

CHAPTER 3
SETTING THE SCENE FOR PERI-URBAN CHIANG MAI:
LANDSCAPE AND CLASS TRANSFORMATIONS

‘Peri-urban’ is a term employed to indicate where urban and rural areas interpenetrate. Nowadays, it is a sphere of rapid change, and in this respect, peri-urban Chiang Mai is no exception. To date, developing countries studies have paid little attention to peri-urban zones. The few that have been undertaken have focused in the main metropolitan cities, such as Bangkok, Manila and Jakarta. Thus, there is a paucity of studies of regional cities. The more common studies of developing countries present a relatively clear cut view of urban and rural zones. However, scant thought has been given to peri-urban zones where urban and rural areas interpenetrate and there is a mix of urban modernity and rural traditional mores.

Peri-urban Chiang Mai, compared to other cities in Thailand, has particular characteristics of rapid development of infrastructure, physical geography, and cultural attractions, the sum of which has a general appeal for people. One of the key phenomena in peri-urban Chiang Mai is the increasing rate of migration involving all social groups. This influx of migrants has resulted not only in land conversion from agrarian fields to residential properties, but also in a great mixture of people from different backgrounds, ways of living, and reasons for migration residing in close proximity.

This chapter aims to set the scene for exploration of peri-urban Chiang Mai; that is, to show how its physical and social landscapes have transformed an agrarian-based society to a rapidly growing urban setting in just a couple of decades or in less than a generation of people.

Studying peri-urban areas is particularly difficult as they are ambiguous areas: their boundaries are not clear cut and may change quickly. The information gained and presented in this chapter represents the macro scale of the whole of peri-urban

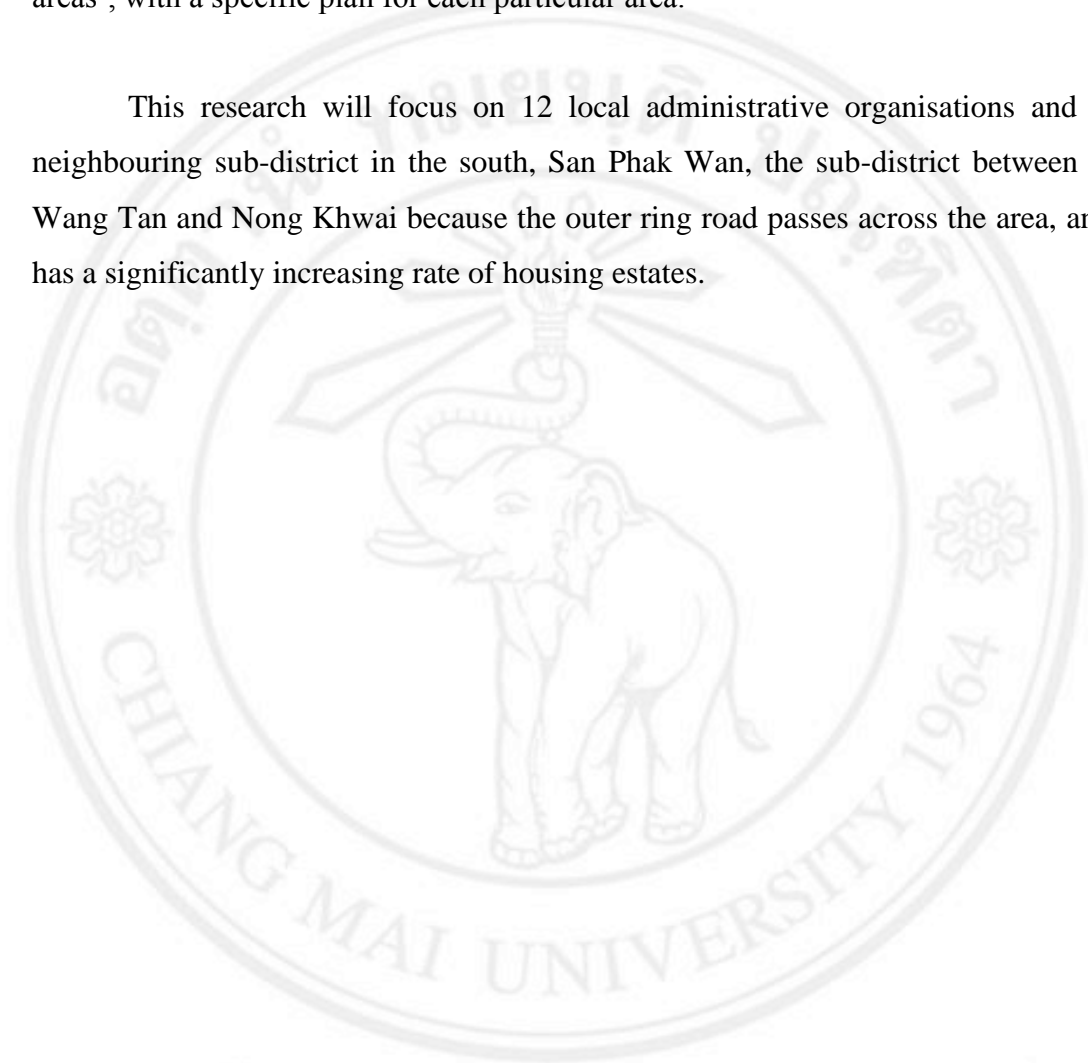
Chiang Mai. Data and statistics are limited and were found to be scattered throughout various government offices. The maps and tables shown are the result of prolonged gathering and extraction of raw data from various sources. Details of the methodologies employed are discussed below, followed by scene setting of peri-urban Chiang Mai.

