

# Migration and Local Economic Development in Rural Northeastern Thailand (1) :

Case Studies of Three Villages in Khon Kaen and Chaiyaphum Province

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## Abstract

This paper is the research report based on results obtained during the period of one-year study abroad from April, 1998 to March, 1999 at Department of Geography, Faculty of Arts, Chulalongkorn University in Thailand. The goal of this research is mainly to provide the detailed information on the levels, types, geographical patterns and factors of migration in three villages of Northeastern Thailand, according to the door to door household survey by using questionnaire conducted in November, 1998. In this paper as the first publication, objective and background of research, industrialization in Khon Kaen province where survey villages are located, outlook for survey villages—their locations, geographical characteristics and agricultural patterns.

## I Introduction

Thai economy has grown very rapidly especially since the latter half of 1980s, when the large volume of foreign investments, above all, Japanese investment in the background of Yen-appreciation began to be introduced intensively due to the Plaza Accord in 1985, although it is now undergoing the structural depression caused directly by Baht plummet in July, 1997. Thai economy has been well known it became one of the most rapidly growing economies in the world in the late 1980s and early 1990s, still growing steadily by the extremely rapid transformation. As known widely, the success of economic development in Thailand has reflected directly on the growing rate of GDP on an average rate of 7 — 8 percent per year over the past about 35 years, by its shifting from basically the agrarian economy to the labor-intensive export-oriented economy.

However, it has faced some serious problems that it will not be able to move upward to grow or develop more steadily than ever, continuously in the future. As pointed out frequently, one of the most serious problems has been certainly uneven or imbalanced regional development of Thailand which has given rise to the regional disparity in terms of income per capita among regions as well as regional unequal

opportunity concerning various resident's benefits such as occupation, consumer life, medical care service, education and so on. The Northeast region whose share of both area and population is as much as one third of the whole country has been consistently in the most backward and the poorest region. There has been remarkable backwardness and poverty in the region concerned, especially in its vast rural areas where agricultural sector, above all things, rainfed rice culture is predominant and its productivity is extremely low due to the unfavorable endowment of natural resources such as erratic pattern of rainfall and sterile or unsuitable soil for paddy field.

During rapid economic growth the latter half of 1980s to early 1990s, the vast rural area in Northeast region had got worse in terms of income distribution per household, especially compared with Bangkok Metropolitan Region, although its absolute value had continued to increase in its own way. It can be seen that such backwardness and poverty of rural Northeast region had been accelerated by the remarkable disparity between urban and rural areas in the background of the expansion of urban economy bubbling up with asset inflation and credit availability, not to say, Bangkok Metropolitan Region being the biggest origin center of it. In order to alleviate regional disadvantages of rural Northeast region more effectively than ever, further attention should be given to local economies and their development or growth expected as regional economic core from viewpoint of national economy nationwide.

Khon Kaen province targeted as survey area in this research has so far grown steadily under industrial decentralization policy through the impacts and effects of the National Economic and Social Development Plan and investment promotion policy by BOI (Board of Investment). Khon Kaen municipality designated strategically as regional urban growth center, especially in the Fifth Plan by NESDB (1982—1986) was expected to accrue trickle down effects creating new jobs and investment opportunities to its surrounding areas. After 1993, when the Northeast region classified as Zone 3 could get the most generous incentives to attract investors to come and set up factories due to the improved promotion policy by BOI, Khon Kaen province has grown remarkably to lead to a rapid increase in GPP (Gross Provincial Product) of manufacturing industry, while rapid decrease of agricultural sector, reinforcing central urban functions of Khon Kaen city as its growth pole.

