Bridge adversely affected the traditional, small ferry and boats crossing the Mekong River. 31 As indicated in the earlier Tables 4-7 and 4-8, among the five chosen border towns, Nong Khai was ranked first in terms of imports and exports traded and the number of vehicles crossing the border.

4.4.1 Land uses

The urban centre is located on a bank of the Mekong River. Built-up areas are clustered in a small zone, surrounded by agricultural and undeveloped areas. To date, urban growth extends along highway routes numbers 2 and 212 which gives access to the First Thai-Laos Friendship Bridge. Government institutions and industrial land uses are situated along these highways. Existing commercial and residential land uses and educational facilities are concentrated in the city centre.

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30 Interviews with local government officials (i.e. Department of Town and Country Planning and Nong Khai City Hall), in addition to conducted observation surveys in Nong Khai during 1999-2001.
4.4.2 Manufacturing

The main industries in Nong Khai are in local agricultural production (i.e. food processing and beverages), construction materials and consumer goods. These tend to be small firms with low capital. The finished products are aimed at Laotian markets. At present, it is difficult to develop large capital firms in Nong Khai because of its location being close to Udon Thani and Khon Khen which are the cities in this northeast region. Bigger firms are likely to locate in the bigger cities according to agglomeration economies (see Section 2.4.1), as a result establishing manufacturing potential in Nong Khai is likely to be limited (National Economic and Social Development Board of Thailand, 2001).

However, this study suggests that if border town development plans provide special investment incentives for border town investors and improves local infrastructure and facilities, then an increase in the number of firms in Nong Khai is likely to occur. Further, it would also seem to be the case that based on its geographical location advantages, firms providing goods and services to Laotian markets (i.e. food processing, soft drink and consumer goods) and employing large volumes of labour with lower wages from neighbouring countries (i.e. textiles, toy, electric products, and agricultural processing), should be promoted in Nong Khai.
Chapter 4: Profile of the border towns chosen for the case studies

Border trade along the Mekong river

Border market

Local transport

Border checkpoint and small ferry port

The First Thai-Laos Friendship Bridge

Border check point

Figure 4-4: Nong Khai, Thailand
Figure 4-4 shows several images of the border situation in Nong Khai. Laotian commodities traded at the Indo-China border market are mainly forest products (i.e. herbs, flowers, and trees) and cheap and poor quality Chinese goods (i.e. small electric devices, homeware, and cosmetics). Infrastructure and facilities (i.e. roads, bridge and border check point) in Nong Khai are in a good condition which should assist its future growth. Vientiane is only 22 kilometres from the Thai-Laos Friendship Bridge at Nong Khai; the new bridge has helped to improve economic and social links between Thailand and Laos. It has directly increased border economic activities particularly in the trading of goods, tourism and vehicles. Therefore, the city has grown as a result of the provision of better infrastructure, illustrating that latent demand/growth just requires the right source of stimulus for it to occur.

4.4.3 Laotian border town: Vientiane

The capital of Laos is Vientiane and it is located on a bend of the Mekong River. Vientiane municipality had 170,000 inhabitants in 2001 and a land area of 3,920 square kilometres (Ministry of Commerce, 2001). The urban area extends to the south along the main road route to the Friendship Bridge. Since 1994, when the Friendship Bridge opened, the Laotian economy has grown with most industries establishing themselves along the highway to Vientiane, rather than locating in the only Promotional Industrial Zone in Vientiane. This is because the road route and bridge is the best transport link between Thailand and Vientiane.32 To date, inadequacy of infrastructure and facilities are the major barriers to business in Laos. However, Australian and Japanese donor-assisted projects have been assisting Laos to improve its basic infrastructure and utilities, in particular roads, solid waste, water supply and drainage systems (Ministry of Commerce, 2001). These improvements should support growth of the city and Thai border towns.

32 Interviews with Laotian people and government officials at Immigration Office in Laotian border and the capital Vientiane, April 2000.
### Chapter 4: Profile of the border towns chosen for the case studies

<table>
<thead>
<tr>
<th>Border checkpoint</th>
<th>Consumer goods from Thailand at bus station</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road along to the Friendship Bridge</td>
<td>Vientiane's market</td>
</tr>
<tr>
<td>Road in Vientiane</td>
<td>Road in Vientiane</td>
</tr>
</tbody>
</table>

#### Figure 4-5: Vientiane, Laos
Chapter 4: Profile of the border towns chosen for the case studies

Figure 4-5 shows several images of the border situation at Vientiane. It can be seen that road conditions are poor relatively, except on the route between Vientiane and the Thai-Laos Friendship Bridge. The Laotian economy heavily relies on trade at this border town because consumer goods (i.e. cosmetics, foods, soft drinks and toys) are imported daily from Nong Khai by lorries and small ferries, whilst Vientiane’s markets provide a strong demand for Thai commodities (i.e. consumer goods, foods, clothes, CD and VCD and small appliances).

The findings so far suggest that Nong Khai could be developed as centre for trade and investment to serve Laotian markets based on its existing role of border trading gateway. Nong Khai should be served first in terms of priority for promotion as a centre for trade and investment by the central government because of its strong economic and trading links with Vientiane. However, inadequate transport links in Laos are a main barrier to this border town’s future growth.

4.5 Border town profile: Mukdahan

Mukdahan municipality is located on the bank of the Mekong River, and is a trading link with Sawannekhet, the second largest city of Laos. Mukdahan is situated further away from growth centres in the northeast region at a distance from Khon Khen of 243 kilometres and 167 kilometres from Ubon Ratcha Thani. It currently, has a total land area of 35.55 square kilometres and is a provincial centre.

In 2001, the border town had a total registered population of 33,443 inhabitants with a population density of 997 persons per square kilometre (see Table 4-2), which is relatively low. Since 1999, Mukdahan has had priority status as a border town by the government as it attempts to promote it as a centre for trade and investment. As a result, the Second Thai-Laos Friendship Bridge was constructed with the intention to link with Suwannakhet (Laos) and Danang seaport (Vietnam) so as to access the global markets. This constitutes an alternative planning choice for this border town’s development since, as earlier indicated in Table 4-1, all the five selected border towns had been designated by the government to link

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Chapter 4: Profile of the border towns chosen for the case studies

up with global markets through the Eastern Sea Board international seaport in Thailand.

4.5.1 Land uses

The urban area is clustered on the west bank of the Mekong River, with its surrounding areas being largely agricultural and undeveloped. Within the town core, commercial and residential land uses are concentrated. The Indo-China border market, which is located along the Mekong River, is also a major tourist attraction in itself. Industrial and warehouse zones are dispersed and located outside the core of the town. The milling of rice is the main industry, followed by the manufacturing of construction materials, foods and metal products, which are all aimed at serving the Laotian markets. 34

4.5.2 Manufacturing

In 2001, the number of industrial factories was 367, with an investment value estimated at only 12.52 million US dollars. Thus firms are small in size with low capital values (Ministry of Commerce, 2001). Apart from firms serving Laotian markets, the priority is for agricultural processing (namely rice milling, food processing, and sugar factories) to locate to Mukdahan with the prime intention of employing Laotian workers on low wages. For instance, sugar-cane firms have moved from Udon Thani to the border towns of Mukdahan and Aranyaprathet so as to benefits from paying lower wages to local workers. In the future, industrial activity in border towns that share a border with Laos (i.e. Nong Khai and Mukdahan) will grow because those firms with capital can be also buying this hydro-electric power at a lower cost from Laos. 35

34 Interviews with local government officials (Department of Town and Country Planning and Mukdahan City Hall) and local governors (Mukdahan Municipality Office), September 2000.
35 Interviews with local governors (Mukdahan Municipality Office) and local government officials (Mukdahan City Hall), September 2000.
Chapter 4: Profile of the border towns chosen for the case studies

Border trade at the Indo-China Market

Local transport

Small ferry port crossing the border to Laos

Small ferry port crossing the border to Laos

Passengers crossing the border by local traditional small ferry

Notice from immigration office warning about gambling in neighbouring country

Figure 4-6: Mukdahan, Thailand
Figure 4-6 shows a number of images of Mukdahan. At present small, local, traditional ferries are the main border transport links between Thailand and Laos at Mukdahan, primarily transferring passengers and consumer goods. Once the Second Thai-Laos Friendship Bridge opens, local people expect that border economic activities in Mukdahan will be boosted in the same way as at Nong Khai. At this Indo-China border, which is situated along the Mekong River, most commodities traded are cheap and low quality Chinese mainly products, including homeware and local silks from Mukdahan and adjacent provinces.

Figure 4-6 also shows official notices by the immigration office warning passengers about gambling in Laos. Opening of new casinos in neighbouring countries around Thai boundary (e.g. Laos, Myanmar and Cambodia) is likely to be important attractions which induces tourists to border towns. Therefore, establishment of casinos in Thai territory, especially in border towns, will be an additional planning choice for border town development that could stimulate the local economy. Locating casinos in border towns may do less harm to the Thai culture, since it has a strong moral code and that these casinos are located far away from Bangkok, which is Thailand’s centre of culture.

4.5.3 Laotian border town: Sawannakhet

Sawannakhet, the second largest Laotian city, is situated in the central region of Laos and trades with Mukdahan, Thailand (Bank of Thailand, 2001). It is located about 270 kilometres to the southeast of Vientiane. The registered population was 60,000 inhabitants in 2001. This border town is in a much less developed area with poor and inadequate infrastructure and facilities, but a good supply of wood and hydro-electric power are its major advantages. Its main industry is wood production.

36 Interviews with local residents and local government officials (Mukdahan City Hall), September, 2000
Chapter 4: Profile of the border towns chosen for the case studies

Figure 4-7: Suwannakhet, Laos
Chapter 4: Profile of the border towns chosen for the case studies

Figure 4-7 shows a number of images of Suwannakhet. Although Suwannakhet is the second largest city of Laos, this town has seen less development, and has limited infrastructure and facilities (i.e. roads are in a poor condition, the international airport building has only one storey, and the hotel is of low quality). The lack of a poor infrastructure will impede Suwannakhet’s future urban growth. The only new building in the border town was built for a government institution. Wood manufacturing is the main industry but this is relatively small in size and is located in a residential area. Existing farming takes place in areas close to the city centre. If Suwannakhet is to become a new growth centre, as it is designated in Laotian investment policy (see Section 3.6.2), it will require time and as well as public investment projects on a large scale.

In summary, to develop Mukdahan as a centre for trade and investment will require improvements in urban infrastructure and facilities in Mukdahan and much better transport links to and in Laos and Vietnam. The potential of Suwannakhet is its role as a trade supplier for Mukdahan’s growth.

4.6 Border town profile: Chong Mek

Chong Mek is a small border town, located in a National Park in Ubon Ratcha Thani province (see Map 4-1). It had a total population of 3,491 inhabitants and 420 households in 2001. It has land area of 10.13 square kilometres and is located 40 kilometres from Campasak town (Pakse) in Laos. Due to its location in a National Park, Chong Mek is unlikely to achieve its goal of becoming a centre for trade and investment growth. But Chong Mek is capable of growing as a centre for tourism so as to avoid harming the national forest. Chong Mek is the only border gateway that accesses southern Laos and which could extend into southern Vietnam and northern Cambodia if better transport links in this sub-region materialise (see Map 4-1).
Chapter 4: Profile of the border towns chosen for the case studies

<table>
<thead>
<tr>
<th>Border checkpoint in Laos</th>
<th>Border boundary post at Chong Mek</th>
</tr>
</thead>
<tbody>
<tr>
<td>Border commodities: Laotian silks</td>
<td>Consumer goods for Laotians</td>
</tr>
<tr>
<td>Border trade: wild trees and flowers</td>
<td>Border trade: herbs and forest products</td>
</tr>
</tbody>
</table>

Figure 4-8: Chong Mek, Thailand
Figure 4-8 shows several images of the main commodities traded at this Laotian border town are mainly forest products (i.e. herbs and wild trees and flowers), craft homewares (baskets) and silks. Thai consumer goods that are traded here are higher value added goods such as washing powders, cosmetics, homewares and electrical appliances.

4.6.1 Land uses

Due to its location in a National Park, border economic activities are limited. Chong Mek is a relatively small border town in terms of land area, numbers of population and population density. The main government institutions to support border trade consist of a customs and immigration office, police station, health centre, border patrol police station and post office. The small amount of residential and commercial areas is clustered within a small border zone, surrounded by the National Park; but Chong Mek has no big manufacturing industries (Phibun Mangsahan Immigration Office, 2000: 3-5).

Beyond being a trading gateway with Laos, Chong Mek is principally a tourist service centre. Passengers cross this border checkpoint aiming to visit natural tourist attractions in Pakse, in the south of Laos namely, Lee Pee waterfall and other cultural attractions. Meanwhile, Laotians cross the border for trading forest products, and purchasing consumer goods and also to access higher quality social services in the form of hospitals, seafood restaurants, and department stores which are located in the provincial centre Ubon Ratcha Thani, or they may go further and travel to Bangkok 37.

4.6.2 Laotian border town: Champasak

Champasak (Pakse) is a Laotian southern economic centre, located in Champasak province. It had about 47,066 inhabitants in 2001 (Phibun Mangsahan Immigration Office, 2000: 7-10). Champasak is some 40 kilometres from Chong Mek but these roads are in an extremely poor condition.38 However, local residents and local government officials hope that when the Third Thai-Laos Friendship Bridge is constructed in the near future, it would encourage stronger economic links

37 Interviews with Laotians and Thai local residents, May 2001.
between Chong Mek and Champasak (Pakse) and beyond to Sateng Trung town, which is located in Cambodia.

Chong Mek has the potential to grow as a new growth centre in this sub-region, but only as a tourist service centre. As it is located in a National Park, the environment is a significant concern, so the government is reluctant to promote Chong Mek's growth.

4.7 Border town profile: Mae Sai

Mae Sai municipality has a total land area of 7.4 square kilometres, with a registered population of 20,195 inhabitants in 2001. Mae Sai shares a border with Myanmar. It is located 63 kilometres from Chiang Rai provincial centre (see Map 4-1). In 1965, the Thai-Myanmar Friendship Bridge was built, which stimulated and strengthened border economic activity links between Thai and Myanmese border towns. Even though Mae Sai is a very significant border trading gateway, providing goods and services for Myanmese markets, trade has been regularly interrupted. This is because the Myanmese border checkpoint has been frequently closed as a result of fighting between state military and various ethnic minority troops on the Myanmese boundary (Thairath, 2002: 5-7). Furthermore, Mae Sai is the main gateway to gambling and tourist attractions in Tha Khi Lek (Myanmese border town) and for travelling to Myanmar, Laos and south China. 39

39 Interviews with local government officials (Mae Sai Immigration Office) and local people, October 2000.
<table>
<thead>
<tr>
<th>Border checkpoint</th>
<th>Border trade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Border tourists aiming to gamble</td>
<td>Consumer goods serving Myanmateses</td>
</tr>
<tr>
<td>Chinese fruit being conveyed to Mae Sai</td>
<td>Construction materials serving Myanmar</td>
</tr>
</tbody>
</table>

Figure 4-9: Mae Sai, Thailand
Chapter 4: Profile of the border towns chosen for the case studies

Figure 4-9 shows several images of Mae Sai. The main goods traded in Mae Sai are Myanmarse gems and precious stones, namely jade, pearl and rubies, and cheap fruit and vegetables from China. Tourists come to this border town aiming to cross the border to gamble in Tha Khi Lek. The main Thai exports that serve Myanmarse markets are consumer goods, vehicles and construction materials, which all have a higher value added.

4.7.1 Land uses

Mae Sai is situated in a fertile valley, surrounded by mountains. The commercial land use extends southwards highway number 110 for about 10 kilometres and also stretches out to Myanmar on the other side of the river. Residential areas are mainly found in the town centre. The main government institutions and public services (i.e. police station, customs office, hospital, school, and post office) are as expected clustered near the border to support border activities. 40

4.7.2 Manufacturing

The main industries involve the processing of agricultural products (i.e. rice mills, fruit and vegetable canneries, food processing and beverages), which employ labour on low wages and involve firms with small investment capital. Low wages and growing markets in Myanmar are significant factors in inducing firms to relocate to Mae Sai. Labour intensive industries (i.e. agricultural processing, textiles and garments) are shifting from the Bangkok Metropolitan Region to relocate to Mae Sai. 41 It is expected that when security improves in the Myanmarse zone, the number of manufacturing and economic activities in this border zone will increase significantly.

40 Observation surveys in Mae Sai and surrounding areas, October 2000.
41 Interviews with local government officials (i.e. Department of Commercial Registration, Chiang Rai), October 2000.
4.7.3 Myanmese border town: Tha Khi Lek

Tha Khi Lek is located in Chan province; it is located in an area which is isolated and mountainous. The whole area is less developed and is served by roads that are in a poor condition. Tha Khi Lek had roughly 15,000 registered inhabitants in 2001 (National Economic and Social Development Board of Thailand, 2002).

The small, built-up area of the town is dominated by casinos, hotels, golf courses and restaurants, which are all surrounded by mountains and forests. Because gambling is not allowed in Thai territory, Thai investors have shifted their investments in casinos to Myanmar, Cambodia and Laos, to serve Thai gamblers. Since 2002, the Thai government has been considering to permit the establishment of casinos on Thai territory in order to increase national revenues (Manager, 2002 and Thairath 2002). Up to now, it has not been decided in which zone to establish casinos that will least impact on Thai morals. However, border towns are likely to become a location for such casinos.

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42 Participant observation surveys with local government officials in Thai-Myanmar border town development programme, October 2000.
Chapter 4: Profile of the border towns chosen for the case studies

Figure 4-10: Tha Khi Lek, Myanmar

Figure 4-10 shows several images of Tha Khi Lek, which is located in a hilly area and its built-up area is clustered in the low lying areas. The main economic activities in this border town are related to gambling.

Mae Sai could become a possible centre for trade and investment if improvements to roads and transport link, and better security in the Myanmese border zone are provided.

4.8 Border town profile: Aranyaprathet

Aranyaprathet municipality had about 17,789 inhabitants in 2001. It is a small border town with a total land area of 5 square kilometres in Sa Kaew province (see Map 4-1). Aranyaprathet has played a role as a small border trading gateway
town to serve Cambodian markets since 1950. 43 This border town serves as the major and permanent trading gateway to Cambodia (Ministry of Commerce, 2001). However, due to the unstable domestic political situation in Cambodia, the closure of the border checkpoint because of fighting in the Cambodian border zone occurs regularly. The continuation of this situation will constrain its future development and growth, being similar to Mae Sai in this respect.

4.8.1 Land uses

The boundary forming Aranyaprathet extends along highway number 33 for about 7 kilometres. Commercial land uses include banks, restaurants, shops and markets and the residential area is concentrated in the town centre. Government institutions are located close to the border so as to support border activities. Military buildings are located in the border town in order to uphold Thai security and sovereignty. 44

4.8.2 Manufacturing

Given that it is a small border town of only 5 square kilometres, most industries are small in size but manage to take advantage of lower Cambodian wages in agricultural processing. 45

In terms of border trade, Aranyaprathet also serves Phnom Penh, which is the capital of Cambodia. In addition, Aranyaprathet is becoming a major centre for second-hand goods such as shoes, cloth, army surplus and curtains which are donated by developed countries. These commodities are traded in the second markets in Bangkok and other larger cities.

43 Interviews with local businessmen at Aranyaprathet border checkpoint, December 2000.
44 Observation surveys, December 2000
45 Interviews with local government officials (i.e. Department of Town and Country Planning), December 2000.
Chapter 4: Profile of the border towns chosen for the case studies

Figure 4-11: Aranyaprathet, Thailand

- Customs check point
- Border post
- Tourists crossing a border to gamble
- Conveying trade at border town
- Border trade, second-hand shoes from Cambodia
- Border trade, second-hand clothes from Cambodia

The Cambodian highway number 5 is the main tourist destination for Aranyaprathet to Poipet.
Figure 4-11 shows several images of Aranyaprathet. Due to its location being 300 kilometres from Bangkok, and good accessibility via road, this border town has become a main tourist destination for border shopping and gambling in Poi Pet, which is located across the border in Cambodia. Cambodian exports are second-hand goods such as curtains, shoes and army surplus. Thai exports to Poi Pet are mainly consumer goods (i.e. washing powder, CD, homeware, electrical devices and clothes), which have considerably higher value added.

4.8.3 Cambodian border town: Poi Pet

Poi Pet is the third largest city in Cambodia and had 50,000 inhabitants in 2001. The Cambodian highway number 5 is the main link from Aranyaprathet to Poi Pet and gives access to other larger cities in Cambodia particularly Srisophon, Battambang and Phnom Penh (Ministry of Commerce, 2001). Since 1990, Poi Pet has become a major trading point with Thailand with commerce flourishing as a result of the opening of casinos. 46

Thus, Aranyaprathet is an important border town which has potential to grow as a centre for trade investment to serve Cambodian and south Vietnamese markets, particularly if better security and better transport links (i.e. roads) in this sub-region take place. As Aranyaprathet is relatively close to Bangkok compared to other border towns, and with convenient public transport that gives access to this border town, border economic activities are more than likely to increase here.

4.9 Summary

From the findings on the five selected border towns (and their counterparts in the neighbouring countries), it is obvious that these border towns are small in size and population. They possess, however, significant locational advantages with the potential to become centres for trade and investment in the Greater Mekong Sub-region. This study suggests that Nong Khai should be the first town to be promoted as a new growth centre by the central government because of its status as a provincial centre, possessing better quality of urban services, and being located

46 Interviews with Cambodian local people at Poi Pet and Thai soldiers at Aranyaprathet border checkpoint, December 2000.
close to Vientiane, the capital of Laos. At the other extreme, the growth of Chong Mek is not recommended, this is due mainly to its location in a National Park.

Presently, these five selected border towns have played a role as border trading gateways to neighbouring countries. The main exports from these Thai border towns have been consumer goods, construction materials and clothes; whereas imports from neighbouring countries' border towns have been agricultural goods, wood and forest products which are relatively low value-added products. This is true for all border towns. As a result, the gap between Thailand and neighbouring countries has widened. Locational advantage factors such as lower wage workers, availability of agricultural goods and growing markets in neighbouring countries are likely to attract firms that are involved in agricultural production, food processing, toys, garments and textiles main founding to relocate to these border towns.

So far social problems resulting from economic growth and the opening of borders (i.e. cultural conflicts, racisms, drugs and criminals) have not yet occurred in border towns. This is because social problems are a function of city size. Freer borders are likely to grow and develop border towns as gateways where economic activities, criminals and illegal migrants from neighbouring countries, drugs and other adverse problems pass through en-route to Bangkok and other bigger cities. It is important also that preservation of local heritage (temples) in urban centres, traditional cultures, environmental protection and involvement of local residents are taken into account alongside economic development in future border town planning policy.

Development and growth of border towns will succeed when the central government supports, through the allocation of national resources and public investment projects, promote business investment, and collaborates with neighbouring countries in the planning of improvements to transport links and better security in the border zones.

International economic and regional economic planning theories are clearly a valuable tool for this research. International trade and investment theories as well as location theory help to explain the strengths and weaknesses locally (as part of five border town case studies) which affect domestic and foreign firms'
decisions to relocate to border towns. This study reveals that concern about security in border zones is a significant additional factor in location decisions, especially in the case of the Greater Mekong Sub-region. Central place and growth pole theories affirm that border towns could be developed as new business centres with the support of investment incentives, taxation relief and public investment, which are funded from the national budgets. Although Thai border towns have played important roles as trading gateways for neighbours, trade values (imports and exports) are low because it mainly involves the trading of agricultural, forestry and daily consumable goods. Trade, investment and tourism would be seen as appropriate economic bases in such border towns as it would stimulate local economies. This study urges that such growth is based on economic diversification rather than on a single industry. Further, explanations of the causes of urban growth (i.e. the innovation, competitive city and quality of life) are helpful in contributing to strategic planning which promotes and sustains some Thai border towns' economies as regional business nodes in this sub-region in the long term. Economic growth and the preservation of environment and local heritage need to work more hand-in-hand.
Chapter Five: The design and implementation of the empirical research

5.1 Introduction

In order to supplement the knowledge on border towns and their economies, and to establish the principles for (developing) guidelines on selecting border towns as centres for trade and investment, research fieldwork was carried out. The border town contexts have already been examined and discussed in Chapter Two; trade and investment policies of countries in the Greater Mekong Sub-region were examined in Chapter Three; and profiles of the border towns selected for case studies were presented in Chapter Four. All of these provide context for this next stage, which aims to focus on developing a better understanding of the theoretical and policy framework for border economic research.

In this next stage, this chapter appraises evidence that has been derived from field-based surveys, which were carried out to answer the research questions set out in Chapter One. Results from the surveys will clarify concepts relating to border towns. Selection of research methodology is presented firstly because it is an essential task in generating and formulating a research procedure. The border towns chosen for case studies and those subject to survey investigations are discussed. In addition, the survey techniques involving observations, semi-structured interviews and postal questionnaires, and the empirical results are all detailed here. Analysis of findings is the theme for discussion in the Chapter Six.

5.2 The empirical research methodology

The objective of this study as stated in Chapter One is to produce criteria for identifying border towns as centres for trade and investment. The research surveys were carried out to fill gaps in knowledge about border towns, to contribute primary empirical data, to provide answers to the research questions, and to re-examine theories (Clark and Causer, 1991: 163-176; Denscombe, 1998: 6-28; Hakim, 2000: 24-45;). It is envisaged that the findings will contribute to the knowledge on regional development which could generate alternate planning
Chapter 5: The design and implementation of the empirical research

guidance and clarify the border planning for Thai development and, subsequently, be applied to countries in this sub-region.

The procedures for empirical research included:

1. Selecting the border towns for case studies and setting up the key subjects for the investigation.
2. Choosing samples to collect information based on reliable methods.
3. Designing research surveys for field observations, semi-structured interviews and postal questionnaires. These three methods were used to triangulate evidence. Observations involved collecting largely qualitative data whereas quantitative data were derived from interview and questionnaire surveys. Employing these different research survey techniques would not only highlight any weakness in each survey method but would serve to supplement each other. It was recognised that each survey method is suited to different research situations; each method has its own strengths and weaknesses. In using these different research instruments, it accords with other researchers' practices and preferences for using multiple research methods (Clark and Causer, 1991: 163-167; Brewer and Hunter, 1989: 13-28; Bechnofer and Paterson, 2000: 57; Blaxter and others, 2001: 89-92; Marshall, 1997: 38-55).
4. Conducting pilots: the questionnaire surveys were piloted with a small number of respondents with similar characteristics as the target samples of (1) Thai-owned firms, (2) foreign-owned firms which are located in Thailand, and (3) foreign-owned firms which are intending to locate in Thailand. 20 firms were involved in each pilot. The pilots were conducted with the aim of tailoring questions, making survey practice efficient and improving response rates (Fink and Kosecoff, 1985: 13-21). Findings from the pilot test were on the whole found to be satisfactory.
5. Conducting surveys: observations were carried out in the selected border towns and countries in the Greater Mekong Sub-region over the period of 1999-2001; semi-structured interviews were conducted at border towns and postal questionnaires were sent to firms located throughout the country during July-September, 2001.
6. Analysing findings: these are set out in Chapter Six.
Chapter 5: The design and implementation of the empirical research

Data analysis is presented in tabular form in Chapter Six. Finally, discussions, conclusions and recommendations for research issues and suggests for future research with regard to border town are set out in Chapter Seven.

5.3 The selection of border towns for case studies

Basically, it was impracticable to survey all possible border towns because of time and resource constraints. Reducing the number of case studies was therefore necessary to ensure that empirical research was successfully managed. The case studies, which represent an approach to investigation of contemporary phenomenon within real contexts, were successfully conducted. Case studies are generally used when the existing state of knowledge is insufficient to explain current problems support historical events (Yin, 1994: 1-17; DePoy and Gitlin, 1998: 142-147).

Consequently, this study decided to select five border towns for case study. Nong Khai, Mukdahan, Chong Mek, Mae Sai and Aranyaprathet were chosen as case studies, out of twelve border towns that had been promoted as centres for trade and investment in Thailand’s National Plans since 1994. The criteria used in selecting these five-selected border towns has already been presented in Chapter One, which are new repeated in Table 5-1 overleaf.

Table 5-1 shows that border towns with the highest scores were chosen as case “A” studies. Nong Khai is thus conceived as the best border town for case study, followed by Mukdahan (7), Aranyaprathet (7), Chong Mek (6) and Mae Sai (6). Those with the lowest scores on these criteria have been excluded from the study: Huay Khon (3), Chiang Khong (4), Chiang Saen (4), Mae Sod (4), and Nakhon Pranom (6) out of 10 (see also Section 4.2 and Table 4-1). Even though, Nakhon Pranom possesses an equal score (6) as Chong Mek and Mae Sai, Nakhon Pranom is not selected as case study because (1) it is located between Nong Khai and Mukdahan, (2) its border trading is similar as Mukdahan that the main import from Laos is wood and timber, and (3) presently, the Thai government has promoted Mukdahan as a new growth centre so as to link to a Danang international seaport in Vietnam, rather than Nakhon Pranom (see Section 4.5).
Table 5-1: Indicative criteria used in selecting border towns as case studies

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Border towns for case studies in Thailand</th>
<th>Other border towns in Thailand</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nong Khai</td>
<td>Mukdahan</td>
</tr>
<tr>
<td>1. Have been promoted as centre for trade and investment in the National Plans since 1994</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>2. Playing a role as border trading gateway and being permanent border checkpoint since 1989</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>3. Being provincial centre</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>4. Located near growth centres</td>
<td>/</td>
<td>x</td>
</tr>
<tr>
<td>5. Located at the geographical location with advantage of easy access to the other countries in this sub-region, beyond neighbouring country</td>
<td>x</td>
<td>/</td>
</tr>
<tr>
<td>6. Good access by roads</td>
<td>/</td>
<td>x</td>
</tr>
<tr>
<td>7. Good access by railways</td>
<td>/</td>
<td>x</td>
</tr>
<tr>
<td>8. Adequate urban infrastructure and business services</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>9. Having strong co-operation for border town development with neighbouring country</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>10. Being secure border zone in neighbouring country</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>Total &quot;yes&quot; scores</td>
<td>9</td>
<td>7</td>
</tr>
</tbody>
</table>

Note: - The key: / is “yes” and X is “no”
- This study surveyed all the ten border towns which were designated as centres for trade and investment in the National Plan in 1994 (located in the Greater Mekong Sub-regional economic development programme)

Source: Author’s own survey, conducted 1999-2001

It is anticipated that the findings drawn from the five chosen border towns for case studies are based on representative events being experienced in border towns, whilst making allowances for the time and manpower constraints available to the researcher (Sapsford, 1999: 18-20), and providing safe enough conditions for the conduct of the research, especially important as border towns are located in sensitive areas in countries of the Greater Mekong Sub-region.
5.4 Research strategy and investigation

In order to provide answers to the research questions established in Chapter One, it was, therefore, essential to devise an effective research strategy and investigation. These research procedures will shape fieldwork surveys, help to maximise the number of returned questionnaires and achieve expected research results.

Interviews and observations do not usually incur low response rates, whereas questionnaires are generally known to be associated with lower response rates. High numbers of returned questionnaires rely on the ability and willingness of respondents to complete and return questionnaires. However, it was found that the numbers of returned questionnaires and the findings derived from observations and interviews in this research were highly satisfactory because the research was carried out as follows:

- Firstly, the fieldwork survey collected data from managers of firms and local government officials who had a good knowledge of border town planning and the research topic directly affected their responsibilities and business. Respondents were, on the whole, willing to assist in completing questionnaires, to participate in interviews, as well as supporting other research activities (e.g. facilitating a survey in the neighbouring countries' border towns).

- Secondly, piloting of the research instruments, especially the postal questionnaire, ensured that wording, sequences of questions and other management aspects of the research was maximised.

- Thirdly, although respondents were proficient and eager to take part in the research survey, because the questions and topic affected their duties and businesses, most questions were sensitive as they asked about future plans of their organisations; in some cases respondents were reluctant to answer these questions. It was, therefore, important to state and confirm to respondents that the information gained would remain confidential and be anonymised and that it would be used only for this research. In this respect, the letter accompanying stated that all respondents' views would be held

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confidentially. For the interviews, it necessitated explaining the importance of the research and results, and affirming to interviewees that their responses would be anonymised, so that these responses could not be linked to their work positions.

A series of indicators were created that were used to organise and structure the research investigations as follows:

1. **Economy and situation in border towns**, including: the characteristics of economic activities (trade, investment and tourism) and border towns’ situations (whether a secure area and domestic migration to border town).
3. **Strengths and weaknesses of the border towns**, these are: the advantages and disadvantages for business and those factors which could attract firms to relocate to border towns.
4. **Strategies to develop border towns as successful centres for trade and investment**, including: the need of and barriers to border town development and doing business in Thailand as a whole; economic activities which should be promoted to locate to border towns; a range of urban infrastructure and facilities which should be improved, and also those (persuasive and preventive) reasons which affects a firm’s decision to relocate to border towns.

As shown, these indicators were used to guide the design of questions in the postal questionnaires and the semi-structured interviews. Detailed findings covering each indicator will be comprehensively discussed in Chapter Six. Based on the basis of these research methods, the number of returned questionnaires was highly satisfactory and the findings that were generated have led to achieving the expected research results.

5.5 The survey techniques

This study employed the triangulation of survey evidence to provide more accurate data which stems from the research strategy set out in Section 5.2. (Marshall, 1997: 38-55; Punch, 2000: 45-46). Research survey techniques consist of
observations, semi-structured interviews and postal questionnaires. Interviews and questionnaires were officially carried out during July-September 2001 whereas the observations on border towns were performed over two years (1999-2001) in order to examine and observe the border towns' normal life and situations. Over these two years both participant and non-participant observations were conducted. Constraints on time and resources available to the researcher meant that it was not possible to stay for long periods in the border towns. Nevertheless, the findings obtained from the fieldwork were considered to be satisfactory and helpful in providing accurate and detailed knowledge on the border towns.

In using these survey methods, a large amount of data was generated, accurate findings were provided, though it was recognised that the survey techniques also possess some weaknesses regarding bias and precision as Marshall (1997: 38-55) has asserted. Each of the survey techniques, their advantages and constraints, are set out below.

5.5.1 Field-based observations

In-the-field observations make up the largest part of the research in this study. Both participant and non-participant observations were carried out with the express purpose of providing qualitative data. These observations were regularly carried out over a period of two years (1999-2001) so as to observe changes in border towns (e.g. built-up area and increased economic activities).

The observations involved investigating the following matters:

1. Geography: the extent of built-up areas and urban land uses.
2. Economic structure: local trade, local investment, imports and exports.
4. Culture: tribes or minorities in surrounding areas and the heritage temples in urban centres.
5. Tourist attractions: border markets (e.g. Indo-China border markets), local products and local tourist attractions
6. **Quality of infrastructure and urban services**: roads, immigration servicing, shopping centres, schools, the higher educational institutions, hospitals, hotels and public space.

7. **Local problems**: impact of migrants from neighbouring countries and other impacts of a more open border.

8. **Interest of people participating in border town development**

The findings from these observations of aspects of border towns serve to supplement other knowledge on border contexts, provided earlier.

### 5.5.1.1 Non-participant observation

In this study, non-participant observation surveys were conducted in the five chosen border towns and their respective neighbouring countries in the Greater Mekong Sub-region, whilst the researcher was a tourist using public transport. It was judged that for this study, non-participant observation was useful in gaining up to date and accurate facts on fieldwork areas rather than other survey techniques on the basis that it would be less biased. If people knew that they were being observed, their behaviour might be different. The data derived from non-participant observation is believed to a valid and, as far as possible, unbiased.

However, a disadvantage of this kind of investigation relates to reliability and validity which may be lower because of researcher bias, which stems from their own knowledge, understanding, preferences, and prejudices. Interpretation and evaluation may thus be seen differently according to context (Marshall, 1997: 38-55; Kumar, 1999: 105-115). Moreover, such observational survey requires longer stays in border towns than other kinds of survey techniques; observational investigations are found to be more costly than postal questionnaires. This research thus questions the claims made by Howe and Lewis (1993: 65-66) that the advantage of observation is a low cost method and suitable for a small number of case studies. Further, access to the border town areas and concerns about security meant a more expensive survey and such factors must be considered earlier when doing further research on border towns.
Observations were conducted in all the countries in the Greater Mekong Sub-region: Thailand, Laos, Myanmar, Cambodia and South of China. The border economic development region of Hong Kong-Shenzhen also was surveyed. The observed areas in this study were specifically:

1. The five-selected border towns in Thailand and their five neighbouring countries’ border towns of:
   - Nong Khai-Vientiane (Thailand-Laos)
   - Mukdahan-Suwannakhet (Thailand-Laos)
   - Chong Mek-Champasak (Thailand-Laos)
   - Mae Sai-Tha Khi Lek (Thailand-Myanmar)
   - Aranyaprathet-Poi Pet (Thailand-Cambodia)

2. Other towns located in the Greater Mekong Sub-regional Economic Cooperation Programme:
   - Yunnan (south China)
   - Ho Chi Minh (Vietnam)

3. The border economic development region of Hong Kong-Shenzhen (China):
   - Hong Kong
   - Shenzhen (south China)
   - Guangzhou (south China)

These border towns and other towns in the Greater Mekong Sub-region were observed in order to more clearly understand the situation of this sub-region. In addition, the findings drawn from observation survey in the border region of Hong Kong-Shenzhen generated a better understanding of the investment promotion policy in border towns.

5.5.1.2 Problems with in the field observation

The conduct of observations in this study suffered from three main constraints. These were:
Chapter 5: The design and implementation of the empirical research

1. Each country in the Greater Mekong Sub-region has its own language: Thai, Myanmarse, Laotian, Cambodian, Chinese and Vietnamese. This made it hard to communicate and to collect information from interviewees. The researcher had to resort to speaking Chinese in Yunnan-South China and in Ho Chi Minh-Vietnam. Chinese was also used when making visits and interviews in the border region of Hong Kong-Shenzhen which included Hong Kong, Shenzhen and Guangzhou (China). Thai language was used in all the neighbouring countries’ border towns because most businesses in this sub-region use Thai language. Despite these difficulties, it was possible to obtain data and conduct the survey made satisfactory.

2. It was found that when people knew that they were being observed, their normal behaviour changed. To conduct the surveys it was felt necessary to visit the border towns as a tourist.

3. Most countries in the Greater Mekong Sub region, except Thailand, are less developed countries, with their infrastructure and facilities, in particular roads and public transport, being in poor condition. The state of political conflict continues to present problems in Myanmar and Cambodia (see Chapter Three). Myanmese and Cambodian border zones are currently not secure since there is unrest along borders that lead to frequent closures of border checkpoints. Such problems with security and access in neighbouring countries’ border towns have adversely affected the research, making it hard to get facts and meet with relevant personal. These problems were overcome, particularly in meeting safety requirements by joining Thai local government collaboration projects sponsored between Thailand and neighbouring countries. However, this research method did not affect the researcher's independent status.

5.5.1.3 Participant observation

Apart from conducting research as a tourist, participant observation was carried out over two years (1999-2001) by taking part in the border town development programmes with neighbouring countries organised by Thai local and central government. In particular this involved:
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1. The First International Seminar for the Twin Project: Thailand and Laos for the border town development programme in August 2001;
2. Border towns development schemes between Thailand and Myanmar in Mae Sai in 2000; and
3. Increasing border trade programme between Thailand and Cambodia in Aranyaprathet in 1999.

These international cooperation programmes with its neighbours in the Greater Mekong Sub-region were useful for collecting data on border towns because they assembled most of the people who directly work on border town development planning, including: government officials, local governors and businessmen from both Thailand and neighbouring countries. In addition this survey method also facilitated safe conditions for collecting data in these neighbouring countries.

Compared to other survey methods (semi-structured interviews and postal questionnaire), it was found that the findings from these observations were as accurate as other survey methods used.

5.5.2 Semi-structured interviews

Interviews were conducted in the form of semi-structured questionnaires by preparing a uniform interview schedule for each targeted group. Taking notes was the method used to record the information during interviews because it was the easiest method and saved time compared to having to transcribe tapes, rewriting and analysing tape-recorded information after interviews. (Moore, 2000: 128-129).

Bernard (2000: 191) advocates the use of semi-structured interview in projects dealing with managers, bureaucrats, or people who are accustomed to efficient use of their time. This approach was used to target interviewees from local government officials and border town investors; in particular, these interviewees had only limited time for the survey. In addition, Howard and Shape (1994: 139-140) suggest that the interview provides higher quality information with less bias than other survey techniques.

In addition to the information derived from interviews, the interview technique offered a range of opportunities for interviewees to detail further data, and
express their opinions and attitudes, especially on sensitive matters (e.g. business plans) (Howe and Lewis, 1993). In addition, at interview the interviewer was able to explain the purpose and importance of the study; give assurance on confidentiality; and explain any unclear questions that respondents might meet. Interviews were thus a helpful method particularly in collecting sensitive data and information. Interviewing was, however, time-consuming taking at least 30 minutes to complete each interview. As a result of this experience, it is suggested that interviews are best suited for small sample sizes and well-funded projects which can access experienced interviewers and professional help (Bernard, 2000: 191).