3.1 Location of the study

Peri-urban zones are generally adjoining or border areas between urban suburbs and the countryside. However, it is hard to delineate them specifically as all areas are constantly transforming. Gray who undertook a study in 1990 of 5 rural villages in “peri-urban” Chiang Mai in 1990, defined the area within a five to fifteen kilometres radius of Chiang Mai city, which was linked by major routes, as a fringe of the city in which local economies were incorporated with those of the city (Gray 1990). At the time, there were no middle or outer ring roads. The key movement lay in the connection and commuting of people to the centre. For the purposes of this study, I will draw on a report titled “The study for city development action plan: Chiang Mai, Chiang Rai, and Lamphun” which provides information vis-a-vis setting up a development strategy for the Northern part of Thailand as a centre in the upper part of the Greater Mekong Sub-region (Maha Nakorn Consultant Co. 2010). With reference to Chiang Mai, this report defined 3 zones: inner city, a peri-urban zone, and the countryside in line with the road network. The inner city, which has 9 local administrative organisations, extends from the centre to the middle ring road; the peri-urban area, the border zone between the urban area and the countryside, covers the area between the middle to the outer ring roads. The peri-urban zone in this defined location was approximately within a three to twelve kilometres radius of the inner city of Chiang Mai. This report was produced in March 2010 as an assignment of the National Economic and Social Development Board (NESDB). I have employed its interpretation of the peri-urban zone in this research. In its official report, the peri-urban constitutes 11 local administrative organisations: Chang Phueak, San Phi Suea, Don Kaeo, Nong Chom, San Sai Luang, San Phranet, San Klang, Chiya Sathan, Nong Phueng, Tha Wang Tan, and Nong Khwai. The NESDB map that appears below

provides a strategic plan for how Chiang Mai, especially the city and peri-urban zone, should be developed. The middle and outer ring roads are defined as ‘peri-urban areas’, with a specific plan for each particular area.

This research will focus on 12 local administrative organisations and one neighbouring sub-district in the south, San Phak Wan, the sub-district between Tha Wang Tan and Nong Khwai because the outer ring road passes across the area, and it has a significantly increasing rate of housing estates.



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3.2 Methodology

Two methodologies, raw data collection from various local authorities and government sources interviews, were employed to gain data for this macro scale investigation. At the national level, secondary data from web sites and reports compiled by relevant central government offices were collected. At the local level, provincial, district, sub-district, and business offices were contacted regarding the collection of available data. In addition, the views of senior officers from almost every local administrative organisation were sought, particularly their impressions of changes in the area. Then, all of the statistics were extracted and data from the interviews compiled to suit the purposes of this study. Within this process, I was confronted by significant challenges related to the searching for, organising and use of these data.