In spite of the development of local economies in recent years, there has been a great deal of migration away from home villages to other regions across Khon Kaen province, especially Bangkok Metropolitan Region and its suburbs, to seek for job opportunities. Speaking in general, it can be said that migration from rural Northeast

region has become one of the main streams in Thailand since 1980s, accompanied by the great need for supplementary household income under commercialization which has caused the rapid rise of the cost of living. Such chronic occurrence of many migrants across Khon Kaen province boundary may reflect directly or indirectly the insufficiency or imperfection at the present time of regional development based on industrial decentralization policy by the government, of course it is too hasty to make a decision on its impacts and effects. In this sense, migration in rural Northeast region can be seen as the self-supporting mechanism for poverty alleviation by which rural residents can correct the growing disparity of income distribution among regions as well as between urban and rural areas.

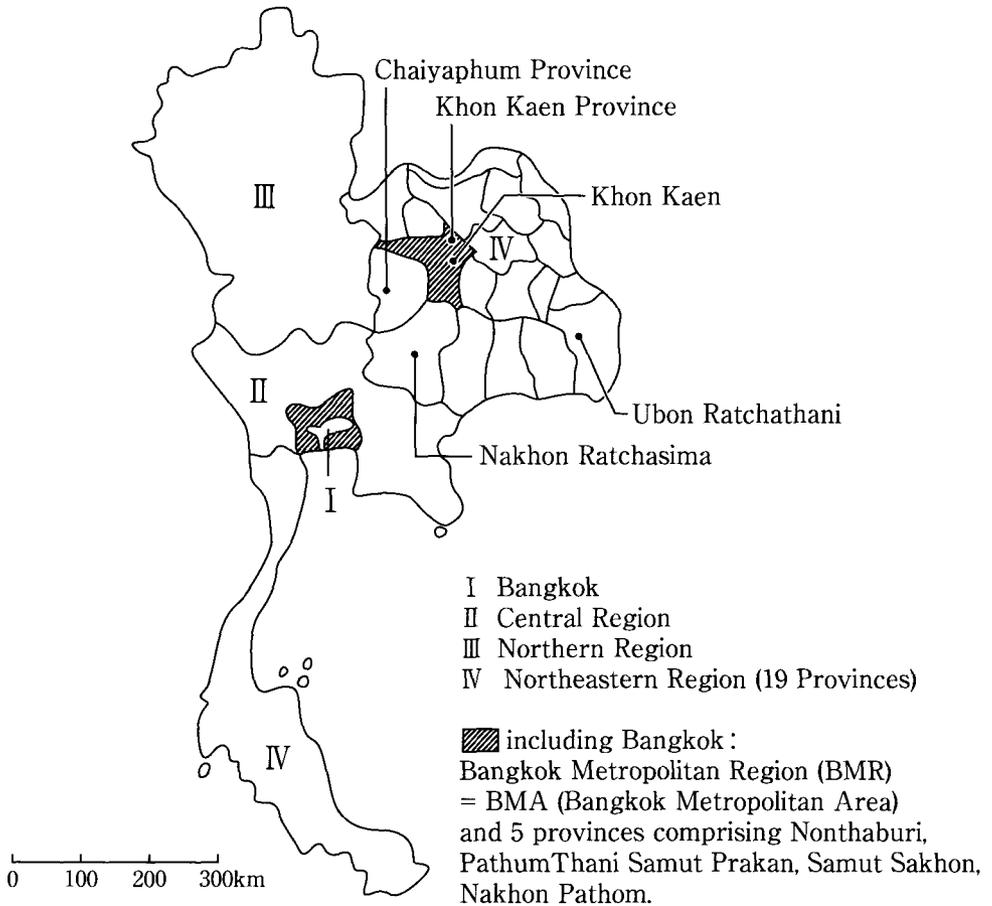
As a consequence, migration may also play the negative role of keeping up or fixing the existing imbalanced or unequal regional structure of Thailand, and, at the same time, the poverty of rural economies or rural communities in Northeast region. Not to say, industrial decentralization policy or investment promotion policy has implicated that efforts of regional development should be directed toward ideal types allowing rural residents to get job opportunity which they want to prefer out of various ones in their home communities without migration they do not prefer.