5.5.2.1 Selecting samples (interviewees)

This research surveyed the three targeted interviewee groups, with three-different interview forms. The targeted interview groups were:

1. Local government officials
2. Border town investors
3. Tourists

Each of the interviewee-targeted groups comprised of 100 persons. Each border town involved interviewing 20 for each of these groups. The total number of interviewees was 300 cases. Although each of the three-interview groups used different forms, the interview schedules contained common subjects and issues as set out in Section 5.4.

5.5.2.2 Local government officials

The selection of local government officials was based on whether they worked on the border town development plans either as policy makers or planners. The local government departments, whose interviewees provided data on border towns, were drawn from:

1. Municipality; this is the local administration.
2. Department of Town and Country Planning; this designs, implements, and controls urban land use planning.
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3. Immigration Division; this controls and checks migrants, passengers as well as tourists crossing borders.

4. The Customs Department; this controls and checks on communities, taxes, smuggling, and illegal drugs.

5. Department of Employment; its responsibility is to provide jobs for locally unemployed people.

6. Department of Industrial Promotion; this promotes and designs investment measures to attract firms to locate in industrial estates or targeted development areas.

7. Department of Industrial Works; this regulates firms on the quality of products and pollution.

8. Department of Foreign Trade; this supports and promotes foreign trade.

9. Department of Business Economics; this promotes and assists in local economic activities.

10. Department of Commercial Registration; this records the number of firms and business companies doing business locally, and also appraises commercial taxes.

Two key persons: the head of office and the deputy head of office in each of the above local government offices were interviewed. Many of the findings derived from local government officials provide strategies to develop border towns from the point of view of the government. As these interviewees directly work on border town development (as well as the government officials), they were found to be willing and able to take part in interviews and assist other research surveys. The findings from the questionnaires also represent national data because all these local government officials were representative governors of the central government (see Section 3.1). This study, therefore, has assumed that there were no differences in the data given by these officials representing central and local government.

5.5.2.3 Border town investors

20 business investors in each of the five border towns were interviewed. The conduct of the semi-structured interviews involving border town investors was facilitated in workshops, which had been organised by the Department of Industrial Works. These workshops regularly take place every month in each
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border town as part of the work of the Department of Industrial Works. The assembly of investors in one place, greatly facilitated the collection of data and generated a 100 per cent response rate. This was because (1) investors participated in a research survey because of being a part of local workshop; and (2) the research being investigated had a view based on their business. The particular issues being investigated on border town investors are set out in Section 5.4. Findings from border town investors were useful in gaining a better understanding of border town investment climate, the businesses' perceived benefits of border town investment and the kinds of problems involved in operating businesses in border towns.

5.5.2.4 Tourists

The main purpose of surveying tourists was to establish perceptions of border town development from the point of view of outsiders or visitors. 20 tourists in each of the five border towns were interviewed at Indo-China Border Markets, which meant that 100 tourists were surveyed. Indo-China Border Markets are the main tourist attractions in all the border towns, so it was fact that these situations offered conquerable research settings.

Tourists were interviewed in different situations, for example, some tourists were interviewed when shopping; others were interviewed whilst waiting to cross at a border checkpoint to gamble in a neighbouring country; while others were interviewed at tourist meeting points, tourist service centres, or in local restaurants. However, most people assembled in Indo-China Border Markets, so it was relatively easy and quick to collect data. The findings from the tourists' interviews were used to generate planning strategies on how to encourage, and to retain new firms and new residents to settle and live in border towns. In addition, other interviews with local residents were also conducted in the border towns; findings from these were be used to support the sustainable border growth policy, especially in judging how to retain local residents and attract newcomers to permanently locate in border towns.

In brief, it was seen that semi-structured interviews were a useful research survey technique. Interviews offered a range of advantages in this study including: (1) because it was a non-structured interview, the interviewee was more relaxed
during the interview; (2) the interviewee could offer further ideas and data; and (3) the interviewer could check the reliability of the data by means of noticing surrounding circumstances or information gained from observation of a non-verbal kind. These findings were found to be valid and reliable. However, it was found that as a method these interviews also possess some weaknesses, in particular the high level of skill needed to handle face-to-face situations. The interviewer should be able to manage and control the interview situation, ensuring the interviewee provides information, which is the subject of investigation. The quality of data depends upon the quality of interviews, motivation of interviewees, and the interaction of both parties during interviews. Like others, this study found that interviews were extremely time-consuming as Dunsmuir and Williams (1992: 42) and Kumar (1999: 105-115) have cited. This was especially the case in doing the border town research, as the distances travelled were long which met that the time affected the time needed not only for travel but for administration too was onerous.

5.5.3 Postal questionnaires

Postal questionnaires were also used to collect survey data in this research, although they are notorious for high non-response rates for incurring problems in the exploration of complex matters, and they are not a commonly used as a method for researching sensitive issues (Moore, 2000: 105-120; Howe and Lewis, 1993; Kumar, 1999: 105-115). However, this study has used questionnaires to research sensitive issues because the focus of the investigation has been to put great emphasis on firms' future decisions and business plans which might affect their market competition. It was essential to assess these sensitive business issues, which were an important part of data generation for the purpose of establishing a methodology for identifying and developing border towns as centres for trade and investment.

In practice, this study found that the questionnaire surveys obtained better data and information on sensitive matters than interviews because of presented benefits derived from avoiding expensive face-to-face surveys. It was found that respondents (firms) were more confident in providing information, especially if they had high trust in being able to express ideas that would not be publicly revealed (without their permission). However, this research found that postal questionnaire surveys were unsuited to producing detailed information. This was
because respondents were more willing to complete questions quickly, giving short and immediate answers rather than in-depth, guarded and more considered responses. The questionnaires were, therefore, found to be more suitable for producing findings that have been used to build broad perspective rather than an answer and a more in-depth one.

In this study, for the postal questionnaire, it was decided to use a mix of both open and closed questions because it could assist in gaining quantitative and qualitative data. Marshall (1997: 38-55) addresses the benefits and limitations of the open and closed questions. The essential reason for including open questions in questionnaires was that respondents were likely to reply to the questions in any way they like. As a result, open questions provide specific facts, especially to sensitive questions which respondents might refuse and feel reluctant to discuss in a face-to-face interview. On the other hand, the main disadvantage of open questions was that completed forms were more difficult to analyse.

5.5.3.1 Selecting sample firms

As questionnaire surveys were used to collect business information throughout the whole country, an appropriate sampling approach was used to reflect the researcher's own time and resources.

In theory, good sampling is essential for this survey of business because a prudently drawn sample would be a true representation of the whole population (Marshall, 1997: 56-58; Dunsmuir and Williams, 1992: 7-42; Black, 1993: 42-50; Abrahamson, 1983; Denscombe, 1998: 6-28; Hall, 1996: 106-128; Moore, 2000: 105-120; Leedy, 1997: 205-220; Bouma and Atkinson, 1995: 117-118; Walliman, 2001: 225-275; Bechnofer and Paterson, 2000: 9-42; Blaxter and others, 2001: 56-62). As a result, systematic sampling was employed to select firms from a list of business related organisations. Systematic sampling was carried out to select samples for the mailed questionnaires by means of selecting every 5th case on the firm list of business-related organisations. Selecting every 5th case in systematic sampling is widely employed (Denscombe, 1998: 6-28; Bouma and Atkinson, 1995: 117-127) as it increases the validity of data, it prevents sampling bias and as such all members of the population have an equal opportunity to be chosen in the sample (Howe and Lewis, 1993: 65-66; Blaikie, 2000: 197-209; Bernard, 2000: 149).
With a 95 percent confidence level, it means that there is about a 95 percent chance that the sample and the population will be similar and leaves a 5 percent possible error (Fink and Kosecoff, 1985: 41-61; Brewer and Hunter, 1989: 111-125). In addition, Walliman (2001: 225-275) advocates that systematic sampling is an appropriate method to use when there is a very large population number.

In selecting the samples, in this study, the postal questionnaires surveyed three types of industry:

1. Thai-owned firms
2. Foreign-owned firms which are located in Thailand
3. Foreign-owned firms which are intending to locate in Thailand

<table>
<thead>
<tr>
<th>Firm</th>
<th>Data source</th>
<th>Numbers registered</th>
<th>Numbers surveyed</th>
<th>Numbers returned</th>
<th>Response rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thai-owned firms</td>
<td>The Office of Federation of Thai Industry</td>
<td>1,350</td>
<td>270</td>
<td>84</td>
<td>32%</td>
</tr>
<tr>
<td>Foreign-owned firms which are located in Thailand</td>
<td>The Industrial Estate Authority</td>
<td>1,620</td>
<td>324</td>
<td>152</td>
<td>47%</td>
</tr>
<tr>
<td>Foreign-owned firms which are intending to locate in Thailand</td>
<td>The Board of Investment</td>
<td>254</td>
<td>50</td>
<td>33</td>
<td>66%</td>
</tr>
<tr>
<td>Total number</td>
<td></td>
<td>3,224</td>
<td>644</td>
<td>269</td>
<td>42%</td>
</tr>
</tbody>
</table>

Note: Systematic sampling was used to select a firm from every 5th number from the firm list for survey. These firm lists are unpublished documents.

Source: Author's own survey, conducted July-September 2001

The data in Table 5-2 show that, for postal questionnaires, three groups of firms were selected for sampling from lists mentioned by:

1. The Office of Federation of Thai Industry
2. The Industrial Estate Authority
3. The Board of Investment
The firm lists from the above organisations possess good characteristics for use as a sampling frame because of being up-to-date, holding precise information and being related to the research (Denscombe, 1998: 6-28).

(1) **Thai-owned firms**
Thai-owned firms typically register with the Office of Federation of Thai Industry because this organisation assists and advises Thai domestic firms on investment; 1,350 firms were registered in 2001. The number of Thai-owned firms surveyed was 270 firms.

(2) **Foreign-owned firms which are located in Thailand**
Foreign-owned firms, which are located in Thailand, normally register with the Industrial Estate Authority. This organisation has the main responsibility of assisting and attracting firms to locate in industrial estates with the purposes of supporting decentralisation policy and controlling pollution from industrial activities. Measures to attract firms to locate to industrial estates involve tax exemptions, lease of cheap land and provide good business conditions (see Section 3.5.2).

Even though the Industrial Estate Authority offers a range of benefits without bias either to Thai-owned firms or foreign-owned firms, this study found that foreign-owned firms are more likely to locate in industrial estates than are Thai firms. Thai-owned firms are generally scattered in locations based on their own decision and land availability; they are currently excluded from being able to access government incentives.\(^47\)\(^48\)\(^49\) Such incentives will be discussed in Chapter Six. 1,620 foreign firms were registered as being on the firm list in 2001; 324 foreign-owned firms were surveyed as part of systematic sampling.

(3) **Foreign-owned firms which are intending to locate in Thailand**
The foreign-owned firms, which are intending to locate in Thailand, are likely to register with the Office of the Board of Investment. The primary responsibility of this office is to support and stimulate investment activities at national level through provision of special investment incentives for qualifying firms under the

\(^47\) Interviews with local government officials and businessmen in border towns, July-September 2000
\(^48\) Data was derived from the firm list of the Industrial Estate Authority (2002)
\(^49\) Observation surveys in selected industrial estates in the eastern region, July-September 2000.
Board of Investment's regulations (see Chapter Three). The study found that the majority of foreign-owned firms, which are intending to locate in Thailand first consider and register with this organisation so as to obtain investment incentives. 254 foreign-owned firms, which were intending to locate in Thailand, were registered between January and July 2001, and of these 50 firms were surveyed as part of systematic sampling.

Each of these targeted firm groups were surveyed with different postal questionnaires, but all firms had to answer similar questions (see Section 5.4). Findings derived from respondent firms will be used to formulate strategies on how to encourage firms to relocate to border towns as these border towns are less developed areas and are located in the most remote areas. Successful border town development should support Thai decentralisation policy, resolving current over-urbanisation in the Bangkok Metropolitan Region, and help narrow the gap in regional incomes. In this respect, border town growth is an urgent planning matter for the Thai government.

5.5.3.2 Response rates

Because mailed questionnaires notoriously incur a high level of non-response, a total of 644 firms were surveyed throughout the whole country. In order to achieve a high response rate as possible, this research needed to employ a range of measures, including:

1. It was necessary to enclose introductory letters issued from the Government and University to confirm that the findings would be used just for this study (see Appendices 12 and 13).
2. The first introductory page of the survey sheet introduced the importance of the research, its research purposes, and explained how the questionnaire was to be conducted.
3. A pre-paid envelope was enclosed with the questionnaire.
4. In some cases, industrial estates were willing to be responsible for collecting and retaining the questionnaires.
5. It was essential to provide a contact telephone number in case respondents met any unclear questions or needed additional explanations, and also to offer a fax number for facilitating return of the completed questionnaires.
6. A telephone survey was used to follow up non-respondents. Before using the telephone survey to follow up non-respondents, co-operation was sought through the Board of Investment and the Industrial Estate Authority in contacting these firms: only then were they contracted by telephone. As a result, the firms' managers found it hard to refuse to participate in research, or if not they gave responsibility to the person who could give details about the firm. However, this research endeavoured to avoid the use of personal contacts to obtain the data because the findings might be biased. But in some cases for the follow up stages, personal contact was used to enhance the response rate.

In using all of the above methods, the response rate was a satisfactory 42% of all completed questionnaires. The telephone follow up survey boosted the first return of questionnaires from 33% to 42%.

5.5.3.3 Constraints of questionnaires

Conducting the postal questionnaire surveys in this study met a series of difficulties, including:

1. This study accepted that the postal questionnaire saw a lower response rate; as people fail to return them, the response rate typically fell well below 50 percent (i.e. 20-25%) (Kumar, 1999; Moore, 2000: 105-120). This fact necessitated the use of measures to boost the response rate.
2. Some of the returned forms (i.e. 2-3%) were found to be incomplete and unclear.
3. Conducting a postal questionnaire survey had more bias than other survey techniques (i.e. observations and interviews). This was because firms were given the opportunity to see the questions before deciding whether to participate and their interests in the topic would be very likely to affect their decision. It was impossible to ensure that the firms' managers (the intended respondents) filled out the form or had received advice from others in giving their answers.
5.5.3.4 The empirical results (questionnaires)

As Table 5-2 shows, 269 firms returned questionnaires, which is a satisfactory response rate of 42%. It is seen that foreign-owned firms achieved a higher response rate than Thai-owned firms with 66% of foreign-owned firms intending to locate in Thailand responding; whilst 47% of foreign-owned firms located in Thailand responding; and only 32% of domestic Thai-owned firms responding.

5.6 Summary

Due to the organisation of the research survey and adaptation of survey techniques to tackle such expected problems, an acceptable level of response was achieved. Research surveys included in the field observations, semi-structured interviews and postal questionnaires. Each research survey method was conducted according to their known relative strengths. As expected, findings generated from these have provided a better understanding of facts on border towns and the needs of firms who returned the questionnaires. These findings are expected to contribute to formulating a methodology for identifying and developing border towns as centres for trade and investment. Results of the data analysis will be discussed in the next chapter. In addition, these answers will provide a basis for the formulation, discussion and recommendation for effective, future border town research, which will be presented in Chapter Seven.
Part Four: Research Results, Discussions and Conclusions
Chapter Six: Data analysis

6.1 Introduction

The previous chapter clarified and detailed the research design for the three principal types of data generated from observations, semi-structured interviews and postal questionnaires. The main purpose of this chapter is to present and analyse findings. Stemming from this evidence, factors used in selecting border towns as new centres for trade and investment are presented at the end of this chapter.

Findings derived from interviews were based on the views of 300 interviewees consisting of: (1) local government officials, (2) border town investors, and (3) tourists. In each group, 20 interviewees were surveyed in each of the five selected border towns. The survey questionnaire of 269 firms consisted of: (1) 84 Thai-owned firms, (2) 152 foreign-owned firms which are located in Thailand, and (3) 33 foreign-owned firms which are intending to locate in Thailand. These respondents are seen as important stakeholders in border town development and their views and opinions will be used to evaluate the sustainability of the border town as locations for future development.

The structure for this chapter is as follows:

1. **Nature of economy and situation in border towns.** This covers details about the characteristics of economic activities (i.e. trade, investment, and tourism), and border situations (i.e. security and border migration) as well as urban infrastructure and facilities.

2. **Investment circumstances.** This includes an assessment of business types, annual sales, workforce size and quality of the labour force.

3. **Strengths and weaknesses of the border towns.** This covers factors affecting business and the facilities attracting visitors to border towns.

4. **Strategies to develop border towns as new centres for trade and investment.** Strategies are assessed in relation to the evaluation of national trade and investment policies, the needs of and barriers to border town development and factors affecting business in Thailand; economic activities which might be promoted in border towns; improvements in
urban infrastructure and facilities; location decisions of firms; and factors affecting firms' decisions to relocate to border towns.

Findings derived from interview and questionnaire surveys were grouped and analysed under four sub-headings described above. The results help in providing a profile of the nature of border towns, the investment circumstances in border towns, and the kinds of strategies to develop border towns compared to the national situation in Thailand. Interview data were gathered in border towns providing the facts on border towns; the findings from questionnaires, which were sent out by mail throughout the whole country, provide facts on national level, dealing with those factors affecting business and the location of new firms in Thailand. The findings - both from border towns and the country generally - are used to devise a range of measures that should encourage firms to relocate to border towns.

In addition, these results will also help to clarify whether and to what extent there are significant differences in activities and situations in border towns compared to the rest of the country, especially the Bangkok Metropolitan Region. A method for identifying border towns as new centres for trade and investment, especially in relation to sustaining and supporting the local economic activities and residents, has not been previously available to the Thai government.

6.2 Nature of economy and situation in border towns

This section presents and analyses data on four particular dimensions, these are:

1. Current economy and situation in border towns;
2. The ranking of border town for development;
3. Differences between border towns in Thailand and their neighbours; and
4. The quality of the urban infrastructure and facilities in border towns.

6.2.1 Current economy and situation in border towns

Aims: 1. To find out whether there has been successful border town development between Thailand and neighbouring countries.
2. To assess and identify which border towns should be supported first as centres for trade and investment.
The principal data findings are presented in five tables, as follows:

- Table 6-1 shows the extent to which there is increasing border town activities in Thailand and its neighbouring countries;
- Table 6-2 shows the same data as in Table 6-1 but covers five pairs of border towns: Thai border towns and neighbouring countries' border towns;
- Table 6-3 shows the ranking of Thai border towns;
- Table 6-4 shows ranking of pair of border towns; and
- Table 6-5 shows statistical analysis which has tested whether there are differences between the pairs of border towns and Thai-only and non-Thai groups of border towns based on the proportion of respondents stating that border town activities are increasing.

300 Thai interviewees, 60 respondents in each five of border towns, were asked to rate the economy and situation in border towns (during 2000-2001) focusing on trade, investment, tourism, security and domestic migration to border towns by rating them as either "decreasing", "stable", or "increasing". Where possible, these data on border towns were compared with the findings derived from similar surveys on neighbouring countries' border towns.

Unfortunately, it was not possible to conduct interviews with people in neighbouring countries because of language barriers. But informal interviews (personal) and observations were possible and these have supplemented the data included in this section (see also Chapters Four and Five).

Although, respondents were requested to rate activities in border towns in terms of whether they are increasing, stable or decreasing, this study employed only the numbers of rising activities. This was because this study judged that number of respondents stating that activities in border towns were increasing, especially in relation to trade, investment, tourism, improving security and domestic migration to border towns point to the border towns' potential. Whereas the answers of stable and decreasing rating of border town activities show weaknesses.
Table 6-1: Respondents’ views on whether activities in border towns are “increasing”

<table>
<thead>
<tr>
<th>Activities</th>
<th>Thai border towns</th>
<th>Neighbouring countries’ border towns</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nong Khai</td>
<td>Mukdahan</td>
</tr>
<tr>
<td>1. Trade (Max = 60)</td>
<td>44</td>
<td>40</td>
</tr>
<tr>
<td>2. Investment (Max = 60)</td>
<td>39</td>
<td>33</td>
</tr>
<tr>
<td>3. Tourism (Max = 60)</td>
<td>49</td>
<td>42</td>
</tr>
<tr>
<td>4. Improving security (Max = 60)</td>
<td>35</td>
<td>32</td>
</tr>
<tr>
<td>5. Domestic migration to border town (Max = 60)</td>
<td>18</td>
<td>22</td>
</tr>
<tr>
<td>Total score (Max = 300)</td>
<td>185</td>
<td>169</td>
</tr>
<tr>
<td>Border town rank</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

Note: Total sample is 300 cases; in each border town 60 interviewees were surveyed. This figure in each cell the number of positive view out of 60

Source: Author’s own interview surveys, conducted July-September 2001

Overview of border towns in Thailand and neighbouring countries
Data in Table 6-1 shows overall, that according to respondents, the number of respondents stating that activities in border towns are likely to increase in Thailand is 50% higher than in neighbouring countries’ border towns. The perceived level of growth potential of border town development in Thailand and in neighbouring countries are summarised below.

For Thai border towns, more than half of respondents thought that trade (202), tourism (197) and investment (157) were increasing (out of 300 respondents). About one third of respondents said that improving security in neighbouring
countries (119) and domestic migration to border towns (116) were better. Considering border towns in neighbouring countries, however, only one third of respondents thought that trade (107) and tourism (107) were increasing. Less than one third of respondents felt that security (76), investment (71) and domestic migration to border town (46) (out of 300 respondents), were improving in these neighbouring countries’ border towns. The typical response in neighbouring countries’ border towns, not shown in the table, was that border towns’ activities was in fact stable.

It is apparent that in Thai border towns, trade and tourism are the main economic activities that are expected to increase. Investment, security and domestic migration to border towns need to be improved. Currently border towns continue to be less popular in attracting firms and residents.

So far, for neighbouring countries’ border towns, fewer respondents believe that activities in these border towns will be increasing. Only Poi Pet, in the view of respondents, had higher number of border economic activities that would increase (trade, investment and tourism), which result probably from the opening of casinos and its better access from Bangkok. Insecure border zones (e.g. Myanmar and Cambodia) and having lower domestic migration to border towns in neighbouring countries are seen as the major barriers to border development in both countries, sustained improvements are needed.

**Trade**

The data in Table 6-1 show that most respondents felt trade would increase most in border town activities in Thailand whereas for neighbouring countries this was rated 50% lower. More than half of respondents said that trade was increasing in most Thai border towns: Aranyaprathet (50), Nong Khai (44), Mudahan (40) and Chong Mek (40), except Mae Sai (28) out of 60. For the border towns in neighbouring countries, respondents said that only in Poi Pet (50 out of 60 respondents) was trade judged to be increasing, being equal to Aranyaprathet and rated higher than the rest of Thai border towns. The rest of neighbouring border towns were rated below 50%: Champasak (29), Vientiane (15), Tha Khi Lek (7) and Suwannakhet (6) out of 60 respondents. It is clear that the development of border towns in neighbouring countries is likely to be generally much lower than in Thailand.
**Investment**

About half of respondents said that investment in all Thai border towns, except Mae Sai, would be increasing: Nong Khai (39), Aranyaprathet (39), Mukdahan (33), and Chong Mek (30). Regarding border towns in neighbouring countries, only in Poi Pet did respondents believing that investment would increase more than in some Thai border towns (e.g. Mukdahan, Chong Mek and Mae Sai). However, very much less than one third of respondents said that investment in the other neighbouring border towns would increase: Champasak (16), Vientiane (9), Suwannakhet (7), and Tha Khi Lek (5). However the typical response for neighbouring countries' border towns was that investment circumstances would at best remain stable.

As suggested by the economic base theory and international investment theory, if border towns' economies are to become more diversified, the measures to encourage business to relocate to border towns will need to be put in place, especially if respondents are be optimistic about investment prospect in Thailand; though they are less optimistic about neighbouring countries.

**Tourism**

With regard to Thai border towns, more than half of respondents thought that tourism in most border towns would increase: Aranyaprathet (51), Nong Khai (49), Mukdahan (42) and Chong Mek (35); only Mae Sai (20) was the exception. In most border towns in neighbouring countries, fewer than half of respondents felt that tourism in their border town would increase: Champasak (26), Vientiane (25), Suwannakhet (11) and Tha Khi Lek (10); only Poi Pet was the exception with 35 out of 60 suggesting that tourism would increase. The typical response was that tourism in these non-Thai border towns would remain stable. Tourism for both types of border towns is seen by respondents to be increasing and their benefits are seen as important as trade and more important than investment.

**Improving security**

Based on the surveys, respondents felt that improvements to security in border towns is the most important factor for border town growth because when a border town is a more secure area, firms and people are more likely to be attracted to relocate to them. However, according to respondents' views and observation surveys, the study found that at present all Thai border towns are safe but the situation of security at border towns relies on the state of affairs in neighbouring...
countries, especially in Myanmar and Cambodia. Please note, the data on improving security only refers to the safety situation in neighbouring countries as perceived by Thai respondents.

For Thai border towns, around half of the respondents felt that security in border towns which are located opposite Laos would improve: Nong Khai (35), Mukdahan (32) and Chong Mek (28) out of 60 respondents. However, in Mai Sai (13) and Aranyaprathet (11) a much lower proportion of respondents (about one sixth of respondents) felt that security would improved, and thus would hinder border town growth. The typical response rated security in border towns sharing a border with Laos (Nong Khai, Mukdahan and Chong Mek) as stable, whereas most respondents felt that security in the border towns located opposite Myanmar (Mae Sai) and Cambodia (Aranyaprathet) as being low and would not improved.

For neighbouring countries’ border towns, one third of respondents felt that security in Laotian border towns would improve: Vientiane (22) Suwannakhet (22) and Champasak (20) out of 60 respondents. The typical response on security in these border towns was that it would remain stable. Most respondents showed that Poi Pet and Tha Khi Lek were least safe where very few respondents believed that security would improve: Poi Pet (11) and Tha Khi Lek (3).

Findings suggest that towns sharing a border with Laos are much more secure than the border towns located on or in Myanmar and Cambodia. Consequently, based on the security criterion, border towns which are located opposite Laos (Nong Khai, Mukdahan, and Chong Mek) ought to be promoted first as new growth centres. Even though a high number of respondents believe economic activities would increase (trade, investment and tourism) at Aranyaprathet, the poor security rating suggests that business and investment will be put off until this situation is significantly improved. However, the pair of border towns of Aranyaprathet (Thailand) and Poi Pet (Cambodia) could be developed together as they are both rated as having increasing border town activities. For this to occur, better international cooperation between Thailand and Cambodia will be needed. Improving relationships generally between neighbouring countries is, therefore, a key factor in facilitating and encouraging border town activities.
Domestic migration to border towns

Domestic migration to border towns is another significant criterion to assess whether border towns are attractive areas (Thairath, 2002: 5-7). Border towns with increasing domestic migration are seen as being attractive towns which would complement investment, business and tourism.

Data in Table 6-1 shows that fewer than half of the respondents judged that domestic migration in any Thai border town would increase: Aranyaprathet (29), Chong Mek (26), Mukdahan (22), Mae Sai (21), and Nong Khai (18) out of 60 respondents. The views of Thai respondents in border towns about the towns in neighbouring countries were that even fewer respondents felt that domestic migration would improve: Suwannakhet (12), Poi Pet (11), Champasak (10), Tha Khi Lek (9), and Vientiane (4). The typical response was that domestic migration to both Thai and neighbouring countries' border towns would remain stable. These figures suggest that respondents believe that domestic migration to border towns is least likely to improve; this is worse for non-Thai border towns.

6.2.2 The ranking of border towns

Data in Table 6-2 presents the same data as in Table 6-1 but for pairs of border town in the Thailand border with its neighbours. These findings provide a means of ranking border towns whether singularly or in pairs based on these key indicators influencing border town development.

Table 6-2 shows data the number of respondents' believing that there would be an increase in activities in five pairs of border towns of (1) Nong Khai-Vientiane, (2) Mukdahan-Suwannakhet, (3) Chong Mek-Champasak, (4) Mae Sai-Tha Khi Lek, and (5) Aranyaprathet-Poi Pet (see Map 4-1).
Table 6-2: Number of respondents believing that activities in border towns (in Thailand and in neighbouring countries) will increase in the future

<table>
<thead>
<tr>
<th>Border activities</th>
<th>Border towns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of respondent expecting an increase in border activities (Max = 60)</td>
<td>Hong Khai (Thai)</td>
</tr>
<tr>
<td>1. Trade</td>
<td>44</td>
</tr>
<tr>
<td>(Total number for a pair = 120)</td>
<td>(59)</td>
</tr>
<tr>
<td>2. Investment</td>
<td>39</td>
</tr>
<tr>
<td>(Total number for a pair = 120)</td>
<td>(48)</td>
</tr>
<tr>
<td>3. Tourism</td>
<td>49</td>
</tr>
<tr>
<td>(Total number for a pair = 120)</td>
<td>(74)</td>
</tr>
<tr>
<td>4. Improving security</td>
<td>35</td>
</tr>
<tr>
<td>(Total number for a pair = 120)</td>
<td>(57)</td>
</tr>
<tr>
<td>5. Domestic migration</td>
<td>18</td>
</tr>
<tr>
<td>(Total number for a pair = 120)</td>
<td>(22)</td>
</tr>
<tr>
<td>Total number for single town = 300</td>
<td>185</td>
</tr>
<tr>
<td>Total number for pair town = 600</td>
<td>(260)</td>
</tr>
<tr>
<td>Rank of single border towns</td>
<td>1</td>
</tr>
<tr>
<td>Rank of pairs of border towns</td>
<td>2</td>
</tr>
</tbody>
</table>

Note: Total sample is 300 cases; in each border town 60 interviewees were surveyed.
Source: Author’s own interview surveys, conducted July-September 2001
Overview of the pairs of border towns

According to respondents' views, all Thai border towns are likely to have a much higher number of activities that would be increasing than neighbouring countries' border towns. Of the 5 pairs of border towns, the highest score of 319 out of 600 was given to Aranyaprathet-Poi Pet pair of border towns, whereas Mae Sai-​Tha Khi Lek pair of border towns had the lowest total score of 131 out of 600 respondents.

Aranyaprathet-Poi Pet (Cambodia)

Aranyaprathet-Poi Pet (Cambodia) was rated first of the 5 pairs of border towns with a total score of 319 (out of 600 respondents) believing that border towns activities would increase. Many more than half of respondents said that border economic activities for trade (100), tourism (86) and investment (73) would increase. However, a minority perceived that domestic migration to these border towns (40) and security (20) would increase or improve. This suggests that even for this pair of towns, safety concerns at the borders need to be resolved if the potential for growth in trade, investment and tourism is to be realised.

Nong Khai-Vientiane (Laos)

In the views of respondents, Nong Khai-Vientiane was rated second with a total score 260 out of 600 for those respondents, being activities would increase; this is equal to Chong Mek-Champasak’s score. Tourism (74), trade (59), and security (57) each out of 120 were said to increase in these border towns, while only a minority of respondents stated that investment (48) and domestic migration to the border towns (22) would increase. The typical responses would at best remain stable.

Chong Mek-Champasak (Laos)

Respondents rated Chong Mek-Champasak (Laos) as the second best pair of border towns equal with Nong Khai-Vientiane (260). More than half of respondents said that trade (69) and tourism (61) had increased out of 120 respondents. Less than half of respondents perceived security (48), investment (46) and domestic migration (36) would improve. The figures suggest that this pair of towns is similar to the pair of Nong Khai-Vientiane in that trade and tourism are the significant border economies, but to encourage the new firms and respondents to settle here is the first task for border development. The typical responses of safety and security would remain stable.
Mukdahan-Suwannakhet (Laos)
Mukdahan-Suwannakhet (Laos) was rated 4th lowest out of the 5 pairs of border towns, with a total score of 227 out of 600 respondents believing that activities at these border towns would increase. Less than half of respondents felt that all border activities in this pair of towns would increase: improving security (54), tourism (53), trade (46), investment (40) and domestic migration to border town (32) each out of 120 respondents. The findings suggest that it would be relatively less easy (neither high public investment) to promote this pair of border towns in becoming a regional business zone in this large sub-region because to date cross border activities have been low and that there is a clear and wide gap between these two border towns in terms of the respondents' view in increasing border towns activities. However, the safe border zone is a strong point for this pair of towns.

Mae Sai-Tha Khi Lek (Myanmar)
Mae Sai-Tha Khi Lek (Myanmar) was ranked last of the five pairs of border towns, with 131 respondents believing that the number of border activities would increase. Fewer than one third of respondents felt that all border activities would increase: trade (35), investment (30), domestic migration to border town (30), investment (20) and improving security (16). The typical responses would at best remain stable. This suggests that in order to develop this pair of towns as a centre for trade and investment complementary public investment is needed to support trade, investment and tourism. Further, this border zone is seen as being unsafe as a result of frequent fighting and closing of the checkpoints. Collaborating these planning of economic development and improving security at this border zone between Thailand and Myanmar are key requirements in the support of future investment and trade growth.
Table 6-3: Rank order of single Thai border towns

<table>
<thead>
<tr>
<th>Thai border towns</th>
<th>Rank order of single border towns</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Respondents' views on number of border activities would increase (see Table 6-2)</td>
</tr>
<tr>
<td>1. Nong Khai</td>
<td>1</td>
</tr>
<tr>
<td>2. Mukdahan</td>
<td>3</td>
</tr>
<tr>
<td>3. Chong Mek</td>
<td>4</td>
</tr>
<tr>
<td>4. Mai Sai</td>
<td>5</td>
</tr>
<tr>
<td>5. Aranyaprathet</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: Author's own survey, conducted July-September 2001

**Ranking of single border towns**

Data in Table 6-3 shows the overall of the rank order five single border towns based on the respondents' views, SWOT analysis and observation surveys. They show that Nong Khai is ranked first by all three sources of evidence, while Mae Sai is consistently ranked last. Mukdahan is ranked 2nd on two sources of evidence as is Aranyaprathet. Chong Mek's rank is never better than 3rd place. Mae Sai is ranked in last place by all three sources of evidence. Intriguingly, Mae Sai continues to be promoted as a centre for trade and investment by the Thai government as part of its border town development policy (Bangkok Post, 2003). Given its insecurity and other political border problems, it is thought neither domestic nor international firms are ever likely to locate to Mae Sai in large numbers.

On the basis of the three sources of data it is clear that Nong Khai is the best border town that possesses the most opportunities to grow and become a new centre for trade and investment. However, this cannot be said for the other border towns.

- Mukdahan, which is ranked 2nd, has secure and safe borders however it is ranked only third (behind Nong Khai and Aranyaprathet) on the number of activities that are expected to increase. Mukdahan currently is strongly supported in national policy and through sub-regional cooperation.
between Thailand, Laos and Vietnam (National Economic and Social Development Board of Thailand, 2000). It benefits from being in a secure zone of Laos, which also gives its an easier access to the Vietnamese seaport of Danang (see Map 1-2).

- Aranyaprathet is ranked 3rd just behind Mukdahan because of its higher level of insecurity and higher levels of migration through its border. However, in terms of business and trade, prospects for growth were viewed by respondents to be higher (i.e. increasing).

- Chong Mek, is ranked 4th, but because it is located in a sensitive area, in a National Park, its prospects for growth rely upon it being promoted mainly as a centre for tourist service centre than as a trading and business investment centre.

- Mae Sai is ranked last order (i.e. 5th) because of its higher level of insecurity affecting low increasing border activities.

Table 6-4: Ranking of pair of border towns

<table>
<thead>
<tr>
<th></th>
<th>Hong Kha</th>
<th>Vientiane</th>
<th>Mukdahan</th>
<th>Suwan nan khet</th>
<th>Chong Mek</th>
<th>Cham pasak</th>
<th>Mae Sai</th>
<th>Thai Khi Lek</th>
<th>Aranyaprathet</th>
<th>Pol Pet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total score for each border town</td>
<td>185</td>
<td>75</td>
<td>169</td>
<td>58</td>
<td>159</td>
<td>101</td>
<td>97</td>
<td>34</td>
<td>180</td>
<td>139</td>
</tr>
<tr>
<td>Total score for each pair</td>
<td>260</td>
<td>227</td>
<td>260</td>
<td>131</td>
<td>319</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rank for single border towns</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total rank score for each pair</td>
<td>4</td>
<td>7</td>
<td>6</td>
<td>10</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall rank score 1 = best 5 = worst</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Author’s own survey, conducted July-September 2001
Ranking of pairs of border towns

Data in Table 6-4 shows the score and rank given to each pair of border towns. Aranyaprathet-Poi Pet border towns are ranked in the first place with 53% of respondents believe that the number of border activities will increase. Mae Sai-Tha Khi Lek border towns are ranked the last (i.e. 5th) by a wide margin. The other pairs of border towns are distinguished by the fact that their individual/single border scores are very different, which is likely to adversely affect being selected in future collaborative plans as it might be seen to waste secure probable investment and other resources. The data consistently shows that Thai border towns have better growth potential than their neighbours but working co-operation may generate wider benefit for the countries involved.

6.2.3 Differences between Thai and non-Thai border towns

Data in Tables 6-1 and 6-2 was also statistically tested to see whether differences between the group and pairs of border towns in relation to the views of respondents on trade, investment, tourism, improving security and domestic migration were significant. The results of the matched pairs tests are presented in Table 6-5. For comparison per pairs, the Wilcoxon test was applied to all border towns, except for test numbers 2 and 3. In the latters case, tests on the two groups of border towns involved the Friedman test. All the tests were analysed under the following conditions:

1. At a significance level of 5%.
2. Null hypothesis (Ho) means there is no significant difference between the border towns on the basis that the number of border activities would increase.

50 The Wilcoxon matched-pairs signed-ranks test is a nonparametric test for comparing two related samples. The Wilcoxon test uses a comparison of the sign and size of differences by ranking size of differences. In this respect, the test shows which numbers of pairs have a greater difference than other pairs. (Hinton, 2004: 224-229; Siegel, 1956: 75-76).
51 Nonparametric tests or alternatively known as distribution-free processes, make relatively free assumptions about the nature of the population, so it is used in this study, while parametric technique is strictly valid only if population frequency distribution has a particular specific shape (Leach, 1979:45).
52 The Friedman test is also a nonparametric test that tests for k related samples or group samples. In this test, data of the test are ranked (Hinton, 2004: 240-246; Siegel, 1956: 166-167).
3. Alternative hypothesis (H₁) means there is a significant difference between the border towns on the basis that the number of border activities would increase.

4. When probability (p) is more than 0.05 or p > 0.05, the case retains the null hypothesis (H₀); when the probability (p) is less than 0.05 or p < 0.05, the case rejects the null hypothesis (H₀) in favour of the alternative hypothesis (H₁).

The results of the statistical tests in Table 6-5 suggest that pairs of towns with the acceptance of (H₀) should be first promoted as new growth centres. This is because there is no difference between those towns on the basis that the number of border activities would increase. The higher the value of probabilities (p) for pairs of towns with (H₀), the less difference there is in the belief that the number of border activities would increase.

In Table 6-5 towns are highlighted if the Ho is rejected in favour of H₁. Each test is described below. Test number 1. It is affirmed that between groups of Thai and non-Thai border towns that there is a difference in the number of border activities that are expected to increase. In this respect, activities in Thai border towns are expected to increase more than in non-Thai border towns. On this basis, domestic and international firms are more likely to relocate to Thai border towns than non-Thai border towns because of much higher business and investment growth prospect. Such Thai border towns are more likely to become capable of developing into new centres for trade and investment in the sub-region.