In Thailand, one still finds conflict between statistics compiled at the national and local levels. The official statistics used in this thesis were obtained from ministries' offices at the national level such as the Bureau of Registration Administration, Department of Provincial Administration, Ministry of Interior; National Statistics Office; Office of the National Economic and Social Development Board; and Office of Agricultural Economics, Ministry of Agriculture and Cooperatives. All of the statistics were retrieved from their web sites where the smallest unit of data is at the national and provincial levels, with the exception of the data on population retrieved from the Bureau of Registration Administration for which the data unit is at sub-district level. Some provincial and sub-district administrative offices have data on their web sites; but, most of that data included errors and required cross checking with relevant staff at each office. In such cases, national data are used: most of the statistics collected from local offices are omitted, with a few exceptions. Conflicting data, such as data related to both national and local are presented even though they are not exactly the same. However, they follow a similar direction and serve as a good indicator of trends.

Data at the local level were limited, scattered and had not been recorded and

computerised correctly. Most was kept in hard copy in the forms of annual reports and monthly record books: some had been put into storage. The data used here are drawn from manually entered numbers in spreadsheets. Different local offices had different ways of recording data. In some cases, changes of staff and re-location to new buildings resulted in the loss of data, making it even more difficult to compare. In addition, the provincial and the district level offices did not have data about the sub-district offices that came under them: such data could only be obtained from each sub-district office.

This was the case with statistics pertaining to land sales and number of rooms in dormitories. Changes of area were also reflected in these data. However, the Provincial Land Department, that organises and transfers money, does not organise and computerise the above data; and, raw data are withheld as the money is transferred to local organisations. Raw data has to be collected from 12 local administrative organisations; but, several do not computerise the data. A further form of statistical data collected from the local administrative organisations are the annual records of numbers of dormitory rooms. This also needed some data extraction.

Regarding background of the history of road development in Chiang Mai, details of the years of commencement and completion are neither compiled nor kept at the central level. Rather, they are scattered throughout several reports and known only by particular officials. Therefore, gaining this data required the assistance of officials who were prepared to make the effort and were willing to search for these reports.

Data about real estate in Chiang Mai had a similar problem. The Land Releasing Section, Chiang Mai Provincial Land Department has the authority to consider providing permits for land release mostly for housing estates. Thai law (2000) requires that any person or agency seeking to divide land into any 10 plots or more has first to obtain permission from the Land Department. This ruling applies to all real estate projects such as commercial complexes and gated communities, the latter being the most dominant on record. Project owners have to provide

standardised communal facilities such as roads and security. There are, however, cases where business owners seek to avoid extra expense on communal facilities; so, they sub-divide the land into several plots then divide it again in less than 10 plots of land and immediately transfer ownership to the individual buyers. Thus, the data shown in this thesis is not necessarily the exact number in reality. However, it can provide good relatively evidence of the transactions.

In addition, data on housing estates could not be treated as complete data due to data storing issues. The Land Release Act was only implemented in 2000; since then land officials started entering data in books and keeping relevant documents in cabinets. They began to computerise data in 2002, and all permit documents were kept in cabinets and entered in computers. Some were lost during the organisation process and when moving office. Data was recently centralised on the Land Department's web site in Bangkok. However, there is less data than in the Provincial Land Office. In addition, data from the web site in the form of records or lists cannot be used for analysis purposes. The re-entering of each record of data from the Provincial Land Department in Chiang Mai in a spreadsheet is required. The data presented here dates for December 2011 when these statistics were collected.

Third, the reality is that official demographic statistics are not entirely accurate due to the following two reasons: first, regarding the demographic data of each sub-district, it appears on the web site of the Ministry of Interior (The Bureau of Registration Administration 2012), that is, data from 1993 to the present; but, later some sub-districts were up-graded to municipality level. Many of them had to combine populations and areas of neighbouring sub-districts to meet the requirements. The web site shows data appertaining to both sub-districts and municipalities that share the same name but have populations divided among different administrative authorities. Due to these complications, it was a major task to compile, check and coordinate them into usable statistical form.