In the context mentioned so far, the objective of this paper is mainly to present the fact findings of migration on the levels, types, geographical patterns and their factors in rural Northeast Thailand through case studies of three villages, which are located within the radius of about 100 km to the west of Khon Kaen city along the national road-route 12. Rural survey of actual conditions on migration in the above target villages was conducted during the period from the beginning of November, 1998 to the middle of November, 1998 over five days, based on the door to door interview form using the household questionnaire. This research also aims at describing definitely current trends and characteristics of migration in rural Northeast region, mainly according to the detailed information and results provided from comparative viewpoints of the above three case studies. Useful results got from field survey must be indispensable to not only further understandings of migration in the future research, but also regional development policy-related discussions having different wider viewpoints of national concern.

## **II Industrialization in Khon Kaen Province**

Before shedding light on case studies of three villages for migration research

Fig. 1 Geographical Position of Khon Kaen Province



in rural Northeast region, it may be useful to briefly describe socio-economic conditions and industrialization in Khon Kaen province mainly targeted (see Figure 1). This provides understandings of actual conditions surrounding three villages and helps to place ones within the larger areal context, namely Khon Kaen province.

Khon Kaen province is one of nineteen provinces (changwats) comprising the Northeast region which covers approximate 170,000 square kilometers, almost exactly one third of the total area of the country and has some twenty million inhabitants of roughly one third of the entire country. It is widely known that the Northeast is the poorest and the most backward region of Thailand in terms of income distribution per household, where its share of employed persons aged 13 years and over in agricultural sector in the entire region is still about three fourth, while Khon Kaen province

decreasing very rapidly to about less than one half. The Northeast region is basically a low-productive agrarian economy which depends mainly on the rainfed paddy cultivation restricted to extremely erratic and unpredictable rainfall during the rainy season followed from the dry season definitely, and soils having both low fertility and a poor moisture retention capacity, suffering from the salinity stratum.

In spite of such general trends and conditions of Northeast region, Khon Kaen province has grown remarkably in recent years, especially since more improved investment promotion policy was introduced by BOI in 1993, aiming at decentralization of industrial activities and urban functions into Zone 3 covering the total area of Northeast region. The industrial structure in Khon Kaen province has been undergoing an extremely rapid transformation, accompanied by the expansion of Khon Kaen municipality as urban growth center influencing its surrounding areas and peripheries.

**Table 1 Share and Increase Rate of Gross Provincial Product by Main Industries**

Industrial Sector	1990		1994		1994/1990	
	Notheast	Khon Kaen	Notheast	Khon Kaen	Notheast	Khon Kaen
Agriculture	29.5	19.0	23.5	11.9	2.8	▲4.8
Manufacturing	8.0	13.5	10.0	22.6	37.8	155.0
Construction	7.9	10.7	8.9	8.8	45.5	20.9
Transportation and Communication	4.1	4.6	5.2	6.1	61.6	10.0
Wholesale and Retail Trade	21.5	18.5	21.9	16.0	30.5	32.0
Banking Insurance and Real Estate	2.7	4.4	5.1	9.5	144.5	230.0
Services	12.7	15.9	12.5	11.3	28.2	8.6
Total	100.0	100.0	100.0	100.0	28.2	52.2

Source : National Statistical Office, *Statistical Reports of Region : Northeastern Region 1995*.

As shown in Table 1, the share of agricultural sector in total GPP of Khon Kaen province dropped from 19.0% in 1990 to 11.9% in 1994, its absolute value decreasing by 4.8% in four years on the other hand and its role has declined considerably, though having a large rural population and abundant human resources. By contrast with agricultural sector, the share of manufacturing sector in total GPP rose very rapidly from 13.5% to 22.6% in the same period. As a direct consequence of the growth of manufacturing sector, the total GPP in the province increased drastically by 52.2% at a much faster rate than average increase rate of the region, that is, 28.2% in the same period. In addition to the fact the share of manufacturing

sector in khon Kaen province has been the largest of all industries in 1994 shifting from agricultural sector, it should paid much attention that the share of industry related to banking, insurance and real estate has increased 2.2 times from 4.4% to 9.5%. This implies certainly that urban central functions of Khon Kaen municipality as growth center in not only the province but also the region has been reinforcing highly by the expansion of finance-related functions.