Test number 2. It is affirmed that within a group of non-Thai border towns there is no difference in the number of border activities that are expected to increase. This test of difference accepts (H₀) the null hypothesis. Test number 3. It is affirmed too that within a group of Thai border towns there is also no difference in the number of border activities that are expected to increase. Again, the test of difference accepts (H₀) the null hypothesis. Test numbers 2 and 3 show that border activities at Thai and non-Thai border towns are in similar group situations which trade, tourism and investment would more increase than domestic migration and improving security.
Table 6-5: The test of differences between the border towns in Thailand and neighbouring countries

<table>
<thead>
<tr>
<th>Test number</th>
<th>Matched pairs test</th>
<th>Probability</th>
<th>Significance (p= 0.05)</th>
<th>Acceptance</th>
<th>Relation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The tests pairs of border towns in Tables 6-1 and 6-2:</td>
<td>0.043</td>
<td>p&lt;0.05</td>
<td>H1</td>
<td>Difference</td>
</tr>
<tr>
<td>2</td>
<td>A group of border towns in neighbouring countries</td>
<td>0.159</td>
<td>p&gt;0.05</td>
<td>H0</td>
<td>No Difference</td>
</tr>
<tr>
<td>3</td>
<td>A group of Thai border towns</td>
<td>0.064</td>
<td>p&gt;0.05</td>
<td>H0</td>
<td>No Difference</td>
</tr>
<tr>
<td>4</td>
<td>Aranyaprathet and Poi Pet</td>
<td>0.068</td>
<td>P&gt;0.05</td>
<td>H0</td>
<td>No Difference</td>
</tr>
<tr>
<td>5</td>
<td>Nong Khai and Vientiane</td>
<td>0.043</td>
<td>P&lt;0.05</td>
<td>H1</td>
<td>Difference</td>
</tr>
<tr>
<td>6</td>
<td>Chong Mek and Champasak</td>
<td>0.043</td>
<td>P&lt;0.05</td>
<td>H1</td>
<td>Difference</td>
</tr>
<tr>
<td>7</td>
<td>Mukdahan and Suwannakhet</td>
<td>0.042</td>
<td>P&lt;0.05</td>
<td>H1</td>
<td>Difference</td>
</tr>
<tr>
<td>8</td>
<td>Mae Sai and Tha Khi Lek</td>
<td>0.039</td>
<td>P&lt;0.05</td>
<td>H1</td>
<td>Difference</td>
</tr>
<tr>
<td>9</td>
<td>Nong Khai and Aranyaprathet</td>
<td>0.715</td>
<td>p&gt;0.05</td>
<td>H0</td>
<td>No Difference</td>
</tr>
<tr>
<td>10</td>
<td>Mukdahan and Aranyaprathet</td>
<td>0.500</td>
<td>p&gt;0.05</td>
<td>H0</td>
<td>No Difference</td>
</tr>
<tr>
<td>11</td>
<td>Chong Mek and Aranyaprathet</td>
<td>0.500</td>
<td>p&gt;0.05</td>
<td>H0</td>
<td>No Difference</td>
</tr>
<tr>
<td>12</td>
<td>Mukdahan and Chong Mek</td>
<td>0.357</td>
<td>p&gt;0.05</td>
<td>H0</td>
<td>No Difference</td>
</tr>
<tr>
<td>13</td>
<td>Nong Khai and Chong Mek</td>
<td>0.225</td>
<td>p&gt;0.05</td>
<td>H0</td>
<td>No Difference</td>
</tr>
<tr>
<td>14</td>
<td>Nong Khai and Mukdahan</td>
<td>0.176</td>
<td>p&gt;0.05</td>
<td>H0</td>
<td>No Difference</td>
</tr>
<tr>
<td>15</td>
<td>Nong Khai and Mae Sai</td>
<td>0.080</td>
<td>p&gt;0.05</td>
<td>H0</td>
<td>No Difference</td>
</tr>
<tr>
<td>16</td>
<td>Mae Sai and Aranyaprathet</td>
<td>0.080</td>
<td>p&gt;0.05</td>
<td>H0</td>
<td>No Difference</td>
</tr>
<tr>
<td>17</td>
<td>Mukdahan and Mae Sai</td>
<td>0.043</td>
<td>p&gt;0.05</td>
<td>H1</td>
<td>Difference</td>
</tr>
<tr>
<td>18</td>
<td>Chong Mek and Mae Sai</td>
<td>0.039</td>
<td>p&gt;0.05</td>
<td>H1</td>
<td>Difference</td>
</tr>
<tr>
<td>19</td>
<td>Vientiane and Suwannakhet</td>
<td>0.273</td>
<td>p&gt;0.05</td>
<td>H0</td>
<td>No Difference</td>
</tr>
<tr>
<td>20</td>
<td>Vientiane and Poi Pet</td>
<td>0.225</td>
<td>p&gt;0.05</td>
<td>H0</td>
<td>No Difference</td>
</tr>
<tr>
<td>21</td>
<td>Champasak and Poi Pet</td>
<td>0.225</td>
<td>p&gt;0.05</td>
<td>H0</td>
<td>No Difference</td>
</tr>
<tr>
<td>22</td>
<td>Suwannakhet and Poi Pet</td>
<td>0.225</td>
<td>p&gt;0.05</td>
<td>H0</td>
<td>No Difference</td>
</tr>
<tr>
<td>23</td>
<td>Suwannakhet and Champasak</td>
<td>0.223</td>
<td>p&gt;0.05</td>
<td>H0</td>
<td>No Difference</td>
</tr>
<tr>
<td>24</td>
<td>Vientiane and Champasak</td>
<td>0.138</td>
<td>p&gt;0.05</td>
<td>H0</td>
<td>No Difference</td>
</tr>
<tr>
<td>25</td>
<td>Vientiane and Tha Khi Lek</td>
<td>0.138</td>
<td>p&gt;0.05</td>
<td>H0</td>
<td>No Difference</td>
</tr>
<tr>
<td>26</td>
<td>Champasak and Tha Khi Lek</td>
<td>0.104</td>
<td>p&gt;0.05</td>
<td>H0</td>
<td>No Difference</td>
</tr>
<tr>
<td>27</td>
<td>Champasak and Tha Khi Lek</td>
<td>0.043</td>
<td>p&gt;0.05</td>
<td>H1</td>
<td>Difference</td>
</tr>
<tr>
<td>28</td>
<td>Poi Pet and Tha Khi Lek</td>
<td>0.043</td>
<td>p&gt;0.05</td>
<td>H1</td>
<td>Difference</td>
</tr>
</tbody>
</table>

Source: Author's own interview surveys, conducted July-September 2001
Test numbers 4, 5, 6, 7, and 8. It is affirmed that for all pairs of border towns, except for Aranyaprathet-Poi Pet that differences in the number of border activities likely to increase is significant. The test of differences rejects the null hypothesis (H₀) for (H₁), except for Aranyaprathet-Poi Pet. It follows that Aranyaprathet-Poi Pet should be promoted first as a new business centre in future collaborative economic plans between Thailand and Cambodia.

Test numbers 9-18. It is affirmed that for all the pairs of Thai border towns, irrespective of their geographical location there is no difference in the number of border activities that are likely to increase, except for Mukdahan-Mae Sai and Chong Mek-Mae Sod. The differences between Mukdahan-Mae Sai and Chong Mek-Mae Sod border towns is significant, showing that because of wider different gap between towns, it is harder to develop these pairs.

Test numbers 19-28. It is affirmed that for all the pairs of non-Thai border towns, irrespective of their geographical location there is also no difference in the number of border activities that are expected to increase, except Champasak-Tha Khi Lek and Poi Pet-Tha Khi Lek. These differences between Champasak-Tha Khi Lek and Poi Pet-Tha Khi Lek border towns is significant at test number 2, showing that there are different development gap between towns, these two pairs are much more time consuming to become as new growth centres. As a result, these statistical tests provide guidance for policy makers and regional planners to choose others pairs of border towns to be promoted as the new growth centres, beyond the five selected border towns for case studies. This means pair of border towns with no difference (or accept H₀) and with a higher probability should be considered first by the central government.

6.2.4 Urban infrastructure and facilities in border towns

Aim: To determine based on the present urban infrastructure and facilities at border towns whether they can support the development of border towns

Table 6-6 shows the results of an evaluation of the quality of urban infrastructure and facilities in border towns based on surveys of respondents. Respondents were asked to rate the quality and condition of urban infrastructure and facilities, where the rating of 1 is of superior quality and a rating of 5 is of poor quality.
Urban infrastructure includes roads, railways, airports, ports, water supply, electricity and telecommunication; while urban facilities include schools, universities, markets, government offices, parks, hospitals, and hotels (for further information see Appendices).

Table 6-6: Evaluation of urban infrastructure and facilities

<table>
<thead>
<tr>
<th>Urban infrastructure and facilities</th>
<th>At border towns</th>
<th>In Thailand as a whole</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Thai-owned firms</td>
<td>Foreign-owned firms</td>
</tr>
<tr>
<td><strong>Urban infrastructure</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Superior</td>
<td>3 (1%)</td>
<td>10 (12%)</td>
</tr>
<tr>
<td>2. Above average</td>
<td>60 (20%)</td>
<td>56 (67%)</td>
</tr>
<tr>
<td>3. Average</td>
<td>180 (60%)</td>
<td>18 (21%)</td>
</tr>
<tr>
<td>4. Below average</td>
<td>54 (18%)</td>
<td>0</td>
</tr>
<tr>
<td>5. Poor</td>
<td>3 (1%)</td>
<td>3 (1%)</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td>2.98</td>
<td>2.10</td>
</tr>
<tr>
<td><strong>Mode</strong></td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td><strong>Urban facilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Superior</td>
<td>3 (1%)</td>
<td>6 (7%)</td>
</tr>
<tr>
<td>2. Above average</td>
<td>51 (17%)</td>
<td>38 (45%)</td>
</tr>
<tr>
<td>3. Average</td>
<td>177 (59%)</td>
<td>35 (42%)</td>
</tr>
<tr>
<td>4. Below average</td>
<td>66 (22%)</td>
<td>5 (6%)</td>
</tr>
<tr>
<td>5. Poor</td>
<td>3 (1%)</td>
<td>0</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td>3.05</td>
<td>2.46</td>
</tr>
<tr>
<td><strong>Mode</strong></td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>300 (100%)</td>
<td>84 (100%)</td>
</tr>
</tbody>
</table>

Source: Author's own interviews and questionnaire survey of firms, conducted July-September 2001

Table 6-6 shows that the overall quality of urban infrastructure and facilities at border towns is much lower than that found nationally. Respondents typically rated the quality of urban infrastructure and facilities at border towns as "average", when nationally they were rated "above average". It seems clear that if business (domestic or international) are to be persuaded to locate to these border towns, then improvement to these infrastructure and facilities will need to be part of the Thai government's policy; promoting these border towns as new
centres for growth will also require them to be part of its investment strategy too.

Further, businesses are likely to relocate from their present sites in the Bangkok Metropolitan Region on the basis of urbanisation economies. This evidence suggests and accords with location theory which contends that areas with high quality urban infrastructure and facilities are important factors in retaining and attracting firms. Also the findings show that business and customer are attracted to places with higher quality of goods and services, such as big cities, which accords well with central place theory.

**Urban infrastructure**

At border towns, most respondents (60%) rated the quality of urban infrastructure as “average”, with a mode score of 3 and a mean score of 2.98 indicating that the rating quality by respondents closely approximate to a normal distribution. Nationally, most firms rated urban infrastructure as “above average”: by 67% of Thai-owned firms and 65% of foreign-owned firms. The distribution of the responses indicates that there is no statistical difference between Thai-owned or foreign-owned firms on the quality of infrastructure.

**Urban facilities**

At border towns, 59% of firms typically rated the quality of urban facilities as “average”, with a mode score of 3 and mean score of 3.05, again indicating that the ratings given by respondents closely approximate to a normal distribution. Nationally, most firms rated urban facilities as “above average”: by 45% of Thai-owned firms and by 62% of foreign-owned firms. The distribution of the responses indicates that there is no statistical difference between Thai-owned or foreign-owned firms on the quality of facilities.

Table 6-7 shows that overall quality of urban infrastructure and facilities in border towns is predominately “average” with a mode score of 3. The mean scores show that Aranyaprathet (2.67) and Nong Khai (2.73) are rated to have a better quality of urban infrastructure, Mukdahan (3.08) and Mae Sai (3.00) are rated to have average quality of urban infrastructure, while Chong Mek (3.42) is rated to have the lowest quality of urban infrastructure. For urban facilities, the best mean score was recorded for Aranyaprathet (2.72). Nong Khai (3.02) and Mukdahan (3.17) are
Chapter 6: Data analysis

Rated has having an average quality of urban facilities, while Mae Sai (3.30) and Chong Mek (3.35) are rated to have the lowest quality of urban facilities. Respondents stated that quality of urban infrastructure is relatively better than facilities (see Section 6.5.6) and better quality of urban infrastructure and facilities are available in Nong Khai and Aranyaprathet.

Table 6-7: Evaluation of urban infrastructure and facilities in five Thai border towns

<table>
<thead>
<tr>
<th>Urban infrastructure and facilities</th>
<th>Nong Khai</th>
<th>Mukdahan</th>
<th>Chong Mek</th>
<th>Mae Sai</th>
<th>Aranyaprathet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban infrastructure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Superior</td>
<td>3 (5%)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2. Above average</td>
<td>20 (34%)</td>
<td>5 (9%)</td>
<td>0</td>
<td>10 (16%)</td>
<td>25 (41%)</td>
</tr>
<tr>
<td>3. Average</td>
<td>27 (45%)</td>
<td>45 (75%)</td>
<td>38 (63%)</td>
<td>10 (16%)</td>
<td>40 (68%)</td>
</tr>
<tr>
<td>4. Below average</td>
<td>10 (16%)</td>
<td>10 (16%)</td>
<td>19 (32%)</td>
<td>10 (16%)</td>
<td>0</td>
</tr>
<tr>
<td>5. Poor</td>
<td>0</td>
<td>3 (5%)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mean</td>
<td>2.73</td>
<td>3.08</td>
<td>3.42</td>
<td>3.00</td>
<td>2.67</td>
</tr>
<tr>
<td>Mode</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Urban facilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Superior</td>
<td>3 (5%)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2. Above average</td>
<td>30 (50%)</td>
<td>1 (1%)</td>
<td>0</td>
<td>0</td>
<td>20 (34%)</td>
</tr>
<tr>
<td>3. Average</td>
<td>20 (34%)</td>
<td>48 (80%)</td>
<td>30 (50%)</td>
<td>42 (70%)</td>
<td>37 (61%)</td>
</tr>
<tr>
<td>4. Below average</td>
<td>7 (11%)</td>
<td>11 (19%)</td>
<td>27 (45%)</td>
<td>18 (30%)</td>
<td>3 (5%)</td>
</tr>
<tr>
<td>5. Poor</td>
<td>0</td>
<td>3 (5%)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mean</td>
<td>3.02</td>
<td>3.17</td>
<td>3.55</td>
<td>3.30</td>
<td>2.72</td>
</tr>
<tr>
<td>Mode</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>60 (100%)</td>
<td>60 (100%)</td>
<td>60 (100%)</td>
<td>60 (100%)</td>
<td>60 (100%)</td>
</tr>
</tbody>
</table>

Source: Author's own interview surveys, conducted July-September 2001

Data in Table 6-7 suggests that to develop border towns as centres for trade and investment, expenditure on public investment projects in Nong Khai and Aranyaprathet is likely to cheaper and more effective than other border towns as a result of the multiplier and accelerates effect of complementary investment and actions. This may be because Nong Khai border town is already a provincial
centre; whilst Aranyaprathet is located near to Bangkok. To develop the growth of Chong Mek, for example, may involve higher amounts of public investment.

Conclusion: economy and situation in border towns
To sum up, the results of data analyses in this section suggest that even though there is no a logical guideline to choose border towns to be promoted as centres for trade and investment, all the five Thai border towns have played a role as border trading gateways with the prospect of becoming places where border activities are expected to increase much more than in neighbouring countries' border towns. Thai border towns may be able to grow as nodal centres in the sub-region. This finding based on the opinions of interviewees accords with the evidence from other research observations in border towns (see Table 4-1) and on the economic structure of countries in the Greater Mekong Sub-region (see Table 3-1), in supporting border town growth.

Trade and tourism are major border economic activities, while there is low but increasing volumes of investment, improved security and rising domestic migration to border towns. This is true for both Thai and neighbouring countries' border towns. Though border towns are currently seen as being less attractive areas and where firms and people will need to be encouraged and offered incentives to relocate. Retaining local people, promoting border towns as attractive places to work and live in, and stimulating local economies are all likely to be key requirements of Thai government policy of border town development.

Insecurity is a significant deterrent to and determinant of border towns' success as centres for trade and investment. To create border towns as safe places will be dependent to a large exist on good international relations and, in this region, on the political, economical and democratic state of affairs in Myanmar and Cambodia.

In terms of ranking border towns in order of priority, the findings suggest that border towns could be promoted either singularly or in pairs of border towns. Evidence suggests that Nong Khai and the pair of border towns Aranyaprathet-Poi Pet should be promoted first if National resources permit. Their promotion is based on growth pole theory prediction that growth can be accelerated and managed better if concentrated geographically.
Economic base theory advocates that economic activities in terms of trade, investment, and tourism are significant mechanisms encouraging the diversification of local economies. Further, the survey findings also support location theory that the town or area with best quality of urban infrastructure and services are more likely to retain firms and people as much as attracting new ones to them.

6.3 Investment circumstances

Aim: To determine whether the current situation at border towns is conclude to these achieving the goal of becoming investment centres.

In this next section, profiles of investment circumstances both at border towns and nationally are presented, which covers such matters as business types, volume of annual sales, workforce size, and the quality of the labour force.

Data in Table 6-8 shows that investment circumstances at border towns and nationally are relatively similar based on the value of annual sales, workforce size and education in low skilled. The exception is in the range of business types with the border towns predominantly involved in food processing and automotive parts, whilst firms nationally are predominated its higher valued production (e.g. chemicals and plastics) especially the foreign firms. Nationally Thai-owned firms and foreign-owned firms are very similar in coverage of the business types.

Business types

Business types at border towns and nationally were different. Most firms in border towns are involved in food processing (48%) and automotive and parts (25%) and electrical and parts (11%), which typically serve neighbouring countries' markets, so that these three categories of firms could be promoted to relocate in border towns. These findings accord with location theory that states these growing markets and access to neighbouring countries are important factors in affecting and influencing business activities in border towns.
## Table 6-8: Investment circumstances in Thailand, 2001

<table>
<thead>
<tr>
<th>Investment circumstances</th>
<th>At border towns (%)</th>
<th>In Thailand as a whole</th>
<th>Thai-owned firms</th>
<th>Foreign-owned firms</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Business types</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Food processing</td>
<td>48</td>
<td></td>
<td>7(8%)</td>
<td>5(3%)</td>
</tr>
<tr>
<td>2. Textiles</td>
<td>1</td>
<td></td>
<td>8(10%)</td>
<td>5(3%)</td>
</tr>
<tr>
<td>3. Wood and furniture</td>
<td>9</td>
<td></td>
<td>7(8%)</td>
<td>0</td>
</tr>
<tr>
<td>4. Electrical goods and parts</td>
<td>11</td>
<td></td>
<td>10(12%)</td>
<td>26(17%)</td>
</tr>
<tr>
<td>5. Construction materials</td>
<td>5</td>
<td></td>
<td>15(18%)</td>
<td>6(4%)</td>
</tr>
<tr>
<td>6. Automotive and parts</td>
<td>26</td>
<td></td>
<td>10(12%)</td>
<td>9(6%)</td>
</tr>
<tr>
<td>7. Others (e.g. Chemicals, Plastics, Industrial machinery, Leathers and Aluminium)</td>
<td>0</td>
<td></td>
<td>27(32%)</td>
<td>100(67%)</td>
</tr>
<tr>
<td><strong>Annual sales (£ Million)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Less than 0.5</td>
<td>96</td>
<td></td>
<td>78(93%)</td>
<td>147(97%)</td>
</tr>
<tr>
<td>2. 0.5 through 1</td>
<td>4</td>
<td></td>
<td>6(7%)</td>
<td>5(3%)</td>
</tr>
<tr>
<td>3. More than 1</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Workforce size (person)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Fewer than 50</td>
<td>92</td>
<td></td>
<td>80(95%)</td>
<td>150(99%)</td>
</tr>
<tr>
<td>2. 50 through 100</td>
<td>8</td>
<td></td>
<td>4(5%)</td>
<td>2(1%)</td>
</tr>
<tr>
<td>3. More than 100</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Quality of labour</strong> (Based on level of educational attainment)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Skilled labour</td>
<td>7</td>
<td></td>
<td>30(35%)</td>
<td>47(31%)</td>
</tr>
<tr>
<td>2. Semi-skilled labour</td>
<td>17</td>
<td></td>
<td>20(24%)</td>
<td>26(17%)</td>
</tr>
<tr>
<td>3. Low skilled labour</td>
<td>76</td>
<td></td>
<td>34(41%)</td>
<td>79(52%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100</td>
<td></td>
<td>84(100%)</td>
<td>152(100%)</td>
</tr>
</tbody>
</table>

Note: Total interviewee at border towns is 300
Total surveyed firms in Thailand as a whole is 236 (84+152)
Source: Author's own interviews and questionnaire survey of firms, conducted July-September 2001

Nationally, firms are currently clustered in the Bangkok Metropolitan Region, as they can take advantage of agglomeration economies. These are involved in a variety of business activities such as chemical, plastics, industrial machinery, leathers and aluminium (32% of Thai-owned firms and 67% of foreign-owned firms). For other business types, Thai-owned firms are involved in construction materials (18%), electrical and parts (12%), and automotive and parts (12%), while foreign-owned firms are mainly involved in trading and making electrical goods and parts (17%). Firms that are involved in "electrical goods and parts", whether
Thai-owned or foreign-owned, are largely involved in exports. Foreign assembly plants (mainly electrical goods and parts) locate in Thailand where they can take advantage of lower wages and import tariffs given by developed countries.

**Annual sales and workforce size**
Annual sales and workforce size have been used to measure firm size in Table 6-8. Typically, in Thailand, firms nationally and those at border towns were small in size. The vast majority (over 93%) had annual sales of less than £0.5 million and employed fewer than 50 persons.

**Quality of labour**
Most firms in border towns and nationally typically employ a high proportion of low-skilled labour, i.e. staff who have only attained elementary education. Whilst 76% of firms at border towns largely employ low skilled labour, 50% of Thai-owned firms nationally employ by more semi-skilled labour. The proportion for foreign-owned firms is just less than 50%. To support growth by attracting firms to border towns will require the availability of a semi-skilled labour force on the promotion of training, education and other study courses targeted on firms in the border towns.

Data in Table 6-9 shows that investment circumstances in border towns are very similar based on the value of annual sales, workforce size and the low skilled workforce. According to the points of view of border town investors, industries in border towns largely serve neighbouring countries' markets. The majority of firms are involved in food processing, particularly occur in Chong Mek (90%), Aranyaprathet (50%) and Mukdahan (45%). Nong Khai, on the other hand, possesses the highest number of the firms in automotive and parts (45%) which serve Vientiane's markets, the capital of Laos. Mukdahan has the highest number of firm in wood and furniture manufacturing and processing (45%) because of its timber and wood links with Suwannakhet (Laos) (see Section 4.5).
Table 6-9: Investment circumstances in border towns

<table>
<thead>
<tr>
<th>Business types</th>
<th>Nong Khai</th>
<th>Mukdahan</th>
<th>Chong Mek</th>
<th>Mae Sai</th>
<th>Aranya prathet</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Food processing</td>
<td>6 (30%)</td>
<td>5 (25%)</td>
<td>18 (90%)</td>
<td>9 (45%)</td>
<td>10 (50%)</td>
</tr>
<tr>
<td>2. Textiles</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3. Wood and furniture</td>
<td>0</td>
<td>9 (45%)</td>
<td>2 (10%)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4. Electrical goods and parts</td>
<td>4 (20%)</td>
<td>2 (10%)</td>
<td>0</td>
<td>2 (10%)</td>
<td>1 (5%)</td>
</tr>
<tr>
<td>5. Construction materials</td>
<td>1 (5%)</td>
<td>2 (10%)</td>
<td>0</td>
<td>2 (10%)</td>
<td>0</td>
</tr>
<tr>
<td>6. Automotive and parts</td>
<td>9 (45%)</td>
<td>2 (10%)</td>
<td>0</td>
<td>7 (35%)</td>
<td>8 (40%)</td>
</tr>
<tr>
<td>7. Others (e.g. Chemicals, Plastics, Industrial machinery, Leathers and Aluminium)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Annual sales (£ Million)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Less than 0.5</td>
<td>18 (90%)</td>
<td>20 (100%)</td>
<td>20 (100%)</td>
<td>20 (100%)</td>
<td>18 (90%)</td>
</tr>
<tr>
<td>2. 0.5 through 1</td>
<td>2 (10%)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2 (10%)</td>
</tr>
<tr>
<td>3. More than 1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Workforce size (person)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Fewer than 50</td>
<td>17 (85%)</td>
<td>20 (100%)</td>
<td>20 (100%)</td>
<td>20 (100%)</td>
<td>15 (75%)</td>
</tr>
<tr>
<td>2. 50 through 100</td>
<td>3 (15%)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5 (25%)</td>
</tr>
<tr>
<td>3. More than 100</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Quality of labour force</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Based on level of educational attainment)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Skilled labour</td>
<td>2 (10%)</td>
<td>1 (5%)</td>
<td>0</td>
<td>0</td>
<td>4 (20%)</td>
</tr>
<tr>
<td>2. Semi-skilled labour</td>
<td>5 (25%)</td>
<td>4 (20%)</td>
<td>20 (100%)</td>
<td>0</td>
<td>8 (40%)</td>
</tr>
<tr>
<td>3. Low skilled labour</td>
<td>13 (65%)</td>
<td>15 (75%)</td>
<td>20 (100%)</td>
<td>20 (100%)</td>
<td>8 (40%)</td>
</tr>
<tr>
<td>Total</td>
<td>20 (100%)</td>
<td>20 (100%)</td>
<td>20 (100%)</td>
<td>20 (100%)</td>
<td>20 (100%)</td>
</tr>
</tbody>
</table>

Note: Number of interviewees (border town investors) is 20 in each cell

Source: Author’s own interview surveys, conducted July-September 2001

Based on annual sales and workforce size, firms in all the five of border towns are small in size with annual sales of less than £0.5 million and employing fewer than 50 workers. In addition, firms in all border towns largely employ low-skilled labour, in particular Chong Mek and Mae Sai (100%) and Mukdahan (75%). Only Nong Khai and Aranyaprathet have big firms with annual sale of £0.5 through £1 million (10%), whereas all the firms in the other three border towns had annual sales of fewer than £0.5 million (100%), and why these 10% of firms in Nong Khai and 20% of firms in Aranyaprathet employed skilled labour. This is probably because Nong Khai is located close to Udon Thani, a major city, which serves Vientiane’s markets while Aranyaprathet is located close to the Bangkok
Metropolitan Region. It is clear that border towns having the better urban infrastructure and services as well as skilled labours could attract big firms to relocate.

**Conclusion: investment circumstances**

In short, findings in this section point out that, typically, firms in border towns and nationally were small in size based on annual sales and size of workforce. While skilled-labour is more readily available to firms located in the Bangkok Metropolitan Region and Thailand's other larger cities, firms in border towns employ largely low-skilled labour.

In terms of location (theory) and attracting businesses to border towns, the findings suggest that these border towns have the advantage of lower labour costs and ease of access to neighbouring countries' markets. Consequently, it is recommended that business involved in food processing; automotive and parts; electrical goods and parts; that use labour intensively (i.e. textiles, clothing and agricultural production); and produce goods for export to neighbouring countries' markets (i.e. consumer goods) should be encouraged to invest in border towns by Thai national government's policies.

### 6.4 Strengths and weaknesses for the development of border towns

The evidence in this section is divided into:

1. Factors affecting businesses in their present locations.
2. Factors present in border towns that attract visitors to border towns.

#### 6.4.1 Advantageous and disadvantageous factors affecting businesses in their present locations

Aim: To search out the strengths and weaknesses affecting businesses in their present site (at border towns and nationally)
Table 6-10: Advantageous and disadvantageous factors affecting businesses in their present locations

<table>
<thead>
<tr>
<th>Factors affecting</th>
<th>At border towns (%)</th>
<th>In Thailand as a whole</th>
<th>Thai-owned firms</th>
<th>Foreign-owned firms</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advantages</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Accessibility to neighbouring country</td>
<td>29</td>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2. Labour force</td>
<td>19</td>
<td></td>
<td>0 (0%)</td>
<td>2 (1%)</td>
</tr>
<tr>
<td>3. Materials</td>
<td>25</td>
<td>5 (6%)</td>
<td>6 (4%)</td>
<td></td>
</tr>
<tr>
<td>4. Growing market</td>
<td>27</td>
<td>50 (60%)</td>
<td>56 (37%)</td>
<td></td>
</tr>
<tr>
<td>5. Adequate infrastructure and facilities</td>
<td>0</td>
<td>20 (24%)</td>
<td>59 (39%)</td>
<td></td>
</tr>
<tr>
<td>6. Investment incentives</td>
<td>0</td>
<td>9 (10%)</td>
<td>29 (19%)</td>
<td></td>
</tr>
<tr>
<td><strong>Disadvantages</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Labour force</td>
<td>11</td>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2. Materials</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3. Growing market</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4. Inadequate infrastructure and facilities</td>
<td>23</td>
<td>8 (10%)</td>
<td>5 (3%)</td>
<td></td>
</tr>
<tr>
<td>5. Laws and regulations</td>
<td>46</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6. Security</td>
<td>12</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>7. Unsatisfactory surrounding environment</td>
<td>0</td>
<td>30 (36%)</td>
<td>28 (18%)</td>
<td></td>
</tr>
<tr>
<td>8. No incentives</td>
<td>0</td>
<td>40 (47%)</td>
<td>108 (72%)</td>
<td></td>
</tr>
<tr>
<td>9. Inadequate site</td>
<td>0</td>
<td>6 (7%)</td>
<td>11 (7%)</td>
<td></td>
</tr>
<tr>
<td><strong>Future business plans</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Relocating in border towns</td>
<td>25</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>- Yes</td>
<td>75</td>
<td>84 (100%)</td>
<td>152 (100%)</td>
<td></td>
</tr>
<tr>
<td>- No</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Relocating in neighbouring countries</td>
<td>17</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>- Yes</td>
<td>83</td>
<td>84 (100%)</td>
<td>152 (100%)</td>
<td></td>
</tr>
<tr>
<td>- No</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Total interviewees at border towns is 300
Total surveyed firms in Thailand as a whole is 236 (84+152)

Source: Author's own interviews and questionnaire survey of firms, conducted July-September 2001

**Advantageous factors**

Data in Table 6-10 shows the differences in the relative strengths of doing business in border towns and in the rest of Thailand. According to respondents, locating at border town give businesses the advantage of being able to benefit from: better accessibility to neighbouring country in terms of lower labour costs...
(29%), growing markets for Thailand’s consumer and exports (27%) and the availability of materials for production (25%).

Nationally, business had based their present locations on being able to have access to growing markets that were served by adequate infrastructure and facilities, while tax and investment incentives were available. Thai-owned firms served growing markets (60%) whilst foreign-owned firms ranked the availability of good quality infrastructure and facilities (39%) first, as being the most important factors affecting their present location decision.

Regarding taxation and investment incentives, both Thai-owned and foreign-owned firms judged that this was the third most important factor affecting their location decision. It suggests that future border town planning policy will need to consider offering similar incentives to attract and encourage firms to relocate from the Bangkok Metropolitan Region to border towns. Though government grants and incentives are currently available for business to relocate to border towns (see Section 3.5.2), clearly these do not offer sufficient advantages to overcome the benefits of agglomeration in their present location in the Bangkok Metropolitan Region. However, some success has been achieved though the establishment of the Special Economic Zone of the Eastern Sea Board as firms, especially foreign-owned firms, have relocated from the Bangkok Metropolitan Region to this zone so as to take advantage of the investment incentives, the high quality infrastructure and business services, which stem from being located close to Bangkok.

Evidence from United Kingdom (UK) experience shows that businesses that are so “dependent” on taxation and investment incentives are unlikely to stay in that location once economic conditions show a downtown or where better conditions appears elsewhere. In other words, businesses or investments do appear to be much more footloose, which result in spending quite large sums of money in the short term to derive limited results in the long term (Sant, 1975: 218).

Data in Table 6-10 shows that the advantageous and disadvantageous factors affecting businesses at border towns and nationally are quite different. Nationally, the disadvantageous factors affecting future business plans of both Thai-owned firms and foreign-owned firms were quite similar. Businesses universally rejected the proposition of relocating to border towns in Thailand or in
neighbouring countries of the Greater Mekong Sub-region. The lack of security and
the lack of a skilled labour force were the prime reasons for this decision. Attracting firms to border towns is essential if border towns are not to be left as
less-developed places and where the gap in regional incomes between the
Bangkok Metropolitan Region and border towns is expected to expand.

Disadvantageous factors
As shown in Table 6-10, respondents said that at present firms in border towns
suffered from having to operate non-standard laws and regulations at borders (46%); having to use inadequate urban infrastructure and facilities (23%); and had
limited confidence in border security (12%). It is rated that one of the firms
change in policy in the support of growth of border towns is the implementation
of standard laws and regulations for crossing border activities (i.e. commodities,
passengers, labour forces and vehicles) and to collaborate growth and
development with neighbouring countries.

In the light of the quality of urban infrastructure and facilities at border towns,
23% of respondents judged this factor to be the second most important
disadvantageous factor affecting the conduct of business in border towns. This
finding backs up other data to be found in Table 6-6, which stated that the quality
of infrastructure and facilities at border towns was only average (and below that
found nationally). The third most important factor adversely affecting business at
border towns was security with 12% stating that neighbouring countries’ border
towns were insecure places, especially if they shared borders with Myanmar and
Cambodia.

Nationally, Thai-owned and foreign-owned firms held similar views on factors
adversely affecting their businesses. The lack of investment incentives and
support from government (stated by 72% of foreign-owned firms and by 47% of
Thai-owned firms), and having to conduct business in unsatisfactory surrounding
environments (stated by 26% of Thai-owned firms and by 18% of foreign-owned
firms) were the main ones. However, businesses have tendered to cluster in the
Bangkok Metropolitan Region because of the Government’s investment policies
(see Section 3.5.2), and have, overtime, suffered from having to pay higher land
values and operate their business in conditions of high-intensive landuse (i.e. high
density, increasing pollution, congestion and higher energy costs).
Chapter 6: Data analysis

Future business plans
Data in Table 6-10 shows that of those firms surveyed nationally, all would refuse to relocate to either border towns or to other towns in neighbouring countries. This was because they did not trust the quality of business services as the security in border zones. But at border towns 25% of border town investors said that they planned to open firms in other border towns in Thailand and 17% of border town investors in neighbouring countries' towns. This was because these border town investors have probably become accustomed to the investment circumstances in border towns and the attraction of being able to top in to the growing markets in neighbouring countries. However, the respondents typically said that so far, they had no future business plans to relocate in border towns especially in the other countries in this sub-region.

The most important and beneficial factor affecting business decision to locate in border towns was the existence of growing markets (in Nong Khai 45% and Aranyaprathet 40%) and the availability of raw material for production (in Mukdahan 60% and Chong Mek 40%). For Mae Sai, the availability of a good supply of cheap labour was most important for business was the main factor. Accessibility to markets in neighbouring countries was judged the second most beneficial factor in Nong Khai (40%), Mukdahan (30%) and Chong Mek (30%); while it was the third most important beneficial factor for businesses in Aranyaprathet (25%) and Mae Sai (20%).

Four of the five border towns stated that the most important factor adversely affecting business in these border towns was the lack of consistent and universal application of laws and regulations. While only Chong Mek (with 75% of respondents) rated the lack of adequate infrastructure and facilities as the most important factor adversely affecting business in this border town. Matters relating to security were also mentioned by most respondents in all border towns'.
Table 6.11: Advantageous and disadvantageous factors affecting businesses in border towns

<table>
<thead>
<tr>
<th>Factors affecting business</th>
<th>Nong Khai</th>
<th>Mukdahan</th>
<th>Chong Mek</th>
<th>Mae Sai</th>
<th>Aranyaprathet</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advantages</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Accessibility to</td>
<td>8(40%)</td>
<td>6(30%)</td>
<td>6(30%)</td>
<td>4(20%)</td>
<td>5(25%)</td>
</tr>
<tr>
<td>neighbouring country</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Labour force</td>
<td>3(15%)</td>
<td>1(5%)</td>
<td>0</td>
<td>8(40%)</td>
<td>7(35%)</td>
</tr>
<tr>
<td>3. Materials</td>
<td>0</td>
<td>12(60%)</td>
<td>10(50%)</td>
<td>3(15%)</td>
<td>0</td>
</tr>
<tr>
<td>4. Growing market</td>
<td>9(45%)</td>
<td>1(5%)</td>
<td>4(20%)</td>
<td>5(25%)</td>
<td>8(40%)</td>
</tr>
<tr>
<td>5. Adequate infrastructure</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>and facilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Investment incentives</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Disadvantages</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Labour force</td>
<td>4(20%)</td>
<td>2(10%)</td>
<td>0</td>
<td>0</td>
<td>5(15%)</td>
</tr>
<tr>
<td>2. Materials</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6(30%)</td>
<td>1(5%)</td>
</tr>
<tr>
<td>3. Growing market</td>
<td>1(5%)</td>
<td>5(25%)</td>
<td>15(75%)</td>
<td>2(10%)</td>
<td>0</td>
</tr>
<tr>
<td>4. Inadequate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>infrastructure and</td>
<td>14(70%)</td>
<td>12(60%)</td>
<td>4(20%)</td>
<td>8(40%)</td>
<td>8(40%)</td>
</tr>
<tr>
<td>facilities</td>
<td>1(5%)</td>
<td>1(5%)</td>
<td>1(5%)</td>
<td>3(15%)</td>
<td>6(30%)</td>
</tr>
<tr>
<td>5. Laws and regulations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Security</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>7. Unsatisfactory</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>surrounding environment</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>8. No incentives</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Inadequate site</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Future business plans**

<table>
<thead>
<tr>
<th></th>
<th>Nong Khai</th>
<th>Mukdahan</th>
<th>Chong Mek</th>
<th>Mae Sai</th>
<th>Aranyaprathet</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Relocating in border</td>
<td>10(50%)</td>
<td>4(20%)</td>
<td>0</td>
<td>1(5%)</td>
<td>10(50%)</td>
</tr>
<tr>
<td>towns</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Yes</td>
<td>10(50%)</td>
<td>16(80%)</td>
<td>20(100%)</td>
<td>19(95%)</td>
<td>10(50%)</td>
</tr>
<tr>
<td>- No</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Relocating in</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>neighbouring countries</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Yes</td>
<td>15(75%)</td>
<td>2(10%)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>- No</td>
<td>5(25%)</td>
<td>18(90%)</td>
<td>20(100%)</td>
<td>20(100%)</td>
<td>20(100%)</td>
</tr>
</tbody>
</table>

Note: Number of interviewees (border town investors) is 20 in each cell.

Source: Author’s own interview surveys, conducted July-September, 2001

For future business plans, half of border town investors in Nong Khai and Aranyaprathet planned to relocate or open new plants in other border towns; this might be explained by the facts that firms in Nong Khai and Aranyaprathet were bigger in size compared to other border towns (see Table 6-8). For the other border towns most investors have refused to locate to other Thai border towns or to neighbouring countries mainly because of concerns with border insecurity. 75% of border town investors in Nong Khai plan to invest in Vientiane (its neighbour).
because of being attracted by its growing market. Whilst, only 10% of border town investors to Mukdahan plan to relocate in Suannakhet (its neighbour) because of being attracted by the availability of a good supply of wood and timber materials.

6.4.2 Attractiveness of border towns to visitors

Aim: To find out the strengths in border towns which will be used to promote them as tourist centres.

Table 6-12: The main reasons for visiting border towns

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Nong Khai</th>
<th>Mukdahan</th>
<th>Chong Mek</th>
<th>Mae Sai</th>
<th>Aranya prathet</th>
<th>Overall (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Travelling</td>
<td>14</td>
<td>8</td>
<td>7</td>
<td>5</td>
<td>3</td>
<td>37</td>
</tr>
<tr>
<td>2. Doing business</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>-</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>3. Gambling</td>
<td>2</td>
<td>11</td>
<td>9</td>
<td>15</td>
<td>15</td>
<td>52</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Author’s own interview surveys in border towns, conducted July-September 2001

The data in Table 6-12 shows that tourists come to border towns with the purpose of either gambling (52%), travelling (37%) or doing business (11%).

52% of all tourists surveyed said that they visited border towns to gamble in casinos located in neighbouring countries. These casinos were the main reason drawing tourists to border towns, except Nong Khai. To open casinos in Thai border towns, though against Thai moral code, might stimulate border economies as well as namely a good case for their location, being a good distance from Bangkok. It would seem that developing tourism in the border towns should complement the government’s own policies of developing some border towns as new centres for trade and investment.

37% of all respondents surveyed said that they visited border towns in order to travel and visit the wider region. Nong Khai (with 70%) was visited most as a
place to visit and in order to access the neighbouring country's attractions and resources.

Only 11% of all respondents surveyed said that they visited border towns to do business indicating that presently these border towns are largely tourist attractions and are not business centres for trade and investment.

Conclusions: the strengths and weaknesses for development of the border towns

To conclude, the results of data analysis in this section support location theory in that geographical location, sufficient urban infrastructure and facilities, and growing markets are influential factors affecting decisions to relocate and open a firm in border towns. Investment incentives are likely to play a role in the location decisions of firms. Findings suggest that the advantages of cheap and low skilled labour is not a main determinant for attracting and retaining business in Thailand but, according to data in Table 6-10, lower wages paid to migrant workers may be a prime factor affecting businesses locating to border towns.

In order to promote the growth of border towns and encourage firms from the Bangkok Metropolitan Region to relocate, border laws standards and regulations will need to be agreed and implemented in cooperation with neighbouring countries. Taxation and investment incentives and improvements in urban infrastructure and facilities also are required as part of any future border town policy. Further, the findings suggest that some border towns are capable of developing as tourist attractions in their own right (e.g. Chong Mek in particular) as well as being promoted as regional business centres (e.g. Nong Khai and Aranyaprathet).