Another important point is that while it is clear that there is a large number of hidden populations in areas subject to high in-migration, this does not show in any

official statistics, the main reason being that many people do not officially register their names in their new places (both the permanent and temporary residents), especially those living in dormitories. Official demographic house and population numbers only recognise official registration whereas in reality there may be numbers of non-registered people living in the area. 'Registered houses' means houses in which a registered member may or may not be living in that house. People register houses when they build them in order to gain access to electricity and other facilities but they might not register their names to where they actually live. At time of local or national elections, they have to vote in the area in which their names are registered. In fact, this is quite a common phenomenon in Thailand and may be found in areas with a high rate of in-migration and in housing estate projects. People who have more than one house to rent out may physically move away from their extended family but do not 'move' their names. There may not be a survey of the actual people who live in the house. Moreover, some of the registered houses remain empty. This happens in cases such as the houses of elderly people who have either died or moved away to live with their children. However, the house numbers have not been cancelled. In the case study, there are 76 empty houses: this prevents one from obtaining the true numbers of people in the household, and data on in-migration and out-migration. Some local administrative organisations provide estimations of non-registered populations such as in-migrant workers in their areas, drawn from their assessments of increasing numbers of dormitories and housing estates. The National Statistics Office, Chiang Mai Province estimates that in 2010 approximately 80.8% of people will live in their registrations; 11.5% do not live in their registrations but are still in Chiang Mai; 5.2% live in Chiang Mai but have their names registered in the provinces; 1.7% are foreigners; and 0.8% are foreign migrant workers (National Statistical Office of Thailand 2012a).

Furthermore, one finds difficulty using official statistics to reflect population changes in each local administrative authority as some local authorities have up-

levelled from TAO¹ to municipality, in the process annexing more area and people from neighbouring authorities. In addition, because some municipalities do not cover only one whole sub-district, they fail to keep consistent records of population changes. The official population statistics from the Department of Provincial Administration, Ministry of Interior show statistics at the sub-district level, not at the local authority of the TAO and municipality. So, data appertaining to some municipalities do not match.

Fourth, presenting visual data in maps at the unit of sub-district proved a great challenge. To start with, in general there is no readymade map shown at this level. Moreover, one has difficulty using different data systems. The 12 local administrative organisations cover approximately 13 sub-districts. This is because the local administrative border and the sub-district border are not the same. In these 12 local administrative organisations of 6 districts, some are TAO and some are municipality.² Some municipalities cover more than one sub-district or parts of a few sub-districts; therefore, data overlap with the sub-district map. Fortunately, the Provincial Department of Public Works and Town & Country Planning has used a map of Chiang Mai for its sub-district boundary. Even though this GIS data is as yet incomplete, and cannot be taken as official, it helps when using other statistical data to visualise them in map form. Details of the covered area of each local organisation are shown in the table below.

¹ TAO = Tambon (sub-district) Administrative Organisation. In 1994, concomitant with the decentralisation policy, sub-districts were transferred to become TAO, an autonomous organisation. The organisation's leader is directly elected by the people in the area. TAO can manage its own income (collected from the area such as land and other service taxes which are used for local development) without following a command from the government.

² Sub-district Municipality (Municipality here) constitutes another autonomous organisation at the subdistrict level. It is densely populated and gains more income than the TAO. In general, a municipality covers a whole sub-district. However, some municipalities cover parts of several sub-districts. This can happen when one municipality is established and annexes some areas of the TAO or municipalities so that it reaches the criteria. Some qualified TAOs do not want to become municipalities. This depends on how people in the area will decide as taxes tend to increase and the administration will be further distanced from the people than the TAO.

Table 3.1: 12 local administrative organisations in 13 sub-districts of peri-urban Chiang Mai

Administrative organisation	Districts	Area covered
Chang Phueak TAO	Mueang	Part of Chang Phueak. Note: Chang Phueak is divided into 3 administrations, one TAO in the peri-urban zone and the other two in Chang Phueak and Nakorn Chiang Mai municipalities in the urban zone.
San Phi Suea TAO	Mueang	Whole sub-district
Don Kao TAO	Mae Rim	Whole sub-district
Nong Chom TAO	San Sai	Part of Nong Chom
San Sai Luang Municipality	San Sai	Parts of San Sai Luang, San Phranet, Pa Phai, and whole area of San Sai Noi
San Phranet Municipality	San Sai	Parts of San Phranet and San Sai Luang
San Klang TAO	San Kamphaeng	Whole sub-district
Chaiya Sathan Municipality	Saraphi	Whole sub-district
Nong Phueng Municipality	Saraphi	Whole Nong Phueng and part of Yang Noeng
Tha Wang Tan Municipality	Saraphi	Whole sub-district
San Phak Wan Municipality	Hang Dong	Whole sub-district
Nong Khwai TAO	Hang Dong	Whole sub-district