**Table 2 Industries in the Northeast of Thailand Classified by Provinces in 1995**

Province	Number of Establishment	Amount of Investment (million baht)	Number of Laborers Employed	B/A	C/A
	A	B	C		
1 Nakhon Ratchasima	6,934	33,988	71,846	4.90	10.4
2 Khon Kaen	4,301	17,434	28,944	4.05	6.7
3 Ubon Ratchathani	3,734	3,184	14,592	0.85	3.9
4 Surin	3,349	12,847	7,389	3.84	2.2
5 Roi Et	3,288	1,370	7,743	0.42	2.4
6 Si Sa Ket	2,407	621	4,802	0.26	2.0
7 Sakhon Nakhon	2,100	1,036	4,972	0.49	2.4
8 Kalasin	1,809	1,393	4,928	0.77	2.7
9 Nakhon Phanom	1,517	477	3,293	0.31	2.2
10 Nong Bua Lam Phu	1,245	443	3,029	0.36	2.4
11 Nong Khai	1,089	1,732	5,059	1.59	4.6
12 Amnat Charoen	1,029	480	2,179	0.47	2.1
13 Udon Thani	925	17,015	13,460	18.4	14.6
14 Yasothon	884	472	2,439	0.53	2.8
15 Loei	818	567	2,510	0.69	3.1
16 Chaiyaphum	357	3,714	5,206	10.4	14.6
17 Mukdahan	337	428	1,833	1.27	5.4
18 Buri Ram	272	1,580	5,771	5.80	21.2
19 Maha Sarakham	125	184	1,182	1.50	9.5

Note : The above data of B/A and C/A is added to original data provided by Provincial Industrial office.

Source : Provincial Industrial Office

Table 2 shows industrial cumulative investment in the Northeast region in 1995. Khon Kaen has been in position of the second popular target province for industrial investment with the number of establishment of approximately 4,300, amount of investment of about 17,400 million baht and the number of laborers employed of about 29,000, their share of 11.8%, 17.6% and 15.1% in this region

respectively. This is mainly due to its location where it has much greater attractions than other provinces in terms of agglomeration merits of various urban central functions and infrastructure, for example, regional offices of several government agencies as administrative function, water supply, electricity, transport and communication and many kinds of amenities etc. needless to say, in addition to easy availability of cheap labor. Of course, Khon Kaen has not been by far beyond Nakhon Ratchasima from viewpoint of its locational advantages due to the closer proximity to both the Eastern Sea Board and Bangkok Metropolitan Region as industrial activity center. Khon Kaen municipality is now expected to be more improved toward highly creating public urban functions through City Plan first developed in 1975 and still effective in response to recent environment concerns of the residents.

Industrialization in Khon Kaen province has been taken by numerous small-scale companies or factories with about 4.05 million of investment per establishment and about 6.7 persons of employed laborers, as shown in Table 2, although this fact has reflected general trends and common characteristics among all provinces of the region more or less. Such industrialization based on small-scale companies or factories is more likely to closely connect with agricultural processing sector, which accounts for approximately 80% of the total industries. However, the emergence of big-scale pulp and paper factories located along the middle reaches of the Nampong River in this province, which employed 1,000 laborers or more, should not be overlooked on the other hand.