6.5 Strategies to develop border towns as new centres for trade and investment

Evidence is presented under six themes:

1. Evaluation of trade and investment policies (Table 6-13)
2. Needs of and barriers to border town development (Table 6-14)
3. Needs of and barriers to business in Thailand (Table 6-15)
4. Decisions to relocate and open firms in Thailand (Table 6-16)
5. Factors affecting firms' investment in border towns (Table 6-17)
6. Strategies to develop border towns as best "hometowns" (Table 6-18)

6.5.1 Evaluation of trade and investment policies

Aim: To evaluate current trade and investment policies and to consider future border town development plans.

Table 6-13: Evaluation of trade and investment policies

<table>
<thead>
<tr>
<th>Point scale</th>
<th>The trade and investment policies</th>
<th>Current policy</th>
<th>Future policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not useful</td>
<td>2 (1%)</td>
<td>1 (1%)</td>
</tr>
<tr>
<td>2</td>
<td>A little useful</td>
<td>41 (8%)</td>
<td>18 (3%)</td>
</tr>
<tr>
<td>3</td>
<td>Moderately useful</td>
<td>196 (42%)</td>
<td>106 (23%)</td>
</tr>
<tr>
<td>4</td>
<td>Useful</td>
<td>183 (39%)</td>
<td>186 (40%)</td>
</tr>
<tr>
<td>5</td>
<td>Very useful</td>
<td>47 (10%)</td>
<td>158 (33%)</td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td>3.49</td>
<td>4.03</td>
</tr>
<tr>
<td>Mode</td>
<td></td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>469 (100%)</td>
<td>469 (100%)</td>
</tr>
</tbody>
</table>

Note: Data were derived from the points of view of 269 firms and 200 interviewees (local government officials and border town investors).

Source: Author's own interviews and questionnaire survey of firms, conducted July-September 2001

Data in Table 6-13 shows that respondents were generally satisfied with present trade and investment policies, (with 39% said they were useful and 10% very useful); and expect that future trade and investment policies would be more useful for development (with 40% survey that they were useful and a follow 33% very useful).

Respondents judged that the current trade and investment policies that have been designed are appropriate for national and border town development, and hope that future trade and investment policies will better assist in this development. Respondents, further, gave a view that success of border towns will
be more dependent upon support from central government in the form of more generous taxation and investment incentives.

6.5.2 Needs of and barriers to border town development

Aim: To provide suggestions for border town development

Table 6.14: Needs of and barriers to border town development

<table>
<thead>
<tr>
<th>Factors affecting</th>
<th>Nong Khai</th>
<th>Mukdahan</th>
<th>Chong Mek</th>
<th>Mae Sai</th>
<th>Aranya prathet</th>
</tr>
</thead>
<tbody>
<tr>
<td>The needs of border town development</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Increasing number of economic activities</td>
<td>15 (37%)</td>
<td>19 (48%)</td>
<td>13 (33%)</td>
<td>11 (27%)</td>
<td>16 (40%)</td>
</tr>
<tr>
<td>2. Standard of border regulations and laws</td>
<td>18 (45%)</td>
<td>18 (45%)</td>
<td>17 (42%)</td>
<td>18 (45%)</td>
<td>17 (42%)</td>
</tr>
<tr>
<td>3. Adequacy and quality of urban infrastructure and facilities</td>
<td>2 (5%)</td>
<td>1 (2%)</td>
<td>1 (2%)</td>
<td>2 (5%)</td>
<td>2 (5%)</td>
</tr>
<tr>
<td>4. Social development</td>
<td>5 (13%)</td>
<td>2 (5%)</td>
<td>9 (23%)</td>
<td>5 (13%)</td>
<td>5 (13%)</td>
</tr>
<tr>
<td>Barriers to border town development</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Lack of standard border regulations and laws</td>
<td>15 (37%)</td>
<td>17 (42%)</td>
<td>21 (53%)</td>
<td>19 (48%)</td>
<td>22 (55%)</td>
</tr>
<tr>
<td>2. Inadequate urban infrastructure and facilities</td>
<td>4 (10%)</td>
<td>9 (23%)</td>
<td>4 (10%)</td>
<td>3 (7%)</td>
<td>8 (20%)</td>
</tr>
<tr>
<td>3. Social problems</td>
<td>21 (53%)</td>
<td>14 (35%)</td>
<td>15 (37%)</td>
<td>18 (45%)</td>
<td>10 (25%)</td>
</tr>
<tr>
<td>The main economic activities which should be promoted in border towns</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Industry</td>
<td>31 (77%)</td>
<td>36 (90%)</td>
<td>31 (77%)</td>
<td>24 (60%)</td>
<td>26 (65%)</td>
</tr>
<tr>
<td>2. Trade</td>
<td>3 (8%)</td>
<td>1 (3%)</td>
<td>1 (3%)</td>
<td>7 (18%)</td>
<td>6 (15%)</td>
</tr>
<tr>
<td>3. Tourism</td>
<td>6 (15%)</td>
<td>3 (7%)</td>
<td>8 (20%)</td>
<td>9 (22%)</td>
<td>8 (20%)</td>
</tr>
</tbody>
</table>

Note: In each town 20 local government officials and 20 border town investors were surveyed.

Source: Author’s own interview surveys, conducted July-September 2001
Data in Table 6-14 shows that all the five border towns were facing similar pattern of needs and barriers to their development and that a similar pattern of economic activities should be promoted in all the five border towns. For four of the five border towns, respondents typically rated the need to have standardised border regulations and laws the most important, with the need to have an increasing number of economic activities rated as the second most important factor affecting border town development (for Mukdahan this was rated the most important factor). Not surprisingly, providing effective border laws and regulations would prove the major barrier to development in four out of five border towns (the marginal except being Nong Khai). Locally, and in order of importance, industry, tourism and trade should be promoted as the main economic activities in border towns.

6.5.3 Needs of and barriers to business in Thailand

Aim: To search out ways of improving the conditions for business in Thailand and then to apply these findings to create a better business environment in border towns.

Barriers to business
The respondents typically said that the most important barrier to business was weak government policies and regulations, which was stated by 75% of foreign-owned and 62% of Thai-owned firms.

The second most important barrier to business was the expense of labour, which was stated by 38% of Thai-owned and 25% of foreign-owned firms. This finding confirms that labour costs tend to be higher in Thailand because of their higher educational attainment, where those who are university graduates are concentrated exclusively in the Bangkok Metropolitan Region and Thailand's other bigger cities (see Table 4-4). Data in Table 6-10 also pointed out that Thailand's higher labour costs have encouraged firms to relocate to countries with lower wages, in particular to China and Vietnam. They also state that they have no intentions of investing in either border towns in Thailand or in neighbouring countries; at least in the short run and without such substantial incentives and improvements to border security.
Table 6-15: Needs of and barriers to business in Thailand

<table>
<thead>
<tr>
<th>Factors affecting</th>
<th>Thai-owned firms</th>
<th>Foreign-owned firms</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Barriers to doing business</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Expensive labour cost</td>
<td>32 (38%)</td>
<td>37 (25%)</td>
</tr>
<tr>
<td>2. Weak government policies and regulations</td>
<td>52 (62%)</td>
<td>115 (75%)</td>
</tr>
<tr>
<td>3. Other factors (i.e. inadequate infrastructure and facilities and lack of raw materials for production)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>The need of business support</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Domestic marketing</td>
<td>42 (50%)</td>
<td>68 (45%)</td>
</tr>
<tr>
<td>2. Exports</td>
<td>20 (24%)</td>
<td>53 (35%)</td>
</tr>
<tr>
<td>3. Getting finance</td>
<td>22 (26%)</td>
<td>31 (20%)</td>
</tr>
<tr>
<td>4. Other factors (i.e. imports and improving site)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>84</td>
<td>152</td>
</tr>
</tbody>
</table>

Source: Author's own questionnaire survey of firms, conducted July-September 2001

**Needs of business in Thailand**

Data in Table 6-15 shows that respondents expect government to assist in promoting and expanding commodities in domestic markets (50% of Thai-owned firms and 45% of foreign-owned firms), and supporting exports (35% of foreign-owned firms and 24% of Thai-owned firms). It shows that foreign firms locate to Thailand both to access Thai markets as well as to assemble products for export.

In the light of the need to get finance, 26% of Thai-owned firms and 20% of foreign-owned firms said that they required government to relax regulations on loans from banks in order to facilitate take up of finance for business. Restrictions on loans were put in place after the economic crisis in Thailand in 1997 and these now need to be reviewed.

Data in Table 6-15 shows that both Thai-owned and foreign-owned firms encounter similar kinds of barriers to and requirements for business. Consequently to increase and sustain the number of firms in Thailand, including border towns,
future trade and investment policies ought to provide a range of additional measures to particularly meet the needs of and give support to domestic markets, facilitating exports and providing better financial services and loans.

6.5.4 Location decisions affecting the relocation and opening firms in Thailand

Aim: To clarify location theory and investigate the location decisions of firms in Thailand

Table 6-16: Decisions to relocate and open firms in Thailand

<table>
<thead>
<tr>
<th>Factors affecting</th>
<th>Thai-owned firms</th>
<th>Foreign-owned firms which are located in Thailand</th>
<th>Foreign-owned firms which intend to locate in Thailand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location decisions for new firms:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Availability of labour</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>10 (30%)</td>
</tr>
<tr>
<td>2. Availability of tax and investment incentives</td>
<td>54 (64%)</td>
<td>120 (79%)</td>
<td>10 (30%)</td>
</tr>
<tr>
<td>3. Adequacy of urban infrastructure and facilities</td>
<td>3 (4%)</td>
<td>12 (8%)</td>
<td>13 (40%)</td>
</tr>
<tr>
<td>4. Growing markets</td>
<td>27 (32%)</td>
<td>20 (13%)</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>84 (100%)</td>
<td>152 (100%)</td>
<td>33 (100%)</td>
</tr>
</tbody>
</table>

Source: Author’s own questionnaire survey of firms, conducted July-September 2001

Data in Table 6-16 shows that firms already based in Thailand (domestic and foreign) expressed similar reasons affecting their business decisions. Availability of taxation and investment incentives was the most important factor affecting location decisions, while the need for growing markets was the second need most important factor. In contrast, those intending to locate to Thailand stated that adequacy of urban infrastructure and facilities was the most important factor, while taxation and investment incentives and availability of labour were equally rated second most important.
6.5.5 Preventive and persuasive factors influencing firms relocating to border towns

Aim: To provide suggestions for increasing the number of firms in border towns.

Table 6-17: Factors affecting firms’ investment in border towns

<table>
<thead>
<tr>
<th>Factors affecting firms moving to border towns</th>
<th>Thai-owned firms</th>
<th>Foreign-owned firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Infrastructure and facilities</td>
<td>35 (42%)</td>
<td>62 (41%)</td>
</tr>
<tr>
<td>2. Security</td>
<td>6 (7%)</td>
<td>14 (9%)</td>
</tr>
<tr>
<td>3. Local demand</td>
<td>13 (15%)</td>
<td>17 (11%)</td>
</tr>
<tr>
<td>4. Labour</td>
<td>5 (6%)</td>
<td>12 (8%)</td>
</tr>
<tr>
<td>5. Raw materials</td>
<td>5 (6%)</td>
<td>12 (8%)</td>
</tr>
<tr>
<td>6. Too distant from Bangkok</td>
<td>20 (24%)</td>
<td>35 (23%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The main attractions to firms relocating to border towns</th>
<th>Thai-owned firms</th>
<th>Foreign-owned firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Incentives</td>
<td>48 (58%)</td>
<td>93 (62%)</td>
</tr>
<tr>
<td>2. Raw materials</td>
<td>8 (9%)</td>
<td>19 (12%)</td>
</tr>
<tr>
<td>3. Labour</td>
<td>8 (9%)</td>
<td>6 (4%)</td>
</tr>
<tr>
<td>4. Infrastructure and facilities</td>
<td>8 (9%)</td>
<td>13 (9%)</td>
</tr>
<tr>
<td>5. Growing market</td>
<td>12 (15%)</td>
<td>19 (12%)</td>
</tr>
<tr>
<td>6. Security</td>
<td>0</td>
<td>2 (1%)</td>
</tr>
</tbody>
</table>

Total 84 (100%) 152 (100%)

Source: Author’s own questionnaire survey of firms, conducted July-September 2001

Data in Table 6-17 shows that the views of Thai-owned and foreign-owned firms are similar on the barriers to attracting firms relocating to border towns. The prime barrier to relocating was the quality of infrastructure and facilities in border towns (compared to Bangkok); and the distance from Bangkok. While the main attractions to firms relocating to border towns was the availability of tax and investment incentives, the existence of growing markets and the availability of raw materials for production.

These results are in accordance with international investment theory (see Section 2.2.3) and the trade and investment policies in the countries of the Greater Mekong Sub-region (see Chapter Three) in that foreign-firms intending to invest
abroad aim to increase their profits by exploiting lower wages and raw materials, being attracted by favourable host government policy and benefiting from the low import tariffs given by developed countries. These factors are relevant in Thailand's case.

6.5.6 The strategies to develop border towns as best hometown

Aim: To provide suggests on a range of urban infrastructure and facilities to be improved or built in border towns for supporting border towns as best hometown with sustainable border economies.

Results in this final section of data analysis provide some suggestions for border town development as best “hometowns” for residents, beyond being centres for trade and investments. From the data in Table 6-6, respondents rated the quality of urban infrastructure and facilities in border towns as being “average”, which is below the quality nationally. In order to sustain and support the growth of border towns in the long term, a range of urban infrastructure and utilities will need to be improved or newly built in border towns, as shown in Table 6-18.

In the light of urban infrastructure in border towns, most respondents in border towns judged that apart from the quality of water supply and electricity, which was rated as equal to that nationally, other urban infrastructure such as, roads, airports, ports and railways need to be substantially improved to a level more normally found in Bangkok and in other bigger cities.

For urban facilities, most respondents in border towns said that the basic urban services are provided in border towns (i.e. schools, markets, government offices, hospital, and hotels), while higher quality of urban services (i.e. universities, shopping hall, and five-star hotels) are rarely available in border towns. Evidence therefore agrees with the central place theory (see Section 2.4.2), that high order services have a tendency to be available only in higher order centres whereas the more frequently demanded goods and services (or lower costs of services) are available in smaller cities such as border towns.
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Data in Table 6-18 also shows that, based on the points of view of respondents, all border towns have similar needs. Improving the quality of roads and transport networks, local public transport, shopping centres and parks, as well as increasing the number of local economic activities, and showing more concern for town planning will help to create border towns as better and new centres for trade and investment, as well as best "hometowns" for residents too.

Table 6-18: Strategies to develop border towns as best hometown

<table>
<thead>
<tr>
<th>The needs for border town development</th>
<th>Nong Khai</th>
<th>Mukdahan</th>
<th>Chong Mek</th>
<th>Mae Sai</th>
<th>Aranyaprathet</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Infrastructure provision</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Roads</td>
<td>6 (30%)</td>
<td>7 (35%)</td>
<td>8 (40%)</td>
<td>8 (40%)</td>
<td>4 (20%)</td>
<td>33</td>
</tr>
<tr>
<td>2. Railways</td>
<td>3 (15%)</td>
<td>4 (20%)</td>
<td>2 (10%)</td>
<td>3 (15%)</td>
<td>4 (20%)</td>
<td>16</td>
</tr>
<tr>
<td>3. International airports</td>
<td>4 (20%)</td>
<td>5 (25%)</td>
<td>2 (10%)</td>
<td>6 (15%)</td>
<td>2 (20%)</td>
<td>19</td>
</tr>
<tr>
<td>4. Local public transportations</td>
<td>7 (35%)</td>
<td>4 (20%)</td>
<td>8 (40%)</td>
<td>3 (15%)</td>
<td>10 (50%)</td>
<td>32</td>
</tr>
<tr>
<td><strong>Facilities provision</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Higher educational institutions</td>
<td>2 (10%)</td>
<td>5 (25%)</td>
<td>3 (15%)</td>
<td>3 (15%)</td>
<td>6 (30%)</td>
<td>19</td>
</tr>
<tr>
<td>2. Parks</td>
<td>8 (40%)</td>
<td>6 (30%)</td>
<td>6 (30%)</td>
<td>5 (15%)</td>
<td>10 (50%)</td>
<td>35</td>
</tr>
<tr>
<td>3. Shopping centres</td>
<td>6 (30%)</td>
<td>6 (30%)</td>
<td>11 (55%)</td>
<td>11 (55%)</td>
<td>2 (10%)</td>
<td>36</td>
</tr>
<tr>
<td>4. Government offices</td>
<td>4 (20%)</td>
<td>3 (15%)</td>
<td>0</td>
<td>1</td>
<td>2 (10%)</td>
<td>10</td>
</tr>
<tr>
<td><strong>Other attractions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Number of economic activities</td>
<td>13 (65%)</td>
<td>10 (50%)</td>
<td>15 (75%)</td>
<td>10 (50%)</td>
<td>2 (10%)</td>
<td>50</td>
</tr>
<tr>
<td>2. Town planning</td>
<td>7 (35%)</td>
<td>10 (50%)</td>
<td>5 (25%)</td>
<td>5 (25%)</td>
<td>8 (40%)</td>
<td>35</td>
</tr>
<tr>
<td>3. Social development</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5 (25%)</td>
<td>10 (50%)</td>
<td>15</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Author's own interview surveys, conducted July-September 2001

Data in Table 6-18 shows that respondents want roads to be improved first in Mukdahan (35%) and Mae Sai (40%), while local public transportations should be improved first in Aranyaprathet (50%) and Nong Khai (35%). In Chong Mek there is a need for roads (40%) and local public transports (40%) to be promoted. Border towns that are also tourist attractions (i.e. Aranyaprathet, Nong Khai and Chong Mek) need to improve local public transport services.
For urban facilities provision, respondents stated that shopping centres in Chong Mek (55%) and Mae Sai (55%) should be improved or newly built in order to stimulate and promote tourism. Respondents said that Parks, including green areas and public spaces, should also be improved in Aranyaprathet (55%) and Nong Khai (40%), while both shopping centres (30%) and parks (30%) need to be promoted in Mukdahan.

For other attractions, respondents stated that increasing the number of economic activities in trade, investment and tourism is a priority in all the five border towns (i.e. Chong Mek 75%, Nong Khai 65%, Mukdahan 50% and Mae Sai 50%), except Aranyaprathet where respondents said that social development (50%) was most important as this border town suffers from illegal Cambodian migrants that are crossing the border to travel to Bangkok. Increasing the number of economic activities (50%) and concerns about the lack of town planning (50%) are the main factors affecting Mukdahan because since 1999 national border town development policy has emphasised this town, resulting from construction of the Second Thai-Laos Friendship Bridge and expressways which provide better economic links between Thailand, Laos and Vietnam. In Mukdahan, much greater attention is placed on town planning respondents as a result. It is these matters relating to urban infrastructure and facilities accommodating the increasing number of economic activities and concerns relating to town planning that are important in ensuring that border town development is sustainable on physically and in terms of trade and investment.

**Summary**

To summarise, all results from the above sections of data analysis generate answers to the research questions set, they clarify the theories set out in Chapter Two, and contribute to a better understanding and the formulation of a methodology for identifying and developing border towns as new centres for trade and investment.

In the light of the research questions, the findings gave a good degree of confidence that the five selected border towns for study could achieve the goal of becoming new centres for trade and investment and these provide suggestions as to what principles or conditions that are necessary for successful development of border towns as centres for trade and investment in the Greater Mekong Sub-
region. As such economic, physical and social planning aspects are all relevant to border town development schemes.

In particular, findings were used to clarify regional economic theories, which were explained in Chapter Two, including the international economic theories (i.e. globalisation concept, international trade and investment theories, as well as concept of regional economic integration), the regional planning theories (i.e. economic base theory, location theory, central place theory and growth pole theory), and the concepts of the causes of urban growth (i.e. the innovation, competitive city and quality of life). These findings confirmed the main outcome of the observation surveys in Chapters Three and Four. The data in this chapter showed that statistically accordance with evidence for businesses and those involved in border town development was largely in evidence in Chapter Three that border town development in Thailand was greater and more likely these in neighbouring countries. At the same time, this data was used to examine and introduce a procedure for ranking border towns in Chapter Four. Emerging guidelines for identifying and developing border towns as centres for trade and investment are presented in Chapter Seven.

The next section presents the factors affecting the identification and selection of border towns as centres for trade and investment based upon the above data analysis.

6.6 Factors affecting the identification and selection of border towns as centres for trade and investment

The results from the data analysis in Sections 6.2-6.5, which together with observations and empirical evidence in Chapters Three and Four, provide information on those factors affecting the identification and selection of border towns as centres for trade and investment. This section thus discusses a number of measures or indicators and possible strategies to promote the growth of border towns. These are based upon dimensions of economic and physical planning and policies. The results from this study may be useful for developing guidelines for use by regional and border town planners.
The study revealed that border towns, as well as becoming as centres for trade and investment in the Greater Mekong Sub-region, could additionally develop as:

1. Border business zones by cooperating with neighbouring countries;
2. Border tourist attractions;
3. Best "hometowns" for local residents and incoming firms and residents; and
4. Towns that are third in the hierarchy of settlements, after Bangkok and the other major cities in Thailand.

The factors that are important in identifying and selecting border towns as centres for trade and investment operate on two levels: international and national. For each "level", there are a number of factors that border towns will have to possess if they are to have a chance of becoming or developing into these other roles (as above).

Table 6-19: Factors affecting border towns as centres for trade and investment

<table>
<thead>
<tr>
<th>Rank</th>
<th>Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>International level</strong>&lt;br&gt;International relations and cooperation factors including: (1) security, (2) international relations policy, (3) standard border laws and regulations, and (4) language and currency standards</td>
</tr>
<tr>
<td>2</td>
<td>Special taxation and investment incentives</td>
</tr>
<tr>
<td>3</td>
<td>Implementation of urban land use and industrial zone measures</td>
</tr>
<tr>
<td>4</td>
<td>Business and support services, especially access to an international airport, the transportation network and customs</td>
</tr>
<tr>
<td>5</td>
<td>Availability of high quality labour</td>
</tr>
<tr>
<td>6</td>
<td>Regional shopping facilities</td>
</tr>
<tr>
<td>7</td>
<td>High quality natural green areas and public open and built spaces</td>
</tr>
</tbody>
</table>

Source: Author's own survey, conducted 1999-2001

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Based on the information set out in Table 6-19, this study suggests that: (1) a border town that possesses most of these factors is expected to be more capable of developing into a new centre for trade and investment; and (2) that some border towns would only develop into more strategic regional business growth centres if they adopt critical international relations and cooperation practices that would secure a wider network of trade and investment.

- **International level**

1. These factors relate to how neighbouring countries relate and cooperate especially regarding (1) security, (2) international relations policy, (3) standard border laws and regulations, and (4) language and currency standards.

International relations and cooperation factors are the domain of state governments to negotiate and cooperate internationally. Strategies to develop border towns as centres for trade and investment are clearly related to globalisation concepts, international trade and investment theories, and also to regional economic integration. Cooperation between countries in the Greater Mekong Sub-region could extend and create in this sub-region regional trade blocs if certain pre-conditions are met relating to security, implementation of a common standard of language, currency, and border laws and regulations.

1.1 Security factor

This research found that security is fundamental to development of border towns especially in this region. Better security at borders with Thailand’s neighbours (e.g. Myanmar and Cambodia) would enhance investor confidence and ensure better and safer conditions for exporting and importing, the movement of workers and tourists, as well as other business activities. When a border town is in a secure area, firms and people are more likely to be attracted. Indeed, the pursuit of other development policies will prove to be wasteful until safety and security can be assured.

1.2 International relations policy factor

This research found that good international relations are important if border towns are to become new centres for trade and investment. Co-ordinated border town development with neighbouring countries is likely to benefit both countries
in a synergetic manner. Thus, collaboration plans need to be considered early and as an integral part of future border town development policies.

1.3 Standard border laws and regulations factor
In order to facilitate and enhance border economic activity movements of commodities, vehicles, passengers, workers and tourists between countries and this large sub-region, the standards of border laws and regulations need to be significantly improved. Differences in laws and regulations at borders currently restrict the volume of goods and speed at which they can be processed. Such improvements should increase investor confidence so that they consider relocating to border towns, especially if other incentives are also made available to both firms and workers. If this happens, the sub-regional economy over time is expected to grow, which commensurately should lead to an expansion in demand for labour, investment and trade at border towns.

1.4 Language and currency standards factor
According to the findings from the surveys, presently Thai language and currency dominate commercial transactions and communications in this sub-region. To some extent this is likely to cause inequality and difference in development sentiment among these countries in this sub-region. International languages such as English or Chinese may need to be introduced to facilitate trade and investment, especially if foreign-owned firms are to be attracted to this sub-region. In time, the creation of a single currency may help investors as this reduces exposure to exchange currency risk (Mulhearn and Vane, 1999: 302-303; Baumol and Blinder, 1998: 823-825).

== National level ==

2. Special Taxation and Investment Incentives
So as to stimulate border town economies and assist in decentralisation policy, evidence from the surveys shows that taxation and investment incentives are likely to attract domestic firms from the Bangkok Metropolitan Region to the border towns. Future border town development policies will need to offer a new range of border incentives, beyond those presently offered. This study suggests such incentives should include longer tax exemptions; easier access to bank loans; the suspension of local taxes and the offer of local subsidies (see Section 7.4),
which are all likely to be well received by domestic firms; these remain doubts about foreign-owned firms thought.

3. Implementation of urban landuse and establishment of industrial parks
To cope with the future border towns’ growth, implementation of urban land use laws and the establishment of industrial parks will need to be considered. This study suggests that industrial parks will be important in these border zones, where they have not previously been established (see Table 3-6 and Map 3-2). In inducing firms to locate to industrial parks in border towns it might be necessary to provide special investment incentives, quality business and support services, and measures to suspend rents initially. Industrial parks are expected to create agglomeration economies and communication economies, which should result in increasing competitiveness from firms for the border towns, such industrial parks help to control urban sprawl, a symptom of over-development that is typically found in Bangkok and the other big Thai cities.

4. Business and support services
In order to attract firms to border towns and to support the growth of border towns as centres for trade and investment, sufficient infrastructure and facilities need to be provided, particularly access to an international airport; transport networks (i.e. roads, railways, bridges and ports); and university and vocational institutions. It is intended that improvements to transport linkages and connectivity in this sub-region will significantly facilitate the movement of goods, services and people between countries and around the sub-region. Transport collaboration plans are a key requirement of policy for the sub-regional development in the Greater Mekong Sub-region.

5. Availability of high quality labour
To support border town growth in the long term, higher quality labour will be needed. Higher quality labour refers to those who are educated at least to university level or have attained further education qualification (i.e. vocational, academic and technical), or can speak and communicate in at least two languages (i.e. neighbouring countries’ languages, Chinese or English). Specialised and technical skilled labour will need to be promoted first as this will assist in border towns becoming the centres for trade and investment. Improving the quality of workers is a long-term objective. Vocational institutions, language schools and
polytechnics thus should be promoted first; only later should universities be considered, given the obvious constraints on the national budget (for border town development).

6. Regional shopping facilities
To enhance the social welfare of local people and create border towns as tourist attractions, it will be necessary to improve regional shopping facilities. In addition, the present Indo-China Border Markets that exist in each border town must continue to be supported and to be promoted as local tourist attractions.

7. High quality natural green areas and public open and built spaces
Large green areas, good quality urban environment landscapes, parks, as well as public spaces, all need to be improved as part of creating a better city for residents. It is important, in the force of regional growth and development, to have in place an effective urban growth management strategy that promotes and conserves those areas and spaces of heritage and cultural value for locals and newcomers alike.

6.7 Summary
Results from the data analysis provide a significant contribution to understanding those factors that affect and influence whether border towns will become or are chosen as new centres for trade and investment. The data has also helped in providing answers to research objectives and research questions, as well as clarify the importance of international economic and regional economic planning theories. Results show that border towns are capable of developing as new centres for trade and investment for this large sub-region. Moreover, it is also possible to develop border towns to become border business zones (i.e. pairs of border towns being developed in cooperation with neighbouring countries), as tourist attractions, as new best hometowns, and as new growth centres in their own right.

The findings are also in accordance with international economic and regional economic planning theories. International economic theories (e.g. globalisation concept, international trade and investment theories and international regional integration concept) impact increasingly on border economic activities and
facilitate border trade in the Greater Mekong Sub-region. These international economic theories also stress the importance of having improved cooperation and relations with neighbouring countries: as part of border town development policy. Though each country in the sub-region believes that their border towns are capable of developing into centres of trade and investment, the findings showed quite different results. This study believes that some Thai border towns are more likely to achieve their goal of becoming new centers for trade and investment than other non-Thai border towns studied.

It is possible to promote border towns either as a single town or as pairs of towns. Results of data analysis suggest the ranking of border towns from the SWOT analysis in Chapter Four and observation surveys in Chapter Five, that Nong Khai, as a single border town, has the highest potential to become a new centre for trade and investment in Thailand. Whilst, the pair of border towns of Aranyaprathet-Poi Pet, are ranked as having the highest potential. It is recommended that Aranyaprathet-Poi Pet border towns be developed to become a border business zone in this sub-region, where economic benefits will be shared by both Thailand and Cambodia.

These findings also suggest that border towns are capable of developing into a third hierarchy of settlements, after Bangkok and other bigger cities, according to growth pole and central place theories. Trade, tourism and investment are currently border economic activities which are related to economic base theory. In terms of location theory, this study found that geographical location, sufficient urban infrastructure and facilities, and growing markets are the most influential factors affecting firms locating and establishing in border towns. Likewise, taxation and investment incentives are additional reasons affecting domestic firms’ decisions to relocate. Finally, creating border towns as new centres for trade and investment is one goal, but sustaining them in the longer-run is also a desired objective too. In this respect, border towns must also recognise the threats (and opportunities) from factors that underpin the concept of the competitiveness city; innovation; and quality of life. The next and final chapter will consider these results, draw inferences and generate conclusions for the whole research.
Chapter Seven: Conclusions, Discussion and Recommendations

7.1 Introduction

This final chapter is organised as follows:

7.1 Introduction
7.2 Summary of findings
7.3 The Thai Government's decentralisation objective for all the border towns
7.4 Identifying border towns as centres for trade and investment: formulating guidelines
   - Regional level
   - National level
   - Supra-national level (the Greater Mekong Sub-region)
   - International level
7.5 Research issues and suggestions for the future research

In Chapter One, the research objectives and research questions which initiated the research were set out. The research objectives are to:

1. develop and establish a methodology for the identification of border towns as centres for trade and investment for the Thai development; and
2. develop a methodology to assist in development and implementation of the Thai government's decentralisation policies.

The particular research questions that have been posed are:

1. What principles should guide the selection of border towns as centres for trade and investment?
2. Which border towns have the potential to become trade and investment centres?
3. What conditions are needed if border towns are to be developed as centres for trade and investment in the Greater Mekong Sub-region?

Finding answers to these research questions was seen as essential for contributing to a better understanding of the regional and border town economic planning in Thailand. The purposes of this final chapter are to reflect on the major ideas of
the study drawing on the findings from the analysis in the previous chapters and to establish guidelines for the selection of border towns in Thailand as centres for trade and investment, and to make recommendations for future research.

7.2 Summary of findings

Findings from this study have been organised into the following themes:

(1) The need for border town development;
(2) Learning from international economic and regional economic theories in formulating policy guidelines;
(3) Economic profiles of countries in the Greater Mekong Sub-region; and
(4) Current status of border towns based on surveys.

7.2.1 The need for border town development

From the discussion in Chapter One, it is clear that Thailand suffers from adverse problems primarily resulting from disparities in income and social welfare. The analysis indicated that economic progress under the National Plans since 1961 has not been diffused throughout the whole country but rather has remained largely concentrated in the Bangkok Metropolitan Region. According to Table 1-1, in 2000, the highest density of population (4,029 person per square kilometre) and per capita incomes (£2,053) are located in the Bangkok Metropolitan Region. Poverty is largely located in the rest of the regions, such as the northeastern region, in which some border towns are located with a density of population of 123 persons per square kilometre and per capita income of £251. Even though the results from regional economic plans have led to some growth being diffused regionally, border towns continue to be significantly less developed.

Some regional problems stem from continuous waves of migrants from the less developed parts of Thailand and illegal migrants from neighbouring countries (i.e. Laos, Myanmar and Cambodia) that typically cluster in and around the Bangkok Metropolitan Region and Thailand's other bigger cities (i.e. Nakorn Ratcha Sima, Khon Khen, and Chiang Mai). Congestion in these bigger cities causes a number of major problems, resulting in a shortage of urban services, higher levels of criminality, and worse air and water pollution; such problems are being similarly

As growth also generates regional income disparities, future growth must benefit the whole of the country, but especially the border regions. This means focusing development more in the poorer regions. However, without a clear strategy for the regions future development is likely to reside in the already developed centres (e.g. the Bangkok Metropolitan Region), whereas large areas of the country continue to be less developed. The role of border towns in this respect is to attract growth since they are located in the north and east of Thailand, which are over 550 kilometres from Bangkok.

The situation at border towns has been improving recently. This stems from a general period of economic liberalisation and because the Thai government sees the role of border towns as locations for new development as well as to control border activities (i.e. passage of commodities, passengers and vehicles) (National Economic and Social Development Board of Thailand, 2003; 2004). As a result, border towns are being promoted by the central government as new development growth centres. It is the government's objective to select some border towns as centres for growth and trade so that they can act as growth poles for these less-developed border regions.

Growth pole theory does not provide locational criteria for development in regions. Instead, growth pole theory explains that if growth is located in particular areas it will serve as a growth stimulator for the region. This study contends that using growth pole theory in this way will provide a sufficient base for Thailand's regional planning. This strategy can also benefit neighbouring countries that form the Greater Mekong Sub-region, if actively co-ordinated. The results of this study also provide a number of important criteria that could be used by policy makers to select and rank potential growth centres at border towns, as well as helping to meet other government objectives relating to regional income disparity and decentralisation.
7.2.2 Learning from international economic theories and regional economic planning theories in developing policy guidelines

The theoretical element of the research has proved to be important as it provides a means of organising and clarifying knowledge. In this respect, this study has reviewed the literature on theories relating to international economics, regional economic planning and concepts on the causes of urban growth. These were all reviewed in Chapter Two.

Under the general umbrella of international economic theories were concepts relating to globalisation, international trade and investment theories, and international economic integration. These were used to inform and provide possible explanations of trade and investment, particularly in respect of border towns. At the same time, regional economic planning theories which embrace economic base, location, growth pole, and central place theories, were also evaluated. These theories were useful in clarifying and explaining the potential of border towns to become new growth and trade centres. Finally, urban growth concepts which include the competitive city, innovation, and quality of life, were also evaluated to see how goals of sustainable economic growth can be incorporated in border town development.

The outcome of this theoretical work, backed up by primary empirical research, is to generate a set of criteria or guidelines that can be used to identify border towns as centres for trade and investment in a more objective manner relative to how the Thai government has selected them to date. The analysis shows that border towns can become significant development areas in the present era of Thailand's economic liberalisation, which also involves cooperation with its neighbours forming the Greater Mekong Sub-region.

The findings in the study agree with these relevant international economic theories that international trade and investment could assist in stimulating border towns' economies. It is argued that if firms cluster by locating in border towns, they will be been as significant in generating investment and employment which ought to reduce or stem out-migration of local residents and in time narrow regional incomes. Further, the Greater Mekong Sub-regional economic cooperation programme, which is based on the concept of international economic integration,
should also assist in facilitating and enhancing economic activities at borders, as well as transforming border towns into new places for the location of trade and investment. In the future, it is the government's objective that this sub-region should become a regional trade bloc. This objective is based on the premise of implementing mutually beneficial economic collaboration plans between the countries of the Greater Mekong Sub-region. If the countries want to meet the objective of economic growth in the sub-region, the study revealed that a number of co-operational plans of: (1) improvements to transport links and nodes (i.e. connectivity), (2) improvements to higher educational and training provisions, (3) standardisation of cross border laws and regulations, and (4) language and currency standards need to be normalised as quickly as possible (see also Section 7-4). Further, being safe and secure in the sub-region, especially at border towns, is crucial which will increase investors' confidence and ensures that this sub-region is attractive to trading and investment.

On the basis of regional economic planning theories this study advocates that classic growth theories provide reasons for the establishment of border towns as premier growth areas that will also diffuse growth regionally. It is contended that guidelines can be established which enable a strategy to be formulated for the promotion of development at border towns, so becoming third growth centres after Bangkok and other big cities. Locational factors and agglomerative forces (such as security, good quality urban services, skilled labour, growing markets and availability of government fiscal incentives) are the principal elements that should be used in selecting and ranking border towns as potential growth centres.

Based upon classic economic base theory, towns or cities rely upon a number of select economic activities. However, border towns are small towns in population and area terms, they lack skilled labour and capacity, and largely rely on border trading activities in primary products. If border towns are to become trade and investment centres then greater economic diversity would lead border towns towards self-sufficiency. A border town's economy would be more vulnerable to change if it depends on single economic activities, such as being a border trading and customs gateway.

Border towns need to develop an investment and growth strategy if they are to derive benefits from Government regional strategies. There are specific
advantages for domestic firms from the growth of existing and new markets in trading with neighbouring countries where wage rates are lower and where there is a good supply of tradable merchandise (i.e. food processing, consumer goods, textiles, electrical parts, automotive and spare parts, and assembly plants). Such firms could be attracted to locate in new industrial parks that might be set up in the border towns through special government incentives. Border towns must attempt to balance the objectives of sustainable and self-sufficient growth without over specialisation or over reliance on foreign investment. The latter is often initially seen as being very attractive to host countries or regions, but foreign investment is also perceived as being much more footloose (Patterson, 1991: 11-12; Sant, 1975: 218).

The concepts of innovation and competitive city typically provide suggestions relating to the support and maintenance of high technology firms locating in cities. At this stage in the border towns' development cycle, this study argues that it will be hard for border towns to become centres for advanced technology because of existing high costs and the shortage of skilled labour. However, with a better quality of urban structure being promoted by central government in border towns, these could become more attractive in the future as places to live as well as new centres for investment (including advanced technology).

In the meantime, it will be necessary for border towns to provide a better quality of city living which includes environmental considerations (i.e. quality of public realm, natural areas), and recognise that local traditional cultures be taken into consideration alongside economic development. This means, therefore, that in selecting and ranking border towns as centres for trade and investment the main drivers for city growth according to Simmie could be applied, namely: (1) quality of the workforce, (2) economic diversity and specialisation, (3) connectivity, (4) strategic decision making capacity, and (5) quality of life (excluding innovation system) (Simmie, 2004). These requirements will be important in the formulation of guidelines which will be more fully explained in Section 7.4.
7.2.3 Economic profiles of countries in the Greater Mekong Sub-region

As part of international trade and investment policies, globalisation and economic liberalisation increases the intensity of economic competition between countries in the Greater Mekong Sub-region. As such, the sub-region has attempted to attract foreign firms to relocate to border towns with the intention of enhancing their national economic profiles and raising the standard of social welfare of citizens. For example, Laos, Myanmar, and Cambodia have implemented policies relating to a good supply of cheap labour, natural resources, agricultural goods and special import tariffs and quotas, which are similar to those adopted by other intra-regional trade blocs. However, in the countries comprising the Greater Mekong Sub-region, survey evidence confirms that inadequacy of infrastructure and urban services are seen as major impediments to the improvement of business activities in these countries. As such, only lower wages and the exemption of special import tariffs and quotas are seen as attractive to foreign firms in their decisions to relocate, in this case, to the Greater Mekong Sub-region.

Compared to the Thai economy, statistics show that the other countries in the Greater Mekong Sub-region have weaker economies. The two prime reasons given are: (1) their economies are more reliant on the Thai economy with over 60% of consumer goods being imported through Thai border towns, and (2) the Thai language and currency dominate the sub-region's commercial and trading activities (see Chapters Three and Four).

The findings from the surveys of domestic and foreign businesses showed that Thailand is a much better place for location of their investment and has the healthiest economy compared with its neighbours in the Greater Mekong Sub-region. Thailand is a country aiming to increase the number of foreign firms by improving its pool of skilled labour, by raising the quality and scope of its urban services, and by giving longer tax exemptions (up to 8 years) to a firm's investment. However, two factors are now adversely affecting Thai business development. One is the relatively expensive wages in Thailand, and two is the withdrawal of low import tariffs on Thai goods to the United States and European markets (as Thailand has been classified as an advanced developing country). Therefore, an alternative development choice might be lower wages and lower import tariffs on trade from neighbouring countries so as to encourage greater
intra-cooperation by, for example, establishing industrial parks that can serve pairs of border towns which should help to diffuse growth to larger areas in the Greater Mekong Sub-region.