Apart from the challenges associated with procuring statistics to show in maps, several data were difficult to access and needed personal communication and willing local officers. Gaining access to statistical data at the local level required local

staff to search and compile the material. This took time and required follow up on more than one occasion. A good interview with the owner of a housing estate could be achieved through friends, or connections of friends; otherwise, it was difficult to gain valuable information. Base maps of sub-districts were also made available through good friendships. Making maps required the learning of map software, ArcGIS. Fortunately, student cohorts at the University of Sydney helped me reach a level of being able to use basic features in the program to present maps in this thesis. Thus, most of the maps that appear in this work were constructed by the author unless otherwise referenced.

In sum, even though collecting data at the macro level to gain a good picture of changes in the area posed some difficulties, valuable understandings and experience were gained. In addition, my acquiring of statistical data from the local officers may have encouraged them to personally start checking, using the data for their purposes in the future.

3.3 Chiang Mai



Figure 3.2: Map of Thailand

Chiang Mai, which is located in the north of Thailand, is the centre of all forms of development, business, education, transportation, health care services, tourism and culture. Its geographical landscape has attracted various groups of people to move into the area, especially into its urban and peri-urban zones. This has resulted in rapid urban expansion, gradually extending into rural areas. In this section, I will provide a background and factors relevant to the transformation of peri-urban Chiang Mai.

3.3.1 Location and Characteristics

Chiang Mai, which is located in the north of Thailand, is the country's second largest province (20,107 square kilometres) after Nakhon Ratchasima in the northeast. Its population totals almost 1.7 million people, making it the fifth most populous province of Thailand's 77 provinces. Chiang Mai has 25 districts and 204 sub-districts (Chiang Mai Province n.d.); Mueang, the central district of the province, is located about 700 kilometres from Bangkok, the capital city of Thailand.

Historically, Chiang Mai is more than 700 years old: it is almost 500 years older than Bangkok. An old Lanna Kingdom founded in 1296, it had close connections with Burma (now Myanmar) and Laos, especially through trading. Lanna was ruled by Burma from the mid 16th century to the late 18th century when the local Lanna leader was assisted by the rulers of the Thonburi kingdom and Rama I of the Chakri Dynasty of Bangkok to free Chiang Mai from Burma. Following this, Chiang Mai was loosely administered by Bangkok. In the early 20th century, when European colonialism expanded into the areas, all of the regional cities, including Chiang Mai, were annexed as provinces to Bangkok and became known collectively as Siam. Later, in 1939 this name was changed to Thailand. This annexation transformed the country into a unified, modern state, similar to the colonial countries. Since then, the national development of highways and railways has enabled Bangkok to secure power over the regions.

Geographically, the upper northern region of Thailand is mountainous; e.g. 80% of Chiang Mai is mountainous terrain (Chiang Mai Province n.d.) with several mountain ranges stretching from the north to the south. These ranges are mainly managed as 44 national conservation parks. The lowland of Chiang Mai lies approximately 310 metres above sea level: the highest mountain is 2,565 metres above sea level. Thus, Chiang Mai experiences cooler weather than other parts of the country. Ping, the main river in the area, is one of the major tributaries of the Chao Phraya River, the country's main river that flows from the north to the Gulf of Thailand. The plain area, which is small by comparison, lines the rivers and valleys.

It is used mostly for fertile agricultural purposes, and is of some importance to the urban and peri-urban zones.