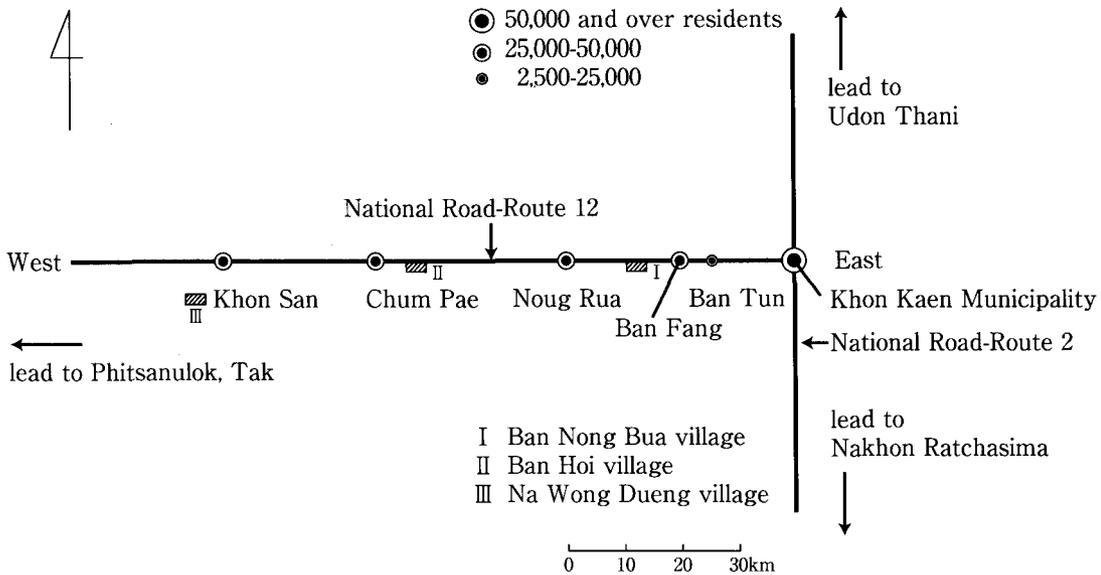
### III Lookout for Research Area

#### 1. Field-Survey Villages and Location

Three villages, Ban Nong Bua in Bang Fang District of Khon Kaen province, Ban Hoi in Chum Pae District of Khon Kaen province and Ban Na Wong Dueng in Khon San District of Chayaphum province were selected for this intensive door to door survey based on interview using the questionnaire on migration, according to preliminary field survey carried out in the end of July, 1998. These three villages are located within the radius of about 100km, respectively roughly 30km, 70km and 100km to the west of Khon Kaen city along the national road-route12, as shown in Figure 2.

The national road-route12 leads to Phitsanulok, further Tak in the Central region going beyond Dong Phaya Yen mountain range by which the Northeast region is separated from the Central region, by way of several small towns having population

Fig. 2 Location of Field Survey Village



less than 50,000 residents which are commercial center of their outskirts and surrounding villages, that is to say, in turn from Khon Kaen city, Ban Tun, Bang Fang, Nong Rua, Chum Pae and Khon San. Although Na Wong Dueng village classified as administrative unit belongs to Chaiyaphum province, it was included as one of survey areas since it could be expected to be influenced to a certain extent by Khon Kaen city as urban core where rapid growth has been recently seen in terms of opportunities for off-farming jobs, daily consumer life and other mobile population movements. From Ban Nong Bua, Ban Hoi and Ban Na Wong Dueng, it takes about one half hour, one hour and ten minutes, and one hour and forty minutes respectively by car to Khon Kaen city.

Both Ban Nong Bua and Ban Hoi are developed just near and along the main national road-route12 in the flat lands at the height of about 200m above sea level. On the other hand, Na wong Dueng village is developed keeping a little apart from the main road at the foot of mountains—about 500~1,000m above sea level—making up parts of Dong Phaya Yen mountain range, although in the almost flat lands at the height of about 250m above sea level. And in all villages, farming land, mainly paddy field landscape spreads widely surrounding their settlements where most houses stand close together.

## 2. Geographical Characteristics and Agriculture

Rural economy and community in case studies depends considerably on rainfed rice cultivation for the self-sufficient livelihood, as well as almost all of other villages in Northeast region. Accordingly, annual rainfall during the wet season and its control conditions of water supply are essential to agricultural production based on rainfed lands, especially under the lack of the large-scale and modernized irrigation like three villages concerned.