Currently, there are five pairs of border towns, which link Thailand to its neighbours, this network of border towns has the potential to offer firms a base for their future investment, trade, and development throughout and within the Greater Mekong Sub-region. The promotion of such a regional trade bloc is based on increased liberalisation of trade and investment between these countries and that national governments have the potential to allocate public funds and establish complementary programmes to assist regional development that is centred on this network of border towns.

7.2.4 Current status of border towns based on surveys

The purpose of this section is to identify and evaluate Thai border towns in terms of current trading and investment potential. The findings from the previous chapters affirm that Thai border towns have the potential to become centres for trade and investment.

All countries in the Greater Mekong Sub-region strongly believe that their border towns are able to develop as centres for trade and investment for this sub-region. Even so, there is no clear methodology to identify which border towns should become centres for trade and investment. The findings drawn from previous chapters contend that the five Thai border towns that formed the case studies have the potential in terms of having healthier economic growth, an adequate range and level of urban services, and a suite of supportive trade and investment policies from the Thai government, compared to other countries in this sub-region.

If these five border towns are to achieve their potential then:

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The findings are drawn from attendance at The First International Seminar for the Twin Project: Thailand and Laos, Mukdahan, Thailand, 29-30 August 2000. Governments and businessmen from all countries in the Greater Mekong Sub-region: Thailand, Laos, Cambodia, Myanmar, Vietnam and Yunnan (south China), attended this seminar.
(1) Mae Sai needs to significantly improve its border security and procedures;
(2) Aranyaprathet needs to consider engaging and implementing collaborative development planning with Cambodia (e.g. Poi Pet);
(3) For Nong Khai, Mukdahan and Chong Mek, these border towns need to improve the scope and raise the quality of their urban services; and
(4) For particular border towns (based on business and trade surveys): (a) Nong Khai needs to improve its local public transport and parks; (b) Mukdahan and Chong Mek need to the quality of their roads, public transport, parks and shopping centre; (c) Mae Sai needs to improve its quality of roads and shopping facilities; and (d) Aranyaprathet needs to promote its local public transport services and parks.

All of these improvements, the same respondents felt, will encourage growth in economic activities, especially trade, investment and tourism in the border towns.

- Trade and investment potential

Table 7.1 summarises whether single or pairs of border towns can attract either foreign or domestic firms and, in doing so, meet different levels of deliverable trade and investment benefits: internationally, supra-nationally, nationally and regionally. Survey evidence from foreign firms and domestic firms shows that these firms are willing to relocate in border towns so long as certain conditions could be met, particularly better border security and investment incentives. It is clear, however, that foreign firms would never relocate to Chong Mek and Mae Sai until security is improved; domestic firms are less concerned about security and are more willing to relocate to border towns, but this would depend upon other policy incentives being made available.
Table 7-1: Foreign firms and Domestic firms' willingness to relocate to border towns (rank order)

<table>
<thead>
<tr>
<th>Spatial level</th>
<th>Inter national level</th>
<th>supra-national level</th>
<th>National level</th>
<th>Regional level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rank order of Border town</td>
<td>Foreign firms</td>
<td>Domestic firms</td>
<td>Foreign firms</td>
<td>Domestic firms</td>
</tr>
<tr>
<td>A single border town</td>
<td>1. Nong Khai 1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>2. Mukdahan 2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>3. Aranyaprathet 3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4. Chong Mek 4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>5. Mae Sai 5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

A pair of border towns
1. Aranyaprathet-Poi Pet 1 | 1 | 1 | 1 | 1 | 1 | 1 |
2. Nong Khai-Vientiane 2 | 2 | 2 | 2 | 2 | 2 | 2 |
3. Chong Mek-Champasak 3 | 3 | 3 | 3 | 3 | 3 | 3 |
4. Mukdahan-Suwannakhmet 3 | 3 | 3 | 4 | 4 | 4 | 4 |
5. Mae Sai-Tha Khi Lek 5 | 5 | 5 | 5 | 5 | 5 | 5 |

Note: - Number 1 is the highest rank and number 5 is the lowest rank.
- Rank order of border towns is presented in Chapter Six and shown in Table 7-2
- Some single border towns (i.e. Chong Mek and Mae Sai) and paired border towns (Chong Mek-Champasak and Mae Sai-Tha Khi Lek) are not ranked according to foreign firms and domestic firms' willingness to relocate because the survey findings showed that these towns were either insecure or located in National Park.

Source: Questionnaire and interview surveys, conducted July-September 2001

The evidence in Table 7-1 shows that it is possible to attract foreign firms and domestic firms to relocate to border towns and in doing so would meet a number of the government's objectives at each of the four spatial levels. For example, at an international level, the main purpose of locating firms to border towns would be to help the national economy to trade in global markets. At the supra-national level relocating firms to border towns would help to develop trade and investment for the benefit of the Greater Mekong Sub-region. At the national level relocating firms to border towns would serve to stimulate Thai regional economic growth and achieve the objectives of decentralisation policies to narrow income and social welfare differences. At the regional level relocating firms to border towns would be based upon local employment, to reduce the predominance of the Bangkok Metropolitan Region, and to raise the growth in urban services and the quality of infrastructure and premises.
Domestic firms are more likely to move from their existing sites (i.e. mainly from Bangkok) to border towns if there were better inducements and investment incentives offered by the government. Only three border towns (Nong Khai, Mukdahan and Aranyaprathet) were ranked as potential locations for foreign firms mainly because of problems of border insecurity. In this respect, Chong Mek and Mae Sai were found to be attractive only to domestic firms.

Regarding pairs of border towns, (1) Aranyaprathet-Poi Pet, (2) Nong Khai-Vientiane, and (3) Mukdahan-Suwannakhet were found to be the most attractive locations for both foreign and domestic firms to settle in and develop. Chong Mek-Champasak and Mae Sai-Tha Khi Lek border towns were ranked lowest by foreign firms. Both domestic and foreign firms would need to see significant improvements in security in these border towns. As investors confidence is raised by better security, in time this would support greater economic collaboration and integration in the sub-region.

Problems in border towns

As all border towns are relatively new and small in development terms, any problems arising from having more open borders and urban development have not yet materialised. However, as border towns are also gateways, they are likely to attract illegal migrants, drugs and criminals who pass through the border en-route to the Bangkok Metropolitan Region and the other bigger cities (see Chapter Four). Evidence has shown that the level of criminal behaviour and social problems is dependent on city size (Flint, 1998: 100). Field observations and interview surveys have shown that development in border towns is concentrated in urban areas which have not significantly harmed local tribes, ethnic minorities or the local cultures who happen to live in the forest areas surrounding the border towns. So far the key concern for border town development is not about tribal problems but about increasing local and minorities' employment opportunities. Most local people conceive of migration as being beneficial because migrants work in the agricultural sectors that pay lower wages than is acceptable to local Thais. Survey evidence also shows that racial conflicts in the border towns are rare.

A major developmental concern for border towns is how they can reduce the level of migration of local people to the Bangkok Metropolitan Region and other large
cities, who are attracted by the promise of higher standards of employment and quality of life. Further, awareness of the need to preserve local heritage (i.e. temples) in city centres, the environment and landscape in surrounding areas, as well as involving minority tribes and retaining local cultures in border town development, is recognised as being important and should all be taken into account in improving the trade and investment potential in border towns.

7.3 The Thai Government's decentralisation objective for all the border towns

This section discusses the National government's decentralisation policy and the role of border towns in meeting its specific objectives.

7.3.1 National government general objectives

Border towns have traditionally performed as border trading gateways. In Thailand's five border towns, results show that they have achieved a better level of economic growth compared to border towns in neighbouring countries. The Government has recognised that in the future, border towns have the potential of serving wider objectives which relate to the:

(a) promotion and development of closer economic cooperation between the neighbouring countries in the sub-region;

(b) promotion and development of regional business zones which would act as prime economic growth centres for the Greater Mekong Sub-region; and

(c) promotion and development of some border towns to act as centres for trade and investment, which would include tourist attractions and leisure facilities.

7.3.2 National government specific objectives

Rank order of border towns

The survey evidence generated for this study used five criteria covering the potential of trade, the potential of investment, the potential of tourism, the quality of security, and the attractiveness of the border towns to domestic migrants. Using these indicators it was possible to rank the 10 border towns based on scores of attractiveness. These comprise the 5 towns in Thailand: Nong Khai,
Chapter 7: Conclusions, discussion and recommendations

Mukdahan, Aranyaprathet, Chong Mek and Mae Sai and their paired border towns located in Myanmar, Laos and Cambodia (see Table 7-2).

Table 7-2: Rank order of border towns: single and paired border towns

<table>
<thead>
<tr>
<th>A single border town</th>
<th>Pairs of border towns</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Thai border town</strong></td>
<td>1. Aranyaprathet-Poi Pet</td>
</tr>
<tr>
<td>1. Nong Khai</td>
<td>2. Nong Khai-Vientiane</td>
</tr>
<tr>
<td>3. Aranyaprathet</td>
<td>4. Mukdahan-Suwannakhet</td>
</tr>
<tr>
<td>5. Mae Sai</td>
<td></td>
</tr>
<tr>
<td><strong>Neighbouring countries’ border town</strong></td>
<td></td>
</tr>
<tr>
<td>1. Poi-Pet</td>
<td>1. Aranyaprathet-Poi Pet</td>
</tr>
<tr>
<td>2. Champasak</td>
<td>2. Nong Khai-Vientiane</td>
</tr>
<tr>
<td>3. Vientiane</td>
<td>3. Chong Mek-Champasak</td>
</tr>
<tr>
<td>4. Suwannakhet</td>
<td>4. Mukdahan-Suwannakhet</td>
</tr>
<tr>
<td>5. Tha Khi Lek</td>
<td>5. Mae Sai-Tha Khi Lek</td>
</tr>
</tbody>
</table>

Source: Research survey, 1999-2001

Table 7-2 shows that Nong Khai is judged to be the best border town in terms of its potential to attract trade and investment in Thailand, and the worst border town is Mae Sai. The best border town in the neighbouring countries is the Cambodian town of Poi Pet, and that the worst of the neighbouring countries’ border towns is the Myanmese town of Tha Khi Lek. In policy terms, this ranking could form the basis of allocating national resources to border towns. However, this would depend on the Thai Government’s specific objectives it has set; in this respect, see Section 7.4.

The best pair of border towns for trade and investment is Aranyaprathet-Poi Pet and the worst pair of towns is Mae Sai-Tha Khi Lek. Again using this ranking would depend upon the specific objectives that the Thai government wants to achieve in respect of global trading opportunities and development of greater regional economic collaboration in the Greater Mekong Sub-region.

According to the survey responses, budgetary resources should be given to the border town development in Nong Khai. This is because there is a need to locate growth which reflects both domestic and foreign firms’ opinions about markets,
security and quality of infrastructure. However, allocating funds in just one centre could be too much of a risk for the Thai Government and, therefore, other factors may have to be considered. For example, regional and supra-national objectives might offer a different set of priorities; although Mae Sai is ranked the least attractive border town for trade and investment, implementation of border security improvements would go along way to normalising relations between Thailand and Myanmar but, may in turn, act against wider international relations where Myanmar is currently excluded.

In respect of Mae Sai, it has been recently confirmed that the Thai government was promoting it as a centre for trade and investment with the purpose of accessing a rapidly growing market in Yunnan which is located in the south of China (Bangkok Post, 2003). In the short term, Mae Sai is unlikely to attract foreign firms as a result of a breakdown of international cooperation. However, supra-national cooperation between Thailand and China might provide the basis for future growth once the international situation normalises.

Table 7-3 attempts to identify single and pairs of border towns that could be selected as centres for trade and investment in the future and in doing so, this would meet a number of the national government’s policy objectives.

The column headed “international” spatial level shows that if the objective is to attract foreign firms to border towns then the sort of policy actions would involve pairs of border towns. Such policy responses would include the improvement in the security, safety and better procedures to facilitate the movement of goods, services and people, and trading and financing between pairs of border towns.

Growth based on pairs of border towns (between Thailand and neighbouring countries) could meet the government's objective at the international level to attract foreign investment resulting from economic liberalisation. However only three of the five pairs of border towns could possibly meet these objectives for attracting foreign firms, namely (in rank order): (1) Aranyaprathet-Poi Pet, (2) Nong Khai-Vientiane, and (3) Mukdahan-Suwannakhet.
Table 7-3: The possibility of border town development to respond to the government's objective

<table>
<thead>
<tr>
<th>International spatial level</th>
<th>National spatial level</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Government’s objective:</strong></td>
<td><strong>Government’s objectives:</strong></td>
</tr>
<tr>
<td>- To improve international relations</td>
<td>- To encourage and assist domestic firms to</td>
</tr>
<tr>
<td>- To attract foreign firms</td>
<td>relocate to border towns</td>
</tr>
<tr>
<td>- To expand exports</td>
<td>- To meet decentralisation objectives</td>
</tr>
<tr>
<td></td>
<td>- To generate economic growth in border towns</td>
</tr>
<tr>
<td><strong>Rank order of pairs of border towns:</strong></td>
<td><strong>Rank order of single border towns:</strong></td>
</tr>
<tr>
<td>1. Aranyaprathet-Poi Pet (Cambodia)-best</td>
<td>1. Nong Khai-best</td>
</tr>
<tr>
<td>2. Nong Khai-Vientiane (Laos)</td>
<td>2. Mukdahan</td>
</tr>
<tr>
<td>3. Mukdahan-Suwannakhet (Laos)-worst</td>
<td>3. Aranyaprathet</td>
</tr>
<tr>
<td></td>
<td>4. Chong Mek</td>
</tr>
<tr>
<td></td>
<td>5. Mae Sai-worst</td>
</tr>
<tr>
<td><strong>Policy response:</strong></td>
<td><strong>Policy response:</strong></td>
</tr>
<tr>
<td>- International relations and cooperation involving</td>
<td>1. Offer investment incentives and taxation</td>
</tr>
<tr>
<td>the:</td>
<td>relief.</td>
</tr>
<tr>
<td>1. Improvement of security and safety</td>
<td>2. Implementation of urban land use policy</td>
</tr>
<tr>
<td>2. Better international relations</td>
<td>and measures to provide industrial zones</td>
</tr>
<tr>
<td>3. Standardisation of crossing border laws and</td>
<td>and business parks.</td>
</tr>
<tr>
<td>regulations</td>
<td>3. Provide modern and reliable business services</td>
</tr>
<tr>
<td>4. Standardisation of languages and currency</td>
<td>4. Promote the training and education of the</td>
</tr>
<tr>
<td>5. Improvements transport links (i.e. connectivity)</td>
<td>local labour force</td>
</tr>
<tr>
<td></td>
<td>5. Develop regional shopping facilities</td>
</tr>
<tr>
<td></td>
<td>6. Provide higher quality environment,</td>
</tr>
<tr>
<td></td>
<td>public spaces and amenities</td>
</tr>
</tbody>
</table>

Source: Research survey, 1999-2001

In addition, focusing investment and attracting firms to pairs of border towns is likely to aid regional development across borders and enhance economic cooperation. There is some potential to achieve national goals if cooperation between member countries in the Greater Mekong Sub-region is promoted too. On
the basis of this finding, there are three pairs of border towns which were ranked by business as possible centres for trade and investment.

The column headed "national" spatial level shows that there are two objectives that the Thai government wants to meet by focusing development and investment at the border towns. The government would need to include a number of policy actions which would assist in attracting domestic firms (and some foreign firms) by providing investment incentives and tax relief, establish industrial and business parks, as well as development of a range of urban services and infrastructure for border towns.

Figure 7-1 schematically displays the pairs of borders at the supra-national level which form part of the Greater Mekong Sub-region. The potential for these border towns to form a network of border business zones, which would enable regional growth poles to be established, could be explored as a strategic objective. Table 7-3 also shows which of the border towns should be selected as trade and investment centres. However, there are differences in the ranking of border towns caused according to whether "pairs" or "single" border towns are chosen. If the government wants to achieve decentralisation and to deal with uneven growth with the establishment of growth centres at border towns, and encourage and assist domestic firms and foreign firms to relocate to border towns, development of single border towns might achieve these objectives at national level. But if the government aims to attract foreign firms, to expand exports and to improve international relations with neighbouring countries, development of pairs of border towns need to be chosen.
Figure 7-1: Schematic diagram of the Greater Mekong Sub-region on the three pairs of border towns

Based on Figure 7-1, possible border business zones in the Greater Mekong Sub-region are as follows:

1. **Aranyaprathet-Poi Pet (Thailand-Cambodia)**
   
   Survey findings place this pair of border towns first. This is because trade across the border was judged by businesses to have the highest potential, though there were concerns about illegal migration and problems relating to gambling which might detract from its attractiveness as a centre for trade and investment.

2. **Nong Khai-Vientiane and Mukdahan-Suwanakhet (Thailand and Laos)**

   Nong Khai-Vientiane was the second best rank pair and Mukdahan-Suwanakhet was ranked third. Given that these two pairs of border towns could be developed as trade and investment centres between Thailand and Laos, supra-national policy and objectives would suggest the priority is given to investment in Nong Khai-Vientiane border towns since this would maximise the benefits according to growth pole theory being located in the northeast in the Greater Mekong Sub-
region. Careful consideration should be given to coordinate the allocation of funds and investment incentives by the Thai and Laotian governments. Ideally, and if budget allows, both pairs of border towns could be developed simultaneously and such development would not only promote development on the Thai border zone, it would also promote closer international cooperation and relations between the two countries.

3. Thailand, Cambodia and Laos

It is hoped that Cambodia and Laos would develop similar cooperation and policies as currently being produced by Thailand. Survey evidence suggests that it is also possible to promote regional business zones by having cooperation between the three partner countries. In this respect, the three pairs of border towns of Aranyaprathet-Poi Pet, Nong Khai-Vientiane, and Mukdahan-Suwannakhet could be simultaneously developed. The growth of this planning option is likely to stimulate sub-regional economic growth which is more reliant on better and closer international relations and cooperation, and better connectivity; in respect of the latter this would include roads, airports, railways, ports and bridges, security and also safety. Implications of this suggestion to border regional planning are presented in Section 7.4.

For the other two pairs of border towns i.e. (1) Chong Mek-Champasak (Laos) and (2) Mae Sai-Tha Khi Lek (Myanmar), survey findings reveal that these have the least potential to develop as the regional business zones between countries. This is because Chong Mek-Champasak towns are largely seen as tourist centres since they are located in National Parks. As a result, domestic firms might be more attracted to relocate to Chong Mek-Champasak towns if they are seeking better environmental conditions. Trade and tourism are the main economic activities of Chong Mek-Champasak towns.

Survey evidence shows that it would be hard for Mae Sai-Tha Khi Lek border towns to succeed as a regional business growth centre because of the insecurity at the Myanmese border town (Tha Khi Lek) while it is a major impediment to investors’ confidences, as foreign firms are unlikely to relocate to Mae Sai. It might be possible to attract domestic firms to Mae Sai as part of government’s attempts to decentralise people and firms to regions (in this case) to the north bordering
Myanmar, but other border towns locating in the north are far more attractive (i.e. Chiang Khong and Chiang Saen) to business.

In conclusion, figure 7-1 suggests that promoting development at border towns as centres for trade and investment could also establish the foundations of a regional trade bloc initially comprising Thailand, Laos and Cambodia and later comprising other countries in the Greater Mekong Sub-region namely Myanmar, Vietnam, and Yunnan (south China).

Table 7-3 shows that good international relations are important for development at and between border towns because these act as secure state buffer zones that are also particularly domestically sensitive areas. Conflicts and tense situations which do occur between countries will have adverse effects on growth of border economic activities and border movements. Improvements in international relations and cooperation requires normalisation of border laws, regulations, languages and effective exchange of currency. Survey evidence has repeatedly shown that an absence of security problems at neighbouring countries’ border towns and better transport connectivity will assist border town development and growth.

Of course, improving international relations is often slow and requires practical and economic commitments; implementation of such policy is dependent upon national governments working closely with their neighbours and some aspects of this involves intangible issues which do affect trade and investment decisions. In respect of the latter, collaboration plans must attempt to define and devise standards for regional planning and show how these relate to national requirements and agreements as shown earlier. This is because the National Plan has a regional dimension covering economic, social and physical objectives that have to be implemented in the plan’s 10 years duration.
Chapter 7: Conclusions, discussion and recommendations

7.4 Identifying border towns as centres for trade and investment: formulating principles and criteria for guidelines

The main outcome of this research is to understand and provide guidelines for identifying and developing border towns as centres for trade and investment. Selecting and ranking border towns are the first tasks, implementation of government's objectives at each planning spatial level, in turn, will develop according to national budgets.

The research revealed the criteria affecting the identification and selection of border towns as centres for trade and investment at Table 6-19 (Chapter Six). These are:

(1) International relations and cooperation;
(2) Special taxation and investment incentives;
(3) Implementation of urban landuse and industrial zone measures
(4) Sufficient level of business services and transport links;
(5) Availability of high quality labour;
(6) Regional shopping facilities; and
(7) High quality natural and public open and built spaces.

These indicators provide guidance on selecting and ranking border towns for promoting as business centres either single or pairs of border towns.

In turn, such guidelines have been formulated in accordance with the Thai government policy's objective relating to its decentralisation policy as set out earlier (see Section 7.3). As such these guidelines need to operate on four planning spatial levels which embrace (1) international, (2) supra-national, (3) national, and (4) regional levels. The guidelines have been formulated on the basis of selecting a number of policy actions that are based on an assessment of relevant theories and empirical evidence generated from an extensive field based surveys of domestic firms and foreign firms, and government officials at national and local levels. These guidelines have been devised as part of a set of regional planning tools to be used by policy makers and regional planners in pursuit of establishing border towns as centres for trade and investment, and the special objectives and goals set for each spatial levels.
Table 7-4 provides a summary which focuses on possible policy responses to guidelines and the role of border towns as centres for trade and investment at each spatial level. It is clear that some objectives will be the same irrespective of the spatial level, while other policies may only be implemented at a particular spatial level. The range of policies that might be pursued includes the achievement in development of international relations, especially those relating to neighbouring country relations and cooperation. For example, the policy responses at both international and supra-national levels involve similar activities that rely on legal and financial procedures that are crucial for the free movement of goods, people and finance. Thai policy responses at national and regional levels are, however, less dependent on external cooperation and, therefore the success of border towns is more reliant on the control and influence of local and national governments, and their respective budgets. Particular policy responses and their implementation for border town development will have short, medium and long term repercussions, especially in terms of the scope of funding being made available as shown in Table 7-5.
Table 7-4: Range of possible government policy responses and the role of border towns

<table>
<thead>
<tr>
<th>Level</th>
<th>Government’s objective</th>
<th>Policy response</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Regional level</td>
<td>to establish border towns as growth centres for trade and investment</td>
<td>to achieve the objective of identifying the policy response that foreign firms and domestic firms require: (1) strategy and local land use planning, (2) support urban services, and (3) establishment of educational institutions</td>
</tr>
<tr>
<td>(2) National level</td>
<td>to reduce the dominance of Bangkok and to narrow regional income gap between Bangkok and the border towns</td>
<td>to achieve the objective of identifying the policy response that foreign firms and domestic firms require: (1) allocating national grants, and (2) devising regional economic planning policy</td>
</tr>
<tr>
<td>(3) Supra-national level (the Greater Mekong Sub-region)</td>
<td>to stimulate economic development in the Greater Mekong Sub-region and to improve international relations</td>
<td>to achieve the objective of identifying the policy response that foreign firms and domestic firms require: (1) improvements to international relations, (2) standard cross border laws and regulations, (3) language and currency standards, and (4) better transport links</td>
</tr>
<tr>
<td>(4) International level</td>
<td>to increase the number of foreign firms and expand exports</td>
<td>to achieve the objective of identifying the policy response that foreign firms and domestic firms require: (1) improvements to international relations, (2) standard cross border laws and regulations, (3) language and currency standards (4) better transport links</td>
</tr>
<tr>
<td></td>
<td>(b) Firm’s objective: to locate in host country to maximise the firms’ competitive advantage</td>
<td>to achieve the objective of identifying the policy response that foreign firms and domestic firms require: (1) standard cross border laws and regulations, (2) language and currency standards, (3) improvements to the quality of labour forces, and (4) better transport links</td>
</tr>
</tbody>
</table>

Source: Research survey, 1999-2001
### Table 7-5: Indicative policy responses

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Planning horizon</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Short term</strong></td>
<td><strong>Medium term</strong></td>
</tr>
<tr>
<td>(1) <strong>Regional level</strong>: government's objective is to establish border towns as growth centres for trade and investment</td>
<td>- strategy and local land use planning: 1. roads 2. industrial parks and business parks - support urban services: 1. border service offices 2. local government services</td>
</tr>
<tr>
<td>(2) <strong>National level</strong>: government's objective is to reduce the dominance of Bangkok and to narrow regional income gap between Bangkok and the border towns</td>
<td>- formulation of investment incentives for border town investors - support exports - allocating of national budgets in the future to the best border towns</td>
</tr>
<tr>
<td>(3) <strong>Supra-national level</strong>: government's objective is to stimulate economic development in the Greater Mekong Sub-region and to improve international relations</td>
<td>- a pair of border towns - improve international relations - standard cross border laws and regulations - language and currency standards - better transport links</td>
</tr>
<tr>
<td>(4) <strong>International level</strong>: (a) government's objectives is to increase the number of foreign firms and expand exports</td>
<td>- a pair of border towns - improve international relations - standard cross border laws and regulations - language and currency standards - better transport links</td>
</tr>
<tr>
<td>(b) firm's objective is to locate the host country to maximise the firms' competitive advantage</td>
<td>- safety and security - standard cross border laws and regulations - language and currency standards - improve quality of labour forces - better transport links</td>
</tr>
</tbody>
</table>

Source: Research survey, 1999-2001
7.4.1 Regional level

**Policy response**: strategy and implementation of action planning in urban structure

Results of this study contend that in addition to border town becoming centres for trade and investment, they could also develop as centres for: (1) border tourist attractions, (2) best hometown for work and living, and (3) new growth centres after the capital (Bangkok) and other bigger cities. Planning guidance on border towns can be used to secure the best possible outcome from a proposal to develop the practice and efficient growth of border towns.

Planning procedures, regionally, mainly deal with physical planning or preparation of urban structures for individual border towns. These planning procedures are likely to succeed, if there is cooperation between the central government, local governors, local government officials, border town investors, and local residents. Border town planning procedures is likely to involve:

1. **Strategy and local land use planning covering**:
   - improvements in transport nodes and accessibility (connectivity), in particular roads, railways, bridges and ports
   - provision of regional airports
   - establishments of industrial parks and business parks
   - improvement to regional shopping facilities
   - meeting environmental concerns

2. **Support services covering**:
   - improvements to border services and offices such as customs, immigration and border checkpoint procedures
   - provision of local government services

3. **Establishment of secondary, vocational and training provision**

The indicators in Table 7-5 suggest that the government promotes border towns in urban planning terms. Strategic plans are first set up and the easiest implementations of action planning are located in the short term, and in turn implementation of large physical developments (e.g. an airport) will materialise in the medium and long term, and according to national budgets. It must be
recognised that domestic firms are more likely to relocate to some of the border towns than foreign firms. However, in this respect, commitment to country, better urban services and infrastructure should retain domestic firms as well as attract some foreign firms so long as border security is normalised. The achievement of regional objectives, which need improved connectivity, are likely to benefit domestic firms as well as improve the attractiveness of border towns, even though foreign firms may not be too receptive (at least in the short and medium term).

- Short-term planning

This study suggests that two kinds of indicative actions are needed in border towns: (1) strategic and local land use planning which should focus on improving connectivity and establishing industrial and business parks; and (2) the provision of support services which should embrace improvements to border services and offices as well as local government services.

In the light of strategic and local land use planning, this study suggests that firstly it is essential that local governors and local government officials must devise implementation of urban land use planning laws and regulations, which use land use zoning for industrial, commercial, residential, community, public spaces and conservation land uses in border towns. These can be used to control urban sprawl as part of urban growth management strategies and to harness future benefits arising from applying growth pole theory.

Secondly, central government and local governors should collaborate to improve current transport nodes and networks for better economic linkages between border towns, other big cities, and major cities in countries of the Greater Mekong Sub-region. Provision of transport and, in particular, improvements to accessibility (connectivity) in the forms of bridges, roads, railways and ports will need to be considered to ease transfer and encourage economic and trading activities (i.e. commodities, vehicles, labours and tourists) between and in countries in this large sub-region. Likewise, local public transport (buses) should increase the daily numbers and routes serving local residents and tourists, so improving access and journeys to border towns.
Thirdly, formulating a process for the establishment of industrial and business parks is also a key requirement of policy since clusters of firms locating in these industrial parks and business parks will tackle problems of urban land use and reduce industrial pollution, especially air and water. In order to establish successful industrial and business parks, policy should be based upon cooperation between border town investors, the central government, local government officials and local governors. This will require clear procedures and decisions for the location of industrial and business parks; methods of targeting firms to be relocated; encompassing environmental impacts as well as utilising local advantages as much as possible (i.e. related to pools of labour and agricultural goods). Evidence shows (see Chapter Four and Section 6-3) that the kind of targeted firms should include food processing, electronics and parts, vehicles and spare parts, and the establishment of assembly plants, which can be located in the new border town’s industrial and business parks (all supported by government investment incentives).

Fourthly, this study suggests border towns need to urgently improve the quality and availability of support services, especially border services and offices, customs’ houses, immigration and border checkpoints, and local government services. Good management of border services will assist in making cross border export and import trade easier between the countries in the sub-region, and also assist in reducing the volume of illegal migrants and drugs en-route to the Bangkok Metropolitan Region and other bigger cities.

Finally, this study further contends that local government offices that deal directly with border town development, including departments of manufacturing, commerce, town and country planning, customs, industrial promotion, foreign trade, business economics, ought to be located in individual border towns. Local government officials represent the central government in border towns in order to implement the latter’s policy of supporting and promoting border town trade and investment activities.

- Medium-term planning

Indicatively Table 7-5 suggests that strategic and local land use planning in the form of regional shopping facilities, regional airports and environmental concerns
will need to be promoted in the medium term since these are comparatively expensive investment projects. Once steady economic growth is achieved at border towns, extending shopping facilities and dealing with environmental concerns are more likely to be sustainable, making it more likely that firms and people will be attracted to locate at border towns. These actions will also help to retain local people and businesses, and to attract new residents and firms to settle at border towns.

Firstly, it is suggested that border town investors, local governors or the central government should support and assist the development of regional shopping centres for the supporting border towns: this will not only improve the social welfare for local residents but serve as tourist attractions too. At the same time, the existing traditional border markets (e.g. the Indo-China border market) situated along the Mekong River must be promoted alongside the new regional shopping centres as a response to maintaining the sense of the city and its traditions. The Indo-China border markets located in each border town play a role in the local border trading gateway between Thais and neighbouring country’s people, and is also a tourist attraction. Local products from Thailand and neighbouring countries (e.g. silks, forest products, craft works and agricultural goods) are provided here (see Chapter Four), this study, therefore, judged that the traditional border market is an important feature of the locality. Future border development plans will need to maintain and improve these border markets for retaining local trade and the traditional sense of these places.

Secondly, based on business survey findings, a domestic airport needs to be provided in each border town, with an international airport being located in only those border towns with the most potential to increase trade and investment activities terms (e.g. Nong Khai and Mukdahan). The central government and local governors will need to select an airport’s location based on environmental impact assessments and to maximise a border town’s connectivity. An airport will assist border towns in increasing their economic diversity resulting from better economic links between border towns and the sub-regional and global markets. Additionally, locating an airport at border towns would help border towns to become attractive investment centres for assembly plants, particularly the higher value-added products (e.g. electrical parts). These could be relocated from the Bangkok Metropolitan Region to selected border towns.
And finally, the study suggests that local governors, residents and business firms need to develop appropriate procedures for the provision of green areas, parks and public spaces in city centres to meet local needs. Meanwhile good environment and landscape in these peripheral regions must be conserved. An increase in the provision of green areas and public spaces will no doubt contribute to a better quality of city life for local residents, and to visitors to sustain a city's growth.

- Long-term planning

The establishment of a higher educational institution and educational training are long term objectives in helping border towns to become attractive investment centres and retain local people to attain better education and skills locally. This indicative action planning is likely to take time to increase the quality of labour. These should be planned at the local level. Border town investors, local governors and central government will need to invest in higher educational institutions and educational training for those living in and relocating to border towns, particularly providing for the semi-skilled, specialised and technical labour pools supporting local businesses. Language schools, commercial and secondary schools will support the growth of trade; vocational schools, polytechnic schools, and training institutions will assist in border towns' investment activities; language schools will also assist in tourism activities. Further educational institutions ought to be established first on the basis of their relative low investment cost and higher benefits to business, based on survey studies.

In turn, when the economy of border towns steadily progresses, establishing technical and professional education for the generation of skilled and technically computer literate labour, and also research centres, should be promoted, which could attract foreign firms and advanced technology transfer too. However, this study judged that the establishment of universities and research centres, which are relatively expense would not be located at some border towns, such as Chong Mek because of its locations in a National Park.

It is clear that the implications of providing better educational institutions and educational training are beneficial locally and will assist in meeting the
Government's decentralisation policy. However, this study suggests that improving the quality of labour force is a long-term commitment.

From Table 7-4: Range of possible government policy responses and the role of border towns

<table>
<thead>
<tr>
<th></th>
<th>Planning horizon</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Short term</td>
</tr>
<tr>
<td>(2) National level</td>
<td></td>
</tr>
<tr>
<td>Government's objective: to reduce the dominance of Bangkok and to narrow regional income gap between Bangkok and the border towns</td>
<td>- formulation of investment incentives for border town investors;</td>
</tr>
<tr>
<td>Policy response: to achieve the objective of identifying the policy response that foreign firms and domestic firms require: these are (1) allocating national grants, and (2) devising regional economic planning policy</td>
<td>- support exports;</td>
</tr>
</tbody>
</table>

7.4.2 National level

Policy response: allocating national grants and devising regional economic planning policy are the main policy responses to help the nation meet the decentralisation policy. Three planning procedures will provide guidance for the central government (i.e. policy makers and regional planners) on how to devise and promote border towns in the future border town development policy and investment policy, these are:

1. Formulation of special taxation and investment incentives for border town investors;
2. Support for exports; and
3. Allocation of national grants in the future to the best border towns
Chapter 7: Conclusions, discussion and recommendations

Based on Table 7-5, the study suggests that these three planning procedures be included as part of planning process in the short term. The planning of special taxation and investment incentives could be applied to all promoted border towns. In order to encourage firms from the Bangkok Metropolitan Region and other bigger cities to relocate in and at border towns, special government incentives and subsidies should be provided for border town investors, as well as 8 years’ tax exemptions which is part of investment policy. This research reveals that special taxation and investment incentives are significant factors affecting location decisions. Future investment policies could include:

a) Exemptions from import duty on machinery and corporate income tax for up to 15 years;
b) Exemptions from import duty on raw materials or essential materials used in the manufacture of export products for 10 years;
c) Suspension of local property and operator taxes for 3 years.
d) Rent exemption for investing large sums when locating in an industrial park for up to 5 years; and
e) Reduction of the interest rate on capital loans

These special border town taxation and investment incentives ought to provide for firms related to the tourism industry, food processing, consumer goods, textiles, agricultural processing, vehicles and spare parts, electrical parts and other assembly parts, and which are willing to locate in industrial parks. Large capital investment by firms, judged by the government, should be offered rent exemptions up to 5 years. This measure should induce investment, especially by foreign firms, and also prevent firms moving out to relocate in other countries when rent exemption expires. It is necessary that investment planning strategy devises scheme for retaining firms in industrial parks as long as possible that will assist the Thai nation, including border towns, to acquire advanced technology transfers from foreign firms. Foreign firms are expected to be attracted to border towns as a result of significant reductions of capital and rent, in particular, where firms locating in industrial parks also contribute infrastructure or advanced technology to border businesses. These kinds of incentives stem from the success of border economic development in such places as Hong Kong-Shenzhen (China) and San Diego-Tijuana (the USA-Mexico).
Considering export support, it is necessary for the government to support exports through a loosening of export regulations and laws, and also joining with new trade partners and regional trade blocs. Such actions and incentives will need to be part of general planning that encourages national economic growth, including at border towns. In addition, good quality business services need to be provided in industrial parks. While better transport links between industrial parks and urban centres, airport and major cities in both Thailand and neighbouring countries will need to be provided too.

So as to promote the growth of border towns, the central government could support border towns’ growth in three planning ways: (1) allocating national resources to only a single town which is Nong Khai, (2) sharing national grants between the five border towns, or (3) promoting the pair of Aranyaprathet-Poi Pet as a regional business zone by cooperating with Cambodia. As these projects typically require large expenditures, only the central government can generate it. Therefore, selection and promotion of border towns will have to be based on the availability of national funds.

From Table 7-4: Range of possible government policy responses and the role of border towns

<table>
<thead>
<tr>
<th>(3) Supra-national level (the Greater Mekong Sub-region)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Government’s objective: to stimulate economic development in the Greater Mekong Sub-region and to improve international relations</td>
<td></td>
</tr>
<tr>
<td>Policy response: to achieve the objective of identifying the policy response that foreign firms and domestic firms require: (1) improvements to international relations, (2) standard cross border laws and regulations, (3) language and currency standards, and (4) better transport links</td>
<td></td>
</tr>
</tbody>
</table>
From Table 7-5: Indicative Policy Responses

<table>
<thead>
<tr>
<th>Spatial level</th>
<th>Planning horizon</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Objectives</td>
</tr>
<tr>
<td>(3) Supra-national level:</td>
<td>government’s objective is</td>
</tr>
<tr>
<td></td>
<td>to stimulate economic development in the Greater Mekong Sub-region and to improve international relations</td>
</tr>
</tbody>
</table>

### 7.4.3 Supra-national level (the Greater Mekong Sub-region)

**Policy response:** This study found that better border security and safety, as well as cooperation between nations are the prime mechanisms to support sub-regional economic development. The growth in the number of trade blocs would seem to support the view that there are significant benefits that could accrue to Thailand. Therefore, the policy responses, devices and establishment of standard cross border laws and regulations, currency exchange and language standards at international level would support business activities between countries of the Greater Mekong Sub-region. Another policy response of significance to stimulate regional economic development, is the selection of pairs of border towns to form business networks that would form into closer supra-national relations and trade (see also Figure 7-1).

With reference to Table 7-5, this study suggests that if the state governments of each country in the Greater Mekong Sub-region wish to promote and stimulate the sub-regional economic development and set up a regional trade bloc, as a first step they would need to select pairs of border towns for the purpose. This study would suggest that it is possible to develop a border business zone in terms of pairs of border towns by an economic collaboration plan between them. Research outcomes suggest that Aranyaprathet-Poi Pet is the best pair of towns which ought to be promoted first as a business zone adjoining Cambodia. This is because both border towns have high and increasing numbers of border economic activities (i.e. trade, investment and tourism) compared to the other pairs of towns, and that the Thai border towns have a better potential than neighbouring countries' border towns too. Success in developing pair towns is greatly reliant on good
collaboration with the neighbouring country and also national grants allocated to
the provision of physical infrastructure.

In turn, improving transport nodes and links between countries, in particular
roads, railways, airports, bridges and ports, ought to be promoted as quickly as
possible by cooperation between the state governments in the sub-region.
Connectivity will encourage and facilitate sub-regional economic activities,
especially trade, investment and tourism. Instead of creating one big regional
city, the study suggests creating a string of closely interrelated urban centres
along the transport routes will generate the spread effects over a whole region in
the quickest possible way. Thus, the concept of a network city development,
implemented in this sub-region, is based on advocating a division of trade; where
Thai border towns are the regional business centres and neighbouring countries' border towns become significant trade suppliers.

This study suggests that bridges crossing the Mekong River should be first to be
improved, followed by roads, railways, and airports. Establishment of an
international airport located in regional business centres (e.g. Thai border towns)
is essential to help this sub-regional economy to join the global and regional
markets, in particular for tourism, and business activities. However,
implementation of better transport links and nodes is likely to require funding
commitment over the medium to long term to support the requisite infrastructure
development for roads, rails and air transportation.

At the same time, improvements in good international relations and cooperation
with neighbouring countries are essential if border towns are to become safe
places to work and live. In turn, this should improve border trading activities,
tourism and other business activities. In time, normalisation of security at border
towns and good relations between countries, cross border laws and regulations
should improve investors' confidence so that this sub-regional economic
cooperation programme could become, in time, much more self-sufficient.

Additionally, implementation of appropriate currency and language standards (i.e.
English and Chinese), instead of the existing Thai currency exchange and
language, are essential for facilitating commercial communication and generating
development sentiments between countries. Likewise, employing a primary
currency will aid business investors and people to reduce transaction costs with different exchange currency rates. It is envisaged that these will be implemented in the short term for planning purposes. However, this study recommends that all action planning will be in a development programme of 10 years' duration.

From Table 7-4: Range of possible government policy responses and the role of border towns

<table>
<thead>
<tr>
<th>(4) International level</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Government’s objective: to increase the number of foreign firms and expand exports</td>
</tr>
<tr>
<td>Policy response: to achieve the objective of identifying the policy response that foreign firms and domestic firms require: (1) international relations, (2) standard cross border laws and regulations, (3) language and currency standards (4) better transport links</td>
</tr>
</tbody>
</table>

From Table 7-5: Indicative Policy Responses

<table>
<thead>
<tr>
<th>Spatial level</th>
<th>Planning horizon</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective</strong></td>
<td>Short term</td>
</tr>
<tr>
<td>(4) International level: Thai government’s objective is to increase the number of foreign firms and expand exports</td>
<td>- a pair of border towns</td>
</tr>
<tr>
<td></td>
<td>- language and currency standards</td>
</tr>
</tbody>
</table>

7.4.4 **International level**

7.4.4.1 **International level: Thai government’s objective**

Policy response:

As border zones deal with neighbouring countries, closer international collaboration and good relations is crucial for avoiding conflicts between countries and would facilitate more border economic activity. Implementing these actions at the supra national level (the Greater Mekong Sub-region) can also achieve benefits at the international spatial level simultaneously. However, the
government's objective at this spatial planning level differs from the supranational level (see Section 7.4.3). Only state governments for each nation can establish and build on these relations.

Table 7-5 suggests that increasing the number of foreign investments and expanding exports needs to materialise straight away or in the short term if the state governments of countries in the Greater Mekong Sub-region wish to stimulate economic development and to join global markets. First of all, selection and action on pairs of border towns should new take place. This study suggests that Aranyaprathet-Poi Pet is the best pair of border towns. Table 7-3 revealed that some pairs of border towns will be hard to develop and meet the government's objective at the international level because of security problems (Mae Sai-Tha Khi Lek) or their locations in National Parks (Chong Mek-Champasak). As a result, these two pairs of border towns were found to be unattractive to foreign firms.

In terms of good international relations, standard border laws and regulations, and language and currency standards need to materialise as soon as possible through cooperation between the state governments in the sub-region (see Section 7.4.3). These collaboration plans with countries in the sub-region will help to facilitate economic activities and improve investors' confidence, especially if foreign firms are to relocate to border towns. This study further suggests that improved transport links can extended to the medium term (e.g. airports). It is seen that physical planning and improving transport links, which is a tangible activity, is likely to be implemented more easily than other policies operating at the international level.

From Table 7-4: Range of possible government policy responses and the role of border towns

<table>
<thead>
<tr>
<th>International level</th>
<th>Firm's objective: to locate in host country to maximise the firms' competitive advantage</th>
</tr>
</thead>
</table>
| Policy response: to achieve the objective of identifying the policy response that foreign firms and domestic firms require: (1) standard cross border laws and regulations, (2) language and currency standards, (3) improve the quality of labour forces, and (4) better transport links
From Table 7-5: Indicative Policy Responses

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Planning horizon</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spatial level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>International level: firm's objective is to locate the host country to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>maximise the firms' competitive advantage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b) firm's objective is to locate the host country to maximise the firms'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>competitive advantage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- safety and security</td>
<td>Medium term</td>
<td></td>
</tr>
<tr>
<td>- standard cross border laws and regulations</td>
<td>Long term</td>
<td></td>
</tr>
<tr>
<td>- language and currency standards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- improve quality of labour forces</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- better transport links</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7.4.4.2 **International level: firm's objective**

**Policy response:**

Survey evidence showed that security is a fundamental criterion for border town development between countries. Border towns with better security in neighbouring countries will enhance investors’ confidence and ensure safer processing of exports and imports, workers and tourists, as well as other business activities through border checkpoints. In the absence of such safety and security improvements, the survey showed that domestic firms from the Bangkok Metropolitan Region and newly locating firms are unlikely to be attracted to some border areas. The pursuit of other policies will prove to be wasteful until safety and security can be assured.

This study suggests improving connectivity in the sub-region. Improvements to the physical infrastructure such as roads, railways, ports, airports and bridges need to be funded. As these kinds of investments are known to generate significant beneficial effects, their planning and implementation is dependent on strategic planning by national governments and the availability of international and national finances to support their construction. In this respect, strategy and provision must be prepared in the short term and implementation is dependent upon budgets being made available in the medium and long term.

Regarding the improvement in the quality of labour force, this study suggests that each nation needs to cooperate in establishing further educational institutions,
located in border towns as regional business centres. These higher educational institutions should include vocational institutions, language schools, polytechnic schools, and commercial schools. These would provide semi-skilled, specialised and technical labour pools for supporting investment and other business activities; in addition, language schools will also assist in tourist businesses. In turn, when the border towns’ economies have progressed, establishment of universities and research centres for generating skilled and professional labours could take place. The presence of these kinds of educational establishments should help to establish border towns as places for attracting new firms and retaining local businesses, as well as helping to retain local residents to attain better qualifications, rather than having to migrate to Bangkok and other bigger cities in Thailand. This study suggests that a collaboration plan for improving the quality of labour is likely to require funding commitment over the medium to long term with support from the state government and businesses.

From the findings of this study, and in terms of the international economic and regional planning theories and concepts which are presented in Chapter Two, the study argues that these theories and concepts have been in contributing to the principal strategies for identifying and developing border towns as the new business centres whether as single or pairs of border towns at different spatial planning levels i.e. internationally, supra-nationally, nationally and regionally (border towns). If the Thai government wants to link border economies to regional and global markets, then international economic theories and concepts explain that international relations and cooperation with neighbours, commitment to standard border laws and regulations, currency and languages as well as security, must be put in place. These measures would increase investors confidence and facilitate border businesses, especially trade and investment in the long term. However, this study suggests that promoting Mae Sai and Chong Mek would be wasteful of national budgets because any growth of these two border towns would be thwarted by the lacked of link to international economies.

Nationally and locally, regional economic planning theories and the causes of urban growth concepts explain how border towns can be created and sustained as attractive places for business and residents. If the Thai government wants to promote border towns as the new growth centres, national grants would be needed to support the towns’ urban infrastructure and services and improvements
to local labour. In addition, taxation and investment incentives from government should be offered to border investors. This study argues that these measures would encourage (at least) domestic firms to relocate in border towns. However, it is noted that successful border towns would not aim to achieve national economic growth like Bangkok in the short term. Promoting and supporting border towns should aim first to balance development between Bangkok (and existing bigger cities) and border towns as much as possible, to assist in decentralisation policy and to retain local people. Thereby, growth of border towns, in turn, would support national growth because Bangkok would grow more slowly, helping to relieve over-urbanisation problems.

Further, this study argues that even though these theories and concepts may be helpful for understanding and setting up strategies for border town development, some aspects of these theories and concepts could not provide suitable explanation in developing countries because of different backgrounds and situations. For instance, growth of border towns relies much more on support from a strong central government; security is a significant factor affecting economic development of countries in the Greater Mekong Sub-region; lack of skilled labour, advanced technologies and national resources primarily impedes developing countries' growth, including that in Thailand. Further, growth pole theory (creating single or pairs of border towns) has been a useful planning tool for developing countries to select and promote towns or cities with the highest potential.

Finally, this study suggests that a methodology for identification and development of border towns stemming from this research could be applied in the first instance in Thailand and to the other countries in the Greater Mekong Sub-region.

From this study, it is concluded that the success of border towns' growth is greatly reliant on political and financial support from the central government, and allocation of national grants for promoting public investment projects and to regulate economic planning policy. This study further contends that there is not a single determinant of urban growth. Successful achievement of sustainable economic growth in border towns deals with several issues and involves neighbouring countries' cooperation and good relations. Secure border towns, especially in neighbouring countries, will raise investors' confidence to relocate
from the Bangkok Metropolitan Region to border towns. Border town planning requires key, long term commitment and appropriate budgets if they are to succeed, but the overall outcomes from growth will be invaluable in forcing the growth to whole regions and creating border business networks which will improve regional trade bloc co-operation and collaboration.

A key outcome of this research will be the resolution of the planning problem in the sense that it provides relevant insights into where development efforts should be located. In addition, it reveals growth at border towns can be diffused to the wider region and make possible more balanced development nationally, which will assist the growth and sustainability in the Greater Mekong Sub-region in a strengthened and rational way.

7.5 Research issues and suggestions for future research

7.5.1 Research issues

Undertaking border town research was made difficult because of their location, which were in sensitive areas of the countries and because of business confidentiality. The empirical results of this research are largely derived from field based surveys, interviews and researcher observations. As mentioned in Chapter One and Chapter Five, the degree of generalisation based on this research was not material but this study still sought to resolve problems as much as possible. By carrying out this kind of research, it is possible to identify a number of issues and matters that can inform future research, these include:

(1) Language communication: each country in the sub-region employs its own language. This made it difficult to communicate and obtain data as expected. This research used Thai in the neighbouring countries of Myanmar, Laos and Cambodia, since Thai language dominates commercial communications in the sub-region, but the researcher employed Chinese in China and Vietnam; Thai language was also used in Vietnam. Thai and Chinese were employed by the researcher in order to avoid translation problems and different definitions in the fieldwork as much as possible. But in the cases where different terms were encountered, it was necessary to repeat questions and clarify these terms with interviewees at the time.
(2) Security at border towns: because the surveyed areas in Myanmese and Cambodian border towns were insecure, the researcher needed to join local government officials to access border towns when seeking information on international projects between Thailand and its neighbours. This may have inhibited respondents as well as unsettling to the researcher.

(3) Accessibility to case study border towns: poor accessibility to border towns for case studies was a particular problem, especially by public transport. The researcher found rail to be the most convenient means of public transport for accessing border towns. The situation was worse in neighbouring countries’ border towns, with the poor quality of roads and very limited daily public transport (i.e. buses). Surveys in neighbouring countries often needed the hire of a local private car and a driver to ensure convenience, safety and success in obtaining survey evidence.

(4) Researcher observation: observation was the most frequently used research survey method to obtain evidence and information because this research largely involved sensitive topics, and the discovery of many unpublished documents.

(5) Surveying local residents: the participation of local residents in the research and the anecdotal views of some of interviewees were undermined by the fact that local people were largely educated only to elementary level. They were thus unable to provide views on how and what might be the quickest ways of promoting border towns. Top-down planning is predominant in Thailand and, as a result, seeking consumers’ views on development is a new departure for them. However, it was felt by the researcher that their views should inform plans to embrace local needs.

(6) Structured research instrument: for interview and questionnaire survey methods, the research found that letters supporting the research, especially from the government, aided and eased collection data. This was because research surveyed key persons from local government officials and business organisations, and also as questions were on sensitive subjects related to business and planning decisions which might also affect the respondents’ future work position and business.
Chapter 7: Conclusions, discussion and recommendations

(7) Research questionnaire: as mailed questionnaires are notorious for high non-response rates and in order to achieve a good response rate, it was essential to: (a) enclose introductory letters issued from the government and university, as well as stating on each page in the questionnaire and on its first page, that findings would only be used for this Ph.D study, (b) enclose a pre-paid envelope, (c) provide telephone numbers in case the respondents found questions unclear or needed further clarification, and fax numbers for helping firms to return completed questionnaires, and (d) use a telephone survey to follow-up non-returnees.

(8) Others’ and experts’ opinions: attendance at international conferences on border town development organised by the central and local governments was a safe and effective way of making contacts and obtaining data from neighbouring countries’ respondents, who were working on border town development planning as businessmen, local governors and central governors.

Further, constraints of time, difficulties in accessing border towns, travelling long distances, working in insecure areas, problems with language and resources for doing research all should be taken into account in any future research relating to border towns as case study areas in countries of the Greater Mekong Sub-region. Likewise, the strengths of this research, which may be a consideration for doing further research on border towns, include carrying out (a) in depth case studies, (b) large field-based observation surveys in the Greater Mekong Sub-regional countries, (c) a large number of interviews with key participants and (d) a large number of postal questionnaires of businesses.

7.5.2 Suggestions for future research

Even though the overall research is firmly embedded in current theory and it aims to fill the gap in knowledge on border towns has been satisfied in its own terms, a range of topics with regard to border town planning need further research. This final section of the research recommends a number of topics for future research regarding border town planning and border town studies for the Greater Mekong Sub-regional area, these are:
1. Socio-cultural issues in border town development: there is a need to involve local people to inform research strategies, especially, minority tribes and local residents in urban planning, so that these particular needs and views can be represented in the plans; this would make "bottom-up" planning approach, which is greatly needed in Thai development. In addition, the topics of conservation and historic city and heritage planning need to be included in research so as to meet objectives relating to sustainable urban growth.

2. Environmental implications of border town development; future research could focus on topics relating to preservation of natural environment and landscapes in surrounding areas. Urban growth and development should not be at the expense of future green space, sensitive environments or local tribes and cultures.

3. Differential economic impacts with different cross-border countries: research topics related to economic impacts (trade, investment and tourism benefiting from more opening the national boundaries) need to be further studied in each country in particularly in the Greater Mekong Sub-regional countries. Future research will need to assess comparative economies, to resolve cross border problems and difficulties, and to find out strategies and ensure that sustainable economic growth will stay in border towns as long as possible.

The research can also be improved. It is recommended that these should be considered in future research to fill the gaps in knowledge on border town economic study. Although the researcher frequently went on field-based observations in border towns to conduct case studies in Thailand and in the other countries in the Greater Mekong Sub-region, it was difficult to stay in each border town for longer than 2 weeks and because there was a need to focus on other aspects of the study. By their very nature, case studies are intensive, qualitative based activities response in depth information and as such piloting and preliminary groundwork are pre-requisites to successful working.

This research grounded large amounts of quantitative data from interviewees and from questionnaire surveys and then had to reduce these data for analysis. As a
Chapter 7: Conclusions, discussion and recommendations

consequence, there is a possibility that the data analysis might ignore qualitative responses. Observation was a main source of qualitative data for this research. This study suggests that to improve research base, future research might wish to consider spending more time on each interview and reducing the overall number of interviewees so as to obtain more in depth, qualitative data. In other words, micro studies on border towns should to be the focus of research in the future.

As this research aimed to formulate guidelines for selecting border towns and encouraging new firms to relocate to border towns, it could be suggested that in the future research focuses on the impacts and success of the policy of attracting and locating firms in border towns. Such questions might include: (a) Do increased numbers of firms relocate to border towns? (b) Do what extent have relocated firms employ local labour and materials? (c) Has relocation of firms in border towns stimulated local economies? (d) Are these particular types of firms that should be promoted to relocate in border towns? (e) What is the duration that firms stay in border towns and what measures are available to ensure that these firms remain in border towns longer?

However, using indicators, (that is perceptions of increasing trade, increasing investment, increasing tourism, improving security, and increasing migrant to border town), and ranking single and pairs of border towns, were all valuable tools used in the research. This study used three measurements: "increasing", "stable" and "decreasing" which is a crude way of ranking border towns. Future researches should consider using a more sophisticated means of ranking, perhaps using as five or ten point scales, so as to make it more precise and sensitive. It is clear that the research was not solely reliant on this kind of evidence since the researcher was able to combine different forms of evidence in identifying border towns where have varying degree of potential of becoming new centres of growth and investment.
Appendix 1
Table A: Summary of the findings from the border town theoretical context

<table>
<thead>
<tr>
<th>Concept and theory</th>
<th>Application to border town research</th>
<th>Suggestions: factors affecting the identification and selection border towns as centres for trade and investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>International economic theories</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Globalisation concept</td>
<td>- It is contended that border towns are significant areas with possibility to become centres for trade and investment.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- It is argued thus that the opening of borders affects facilitating volumes of border economic activities and also raising adverse problems of criminals, drugs and illegal migrants crossing a border to other big cities.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Expanding export is a significant mechanism to enhance border town and national economic growth.</td>
<td></td>
</tr>
<tr>
<td>2. International trade theory</td>
<td>- International investment will assist in enhancing economic diversifications and increasing employments but the transferring advanced technology from foreign investments would not happen in Thailand including border towns because of lack of skilled capacity, risk and high cost.</td>
<td></td>
</tr>
<tr>
<td>3. International investment theory</td>
<td>- Development of border towns under the Greater Mekong Sub-regional economic cooperation programme assists in the decentralisation policy, improving good relations with neighbouring countries, and also making possible healthy economic growth in both border zones and their sub-region.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- When currency, languages and border crossing laws standards are implemented and the healthy economy occurs in the Greater Mekong Sub-region, this sub-region will become a regional trade bloc.</td>
<td></td>
</tr>
<tr>
<td>4. International economic integration concept</td>
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<td></td>
</tr>
</tbody>
</table>

(continued)
### Concept and theory

#### Regional economic planning theories

<table>
<thead>
<tr>
<th>Application to border town research</th>
<th>Suggestion: Factors affecting the identification and selection as centres for trade and investment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>5. Economic based theory</strong></td>
<td>- Trade, investment and tourism would as seen appreciate economic bases in border towns which could stimulate border town economy. Economic diversification seems suitable for border town growth.</td>
</tr>
<tr>
<td></td>
<td>- Location factors of firms to locate in Thailand comprise 1. growing markets, 2. good quality and condition of infrastructure and urban services, and 3. government incentives; meanwhile location factors of firms to locate in border towns are 1. geographical location with easy access to neighbouring countries, 2. growing markets, and 3. availability of lower wages and agricultural goods.</td>
</tr>
<tr>
<td></td>
<td>- Specially offered government incentive is seen as encouraging firms to relocate in border towns and other less developed areas.</td>
</tr>
<tr>
<td></td>
<td>- In the light of border town development, security in border zones is an additional concern in location factor.</td>
</tr>
<tr>
<td></td>
<td>- Industrial parks must be established at each border town in order to tackle urban planning land use. Firms related to serve neighbouring countries' markets and employ lower wages (ie. food processing, consumer goods, electrical parts, and automotive and spare parts) should be promoted to relocate in border towns' industrial parks through provision of specially offered government incentives.</td>
</tr>
<tr>
<td><strong>6. Location theory</strong></td>
<td>1. Special taxation and investment incentives</td>
</tr>
<tr>
<td></td>
<td>2. Implementation of urban landuse and industrial zone measures</td>
</tr>
<tr>
<td></td>
<td>3. Business and support services</td>
</tr>
<tr>
<td></td>
<td>4. Availability of high quality labour</td>
</tr>
<tr>
<td></td>
<td>5. Regional shopping facilities</td>
</tr>
<tr>
<td></td>
<td>6. High quality natural green areas and public open and built spaces</td>
</tr>
</tbody>
</table>

| **7. Growth pole theory**           | - This study contends that growth pole theory is a very helpful regional planning concept for Thai border town development because within the constraint of National grants, the Thai government must select border towns with the highest future potential growth to develop as the new growth centres. In turn, these border towns are expected to spread growth over a region. Meanwhile this study supplements the growth pole theory that surrounding areas will also become the trade suppliers of agricultural goods, labours' lower wages and good environment for existence of growth centres. |

(continued)
<table>
<thead>
<tr>
<th>Concept and theory</th>
<th>Application to border town research</th>
<th>Suggestion: Factors affecting the identification and selection as centres for trade and investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. Central place theory</td>
<td>- Border towns possibly become the third order city after the Bangkok Metropolitan Region and other big cities when good quality of infrastructure and urban services, and improving labour forces’ skill are promoted.</td>
<td></td>
</tr>
<tr>
<td>Concepts of the cause of urban growth</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 9. Competitive city concept | - In order to support and sustain border towns as the regional business centres, establishment of the big public investment projects (especially university, higher educational institution and airport) and induction of and improvement in a better quality of city life are the key policy requirements. | 1. Special taxation and investment incentives  
2. Implementation of urban landuse and industrial zone measures  
3. Business and support services  
4. Availability of high quality labour  
5. Regional shopping facilities  
6. High quality natural green areas and public open and built spaces |
| 10. Innovation concept | - It is suggested that adequacy and good quality of urban services and the specialised, technical and skilled labour pools will support firms’ growth in terms of communicate economies, creation of sophisticated products, markets and firms’ competitiveness. In turn cluster of firms locating in border towns will generate city’s growth. | |
| 11. Quality of life concept | - Increasing good urban environment (ie. green areas and public spaces), protecting environment and landscape in surrounding areas, improving in urban services, and taking into consideration of local cultures and sense of city in planning policy will create border towns as attractive and safe places for work and live. | |

Source: Author's own survey, conducted 1999-2001
Appendix 2
Map A: San Diego-Tijuana (The USA-Mexico border)

Source: Donnan and Wilson, 1999
Appendix 3
Map B: Hong Kong-Shenzhen, (Zhujiang Delta, south China)

Source: Shen and others, 2001
Appendix 4
Note: all interviews and questionnaires were all translated in Thai language

Interview guide for local government official

"A methodology to identify border towns as centres for trade and investment with particular reference to north-east Thailand"

Local government office's name
Interviewee's name
Date

Questions:

Q1. How would you characterise the present economy and situation in border town?

- Trading activity: increase/ stable/ decrease
- Investment activity: increase/ stable/ decrease
- Tourist: increase/ stable/ decrease
- Domestic migration: increase/ stable/ decrease

Other details

Q2. Do these reflect the condition of the present economy and situation in neighbouring country's border town?

( ) Yes
( ) No

How would characterise these?

- Trading activity: increase/ stable/ decrease
- Investment activity: increase/ stable/ decrease
- Tourist: increase/ stable/ decrease
- Domestic migration: increase/ stable/ decrease

Other details
Q3. How do you rate the current and future National trade and investment policy which has attempted to develop border towns as centres for trade and investment?

<table>
<thead>
<tr>
<th>Very useful</th>
<th>Useful</th>
<th>Moderate</th>
<th>A little</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Now ( ) ( ) ( ) ( ) ( )
Future ( ) ( ) ( ) ( ) ( )

Q4. So far, how to devise the National policy for supporting the growth of border towns?


Q5. In your opinion, what is the single factor, which assist border towns in achieving the goal of centres for trade and investment?


Q6. In your view, what is a main barrier for the border town development?


Q7. How do you rate the present urban infrastructures? Would you say the following items are superior, above average, average, below average or poor?

<table>
<thead>
<tr>
<th>Superior</th>
<th>Above average</th>
<th>Average</th>
<th>Below average</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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</table>

Road ( ) ( ) ( ) ( ) ( )
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Port ( ) ( ) ( ) ( ) ( )
Airport ( ) ( ) ( ) ( ) ( )
Water supply ( ) ( ) ( ) ( ) ( )
Electric supply ( ) ( ) ( ) ( ) ( )
Communication systems ( ) ( ) ( ) ( ) ( )
Others (Please specify) ......... ( ) ( ) ( ) ( ) ( )

272
Q8. How do you rate the present urban social services? Would you say these are superior, above average, average, below average or poor?

<table>
<thead>
<tr>
<th>Service</th>
<th>Superior</th>
<th>Above average</th>
<th>Average</th>
<th>Below average</th>
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<tbody>
<tr>
<td>School</td>
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<tr>
<td>Others (Please specify)</td>
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</tbody>
</table>

Q9. In your opinion, which the main economic activities should be conveyed to locate in border town in order to achieve sustainable development, and what are the reasons?


Q10. How do you comments and suggestions on the present trade and investment policy and the trend of developing border towns?


Thank you very much,
Interview guide for border town investor

"A methodology for identification and development of border towns as centres for trade and investment in Thailand"

The business organisation/firm's name
Interviewee's name
Date

Basic details of organisation/firm:

Kind of firms: ( ) Thai domestic firm ( ) Foreign-owned firm
Business type
Address in mother country (city and country)
Annual sales
The established year in Thailand (for foreign firm-owned only)
The established year in border towns
What is the size of the work force?

........................% Skilled labour (graduated up to the first degree)
........................% Semi-skilled labour (graduated at high school)
........................% Unskilled labour (graduated below high school level)
Questions:

Q1. Rank the order of the advantages which influence on opening firm in border town? (Number 1 is the most important while number 15 is least important)

( ) A favourable location with access to neighbouring country
( ) Lower labour cost
( ) Availability of skilled labours
( ) Availability of materials
( ) Market size
( ) Availability of natural resources
( ) Adequate urban infrastructure
( ) Adequate urban facilities
( ) Low price of land
( ) A favourable the surrounding environments
( ) The offered incentives
( ) Security criterion
( ) Attractive culture
( ) Low cost of living
( ) Others (please specify) ............................................................

Q2. Do you have other plants in other border towns?

( ) Yes

( ) Domestic (Please specify) ............................................................

( ) Neighbouring country (Please specify) ........................................

( ) No

Q3. What are the main attractive factors, which could encourage you decide to locate in the border towns?

- Nong Khai .................................................................
- Mukdahan ...............................................................  
- Chong Mek ...............................................................  
- Mae Sai .................................................................  
- Aranyaprathet ............................................................
- Other border towns (Please specify) ...........................................

Q4. What are the benefits, which you get from the present site?


Q5. In turn, what are the impediments, which you suffer in the present site?


276
Q6. How would you characterise the present economy and situation in border town?

- Trading activity: increase/ stable/ decrease
- Investment activity: increase/ stable/ decrease
- Tourist: increase/ stable/ decrease
- Domestic migration: increase/ stable/ decrease

Other details

Q7. Do these reflect the condition of the present economy and situation in neighbouring country’s border town?

( ) Yes
( ) No

How would you characterise these?

- Trading activity: increase/ stable/ decrease
- Investment activity: increase/ stable/ decrease
- Tourist: increase/ stable/ decrease
- Domestic immigration: increase/ stable/ decrease

Other details

Q8. Do you intend to relocate the new plant in the neighbouring country? If yes, what is the major reason for moving? If no, what are the main reasons prevent your firm moving?

( ) Yes,

( ) No,
Q9. Are you aware of the current National trade and investment policy which has attempted to promote the growth of border towns as centres for trade and investment?
( ) Yes
( ) No

Q10. How do you rate the current and future National trade and investment policy dealing with the border town development?

<table>
<thead>
<tr>
<th></th>
<th>Very useful</th>
<th>Useful</th>
<th>Moderate</th>
<th>A little</th>
<th>None</th>
</tr>
</thead>
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</tr>
</tbody>
</table>

Q11. So far, how to devise the National policy for supporting the growth of border towns?

Q12. In your opinion, what is the single factor, which assists border towns in achieving the goal of centres for trade and investment in the Greater Mekong Sub-region?

Q13. In your view, what is a main barrier for the border town development?

Q14. How do you rate the present urban infrastructure? Would you say the following items are superior, above average, average, below average or poor?

<table>
<thead>
<tr>
<th></th>
<th>Superior</th>
<th>Above average</th>
<th>Average</th>
<th>Below average</th>
<th>Poor</th>
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<tbody>
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<td>Communication systems</td>
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<td>Others (Please specify)</td>
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</tr>
</tbody>
</table>
Q15. How do you rate the present urban social services? Would you say these are superior, above average, average, below average or poor?

<table>
<thead>
<tr>
<th>Service</th>
<th>Superior</th>
<th>Above average</th>
<th>Average</th>
<th>Below average</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>School</td>
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<td>Others (Please specify)</td>
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</tbody>
</table>

Q16. In your opinion, which the main economic activities should be conveyed to locate in border town in order to achieve sustainable development, and what are the reasons?

Q17. How do you comments and suggestions on the present trade and investment policy and the trend of developing border towns?

Thank you very much,
Appendix 6
Interview guide for tourist

*A methodology for identification and development of border towns as centres for trade and investment in Thailand*

Interviewee's name __________________________ Area __________________________

Date __________________________ Time __________________________ No __________________________

Basic details of interviewee: ( ) Female ( ) Male

Age __________________________________________

Occupation __________________________________________

Educational attainment __________________________________________

Questions:

Q1. Where are you from?

Q2. Is it your first time to visit this border town? If it is the first time, what is the main attraction that you decide to visit here?

Q3. If not, how many times or how often do you visit here?

Q4. What is the main purpose to come this border town?

( ) Travelling (Please specify)...

( ) Doing Business (Please specify)...

( ) Visiting relatives (Please specify)...

( ) Others (Please specify)...

Q5. How long do you stay in this border town?

Q6. Where do you stay during this visiting?

281
Q7. What is the next destination to visit?
   ( ) Domestic (Please specify) .................................................................
   ( ) Neighbouring country (Please specify) ...........................................

Q8. How would you characterise the present economy and situation in border town?

   • Trading activity: increase/ stable/ decrease
   • Investment activity: increase/ stable/ decrease
   • Tourist: increase/ stable/ decrease
   • Security: improve/ stable/ decrease
   • Domestic migration: increase/ stable/ decrease

Other details

Q9. Do these reflect the condition of the present economy and situation in neighbouring country's border town?
   ( ) Yes
   ( ) No

   How would you characterise these?
   • Trading activity: increase/ stable/ decrease
   • Investment activity: increase/ stable/ decrease
   • Tourist: increase/ stable/ decrease
   • Security: improve/ stable/ decrease
   • Domestic migration: increase/ stable/ decrease

Other details

Q10. How do you rate the present urban infrastructure? Would you say the following items are superior, above average, average, below average or poor?

<table>
<thead>
<tr>
<th>Item</th>
<th>Superior</th>
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<td>Others (Please specify)</td>
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</tr>
</tbody>
</table>

282
Q11. How do you rate the present urban social services? Would you say these are superior, above average, average, below average or poor?

<table>
<thead>
<tr>
<th>Service</th>
<th>Superior</th>
<th>Above average</th>
<th>Average</th>
<th>Below average</th>
<th>Poor</th>
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</table>

Q12. In your view, in what ways can attract you to move or relocate in this the border town?

- Urban structures

- Urban facilities

- Others

Q13. How do you comments and suggestions on the present trade and investment policy and the trend of developing border towns?

Thank you very much,
Appendix 7
Questionnaire survey for Thai-owned firm

Instructions: the questionnaire survey comprises four parts. The first part is concerned with the general of your firm details, the second part is about the present firm location, the third part is about the new firm location, and the fourth part is about trade and investment policy.

Could you please complete the following questionnaires by ticking the appropriate codes, ranking the number of the chosen answer, or writing in the space provided. I hope that all questions will be completed.

Part 1: General of your firm details

Q1 Firm's name ..........................................................................................................................

Q2 Business type (Standard description) .............................................................................

Q3 Address ..............................................................................................................................

Q4 Annual sales ....................................................................................................................

Q5 What year was the firm established? 19.......... 

Q6 What is the size of your work force? 

Q7 What proportion of your work force size?

\[ \begin{array}{l}
0.00\% & \text{Skilled labour (graduated up to the first degree)} \\
0.00\% & \text{Semi-skilled labour (graduated at high school level)} \\
0.00\% & \text{Unskilled labour (graduated below high school level)} \\
\end{array} \]

All of these information generated will be operated in only this research and held in secure and will remain confidential.
Part 2: About the present firm location

Q8 Rank the order of the main advantages in setting up of your present location? (Number 1 is the most important while number 10 is least important)

( ) Close to market size
( ) The offered incentives
( ) Availability of labour
( ) Availability of material
( ) Low price of land
( ) Near port or airport
( ) Adequate urban infrastructure
( ) Adequate urban facilities
( ) More attractive surrounding environment
( ) Others (please specify) .................................................................

Q9 Rank the order of the main disadvantages in setting up of your firm in the present location? (Number 1 is the most important while number 9 is least important)

( ) Inadequate existing site
( ) Unsatisfactory labour supply
( ) Poor condition in infrastructure
( ) Poor condition in facilities
( ) Lack of materials
( ) Unsatisfactory surrounding environment
( ) No offered incentives
( ) Too far from Bangkok or the growth centre
( ) Others (please specify) .................................................................

Q10 How do you rate the present infrastructure where your firm is situated? Would you say the following items are superior, above average, average, below average or poor?

<table>
<thead>
<tr>
<th></th>
<th>Superior</th>
<th>Above average</th>
<th>Average</th>
<th>Below average</th>
<th>Poor</th>
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</tbody>
</table>

All of these information generated will be operated in only this research and held in secure and will remain confidential.
Q11 How do you rate the social services in the immediate area of the firms present location? Would you say these are superior, above average, average, below average or poor?

<table>
<thead>
<tr>
<th>Services</th>
<th>Superior</th>
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<th>Average</th>
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<td>Others (please specify)</td>
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</table>

Q12 Are you satisfied with the present site of your firm?
- ( ) Yes, satisfy
- ( ) No, unsatisfied

Q13 Do you plan to relocated your firm to other areas?
- ( ) Yes (go to Q14)
- ( ) No (go to Q15)

Q14 If yes, Do you intend to relocate to
- ( ) To foreign country
  - ( ) Southeast Asia
  - ( ) Asia
  - ( ) EU
  - ( ) North America
  - ( ) Middle East
  - ( ) Africa
  - ( ) South America
  - ( ) Others
- ( ) To neighbouring country
  - ( ) Laos
  - ( ) Myanmar
  - ( ) Cambodia
  - ( ) Malaysia
- ( ) Within Thailand
  - ( ) Other provinces which are not border towns
    - Please specify the province................................................

All of these information generated will be operated in only this research and held in secure and will remain confidential.
( ) The following border towns
   ( ) Nong Khai
   ( ) Mukdahan
   ( ) Chong Mek
   ( ) Mae Sai
   ( ) Aranyaprathet
   ( ) Other border towns (please specify) .............................................

Q15 If no, what the main caused are your intentions to stand?
..............................................................................................................................
..............................................................................................................................
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..............................................................................................................................

Part 3: About the new location

Q16 Do you have other branches in any of the location sites in Q14?
   ( ) Yes (go to Q17)
   ( ) No (go to Q18)

Q17 If yes, please specify there location.....
   ( ) In foreign country
      ( ) Southeast Asia
      ( ) Asia
      ( ) EU
      ( ) North America
      ( ) Middle East
      ( ) Africa
      ( ) South America
      ( ) Others
   ( ) In neighbouring country
      ( ) Laos
      ( ) Myanmar
      ( ) Cambodia
      ( ) Malaysia
   ( ) Within Thailand
      ( ) Other provinces which are not border town
         please specify the province.................................................................

All of these information generated will be operated in only this research and held in secure and will remain confidential.
The following border towns
( ) Nong Khai
( ) Mukdahan
( ) Chong Mek
( ) Mae Sai
( ) Aranyaprathet
( ) Other border towns (please specify)

Q18 What caused you to consider opening a new plant in a new location?
Rank the order of the most important advantages: number 1 is the most important while number 11 is least important

( ) To permit an expansion of output
( ) Inadequate existing site
( ) Unsatisfactory labour supply
( ) Opportunities to purchase or rent site at new location
( ) Town planning difficulties
( ) Far from market size
( ) Far from materials
( ) Desire to be in more attractive surrounding
( ) Adequate infrastructure and facilities made available
( ) The offered incentives
( ) Others (please specify)

Q19 In consider on new location what fact in term in your choice of the new location. (Rank the order of the most important advantages: number 1 is the most important while number 7 is least important)

( ) Availability of labour
( ) The offered incentives
( ) Access to the transport facilities
( ) Market size
( ) Good amenities and environment
( ) Available industrial and commercial services
( ) Others (please specify)

Part 4: About trade and investment policy

Q20 Are you aware of the current National trade and investment policy?
( ) Yes
( ) No

All of these information generated will be operated in only this research and held in secure and will remain confidential.
Q21 How useful is this policy for your business will be to support or assist your business?

<table>
<thead>
<tr>
<th>Now</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very useful</td>
<td>( )</td>
</tr>
<tr>
<td>Useful</td>
<td>( )</td>
</tr>
<tr>
<td>Moderate</td>
<td>( )</td>
</tr>
<tr>
<td>A little</td>
<td>( )</td>
</tr>
<tr>
<td>None</td>
<td>( )</td>
</tr>
</tbody>
</table>

Q22 Are you aware of the current National trade and investment policy which has attempted to assist border towns in achieving the goal of centers as trade and investment?
( ) Yes, I know (go to Q23)
( ) No, I do not know (go to Q24)

Q23 If yes, do you intent to relocate or open the new plant in the border towns?
( ) Yes, I will locate the new plant at border towns, please specify .................
( ) No, I will not do that

Q24 What is the single factor which persuade you to move to the border towns? (eg. government taxes, tax incentive, raw material)

Q25 What is the single factor which prevent you to relocate the border towns? (eg. inadequate social facilities, poor infrastructure, security, labour forces)

Q26 Can you tell me what are the problems or limitations on doing business? (Rank the order of the most important advantages: number 1 is the most important while number 11 is least important)

( ) Insufficient infrastructure
( ) Insufficient facilities
( ) Lack of material
( ) Problem of quality material
( ) Lack of labour
( ) Problem of quality of labour
( ) Expensive labour cost
( ) The policy has poor understanding of business needs
( ) Non-stable government and cabinet
( ) Limitation of laws or out of date laws
( ) Others (please specify) ...........................................................

All of these information generated will be operated in only this research and held in secure and will remain confidential.
Q27 Do you think what kind of business advice or system which your firms need to improve it performance? (Rank the order of the most important advantages: number 1 is the most important while number 8 is least important)

( ) Marketing
( ) Security
( ) Exports
( ) Imports
( ) Improving site
( ) Getting finance
( ) Others (please specify)..........................................................
( ) None of these

Thank you for your time and help.

All of these information generated will be operated in only this research and held in secure and will remain confidential.
Appendix 8
Note: all interviews and questionnaires were all translated in Thai language

Questionnaire survey for Foreign-owned firm located in Thailand

Instructions: the questionnaire survey comprises four parts. The first part is concerned with the general of your firm details, the second part is about the present firm location, the third part is about the new firm location, and the fourth part is about trade and investment policy.

Could you please complete the following questionnaires by ticking the appropriate codes, ranking the number of the chosen answer, or writing in the space provided. I hope that all questions will be completed.

Part 1: About general firm details

Q1 Firm's name ...........................................................................................

Q2 Business type (Standard description)

.............................................................................................................
.............................................................................................................
.............................................................................................................

Q3 Address in Thailand

.............................................................................................................
.............................................................................................................

Address in mother country (city and country)
.............................................................................................................

Q4 Annual sales..............................................................................

Q5 What year was the firm established in Thailand? 19................

Q6 What is the size of your work force?

Q7 What portion of your work force size?

\[\begin{array}{l}
\text{Skilled labour (graduated up to the first degree)}
\end{array}\]

\[\begin{array}{l}
\text{Semi-skilled labour (graduated at high school level)}
\end{array}\]

\[\begin{array}{l}
\text{Unskilled labour (graduated below high school level)}
\end{array}\]

All of these information generated will be operated in only this research and held in secure and will remain confidential.
Q8 Where do most of these workers come from? 

Q9 How many of your firms are in Thailand? 

Part 2: About the present firm location

Q10 Rank the order of the advantageous factors which influence on opening firm in Thailand? (Number 1 is the most important while number 15 is least important)

( ) A favourable location with access to neighbouring countries
( ) Lower labour cost
( ) Availability of skilled labour
( ) Availability of materials
( ) Market size
( ) Availability of natural resources
( ) Adequate urban infrastructure
( ) Adequate urban facilities
( ) Low price of land
( ) More attractive surrounding environments
( ) The offered incentives
( ) Security criterion
( ) Attractive culture
( ) Low cost of living
( ) Others (please specify)........................................................................

Q11 Rank the order of the main advantages in setting up in your firm in the present site? (Number 1 is the most important while number 10 is least important)

( ) Close to market size
( ) The offered incentives
( ) Availability of labour
( ) Availability of materials
( ) Low price of land
( ) Near port or airport
( ) Adequate urban infrastructure
( ) Adequate urban facilities
( ) More attractive surrounding environment
( ) Others (please specify)........................................................................

All of these information generated will be operated in only this research and held in secure and will remain confidential.
Q12 Rank the order of the main disadvantages which you suffer in the present site? (Number 1 is the most important while number 9 is least important)

1. Inadequate existing site
2. Unsatisfactory labour supply
3. Poor condition of infrastructure
4. Poor condition of facilities
5. Lack of materials
6. Unsatisfactory surrounding environment
7. Not offered incentives
8. Too far from Bangkok or the growth centre
9. Others (please specify)

Q13 How do you rate the present infrastructure where your firm is situated? Would you say the following items are superior, above average, average, below average or poor?

<table>
<thead>
<tr>
<th>Infrastructure</th>
<th>Superior</th>
<th>Above average</th>
<th>Average</th>
<th>Below average</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
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<tr>
<td>Railway</td>
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<td>( )</td>
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<tr>
<td>Port</td>
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</tr>
<tr>
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</tr>
<tr>
<td>Water supply</td>
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<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>Electric supply</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>Communication systems</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>Others (Please specify)</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
</tbody>
</table>

Q14 How do you rate the present social services where your firm is situated? Would you say these are superior, above average, average, below average or poor?