Mean annual rainfall for the period from 1991 to 1995 was just 1,150mm in Khon Kaen province, but there was considerable fluctuations year by year from 873mm to 1,479mm even in recent short term of five years. In addition to intensively changeable precipitation from year to year of the Northeast region or Khon Kaen province, most crop production including rice are forced to be under poor or instable conditions, but also due to the chronic lack of substantial perennial supplies of water, suffering from drought frequently. Apart from general conditions with regard to adverse climate or water supply as mentioned above, the variation can be certainly found in survey villages according to their topographical, biophysical and socio-economic factors.

For example, Na Wong Dueng village at the forest-mountains have the history that reclamation of paddy fields started from the sites near natural spring and was expanded by digging the canals to bring enough water from them into farming lands. Also in Hoi village with the chronic lack of water supply over long term period, this problem has been challenged to solve by digging ponds as reservoir in the paddy field, but there has been almost not possibility as before that it will be solved completely. In this connection, there are natural water resources in the village, but they are not enough. Anyway, It can be said that Na Wong Dueng village near mountains with forests is blessed with much better hydrological environment than that of other two villages located at frequently drought-affected flat lands.

Besides rainfall, soils in Northeast region are sandy loam having a poor moisture retention and potentially salt-affected, which are typically distributed within the triangle region formed by linking three big cities of Khon Kaen, Nakhon Ratchasima and Ubon Ratchathani, according to data provided at Agricultural Development Research Center (ADRC) in Khon Kaen city. On the other hand, soils in survey villages are completely found in forest-mountain area classified as outside of the above triangle area. Although having low fertility and poor moisture retention capacity, soils especially in Na Wong Dueng village are therefore not likely to face

lower agricultural productivity in terms of yield per rai than soils in other parts of the Northeast. In accordance with the survey interview, villagers in Ban Hoi usually use chemical fertilizers—formular 15-15-20 or 15-15-8 of 50kg per rai for rice farming, 1 kg per rai for corn farming and 50kg per rai for sugar cane farming respectively in order to improve poor soil conditions. In Na Wong Dueng village, villagers put into chemical fertilizers—formular 15-15-15 for the areas in the east of the village whose soil is sandy loam, but they can not still get better yields and have problems relative to the cost of very expensive chemical fertilizers, for example, in sugar cane farming which needs a lot of chemical fertilizers, while its price for sale is not fixed and unstable.

As already mentioned, the self-sufficient rice cultivation depending mainly on rainfed lands is on basis of agricultural product in all of survey villages. And the typical common cropping pattern of survey villages is basically one which secondary cash crops such sugar cane, corn and then some kinds of vegetables are grown, accompanied by rice as villager's principal staple food. It should be noted in addition that different tropical fruit trees such as coconut, areca nut, banana, papaya and mango etc. has been grown very well in the backyard gardens near houses, and also chilli, soyabean, leek and cabbage etc. in the field lands near houses, especially in Na Wong Dueng village having enough water provided through canals and creeks from natural spring.

As for varieties of rice, the cultivation of glutinous rice for self-sufficient and livelihood has spread in survey villages similar to other areas of Northeast region, with non-glutinous rice doing a little. It was reported in some villages of the Northeast region by another researchers that the planting of non-glutinous rice for sale has been spreading rapidly due to its higher price than other crops, in order to meet the expanding demand for cash in village's life. However, there has been not yet such a new phenomenon definitely in survey villages. According to interview survey, in Na Wong Dueng village, villager's do not normally sell non-glutinous rice as they only grow it in a small amount, on the other hand, they usually sell three tenth of total yields of glutinous rice keeping seven tenth of them for self-consumption and livelihood at the end of year, if the former as extra products will be yielded exceeding the latter. Moreover, Much the same results was obtained in Hoi village, that is, the portion of sale and self-sufficient consumption of glutinous rice yields is usually eight to two depending mainly on how much villagers yield, while they normally keep non-glutinous rice for self-consumption as they do not grow it much.

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