<table>
<thead>
<tr>
<th>Social Service</th>
<th>Superior</th>
<th>Above average</th>
<th>Average</th>
<th>Below average</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>School</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
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</tr>
<tr>
<td>University</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
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</tr>
<tr>
<td>Hospital</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>Police station</td>
<td>( )</td>
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<td>( )</td>
<td>( )</td>
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</tr>
<tr>
<td>Hotel</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
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</tr>
<tr>
<td>Restaurant</td>
<td>( )</td>
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<td>( )</td>
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</tr>
<tr>
<td>Park</td>
<td>( )</td>
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<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>Government office</td>
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</tr>
<tr>
<td>Others (Please specify)</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
</tbody>
</table>

All of these information generated will be operated in only this research and held in secure and will remain confidential.
Q15 Are you satisfied with your present site?
   ( ) Yes, satisfy
   ( ) No, unsatisfied

Q16 Do you plan to move your firm to other areas?
   ( ) Yes (go to Q17)
   ( ) No (go to Q18)

Q17 If yes, Do you intend to relocated to?
   ( ) To foreign country
      ( ) Southeast Asia
      ( ) Asia
      ( ) EU
      ( ) North America
      ( ) Middle East
      ( ) Africa
      ( ) South America
      ( ) Others
   ( ) To neighbouring country
      ( ) Laos
      ( ) Myanmar
      ( ) Cambodia
      ( ) Malaysia
   ( ) Within Thailand
      ( ) Other provinces which are not border town
      ( ) The following border towns
         ( ) Nong Khai
         ( ) Mukdahan
         ( ) Chong Mek
         ( ) Mae Sai
         ( ) Aranyaprathet
      ( ) Other border towns (please specify)...........................

Q18 If no, what are your intentions to stand?
..............................................................................................................................
..............................................................................................................................
..............................................................................................................................
..............................................................................................................................
..............................................................................................................................

All of these information generated will be operated in only this research and held in secure and will remain confidential.
Part 3: About the new location

Q19 Do you have other branches in any of the location sites in Q17?
( ) Yes (go to Q20)
( ) No (go to Q21)

Q20 If yes, please specify there location......
( ) In foreign country
( ) Southeast Asia
( ) Asia
( ) EU
( ) North America
( ) Middle East
( ) Africa
( ) South America
( ) Others
( ) In neighbouring country
( ) Laos
( ) Myanmar
( ) Cambodia
( ) Malaysia
( ) Within Thailand
( ) Other provinces which are not border town
( ) The following border towns
( ) Nong Khai
( ) Mukdahan
( ) Chong Mek
( ) Mae Sai
( ) Aranyaprathet
( ) Other border towns (please specify)

Q21 What location decision caused you to open a new plant in a new location? Rank the order of the most important advantages: number 1 is the most important while number 11 is the least important)
( ) To permit an expansion of output
( ) Inadequate existing site
( ) Unsatisfactory labour supply
( ) Opportunities to purchase or rent site at new location
( ) Town planning difficulties
( ) Far from market size
( ) Far from materials
( ) Desire to be in more attractive surrounding
( ) Adequate infrastructure and facilities made available
( ) The offered incentives
( ) Others (please specific)

All of these information generated will be operated in only this research and held in secure and will remain confidential
Q22 In consider on new location what fact in term in your choice of the new location. (Rank the order of the most important advantages: number 1 is the most important while number 7 is least important)

( ) Availability of labour
( ) The offered incentives
( ) Access to the transport facilities
( ) Market size
( ) Good amenities and environment
( ) Available industrial and commercial services
( ) Others (please specify) .................................................................

Part 4: About trade and investment policy

Q23 are you aware of the current National trade and investment policy?
( ) Yes
( ) No

Q24 How useful is this policy for your business will be support or assist your business?

<table>
<thead>
<tr>
<th></th>
<th>Now</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very useful</td>
<td>(</td>
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<tr>
<td>Useful</td>
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<tr>
<td>Moderate</td>
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<td>(</td>
</tr>
<tr>
<td>A little</td>
<td>(</td>
<td>(</td>
</tr>
<tr>
<td>None</td>
<td>(</td>
<td>(</td>
</tr>
</tbody>
</table>

Q25 Are you aware of the current Nation trade and investment policy has attempted to assist border towns in achieving the goal of centres for trade and investment?
( ) Yes, I know
( ) No, I do not know

Q26 If yes, do you intend to relocated or open the new plant in the border towns?
( ) Yes, I will locate the new plant at border towns, please specify..................
( ) No, I will not do that.

Q27 What is the single factor which attract you to move to the border towns? (eg. government taxes, tax incentives, new potential market)

All of these information generated will be operated in only this research and held in secure and will remain confidential.
Q28 What is the single factor which prevent you to relocate the border towns? (eg. inadequate social facilities, poor infrastructure, security, lack of labour)

Q29 Can you tell me what are the problems or limitations on doing business? (Rank the order of the most important advantages: number 1 is the most important while number 11 is least important)

( ) Insufficient infrastructure
( ) Insufficient facilities
( ) Lack of materials
( ) Problem of quality material
( ) Lack of labour
( ) Problem of quality of labour
( ) Expensive labour cost
( ) The policy has poor understanding of business needs
( ) Non-stable government and cabinet
( ) Limitation of laws or out of date laws
( ) Others (please specify)..........................................................

Q30 Do you think what kind of business advice or system which your firms need to improve it performance? (Ranks the order of the most important advantages: number 1 is the most important while number 7 is the least important)

( ) Marketing
( ) Security
( ) Exports
( ) Imports
( ) Improving site
( ) Getting finance
( ) Others (please specify)..........................................................
( ) None of these

Thank you for your time and help.

All of these information generated will be operated in only this research and held in secure and will remain confidential.
Appendix 9
Note: all interviews and questionnaires were all translated in Thai language

Questionnaire survey for Foreign-owned firm that are intending to locate in Thailand

Instructions: the questionnaire survey comprises three parts. The first part is concerned with the general of your firm details, the second part is about the present firm location, the third part deals with the trade and investment policy.

Could you please complete the following questionnaires by ticking the appropriate codes, ranking the number of the chosen answer, or writing in the space provided. I hope that all questions will be completed.

Part 1: General of your firm details

Q1 Firm's name

Q2 Business type (Standard description)

Q3 Address (city and country)

Q4 Annual sales

Q5 What year will be the firm established in Thailand?

Q6 What is the size of your work force in which Thailand?

Skilled labour (graduated up to the first degree)

Semi-skilled labour (graduated at high school level)

Unskilled labour (graduated below high school level)

All of these information generated will be operated in only this research and held in secure and will remain confidential.
Part 2: About the firm location

Q7 Rank the order of the causes to consider opening a new plant in a new location? (Number 1 is the most important while number 11 is least important)

( ) To permit an expansion of output
( ) Inadequate existing site
( ) Unsatisfactory labour supply
( ) Opportunities to purchase or rent site at new location
( ) Town planning difficulties
( ) Far from market size
( ) Far from materials
( ) Desire to be in more attractive surrounding
( ) Urban infrastructure and facilities made available
( ) The offered incentives
( ) Others (please specific)

Q8 Having decided to open a new plant what is the main location decision? (Rank the order of the most important advantages: number 1 is the most important while number 7 is least important)

( ) Availability of labour
( ) The offered incentives
( ) Access to the transport facilities
( ) Market size
( ) Good amenities and environment
( ) Available industrial and commercial services
( ) Others (please specify)

All of these information generated will be operated in only this research and held in secure and will remain confidential.
Q9 Rank the order of the advantageous factors which influence on opening firm in Thailand? (Number 1 is the most important while number 15 is less important)

(  ) A favourable location with access to neighbouring countries
(  ) Lower labour cost
(  ) Availability of skilled labour
(  ) Availability of materials
(  ) Market size
(  ) Availability of natural resources
(  ) Adequate urban infrastructure
(  ) Adequate urban facilities
(  ) Low price of land
(  ) A favourable the surrounding environments
(  ) The offered incentives
(  ) Security criterion
(  ) Attractive culture
(  ) Low cost of living
(  ) Others (please specify) .............................................................

Q10 Would you tell me where will your firm be located in Thailand?
(  ) Bangkok
(  ) The growth centres in region
(  ) Other provinces which are not border towns
(  ) The following border towns
  (  ) Nong Khai
  (  ) Mukdahan
  (  ) Chong Mek
  (  ) Mae Sai
  (  ) Aranyaprathet
(  ) Other border towns (please specify) ............................................

Part 3: About trade and investment policy

Q11 Are you aware of the current National trade and investment policy?
(  ) Yes
(  ) No

All of these information generated will be operated in only this research and held in secure and will remain confidential.
Q12 How useful is this policy for your business will be supported or assistant your business?

Now Future
Very useful ( ) ( )
Useful ( ) ( )
Moderate ( ) ( )
A little ( ) ( )
None ( ) ( )

Q13 Are you aware of the current National trade and investment policy has attempt to assist border towns in achieving the goal of centres for trade and investment?

( ) Yes, I know.
( ) No, I do not know.

Q14 Do you intend to relocate or open the new plant in the border towns?

( ) Yes, I will locate the new plant at border towns, please specify.............
( ) No, I will not to do that.

Q15 What is the single factor which attract you to move to the border towns (eg. government taxes, tax incentives, cheap labour, potential market)

Q16 What is the single factor which prevent you to relocate the border towns? (eg. inadequate social facilities, poor infrastructure, security)

Q17 In the future, do you desire to open the new firm or move to locate in the following neighbouring countries?

( ) Yes, I will do, please specify the countries ...........................................
for the reasons that ..........................................................................................
...................................................................................................................
...................................................................................................................

( ) No, I will do that, for the reasons that .......................................................
...................................................................................................................
...................................................................................................................

Thank you for your time and help.

All of these information generated will be operated in only this research and held in secure and will remain confidential.
Appendix 10
แบบสำรวจสำหรับนักเรียนระดับชั้นปีที่ 2

คำถาม: แบบสำรวจชั้นปีที่ 2 เป็นการสำรวจเพื่อประกอบการวิทยานิพนธ์ระดับปริญญาเอกของ นางสาว มากี กระแสสมัคร ซึ่งศึกษาอยู่ที่ Oxford Brookes University ประเทศอังกฤษ สาขาวิชาการวางแผน Planning หัวข้อวิทยานิพนธ์เรื่อง A methodology to identify border towns as centres for trade and investment with particular reference to north-east Thailand ตัวชี้วัดเพื่อกำหนดให้มีรูปแบบแผนพัฒนาเป็นเมืองศูนย์กลางทางการค้าและการลงทุน กรณีศึกษา ภาคตะวันออกเฉียงเหนือของประเทศไทย ข้อมูลที่ได้จากการสอบถามจะใช้ประโยชน์ในการวิเคราะห์และการศึกษาที่นั้น

ข้อมูลส่วนตัว

1. สถานการณ์และภาวะเศรษฐกิจของเมืองชายแดนในปัจจุบัน
- กิจกรรมการค้า เพิ่มขึ้น / คงเดิม / ลดลง
- กิจกรรมการทำธุรกิจ เพิ่มขึ้น / คงเดิม / ลดลง
- การท่องเที่ยว เพิ่มขึ้น / คงเดิม / ลดลง
- ความมั่งคั่งและความปลอดภัย เพิ่มขึ้น / คงเดิม / ลดลง
- การย้ายถิ่นเข้ามาในพื้นที่ เพิ่มขึ้น / คงเดิม / ลดลง
- การลักลอบเข้ามาต่างชาติเพื่อปล้น เพิ่มขึ้น / คงเดิม / ลดลง
- การลักลอบเข้ามาต่างชาติเพื่อทำบุญ เพิ่มขึ้น / คงเดิม / ลดลง

2. สถานการณ์และภาวะเศรษฐกิจของเมืองชายแดนปัจจุบันซึ่งมีผลต่อสถานการณ์และภาวะเศรษฐกิจของประเทศเพื่อนบ้านหรือไม่
- มีผล
- ไม่มีผล

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สถานการณ์ของประเทศเพื่อนบ้านต่างกล่าวเป็นเช่นนี้

- กิจกรรมการค้า  เพิ่มขึ้น /คงเดิม /ลดลง
- กิจกรรมการลงทุน  เพิ่มขึ้น /คงเดิม /ลดลง
- การต่างเที่ยว  เพิ่มขึ้น /คงเดิม /ลดลง
- ความมั่นคงและความปลอดภัย  เพิ่มขึ้น /คงเดิม /ลดลง
- การขยายอิทธิพลในจังหวัด  เพิ่มขึ้น /คงเดิม /ลดลง
- การลอกฟอร์มจากประเทศเพื่อนบ้าน  เพิ่มขึ้น /คงเดิม /ลดลง
- การขยายอิทธิพลในต่างถิ่น  เพิ่มขึ้น /คงเดิม /ลดลง

ข้อมูลอื่นๆเพิ่มเติม

3. ท่านคิดว่านโยบายทางการค้าและการลงทุนของแผนพัฒนาเศรษฐกิจและสังคมแห่งชาติ ซึ่งมีจุดประสงค์อย่างไรที่แผนพัฒนาพื้นที่เมืองขยายแผนให้เป็นเมืองศูนย์กลางทางการค้าและการลงทุน นั้นเป็นเรื่องไร้ปัญหา

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<thead>
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<th>มีประโยชน์</th>
<th>มีประโยชน์</th>
<th>ปานกลาง</th>
<th>มีประโยชน์</th>
<th>ไม่มีประโยชน์</th>
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<td>มาก</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

ปัจจุบัน □ □ □ □ □ □
อนาคต □ □ □ □ □ □

4. ในปัจจุบัน ท่านคิดว่าการกำหนดนโยบายในการพัฒนาเมืองขยายแผนอย่างไรที่ให้เกิดประสิทธิภาพอย่างต่อเนื่องในการพัฒนาพื้นที่เมืองขยายแผน

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5. ในความคิดเห็นของท่าน ปัจจัยที่สำคัญที่สุดเพื่อการวิเคราะห์ในกรณีสูญหายหรือ khámผ่านเมื่อรายแผนให้เป็นไปตามขั้นตอนหลักการตามการดำเนินการและการลงทุน คือต่อไปนี้

6. ในความคิดเห็นของท่าน ปัจจัยที่สำคัญที่สุดเพื่อการวิเคราะห์ที่เป็นไปตามหลักการวิเคราะห์รายแผนให้เป็นไปตามขั้นตอนหลักการตามการดำเนินการและการลงทุน คือต่อไปนี้

7. ท่านคิดว่าโครงสร้างพื้นฐานของเมืองรายแผนในปัจจุบันเป็นอย่างไรบ้าง

<table>
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<th>คิวมาที่ดูค</th>
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<td>ข้ออื่น ๆ (โปรดระบุ)</td>
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7. ท่านคิดว่าระบบสารสนเทศปริการ หรือการบริการทางสังคมของเมือง (Social Services) เป็นอย่างไรบ้าง

<table>
<thead>
<tr>
<th>สิ่งมากที่สุด</th>
<th>สิ่งมาก</th>
<th>ปานกลาง</th>
<th>ค่อนข้างน้อย</th>
<th>น้อยมาก</th>
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</tbody>
</table>

9. ในความเห็นของท่าน ท่านคิดว่ากิจกรรมทางเศรษฐกิจหรือ ดุลยภาพระหว่างใดควรจะต้อง ที่เมืองรายแผนเพื่อเป็นการพัฒนาที่ทันท่วงที และด้วยเหตุผลใด

10. ขอคิดเห็นและข้อเสนอแนะเกี่ยวกับนโยบายทางการค้าและการลงทุน และแนวทางในการ พัฒนาเมืองรายแผน

ขอบคุณท่านที่สละเวลาและให้ความร่วมมือ
แบบสำรวจสำหรับนักลงทุน

คำแนะนำ : แบบสำรวจชุดนี้เป็นการสำรวจเพื่อประกอบการทําวิทยานิพนธ์ระดับปริญญาเอกของนางสาวกาลีย์ กมภัณฑ์ใน ชื่อศึกษาดูญที่ Oxford Brookes University ประเทศอังกฤษ สาขาวิชาการวางแผน Planning หัวข้อวิทยานิพนธ์เรื่อง "A methodology to identify border towns as centres for trade and investment with particular reference to north-east Thailand" หัวข้อที่ได้จากการสอบถามนี้จะใช้ประโยชน์ในเรื่องการวิเคราะห์และการศึกษาเท่านั้น ดังนั้นข้อมูลที่ได้เป็นอย่างยิ่งที่ผ่านได้แสดงรายละเอียดและรวมถึงในการตอบแบบสำรวจ

ข้อมูลทั่วไปเกี่ยวกับอุตสาหกรรมของท่าน

ชื่อบริษัท หรืออุตสาหกรรม.................................................................
ที่อยู่ (ชื่อสถานที่จํานวน)..................................................
ที่อยู่ (บริษัทสัญชาติ ชื่อของเมืองและประเทศ)...................................
ชนิดของธุรกิจหรืออุตสาหกรรม...................................................
ยอดรายได้ปี (Annual Sales)..........................................................
ปีที่จัดตั้งธุรกิจอุตสาหกรรม ป.ศ...................................................
ปีที่จัดตั้งธุรกิจอุตสาหกรรมในเริ่มต้นปี ป.ศ...........................................
จำนวนแรงงาน..............................................................................
สัดส่วนของแรงงานในอุตสาหกรรม
................................................% แรงงานที่มีคุณภาพ (จบการศึกษาระดับปริญญาตรีขึ้นไป)
................................................% แรงงานที่มีฝีมือ (จบการศึกษาระดับนิพนธ์ศึกษา หรือวิศวิทยา)
................................................% แรงงานที่มีฝีมือชั้นยอด (จบการศึกษาต่ํากว่าระดับนิพนธ์ศึกษา)
คำถาม:
1. กรุณาเลือกตามความสำคัญของเหตุผลที่ท่านตัดสินใจเลือกที่จะเปิดโรงงานอุตสาหกรรมในเมืองชายแดน (หมายเลขอื่น 1 ถึง 16 ที่มีความสำคัญมากที่สุด และหมายเลขอื่น 16 ถึง 20 มีความสำคัญน้อยที่สุด)

☐ ที่ท่านตัดสินใจเลือกที่จะเปิดโรงงานที่มีประโยชน์ต่อประเทศ
☐ แรงงานราคาน้อยและมีจ่าตำแหน่ง
☐ แรงงานมีคุณภาพ
☐ ความสะดวกในการหาพัสดุ
☐ ที่ท่านตัดสินใจผลิตสินค้าภูมิภาค
☐ ความต่ำของบุคคลหรือทรัพยากร
☐ ความสมบูรณ์ซึ่งโครงสร้างพื้นฐาน (Completed infrastructure) เช่น ถนน ไฟฟ้า ประปา ไฟฟ้า
☐ ความสมบูรณ์ซึ่งสาธารณูปการ (Adequate facilities) เช่น โรงพยาบาล สถานศึกษา
☐ ราคาที่ดินถูกและมีที่ดินขนาดใหญ่
☐ สภาพแวดล้อมที่ดี
☐ นโยบายของรัฐส่งเสริมการลงทุน
☐ การได้รับสิทธิพิเศษจากภาครัฐ (More incentives)
☐ ความปลอดภัยและความมั่นคงของประเทศ
☐ เหลือส่วนอันสมควรและประหยัด
☐ ค่าตอบแทนที่ดี
☐ อื่นๆ โปรดระบุ ..........................................................

2. ท่านมีสาธารณะอุตสาหกรรมในเมืองชายแดนแห่งนี้อีกหรือไม่
☐ มี

☐ ไม่ใช่สถานที่โปรดระบุจังหวัด........................................
☐ ไม่ใช่สถานที่ที่น่าสนใจโปรดระบุ........................................

☐ ไม่มี
3. อะไรคือปัญหาดิสังคีตที่ดังกล่าวที่สุด ที่ทำาให้ในกิจกรรมการตัดสินใจไปทูนในเมืองชายแดน

- หนอนสาย
- มูลกลาง
- ข้อเลิก-ขุนตราลเรน
- แม่สาย-外媒การ
- ทรัพย์ประสง-ระแวก
- เมืองชายแดนอื่นๆ (โปรดระบุ)

4. ประโยชน์ให้กับรัฐจากการตัดสินทำาเกินที่ตั้งปัญญานิคิช


5. ดุลยภาพที่ทำาประมวลหรือได้รับจากการตัดสินทำาเกินที่ตั้งปัญญานิคิช


6. สถานการณ์และภาวะเศรษฐกิจของเมืองชายแดนในปัจจุบัน

- กิจกรรมการค้า เฟิร์นิ /คงเดิม /ลดลง
- กิจกรรมการลงทุน เฟิร์นิ /คงเดิม /ลดลง
- การท่อเทยว เฟิร์นิ /คงเดิม /ลดลง
- ความมั่นคงและความปลอดภัย เฟิร์นิ /คงเดิม /ลดลง
- การย้ายถิ่นเข้ามาในจังหวัด เฟิร์นิ /คงเดิม /ลดลง
- การลักผิดเข้ามาจากประเทศเพื่อนบ้าน เฟิร์นิ /คงเดิม /ลดลง
- การย้ายถิ่นออกของคนในท้องถิ่น เฟิร์นิ /คงเดิม /ลดลง

ขออธิบายเพิ่มเติม
7. สถานการณ์และภาวะเศรษฐกิจของเมืองจังหวัดบัณฑิตจังหวัดนี้มีผลต่อสถานการณ์และ
ภาวะเศรษฐกิจของประเทศเพื่อนบ้านหรือไม่
☐ มีผล
☐ ไม่มีผล

สถานการณ์ของประเทศเพื่อนบ้านลักษณะเป็นเช่นไร

- กิจกรรมการค้า
- กิจกรรมการลงทุน
- การท่องเที่ยว
- ความมั่นคงและความปลอดภัย
- การย้ายถิ่นฐานภายในประเทศ
- การสัมคมน์เมืองจากประเทศเพื่อนบ้าน
- การย้ายถิ่นฐานในท้องถิ่น

ข้อมูลอื่นๆเพิ่มเติม
8. ท่านตั้งใจที่จะอายุหรือพิทักษ์การของอุตสาหกรรมในประเทศเพื่อป้องกันหรือไม่ และอะไรเป็นเหตุผลสำคัญที่สุดที่ต้องทำให้ไม่ต้องอุตสาหกรรมในประเทศเพื่อป้องกัน และเหตุผลใดที่สำคัญที่สุดที่ทำให้ท่านไม่อยากไปต้องอุตสาหกรรมในประเทศเพื่อป้องกัน

☐ ตั้งใจที่จะไปต้องอุตสาหกรรมในประเทศเพื่อป้องกัน เนื่องจาก

☐ ไม่ประสงค์ที่จะไปต้องอุตสาหกรรมในประเทศเพื่อป้องกัน เนื่องจาก

9. ท่านทราบถึงกับนโยบายการดำเนินการของทุ่นน้ำ มีเป้าหมายหลักที่จะพัฒนาเมืองชายแดน ซึ่งในปัจจุบันเป็นพื้นที่ที่ต่างไทย แต่มีการพัฒนาอย่างต่อเนื่องให้เป็นฐานยกระดับทางการด้านและการด้านการทุนของ.Imp মุมมองการ หรือไม่

☐ ทราบ

☐ ไม่ทราบ

10. ท่านมีความต้องการแนวทางการดำเนินการและขั้นตอนในการพัฒนาเศรษฐกิจและสังคมแห่งชาติ ซึ่งมีด้วยมุ่งหมายเพื่อพัฒนาที่ต้องการและกิจการที่มีเป็น เรื่องปกติ

<table>
<thead>
<tr>
<th>มีประโยชน์</th>
<th>มีประโยชน์</th>
<th>ปานกลาง</th>
<th>มีประโยชน์</th>
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</tbody>
</table>

ปัจจุบัน:

☑ ☐ ☐ ☐ ☐

อนาคต:

☐ ☐ ☐ ☐ ☐
11. ในปัจจุบัน ท่านคิดว่าควรกำหนดนโยบายในการพัฒนาเมืองรายแผนอย่างไรเพื่อให้เกิดประสิทธิภาพสูงสุดในการพัฒนาที่มีเมืองรายแผน

12. ในความคิดเห็นของท่าน ปัจจัยที่สำคัญที่สุดเพื่อยกระดับในการกระทำในการพัฒนาเมืองรายแผนให้เป็นเมืองยุคถัดต่อการดำเนินการและการลงทุน คืออะไรคือ

13. ในความคิดเห็นของท่าน ปัจจัยที่สำคัญที่สุดเพื่อยกระดับการที่เป็นเมืองยุคถัดต่อการพัฒนา เมือง รายแผนให้เป็นเมืองยุคถัดต่อการดำเนินการและลงทุน คือสิ่งใด

14. ท่านคิดว่าโครงสร้างพื้นฐานของเมืองรายแผนในปัจจุบันเป็นอย่างไรบ้าง

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15. ท่านคิดว่าระบบสาธารณูปการ หรือการบริการทางสังคมของเมือง (Social Services) เป็นอย่างไรบ้าง

<table>
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<th>ตัวมากที่สุด</th>
<th>ตัวมาก</th>
<th>ปานกลาง</th>
<th>ค่อนข้างน้อย</th>
<th>น้อยมาก</th>
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<td>กิจการมวย</td>
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<td>สถานที่ร้านค้า</td>
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<tr>
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<tr>
<td>ขึ้นๆ (โปรดระบุ)</td>
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</tbody>
</table>

16. ในความเห็นของท่าน ท่านคิดว่ากิจกรรมทางเศรษฐกิจหรืออุตสาหกรรมประกอบโค้กม้วนที่เมืองรายแรกเป็นการพัฒนาที่ใด และด้วยเหตุผลใด

17. ข้อคิดเห็นและข้อเสนอแนะเกี่ยวกับนโยบายทางการศึกษาและการลงพื้นที่ และแนวทางในการพัฒนาเมืองรายแรก

รวบรวมที่สอดคล้องและให้ความร่วมมือ
แบบสำรวจสำหรับนักท่องเที่ยว

คำแนะนำ: แบบสำรวจครั้งนี้เป็นการทำสำรวจเพื่อประกอบการทำวิจัยในประเด็นระดับบริษัธิอาออกของบางส่วน มาดัง กรุงเทพมหานคร ซึ่งศึกษาภูมิที่ Oxford Brookes University ประเทศอังกฤษ สาขาวิชาวางแผน Planning หน่วยวิชาวิทยาพื้นฐานเรื่อง A methodology to identify border towns as centres for trade and investment with particular reference to north-east Thailand "ตัวชี้วัดเพื่อกำหนดให้เมืองชายแดนพัฒนาเป็นเมืองสูงสุด กลางทางการค้าและการลงทุน การศึกษา ภาคตะวันออกเฉียงเหนือของประเทศไทย" ข้อมูลที่ได้จากการตอบแบบนี้จะใช้ประโยชน์ในเรื่องการวางแผนและการศึกษาที่นั้น
dีข้อกำหนดคุณเป็นอย่างยิ่งที่ทำนได้สะดวกและร่วมมือในการตอบแบบสำรวจ

ข้อมูลทั่วไป
เพศ □ หญิง □ ชาย
อายุ.....................................................ปี
อาชีพ..........................................................
ระดับการศึกษา..............................................

คำถาม:

1. ท่านเดินทางมาจากจังหวัดใด.................................................................

2. ท่านเดินทางมาเมืองชายแดนนี้เป็นครั้งแรกหรือไม่ และหากเป็นการเดินทางครั้งแรก เผยแพร่ใดเป็นสิ่งคด้วยให้ท่านเดินทางมาที่เมืองชายแดนนี้

3. หากการเดินทางครั้งนี้ไม่ใช่การเดินทางครั้งแรก อยากทราบว่าท่านเดินทางมาเมืองชายแดนนี้มีความสุ่มที่จะเปรียบเทียบมากมายเพียงใด

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4. ท่านคิดเห็นมากเมื่อยางแผนตัวอย่างเพียงใด
☐ ท่องเที่ยว
☐ ติดต่อทางธุรกิจ
☐ เยี่ยมบุคคล
☐ อื่นๆ โปรดระบุ...........................................................................................................

5. ท่านใช้เวลาอยู่ในเมืองหรือจังหวัดนั้นนานเท่าไร

6. ท่านพบกับอะไรในระหว่างที่อยู่ในเมืองหรือจังหวัดนี้ (เช่น โรงเรียน บ้านภูเก็ต บ้านพื้นที่)

7. เมื่อเดินทางจากกิจวัตรในเมืองหรือจังหวัดนี้แล้ว ท่านวางแผนที่จะเดินทางไปที่ใดต่อไป
  ☐ ภายในประเทศ (โปรดระบุจังหวัด)..........................................................................
  ☐ ไปประเทศต่างประเทศ (โปรดระบุประเทศ)............................................................

8. สถานการณ์และภาวะเศรษฐกิจในเมืองขยายแผนในปัจจุบันจากการสังเกตของท่าน

- กิจกรรมการเดิน
  มาก / ปานกลาง / น้อย
- กิจกรรมการชุมนุม
  มาก / ปานกลาง / น้อย
- การท่องเที่ยว
  มาก / ปานกลาง / น้อย
- ความมั่นคงและความปลอดภัย
  มาก / ปานกลาง / น้อย
- การอยู่อาศัยมีความพื้นที่
  มาก / ปานกลาง / น้อย
- การเข้าถึงทางเดินจากประเทศต่างประเทศ
  มาก / ปานกลาง / น้อย
- การเข้าถึงของคนในท้องถิ่น
  มาก / ปานกลาง / น้อย

รูปแบบอื่นๆที่เกี่ยวกับ
9. สถานการณ์และการเศรษฐกิจของเมืองชายแดนปัจจุบันข้างต้นมีผลต่อสถานการณ์และการเศรษฐกิจของประเทศเพื่อนบ้านหรือไม่
[ ] มีผล
[ ] ไม่มีผล

สถานการณ์ของประเทศเพื่อนบ้านดังกล่าวเป็นเช่นใด
- กิจกรรมการค้า เกินรับ /คงเดิม /ลดลง
- กิจกรรมการลงทุน เกินรับ /คงเดิม /ลดลง
- การท่องเที่ยว เกินรับ /คงเดิม /ลดลง
- ความมั่นคงและความปลอดภัย เกินรับ /คงเดิม /ลดลง
- การขยายตัวเริ่มในจังหวัด เกินรับ /คงเดิม /ลดลง
- การลักลอบเข้าเมืองจากประเทศเพื่อนบ้าน เกินรับ /คงเดิม /ลดลง
- การขยายตัวของคนในท้องถิ่น เกินรับ /คงเดิม /ลดลง

หมายเล็กนำเหตุผล
10. ตั้งคิดว่าโครงสร้างพื้นฐานของเมืองรายแผนในปัจจุบันเป็นอย่างไรบ้าง

<table>
<thead>
<tr>
<th>ตีมาที่ดูด</th>
<th>ตีมาที่ดูด</th>
<th>ปานกลาง</th>
<th>คะแนนรวม</th>
<th>หมายเหตุ</th>
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<tbody>
<tr>
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<td>ประปา</td>
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<tr>
<td>ไฟฟ้า</td>
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<tr>
<td>การคมนาคมสื่อสาร</td>
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<tr>
<td>อื่นๆ (โปรดระบุ) .......</td>
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</tr>
</tbody>
</table>

11. ตั้งคิดว่าระบบสาธารณูปการ หรือการบริการทางสังคมของเมือง (Social Services) เป็นอย่างไรบ้าง

<table>
<thead>
<tr>
<th>ตีมาที่ดูด</th>
<th>ตีมาที่ดูด</th>
<th>ปานกลาง</th>
<th>คะแนนรวม</th>
<th>หมายเหตุ</th>
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<td>สถานีดื่มชู</td>
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<td>โรงเรียน</td>
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<td>หมวดที่อยู่อาศัย</td>
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<td>สวนสาธารณะ</td>
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<td>หน่วยงานราชการ</td>
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<tr>
<td>อื่นๆ (โปรดระบุ) .......</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

320
12. ในความคิดเห็นของท่านท่านคิดว่าควรที่จะมีการเปลี่ยนแปลงโดยใช้การจัดการดังกล่าวให้การเข้ามาติดตั้งที่ฐานอยู่ในเมืองแห่งนี้

โครงสร้างพื้นฐานของเมือง เช่น ไฟฟ้า ประปา ถนน

การบริการทางสังคมของเมือง เช่น โรงพยาบาล มหาวิทยาลัย สถานีตำรวจ

อื่นๆ เช่น ที่

13. รักษาเพื่อและข้อเสนอแนะเกี่ยวกับนโยบายทางการค้าและการลงทุน และแนวโน้มในการพัฒนาเมืองรายแผน

ระบบคู่คุมที่สอดคล้องและให้ความร่วมมือ
Appendix 11
แบบสอบถามสำหรับ Thai Domestic Firm ล่าสุดที่...........

<table>
<thead>
<tr>
<th>ลำดับที่</th>
<th>รายการ</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ชื่อบริษัท หรือธุรกิจ หรือธุรกิจต่างชาติ</td>
<td>.................................</td>
</tr>
<tr>
<td>2. ในกรณีของผู้ประกอบการ หรือธุรกิจ</td>
<td>.................................</td>
</tr>
<tr>
<td>3. ที่อยู่</td>
<td>.................................</td>
</tr>
<tr>
<td>4. ยอดขายสุทธิ (Annual Sales)</td>
<td>.................................</td>
</tr>
<tr>
<td>5. ปีที่จัดตั้งธุรกิจ (ธุรกิจ)</td>
<td>.................................</td>
</tr>
<tr>
<td>6. จำนวนแรงงานในธุรกิจ</td>
<td>.................................</td>
</tr>
<tr>
<td>7. ลักษณะของแรงงานในธุรกิจ</td>
<td>.................................</td>
</tr>
</tbody>
</table>

ข้อมูลที่ได้จากการสอบถามจะใช้ประโยชน์ในการวิจัยและการศึกษาต่อเนื่อง และข้อมูลบางส่วนจะเป็นความลับและไม่มีการเผยแพร่ต่อผู้ภายนอก
ส่วนที่ 2 เกี่ยวกับทัศนคติของอุตสาหกรรมในปัจจุบัน

8. ทุนนราเริงสั่งความแล้วคุณของความได้เปรียบ(The Main advantages) ของที่ดินอุตสาหกรรมของท่านในปัจจุบัน (หมายเล่า 1 คือ มีความสำคัญมากที่สุด และ นายเล่า 11 คือ มีความสำคัญน้อยที่สุด)

- [ ] ที่ดินที่ดั้งได้ติดตามบริบท
- [ ] รูปแบบการจัดสรณ์มุม
- [ ] สะดวกในการขนส่ง
- [ ] สะดวกในการนำวัตถุภูมิ
- [ ] ราคาที่ต่ำถูกและมีที่ดินมากในถูก
- [ ] ใกล้เคียงหรือห่างจากสถานที่อยู่
- [ ] ความสมบูรณ์ของโครงสร้างพื้นฐาน (Completed infrastructure) เช่น ถนน รถไฟ ประปา ไฟฟ้า
- [ ] ความสมบูรณ์ที่ต่อต้านทางการ (Adequate facilities) เช่น โรงเรียน โรงพยาบาล ธนาคาร
- [ ] สภาพแวดล้อมที่ดี
- [ ] การได้รับสิทธิประโยชน์จากภาครัฐ (More incentives)
- [ ] ข้ออื่น ๆ โปรดระบุ ..........................................................

9. ทุนนราเริงสั่งความสำคัญของความเสียเปรียบ(the Main disadvantages) ของที่ดินอุตสาหกรรมของท่าน ใบปัจจุบัน (หมายเล่า 1 คือ มีความสำคัญมากที่สุด และ นายเล่า 10 คือ มีความสำคัญน้อยที่สุด)

- [ ] ที่ดินที่ดั้งได้ไม่เพียงพอต่อการประกอบการ
- [ ] ขาดสมรรถนะงาน
- [ ] ปัญหาด้านโครงสร้างพื้นฐาน (Infrastructure) เช่น ถนนข้างทาง ความไม่สมบูรณ์ของโครงสร้าง
  ถนน
- [ ] ปัญหาด้านสถานการณ์ (Facilities) เช่น ความไม่เพียงพอของโรงพยาบาล มีร้านขายยาเดิม
- [ ] ขาดสมรรถนะภูมิ
- [ ] สภาพแวดล้อมร่วมของอุตสาหกรรมไม่ดี
- [ ] ไม่ได้รับสิทธิพิเศษทางการเจริญการบุกคุณ
- [ ] ไม่ได้รับการสนับสนุนจากภาครัฐ
- [ ] ใกล้จากทุ่งทราย หรือเมืองเล็ก
- [ ] ข้ออื่น ๆ โปรดระบุ ..........................................................

ข้อมูลที่ได้จากการสอบถามนี้จะใช้ประโยชน์ในการวิจัยการผลิตและการศึกษาทั่วไป และขอรับรองว่าข้อมูลดังกล่าวจะเป็นความลับและไม่มีการเผยแพร่ต่อประกาศใด
10. กระบวนการของโควะสร้างพื้นฐานในสังกัดอุตสาหกรรมของท่านเป็นชั่วิก

<table>
<thead>
<tr>
<th>ลำาะก</th>
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<td>ด้วยวิทยา</td>
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<tr>
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<tr>
<td>อื่นๆ ไปกับ</td>
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</tr>
</tbody>
</table>

11. กระบวนการของสาระมนุษย์การในสังกัดอุตสาหกรรมของท่านเป็นชั่วิก

<table>
<thead>
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<tr>
<td>ภพองานกำร</td>
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<td>อื่นๆ ไปกับ</td>
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12. ทำเผื่อให้กับที่สังกัดอุตสาหกรรมของท่านในปัจจุบันหรือไม่

☐ ใช่
☐ ไม่ใช่
13. ติดต่อสารภีที่จะอยู่ที่ตั้งสถานประกอบการหรือไม่
☐ ติดต่อสารภี (กรุณาไปที่คำถาม 14)
☐ ไม่ติดต่อสารภี (กรุณาไปที่คำถาม 15)

14. หากติดต่อสารภี, ติดต่อไว้ที่จะอยู่ไปเต็มทิ้ง

☐ ต่างประเทศ

☐ เข้าเที่ยวในประเทศต่างๆ
☐ เข้าเมือง
☐ ซื้อของ
☐ สำรวจ
☐ ซื้อสินค้า
☐ ต่างประเทศ...ไปตรง...

☐ ประเทศเพื่อนบ้าน

☐ ตาย
☐ หน้า
☐ กิจพุทธ
☐ สารพัด

☐ ภายในประเทศไทย

☐ จังหวัดหรือที่ไม่ได้เรียกว่า เป็นควบคุมจังหวัด...

☐ เมืองประเทศไทย

☐ หน้าที่
☐ ลูกค้า
☐ ซื้อสินค้า
☐ แหล่งหน้าที่
☐ แหล่งสรรพที่ ตรง...

☐ เมืองไทยที่เหล่านี้...ไปตรง...
15. หากคำนวณไม่คู่กับการซื้อตั๋ว เป็นเพราะเหตุผลใด
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ส่วนที่ 3 เกี่ยวกับตั๋วอุตสาหกรรมแผงใหม่

16. ท่านมีรายละเอียดของโรงงานอุตสาหกรรมที่ซื้อซักครั้งหรือไม่
  □ มี (กรุณาไปที่คำถาม 17)
  □ ไม่มี (กรุณาไปที่คำถาม 18)

17. ถ้ามี, กรุณาระบุที่ตั้งของโรงงานอุตสาหกรรม
  □ ต่างประเทศ
    □ เขียวตะวันออกเฉียงใต้
    □ เขียว
    □ ยุโรป
    □ ถนนก้านเหนือ
    □ ถนนก้านใต้
    □ เขียวกลาง
    □ ยุโรปก้า
    □ อื่นๆ โปรดระบุ

  □ ประเทศไทย
    □ ทาง
    □ หน้า
    □ ถนนธนบุรี
    □ ถนนเฉลิม

ข้อมูลที่ได้จากการสอบถามนี้จะใช้ประโยชน์ในการวิจัยและการศึกษาเท่านั้น และจะรักษาความลับของข้อมูลดังกล่าวจะเป็นความส่วนตัวและไม่มีการเผยแพร่ต่อสาธารณะใด
18. อะไรเป็นสาเหตุสำคัญที่ทำนายรายสาขาในที่ตั้งแห่งใหม่ กลุ่มการผลิตกลุ่มความสำคัญของความได้เปรียบ (the Main advantages) หมายถึง 1 คือ มีความสำคัญมากที่สุด และหมายถึง 13 คือ มีความสำคัญน้อยที่สุด

- ด้านการขยายผลผลิต
- ด้านที่ตั้งที่ตั้งผู้ผลิต
- ขาดแคลนแรงงาน
- โอกาสในการขยายหรือรื้อที่ตั้งแห่งใหม่
- ปรับปรุงด้านการวางผังเมือง หรือกฎหมายทางผังเมือง
- โอกาสจากตลาดผู้บริโภค
- โอกาสแหล่งวัตถุดิบ
- ด้านการสภาพแวดล้อมที่ดี
- มีสิ่งแวดล้อมความสะดวก
- ด้านการที่จะได้รับสิทธิพิเศษเชิงลบที่ทางกฎหมาย
- ความไม่เพียงพอของโครงสร้างพื้นฐาน
g- ความไม่เพียงพอด้านสาธารณูปการ
- ขั้นๆ ไปคือมัน...
19. ในตารางที่ตั้งโปร่งบางดูตามธรรมเนียมทั่วไป ท่านพิจารณาถึงลิสต์เป็นสำคัญ กรุณาเรียงลำดับความสำคัญของความได้เปรียบ (the Main advantages) หมายถึง 1 คือ มีความสำคัญมากที่สุด และ หมายถึง 9 คือ มีความสำคัญน้อยที่สุด

- สะดวกในการทำงาน
- การได้รับสิทธิพิเศษเสริมในการลงทุนจากภาครัฐ
- ได้รับการช่วยเหลือ หรือ การส่งเสริมต่างๆจากภาครัฐ
- การวางแผนหมดเวลา
- ตลาดที่มีศักยภาพสูง
- ภาพแวดล้อมที่ดี
- ลักษณะพิเศษเฉพาะของที่ที่ที่ดีที่สุดในการลงทุน
- สะดวกในการใช้บริการของสิ่งอำนวยความสะดวกดีอยู่ตามธรรมเนียมและธุรกิจ
- ข้อดีอื่น ๆ โปรดระบุ

ส่วนที่ 4 เกี่ยวกับนโยบายการค้าและการลงทุน

20. ท่านเห็นด้วยกับนโยบายการค้าและการลงทุนของภาครัฐหรือไม่

☐ เห็น
☐ ไม่เห็น

21. ท่านเห็นนโยบายการค้าและการลงทุนจะมีประโยชน์ต่อการดำเนินการธุรกิจของท่านเพียงใด

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<td>มีประโยชน์น้อย</td>
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<tr>
<td>มีประโยชน์น้อยถึงไม่มี</td>
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</tbody>
</table>

ข้อมูลที่ได้จากการสอบถามนี้จะใช้ประโยชน์ในการวิเคราะห์การลงทุน และการจัดทำข้อเสนอต่อท่านผู้บริโภคที่มีความต้องการจะเป็นความตั้งใจและไม่มีการปรับแผนการดำเนินการใด
22. ท่านเสนอให้กับนโยบายการค้าและการลงทุนที่มีเป้าหมายหลักที่จะพัฒนาเมืองรายเดือนซึ่งไม่จำเป็น
เป็นพื้นที่ค้าต่างประเทศ แต่มีกิจการสูงในการพัฒนาในอนาคต ให้เป็นศูนย์กลางทางการค้าและการลงทุนของ
อนุภาค เข้าร่วมรับรองได้หรือไม่
☐ ทราบ
☐ ไม่ทราบ

23. ท่านคิดการที่จะทำอย่างที่ตั้ง หรือเปิดราชการของโรงงานอุตสาหกรรมในเมืองรายเดือนหรือไม่
☐ ต้องการเปิดโรงงานอุตสาหกรรมแห่งใหม่ที่เมืองรายเด่น โปรดระบุจัดหนักรอ
☐ ไม่ต้องการ

24. เหลือล่าสุดที่มีการเปลี่ยนแปลงการค้าที่จะทำให้พื้นที่เปิดโรงงานอุตสาหกรรมที่เมืองรายเด่น (เช่น การพัฒ
หย่อมที่น้อย, ด้านพิเศษส่งเสริมการลงทุน, แหล่งวัสดุ, แรงงาน, ตลาด เป็นต้น)

☐

25. เหลือล่าสุดที่มีการเปลี่ยนแปลงการค้าที่จะทำให้พื้นที่เปิดโรงงานอุตสาหกรรมที่เมืองรายเด่น (เช่น
ปัญหาค่าดำเนินการที่บ้าน, ปัญหาสารสนเทศการ, โลจิสติกส์ที่มีอุปสรรค, แรงงานบุคคลภาพเป็น
เป็นต้น)

☐

ข้อมูลที่ได้จากการสอบถามนี้จะใช้ประโยชน์ในการวิเคราะห์และการศึกษาท่านนี้ และขอรับรองว่าข้อมูลดังกล่าว
จะเป็นความส่วนและไม่มีการเผยแพร่ต่อสาธารณะใด
26. อะไรคือข้อจำกัดหรือปัญหาที่เกิดขึ้นในการดำเนินงานธุรกิจของท่านในปัจจุบัน หมายถึง 1 คือ มีความสำคัญมากที่สุด และ หมายถึง 11 คือ มีความสำคัญน้อยที่สุด

☐ ความไม่เสถียรของโครงสร้างพื้นฐาน
☐ ความไม่เสถียรของสาธารณูปการ
☐ ขาดแคลนนวัตกรรม
☐ ปัญหาของคุณภาพฟิวเดคิบ
☐ ขาดแคลนแรงงาน
☐ ปัญหาคุณภาพแรงงาน
☐ ราคาค่าแรงสูง
☐ นโยบายของภาครัฐไม่สอดคล้องกับความต้องการของธุรกิจ
☐ รัฐบาลไม่มีมตินโยบาย
☐ ข้อจำกัดด้านกฎหมาย
☐ อื่นๆ โปรดระบุ

27. ท่านมีความสามารถในการทำอะไรได้บ้างในการทำธุรกิจ หรือพัฒนาในด้านใดจากภาษาครู หมายถึง 1 คือ มีความสามารถมากที่สุด และ หมายถึง 6 คือ มีความสามารถน้อยที่สุด

☐ การตลาด
☐ ความมั่นคง
☐ ความปลอดภัย
☐ การส่งออก
☐ การนำเข้า
☐ การพัฒนาและมาตรฐาน
☐ อื่นๆ โปรดระบุ
☐ ไม่ต้องการใดๆ

ขอขอบคุณท่านที่ได้วางเวลาและให้ความร่วมมือ

ข้อมูลที่ได้จากการสอบถามจะใช้ประโยชน์ในการวิจัยการทำการศึกษาท่านนี้ และข้อบ่งชี้จากการทุ่มเทด้านผ่านานจะเป็นความรับผิดและไม่มีการเผยแพร่ต่อผู้ที่มีอย่างใด
แบบสอบถามสำหรับ Foreign-Owned Firm Located in Thailand ตัวบดที่………..

คำแนะนำ: แบบสอบถามนี้ประกอบด้วยข้อมูล 4 ส่วน คือ
ส่วนที่ 1 จะเป็นการสอบถามข้อมูลทั่วไปเกี่ยวกับธุรกิจของท่าน
ส่วนที่ 2 สอบถามเกี่ยวกับตัวเลขตัวอย่างของธุรกิจของท่านในปัจจุบัน
ส่วนที่ 3 เป็นการสอบถามเกี่ยวกับการดำเนินงานที่มีอยู่ของธุรกิจของท่าน
ส่วนที่ 4 เป็นการสอบถามเกี่ยวกับนโยบายการดำเนินการทางธุรกิจ
กรุณาให้ข้อมูลในแต่ละหัวข้อที่กำหนด เลือกข้อที่เหมาะสม หรือ เลือกลบต่อข้อมูล

ส่วนที่ 1 ข้อมูลทั่วไปเกี่ยวกับธุรกิจของท่าน

1. ชื่อบริษัท หรือธุรกิจของท่าน

2. ชื่อของผู้ถือหุ้น หรือธุรกิจของท่าน

3. ที่อยู่ (ประเทศไทย)

ที่อยู่ของบริษัท (Name of Business) ที่อยู่ในประเทศไทย (ประเทศไทย) ชื่อผู้เป็นเจ้าของมีอยู่ในประเทศไทย

4. ยอดขายสัปดาห์ (Annual Sales)

5. ปีที่จัดส่งสินค้าล่าสุด (年的) หรือ พ.ศ.

6. จุดหมายปลายทาง คณ

7. ลักษณะของงานในธุรกิจของท่าน

% แรงงานที่มีคุณภาพ (จำนวนข้อความที่ระบุบุคคลหรือไม่)
% แรงงานที่ไม่มีความ (จำนวนข้อความที่ระบุบุคคล)
% แรงงานที่มีการศึกษาที่ระดับ (จำนวนข้อความที่ระบุบุคคล)

8. หมั่นงานด้านในบุคคลที่สี่ (ต่างประเทศในประเทศจัดหวัก...) ?

9. บริษัทของท่านมีสาขาในประเทศไทยถังสี่?

ขอปฏิเสธที่ไม่เป็นสาระเกี่ยวกับธุรกิจการบริการทางวิจัยทางการศึกษาและอการศึกษาทั่วไป และขอรับรองว่าข้อมูลดังกล่าวจะเป็นความจริงและไม่มีการเผยแพร่ต่อประชากรใด
ส่วนที่ 2 เกี่ยวกับที่ตั้งของดูสขาทแกรรมในปัจจุบัน

10. กลุ่มเรียนสั่งความสำคัญของเหตุผลที่ทำาด้สินใจเลือกที่จะเปิดโรงงานดูสขาทแกรรมในประเทศไทย
(หมายเลา 1 คือ มีความสำคัญมากที่สุด และ หมายเลา 16 คือ มีความสำคัญน้อยที่สุด)

- ทำาสิ่งต่างๆ สามารถส่งเสริมคุณภาพการศึกษาต่อระดับประเทศเพื่อนบ้านและประเทศในเอเซียตะวันออกเฉียงใต้
- แรงงานภาคภูมิภาคและมีจำนวนมาก
- แรงงานมีคุณภาพ
- ความสะดวกในการหาดูสขาทแกรรมทุก
- ทำาสิ่งต่างๆ ใกล้บ้านผู้บริโภค
- ความต้องการของรัฐบาล
- ความต้องการกับโครงสร้างพื้นฐาน (Completed infrastructure) เช่น ถนน รถไฟ ประปา ไฟฟ้า
- ความต้องการสำหรับนักเรียน (Adequate facilities) เช่น โรงเรียน โรงพยาบาล ธนาคาร
- ราคาที่เดินบุกและมีที่ดินขนาดใหญ่
- ราคาแสดงสิ่งทีดี
- รูปแบบในการเดินทาง
- 素敵ได้รับสิทธิพิเศษจากภาครัฐ (More incentives)
- ความปลอดภัยและความมั่นคงของประเทศ
- แผนผังด้านพลังงานและประเทศ
- ค่ากระเช้าพื้นที่
- ข้าวสาร โปรดระบุ

ช่วงเวลาที่ได้จากการตอบคำถามจะใช้ประโยชน์ในจิตวิชาระบบและการศึกษาท่านี้ และกระทำระหว่างที่นี้ด้วยการ
จะเป็นความตั้งใจและไม่มีการเผยแพร่ในประชากรใด
11. กลุ่มเรียงลำดับคุณค่าและความได้เปรียบ (The Main advantages) ของที่ดินที่สามารถทำเล่นในปัจจุบัน (หมายถึง 1 คือ มีความลำดับคุณค่ามากที่สุด และ หมายถึง 12 คือ มีความลำดับคุณค่าน้อยที่สุด)

- ที่ดินที่ดีใกล้ตลาดผู้บริโภค
- รัฐบาลให้การสนับสนุน
- แนวทะเบียนสูงเสรีการลงทุน
- สะดวกในการขนส่งทาง
- สะดวกในการหาอุปกรณ์
- ราคาที่ดินถูกและมีที่ดินขนาดใหญ่
- ใกล้ท่าเรือ หรือ ท่าอากาศยาน
- ความสมบูรณ์ในโครงสร้างพื้นฐาน (Completed infrastructure) เช่น ถนน รถไฟ ประปา ไฟฟ้า
- ความสมบูรณ์ในสาธารณูปโภค (Adequate facilities) เช่น โรงพยาบาล สถานที่
- ภาพแวดล้อมที่ดี
- การได้รับสิทธิพิเศษทางภาษี (More incentives)
- ขั้น ๆ ไปตาม...

12. กลุ่มเรียงลำดับคุณค่าของความเสียเปรียบ (the Main disadvantages) ของที่ดินที่สามารถทำเล่นในปัจจุบัน (หมายถึง 1 คือ มีความลำดับคุณค่ามากที่สุด และ หมายถึง 12 คือ มีความลำดับคุณค่าน้อยที่สุด)

- ตั้งที่ดินที่ไม่เพียงพอต่อการประกอบการ
- ขาดแคลนแรงงาน
- ปัญหาด้านโครงสร้างพื้นฐาน (Infrastructure) เช่น ถนนขาดแคลน ความไม่สมบูรณ์ของโครงข่าย ถนนบางที่
- ปัญหาด้านสาธารณูปโภค (Facilities) เช่น ความไม่เพียงพอของโรงพยาบาล มีถนนขาดแคลนเล็ก
- ขาดแคลนวัตถุดิบ
- ขาดแคลนแหล่งน้ำที่ดี
- ขาดแหล่งรายได้ทางเศรษฐกิจ
- ไม่ได้รับการทำศึกษาการส่งเสริมตลาด
- ไม่ได้รับการส่งเสริมโครงการสิ่งก่อสร้าง
- ห่างจากแหล่งที่อยู่ หรือ ห่างไกล
- ขั้น ๆ ไปตาม...

ๆ ฯลฯ ได้รับการประเมินชนิดใช้ประโยชน์ในพื้นที่และการดูแลรักษาที่ดิน และข้อมูลกว่าข้อมูลดังกล่าวจะเป็นคุณค่าที่ไม่ได้มีการเผยแพร่หรือประกาศใด
13. ลักษณะจุบบันของโครงสร้างพื้นฐานที่ตั้งอยู่ตามสถานะของท่านเป็นเช่นไร

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<tr>
<th>ลำดับ</th>
<th>ดี</th>
<th>มาก</th>
<th>ปานกลาง</th>
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14. ลักษณะจุบบันของสาธารณูปการที่ตั้งอยู่ตามสถานะของท่านเป็นเช่นไร

<table>
<thead>
<tr>
<th>ลำดับ</th>
<th>ดี</th>
<th>มาก</th>
<th>ปานกลาง</th>
<th>ดี</th>
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15. ท่านแสดงกิจกรรมตั้งอยู่ตามสถานะของท่านในปัจจุบันหรือไม่

- [ ] ใช่
- [ ] ไม่ใช่
16. ทำนองต้องการที่จะถ่ายที่ต้องมีเอกสารที่ทำนองหรือไม่
   □ ต้องการทำ (กรุณาโปรดที่คำว่า 17)
   □ ไม่ต้องการทำ (กรุณาโปรดที่คำว่า 18)

17. มากทำนองต้องการทำ, ทำนองใดที่จะถ่ายไปตั้งที่ใด
   □ ต่างประเทศ
     □ เอเชียตะวันออกเฉียงใต้
     □ อเมริกาเหนือ
     □ อเมริกาใต้
     □ เอเชียกลาง
     □ อังกลา
     □ อื่นๆ โปรดระบุ...
   □ ประเทศไทย
     □ ลาว
     □ ไทย
     □ กัมพูชา
     □ เวียดนาม
   □ ภูมิภาคไทย
     □ จังหวัดอื่นที่ไม่ได้ถ่ายในระบบ โปรดระบุ...ที่นี้...
   □ เมืองรายย่อย
     □ หนองดง
     □ มุกดาหาร
     □ ชลบุรี อุดรธานี
     □ แม่สาย เชียงราย
     □ ฮิปไปที่ระบุ ตรงกัน
   □ เมืองรายย่อยอื่นๆ โปรดระบุ...

ข้อมูลที่ได้จากการตอบแบบสิ่งนี้จะใช้ประโยชน์ในศึกษาการและบริการศึกษาที่นี้ และ veteranของวิจัยชุดกลับคุณ จะเป็นความสำคัญและไม่มีการเผยแพร่ตามประการใด
18. หากคุณไม่ได้ทำการย้ายที่ตั้งเป็นเพราะเหตุผลใด
..............................................................................................................................................................
..............................................................................................................................................................

ส่วนที่ 3 เกี่ยวกับที่ตั้งอุตสาหกรรมแห่งใหม่

19. ทำมีเอกสารของโรงงานอุตสาหกรรมที่ขึ้นอีกหรือไม่
   ☐ มี (กรุณาไปที่คำถาม 20)
   ☐ ไม่มี (กรุณาไปที่คำถาม 21)

20. หากมี, กลุ่มระดับตัวชี้ของโรงงานอุตสาหกรรม
   ☐ ต่างประเทศ
      ☐ เอเชียตะวันออกเฉียงใต้
      ☐ เอเชีย
      ☐ ยุโรป
      ☐ อเมริกาเหนือ
      ☐ อเมริกาใต้
      ☐ เอเชียกลาง
      ☐ อหิภิก
      ☐ อื่นๆ โปรดระบุ

   ☐ ประเทศเพื่อนบ้าน
      ☐ ลาว
      ☐ ฝรั่ง
      ☐ กัมพูชา
      ☐ มาเลเซีย

ข้อมูลที่ได้จากการสอบถามนี้จะใช้ประโยชน์ในการวิเคราะห์และการศึกษาที่สืบทอด และขอรับรองว่าข้อมูลดังกล่าวจะเป็นความลับและมิใช่การเผยแพร่ต่อนอกการใด

337
21. อะไรเป็นสาเหตุสำคัญที่ทำนายรายสาขาไม่ต้องแพงไหม ครูนาเรียลอาจมีความสำคัญของความได้เปรียบ (the Main advantages) หมายถึง 1 คือ มีความสำคัญมากกว่าที่คุ้ม และหมายถึง 13 คือ มีความสำคัญน้อยที่สุด

- คัดการขยายผลคิด
- ที่ส่งที่ต้องการไม่เพียงพอ
- ขาดผลการแข่ง
- โอกาสในการเข้าหรือย้ายที่คิดแพงไหม
- ปัญหาด้านการวางแผนหรือการปรับมั่นคง
- โอกาสจากตลาดผู้บริโภค
- โอกาสจากผลิตภัณฑ์
- ต้องการวางแผนที่ดี
- มีงบประมาณความแม่นยำ
- ต้องการที่จะได้รับผลิตภัณฑ์ผลิตภัณฑ์ที่จะทำให้มากขึ้น
- ความไม่เพียงพอของโครงสร้างพื้นฐาน
- ความไม่เพียงพอด้านสารสนเทศ
- ข้ออื่น ๆ โปรดระบุ..................................................................................................................
22. ในกรณีที่ต้องปรุงงานดูแลการแพทย์แบบใหม่ ท่านพิจารณาถึงตัวเลือกที่เป็นสีสัน ถูกต้องเรียงลำดับความสำคัญของความได้รับประโยชน์ (the Main advantages) หมายเลข 1 คือ มีความสำคัญมากที่สุด และ หมายเลข 9 คือ มีความสำคัญน้อยที่สุด

- สะดวกในการทำงาน
- การได้รับสิทธิ์พิเศษสำหรับการดูแลจากภาครัฐ
- ได้รับการช่วยเหลือ หรือ การดูแลรักษาจากภาครัฐ
- การง่ายดายในการติดต่อ
- สะดวกในการใช้บริการ
- สะดวกในการใช้บริการของเพื่อช่วยเหลือความสะดวกบริการที่ดูแลสุขภาพและสุขภาพ
- ขึ้นๆไปตาม...

ส่วนที่ 4 เกี่ยวกับนโยบายการค้าและการลงทุน

23. ท่านทราบถึงการใช้นโยบายการค้าและการลงทุนของภาครัฐหรือไม่

- ทราบ
- ไม่ทราบ

24. ท่านคิดว่านโยบายการค้าและการลงทุนจะมีประโยชน์ต่อการดำเนินการธุรกิจของท่านเพียงใด

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<td>มีประโยชน์มาก</td>
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<td>มีประโยชน์น้อย</td>
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<tr>
<td>มีประโยชน์เล็กน้อย</td>
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<tr>
<td>ไม่มีประโยชน์</td>
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ข้อมูลที่ได้จากการสอบถามจะใช้ประโยชน์ในการวิเคราะห์และการศึกษาต่อไปนี้ และขอรับรองว่าข้อมูลดังกล่าวจะเป็นความลับและไม่มีการเผยแพร่ต่อสาธารณะ
25. ท่านทราบกันบ้างว่าการค้าและการลงทุนที่มีเป้าหมายหลักที่จะพัฒนาเมืองชายแดนชั้นในปัจจุบันเป็นฟื้นฟูที่ทั่วโลก แต่ยังคงยุทธศาสตร์ในการพัฒนาในอนาคต ให้เป็นศูนย์กลางทางการค้าและการลงทุนของอนุภาค เอเซียตะวันออกเฉียงใต้ หรือไม่

☐ ทราบ
☐ ไม่ทราบ

26. ท่านคิดถึงการที่จะย้ายที่ตั้งหรือไปราชการในเมืองชายแดนหรือไม่

☐ ต้องการเปิดเจ้าหน้าที่ในที่ตั้งเมืองชายแดน โปรดระบุจังหวัด

☐ ไม่ต้องการ

27. เมื่อสิ้นสุดปีนี้จะพิจารณาว่าจะทำการก่อหน้าที่จะทำให้งานไม่เปิดเจ้าหน้าที่ในเมืองชายแดน (เช่น การลด โลหะ, สรรพสิ่ง, ทรัพยากร, การพัฒนา, ตลาด เป็นต้น)


28. เมื่อสิ้นสุดปีนี้จะพิจารณาว่าจะทำการก่อหน้าที่จะทำให้งานไม่เปิดเจ้าหน้าที่ในเมืองชายแดน(เช่น ปัญหาด้านโครงสร้างพื้นฐาน, ปัญหาการดูแลไม่ดี, โรคจากภูมิแพ้หรือโรคอื่น ๆ, แรงงานคุณภาพต่ำ เป็นต้น)


ข้อมูลที่ได้จากการสอบถามนี้จะใช้ประโยชน์ในการวิเคราะห์และการศึกษาท่านั้น และขอขอบคุณว่าข้อมูลดังกล่าวจะเป็นความทันและไม่มีการเผยแพร่ต่อประชาชนใด

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29. อะไรคือข้อจำกัดหรืออุปสรรคสำคัญในการดำเนินธุรกิจของท่านในปัจจุบัน หมายถึง 1 คือ มีความลักักบานมากที่สุด และ หมายถึง 11 คือ มีความลักักบานน้อยที่สุด

- ความไม่เพียงพอของโครงสร้างพื้นฐาน
- ความไม่เพียงพอของสารสนเทศ
- ขาดแคลนวัตถุดิบ
- ปัญหาของอุปทานวัตถุดิบ
- ขาดแคลนแรงงาน
- ปัญหาคุณภาพแรงงาน
- ราคาอุปกรณ์สูง
- นโยบายของภาครัฐไม่สอดคล้องกับความต้องการของธุรกิจ
- วัสดุไม่มีเสถียรภาพ
- ข้อจำกัดด้านกฎหมาย
- ข้ออื่น ๆ โปรดระบุ

30. ท่านมีความรู้จากธุรกิจของท่านควรได้รับการส่งเสริม หรือพัฒนาในด้านใดจากภาครัฐ หมายถึง 1 คือ มีความ

สำคัญมากที่สุด และ หมายถึง 8 คือ มีความสำคัญน้อยที่สุด

- การตลาด
- ความมั่นคง
- ความปลอดภัย
- การส่งออก
- การนำเข้า
- การเงินและธนาคาร
- ข้ออื่น ๆ โปรดระบุ
- ไม่ต้องการใด ๆ

ข้อมูลที่ได้จากการตอบกลับนี้จะใช้ประโยชน์ในการวิจัยและการศึกษาทั่วไป ซึ่งท่านเห็นควรจะเป็นความลับและไม่มีการเผยแพร่ต่อสาธารณะใด
แบบสอบถามสำหรับ Foreign-Owned Firm that are intending to locate in Thailand

คำถาม: แบบสอบถามข้อมูลนี้ประกอบด้วยข้อมูล 3 ช่วง ดังนี้

ช่วงที่ 1 จะเป็นการสอบถามข้อมูลทั่วไปเกี่ยวกับธุรกิจของผู้ประกอบการ
ช่วงที่ 2 สอบถามเกี่ยวกับการทำสัญญาซื้อขายในปีปัจจุบัน
ช่วงที่ 3 เป็นการสอบถามเกี่ยวกับนโยบายการคำนวณและการลงทุน

กรุณาเติมข้อมูลในส่วนที่ว่างทั่งหมด แล้วส่งคืนแบบฟอร์ม หรือ เรียกหลังเติมข้อมูล

ช่วงที่ 1 ข้อมูลทั่วไปเกี่ยวกับธุรกิจของผู้ประกอบการ

1. ชื่อบริษัท หรือองค์กร.................................................................
2. ชนิดของธุรกิจ หรือองค์กร.................................................................

3. ที่อยู่ (ข้อมูลเฉพาะชื่อเมืองกันประเทศ) .................................................................
4. ยอดขายประจำปี (Annual Sales).................................................................
5. ปีที่ตั้งต้นธุรกิจของผู้ประกอบการ ค.ศ.19..............................หรือ พ.ศ. .................................................................
6. จานวนแรงงาน............................................. คน

ข้อมูลของแรงงานในธุรกิจของผู้ประกอบการ

% แรงงานที่มีคุณภาพ (จากภาคีทางด้านวิศวกรรมหรือสันติ) .................................................................
% แรงงานที่มีมืออาชีพ (จากภาคีทางด้านวิศวกรรม) .................................................................
% แรงงานที่มีประสบการณ์ (จากภาคีทางด้านวิศวกรรม) .................................................................

ข้อมูลที่ได้จากการสอบถามนี้จะใช้ประโยชน์ในการพิจารณาการศึกษาเท่านั้น และข้อรับรองว่าข้อมูลดังกล่าวจะเป็นความลับและไม่มีการเผยแพร่ต่อสาธารณะใด

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ส่วนที่ 2 เกี่ยวกับที่ตั้งของดูดสารogramในปัจจุบัน
7. อะไรเป็นสาเหตุสำคัญที่ทำให้เราไม่ต้องจ่ายเงิน ทุกภาคเรียนลำดับความสำคัญของความได้เปรียบ (the Main advantages) หมายเลขอ 1 คือ มีความสำคัญมากที่สุด และ หมายเลขอ 10 คือ มีความสำคัญน้อยที่สุด

- ต้องการขยายผลิต
- พื้นที่ดินที่ไม่เป็นพ่อ
- ขาดแคลนแรงงาน
- โอกาสในการขายหรือข้อถัดหน้าแผ่นไม้
- ปัญหาค้านการวางแผน หรือแยกระบบทางมัลเมือง
- โอกาสตลาดผู้บริโภค
- โอกาสแผนการอุดมศึก
- ต้องการวางแผนพื้นที่ที่ดิน
- มีสิ่งอำนวยความสะดวก
- ต้องการที่จะได้รับผลิตภัณฑ์เสริมการศึกษาจากภาครัฐ
- ความไม่เสียหายของโครงสร้างพื้นฐาน
- ความไม่เสียหายของสถานสถานบริการ
- อื่นๆ โปรดระบุ

8. ถ้าเราเริ่มต้นความสำคัญของเหตุผลที่ทำแต่ละแผ่นไม้เสื่อมที่จะเป็นโอกาสดูดสารogramได้ที่แตกต่างปัจจุบัน
(หมายเลขอ 1 คือ มีความสำคัญมากที่สุด และ หมายเลขอ 10 คือ มีความสำคัญน้อยที่สุด)

- ความสามารถในการวางแผน
- การได้รับผลิตภัณฑ์เสริมการศึกษา (More incentives)
- ภาครัฐให้การสนับสนุน
- ความสามารถในการขยาย
- ความสามารถในการอุดมศึก
- ทำเลที่ดีใกล้ตลาดผู้บริโภค
- สภาพแวดล้อมบนพื้นที่
- ลักษณะพื้นที่ของพื้นที่
- ความสามารถในการใช้บริการทางกิจกรรมดูดสารogramและการพัฒนาระหว่างค่ายคุณภาพการแก้ว
- ความต้องการ โฆษณา โดยใช้เป็นต้น
- อื่นๆ โปรดระบุ

ข้อมูลที่ได้จากการสอบถามจะใช้ประโยชน์ในการวางแผนและการศึกษาเท่านั้น และขอร้องให้ความยุติธรรมในการจัดทำแผนที่จะเป็นผลที่ดีและไม่มีการแย้งหรือต่อรองกันใด
9. ครูผู้สอนผู้เป็นตัวเลือกของเด็กผู้หญิงที่ต้องการให้เข้าร่วมโครงการเพื่อความมั่นคงทางการเงินในประเทศไทย ไม่ว่าจะเป็นสถาบันการเงินหรืออื่น ๆ (แนวข้อ 1 คือ มีความสำคัญมากที่สุด และ แนวข้อ 16 คือ มีความสำคัญน้อยที่สุด)

- ทักษะที่ต้องมีต่อการตัดสินใจเกี่ยวกับการเงินทั้งภายในและระหว่างประเทศ
- แรงงานภาคอุตสาหกรรม
- แรงงานภาคพื้นที่
- ความสามารถในการจัดการ
- ทักษะที่ดีที่สุดสำหรับผู้ประกอบการ
- ความสามารถในการจัดการที่มีความสำเร็จในการพัฒนา (Completed infrastructure) เช่น ถนน รถไฟ ประมาณที่พัฒนาได้
- ความสามารถในการจัดการในทางการเงิน (Adequate facilities) เช่น โรงเรียน โรงพยาบาล ธนาคาร
- ราคาที่ดินถูกและมีที่ดินขนาดใหญ่
- ภาพพัฒนาด้อยที่ดี
- นโยบายรัฐสงเสริมการลงทุน
- การดีพัฒนาติดตั้งจากภาครัฐ (More incentives)
- ความปลอดภัยและความมั่นคงของประเทศ
- เหลี่ยมด้านการอุตสาหกรรมและบริการ
- ค่าทรัพย์สิน
- ข้ออื่น ๆ โปรดระบุ .................................................................

10. ที่ดีขึ้นของคุณสมบัติของท่านในประเทศไทย

- กุนภำพ
- เมืองศักดิ์สิทธิ์ เช่น นครราชสีมา ชลบุรี จันทบุรี สงขลา
- จังหวัดอื่นที่ไม่ใช่เยี่ยงชนแผนโยกรูปจังหวัด...

- เมืองชายแดน
  - ชายแดน
  - มุกดาหาร
  - ระนอง อุบลราชธานี
  - เพชร ชัยภูมิ
  - ชัยภูมิ ตราด

- เมืองชายแดนอื่น ๆ โปรดระบุ....................................................

ข้อมูลที่ได้จากการสอบถามนี้จะใช้ประโยชน์ในการจัดการและการศึกษาทั่วโลก และข้อมูลทั่วโลกดังกล่าวจะเป็นความสำคัญไม่มีการแพร่ระบาดในประเทศไทย

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ส่วนที่ 3 เกี่ยวกับนโยบายการค้าและการลงทุน

11. ทำตามเกี่ยวกับนโยบายการค้าและการลงทุนของภาคธุรกิจหรือไม่
   - [ ] ทำบะ
   - [ ] ไม่ทำบะ

12. ทำดังกล่าวนโยบายการค้าและการลงทุนจะมีประโยชน์ต่อการดำเนินการธุรกิจของท่านเพียงใด

<table>
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<tr>
<td>มีประโยชน์น้อย</td>
<td>[ ]</td>
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<tr>
<td>ไม่มีประโยชน์</td>
<td>[ ]</td>
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</tbody>
</table>

13. ทำตามเกี่ยวกับนโยบายการค้าและการลงทุนว่า มีปัญหาเหลือที่จะพัฒนาเมืองชายแดนซึ่งในปัจจุบันเป็นพื้นที่ที่มีโอกาส แต่มีศักยภาพทางการพัฒนาในอนาคตให้เป็นศูนย์กลางทางการค้าและการลงทุนของอนาคต เฉพาะในระดับประเทศได้หรือไม่
   - [ ] ทำบะ
   - [ ] ไม่ทำบะ

14. ทำดังกล่าวการที่จะย้ายที่ตั้ง หรือเปิดสาขาของโรงงานอุตสาหกรรมในเมืองชายแดนหรือไม่
   - [ ] ต้องการเปิดโรงงานอุตสาหกรรมแห่งใหม่ที่เมืองชายแดน โปรดระบุข้อกำหนด………………………………
   - [ ] ไม่ต้องการ

15. เสมอสติสิ่งที่ต้องเพิ่มประสบการณ์ที่จะทำให้ไม่ไปเปิดโรงงานอุตสาหกรรมที่เมืองชายแดน (เช่น การผลิตสินค้า, ติดตั้งขนาดส่งเสริมการลงทุน, แหล่งวัสดุ, แรงงาน, ตลาด เป็นต้น)


ข้อมูลที่ได้จากการสอบถามนี้จะใช้ประโยชน์ในการวิเคราะห์และการศึกษาทั่วบ้าน และข้อเท็จจริงต่างจะเป็นข้อมูลเพื่อใช้ในการวิเคราะห์การลงทุนในอนาคต
16. แสดงสิ่งที่ดูเพิ่มป่วยการกิจกรรมที่จะทำให้ท่านไม่ไปเปิดโรงพยาบาลฉุกเฉินกรณีที่มีข้ออนุญาต (เช่น
ปัญหายาสูบสิ่งของร่างกาย, ปัญหาอาการระทึก, ขาดแคลนเวชภัณฑ์หรือเครื่องมือหลัก, แรงงานศุภคุณภาพต่าง
เป็นต้น)

17. ในอนาคต ท่านตัดสินใจที่จะไม่ไปเปิดโรงพยาบาลฉุกเฉินกรณีที่มีปัญหาเพื่อนบ้านหรือไม่

☐ ปิดไว้ประกาศ...........................................................................................................

เหตุผลคือ....................................................................................................................

☐ ไม่ปิด

เหตุผลคือ....................................................................................................................

รอบคุณท่านที่สอดคล้องและให้ความร่วมมือ

ข้อมูลที่ได้จากกระดาษนี้จะใช้ประโยชน์ในการวิเคราะห์และการศึกษาท่านนี้ และข้อมูลของท่าน
จะเป็นความลับและไม่มีการเผยแพร่ต่อประกาศใด
Appendix 12
21st June 2001

TO WHO IT MAY CONCERN

Malai Kornkeusomneuk, Postgraduate Research Student

As Director of Studies, I write in respect of Malai Kornkeusomneuk’s postgraduate research at The School of Planning, Oxford Brookes University, Oxford, England.

Malai is presently pursuing a study entitled:

“A methodology to identify border towns as centres for trade and investment with particular reference to north east Thailand”.

Malai will be conducting a variety of research investigations in the locality with local firms and businesses, local government agencies and with visitors and tourists. Please help her to conduct her fieldwork by agreeing to be interviewed or to complete a questionnaire survey.

All of the information generated from her fieldwork investigations will be held in secure files and will remain confidential. She is an independent student and has no connections with either business or government institutions.

Can I thank you, in advance, for your co-operation and assistance given to Malai.

Yours faithfully

Stephen Walker, Director of Studies
Director of Research, School of Planning
Appendix 13
ที่ นร. 0706.9/ 2166

หนังสือรับรอง

สำนักงาน ก.พ. ขอรับรองว่า นางสาวมัลย์ กรแก้วสมบัติ เป็นนักเรียนทุนรัฐบาล(ก.พ.) ประจำปี 2542 ไปศึกษาขั้นปริญญาเอก สาขาวิชา Urban Planning ณ Oxford Brookes University ประเทศอังกฤษ โดยออกเดินทางไปศึกษาตั้งแต่วันที่ 28 กันยายน 2542 และคาดว่าจะศึกษาสำเร็จขั้นปริญญาเอกประมาณเดือนวันที่ 27 กันยายน 2546

สถาบันพัฒนาข้าราชการพลเรือน
ส่วนการศึกษาและฝึกอบรมในต่างประเทศ
โทร. 6286240 โทรสาร. 2803334

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เรื่อง ขอความอนุเคราะห์ตอบแบบสอบถาม
เรียน ผู้มีหน้าที่ เรียกให้สู่เวร

สิ่งที่ส่งมาด้วย แบบสอบถามจำนวน 1 ชุด

ด้วยสำนักงานผู้มีอิสระจ้างหน้าจังจากนางสาวมลิตา กรณ์สมณึก นักเรียนทุนรัฐบาล (ก.พ.) ประจำปี ๒๕๔๐ ไปศึกษาชั้นปริญญาเอก สาขาวิชา Urban Planning ณ Oxford Brookes University ประเทศอังกฤษ กำลังดำเนินการสำรวจข้อมูลตามแบบสอบถามเพื่อประกอบการทวิภาคย์แนวคิดปริญญาเอกเรื่อง "ตัวชี้วัดเพื่อกำหนดให้มีงานช่วยพัฒนาเป็นเมืองสูงสุดแห่งทางการศึกษาและการลงทุน กรณีศึกษา ภาคตะวันออกเฉียงเหนือของประเทศไทย".

จึงเรียนมาเพื่อโปรดพิจารณาให้ความอุตสาหะทุ่มตอบแบบสอบถามดังกล่าวแล้วส่งคืนสำนักงานผู้มีอิสระจ้างหน้าจังจากนางสาวมลิตา กรณ์สมณึก

ขอแสดงความนับถือ

(นายไพจิตร สาลี่บัว)
ผู้มีอิสระจ้างหน้าจังจากนางสาวมลิตา กรณ์สมณึก

สำนักงานผู้มีอิสระจ้างหน้าจัง
โทร. (นท.) ๓๒๓๒๒๒/๐๔๔ ๒๖๐๐
เรื่อง จนความมุ่งมั่นในการตอบแบบสอบถาม

เรียน ผู้ประกอบการไทย

สิ่งที่ส่งมาด้วยแบบสอบถาม 1 ชุด

ในการเป็นนักศึกษาระดับปริญญาเอก โดยทุนรัฐบาล 1 ฉบับ

ตัวที่ติด นางสาว กลางด้า กรมก้มมัน นักศึกษาระดับปริญญาเอก ของ Oxford Brookes University ประเทศอังกฤษ ขณะนี้กำลังศึกษาหลักสูตรปริญญาเอก สาขาบริการการออกแบบ (Planning) กำลังบรรยายเรื่อง "ตัวชี้วัดเพื่อกำหนดให้เมืองกลายเป็นศูนย์กลางทางการค้าและการลงทุน กรณีศึกษาภาคตะวันออกเฉียงเหนือของประเทศไทย (A methodology to identify border towns as centres for trade and investment with particular reference to north-east Thailand) โดยมีวัตถุประสงค์ของการศึกษาเพื่อความเข้าใจในสถานการณ์การเลือกที่ตั้งของหน่วยธุรกิจ และความถี่เข้าถึงได้เปรียบ และอุปสรรคของการเลือกที่ตั้งของหน่วยธุรกิจ

และของการศึกษาและวิเคราะห์ที่ได้จากการสำรวจในครั้งนี้จะเป็นประโยชน์อย่างต่อต่อกับทักษะของนักศึกษาให้มีเมือง

ข้างต้นพัฒนาเป็นเมืองศูนย์กลางทางการค้าและการลงทุน ซึ่งเป็นตัวชี้วัดที่สำคัญ และเป็นประโยชน์ต่อการพัฒนาการวางแผนธุรกิจ ตลอดจนข้อมูลที่เป็นประโยชน์ต่อการตัดสินใจของเมืองในปัจจุบัน

ขณะนี้ คิดเห็นว่าควรความมุ่งมั่นจากท่านได้แสดงแบบสอบถามฉบับนี้ให้ดีค่ะ ซึ่งข้อมูลที่ได้จากแบบสอบถามนี้จะใช้ประโยชน์ในบริการทางนั้น

ดังนั้นจึงจะให้ความมุ่งมั่นจากท่านค่ะ และขอความกรุณาท่านได้โปรดแสดงแบบสอบถามดังทางไปรษณีย์ที่ได้แสดงตามแบบไปรษณีย์ประจำ หรือ FAX No. 02 675-6404ค่ะ และขอขอบพระคุณเป็นอย่างยิ่งที่ท่านได้แสดงความสามารถในการตอบและแสดงผลแบบสอบถามไป โปรดด้วย

ขอแสดงความนับถือ

(นางสาว กลางด้า กรมก้มมัน)
References

Bangkok Metropolitan Administration (1999) Bangkok Metropolitan Regional Plan, Bangkok, Thailand.


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Richardson H.W (1978) Regional Economics, University of Illinois Press, Urbana-the USA, pp. 164-178.

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Shen J and others (2001) "Regional Economic Growth and Factor Contributions in the Zhujiang Delta Region of South China" in *Asian Geographer 1 and 2*, The University of Hong Kong Geographical Association Publishers, Hong Kong, pp. 125-151.


Sit V.F.S (1989) "Hong Kong's New Industrial Partnership with the Pearl River Delta" in *Asian Geographer 1 and 2*, The University of Hong Kong and the Hong Kong Geographical Association, Hong Kong, pp. 103-115.


Yeh A.G.O and others (1989) “Spatial Relationships among Hong Kong, Macao and the Pearl River Delta” in *Asian Geographer 1 and 2*, The University of Hong Kong and the Hong Kong Geographical Association, Hong Kong, pp. 1-9.

Yeh A.G.O (1992) “Industry Policy and Industrial Park Development in Hong Kong” in *Asian Geographer 1 and 2*, The University of Hong Kong and the Hong Kong Geographical Association, Hong Kong, pp. 87-114.


Other Works Consulted


Friedmann J (1986) The World City Hypothesis Development and Change, 17, pp. 69-84


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