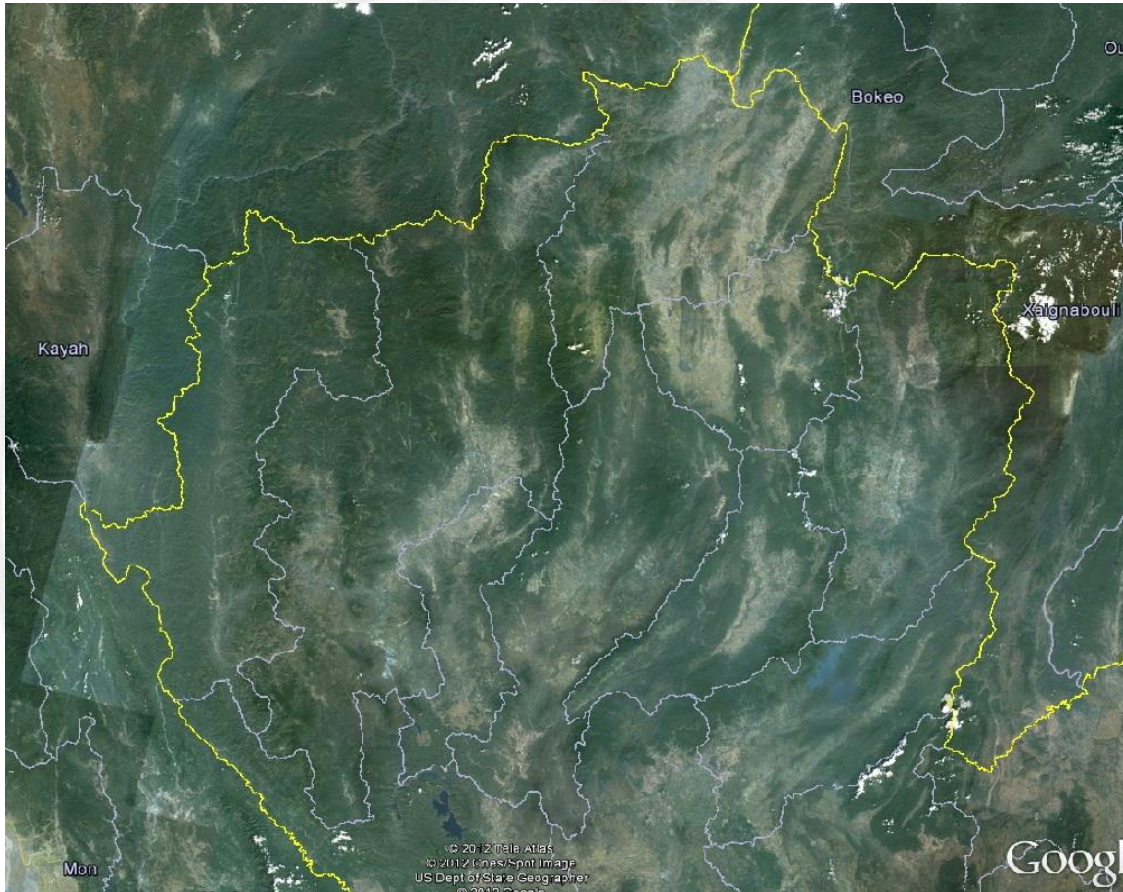


Figure 3.3: Topographical map of Chiang Mai and the upper northern provinces, Thailand

3.3.2 Demography

Northern Thailand, which shares borders with Myanmar and Laos, is home to diverse ethnic minorities. The dominant ethnic minority groups in Chiang Mai are: the Karen, Hmong, Lahu, Akha and Shan. The table below shows data from the National Statistics Office (National Statistical Office of Thailand 2012b), indicating that there were 343,092 ethnic minority peoples in Chiang Mai in 2009, with some living in the urban and peri-urban districts of Mueang, Mae Rim and Hang Dong. Mae Rim and Hang Dong districts, which are partly in the hills area, have large areas containing many sub-districts. In 2009, in Mueang district, which is an urban area,

there were 2,507 ethnic minority people, most of whom came from the hills area to trade in Chiang Mai town.

Table 3.2: Ratio of ethnic minority peoples in Chiang Mai from 2001 to 2009

Districts	2001			2009		
	Total	Ethnicity	%	Total	Ethnicity	%
Whole province	1,600,850	239,077	14.93	1,632,548	343,092	21.02
Rural districts	959,291	229,645	23.94	966,564	330,788	34.22
Urban and peri-urban districts						
Mueang	260,961	2,428	0.93	238,460	2,507	1.05
Mae Rim	78,499	6,020	7.67	84,570	8,562	10.12
San Sai	95,168	-	-	113,499	-	-
San Kamphaeng	73,329	-	-	76,611	-	-
Saraphi	75,088	-	-	76,331	-	-
Hang Dong	58,514	984	1.68	76,513	1,235	1.61
sub total	641,559	9,432	1.47	665,984	12,304	1.85

Source: Ethnicity data is adapted from the National Statistical Office website (2012b)

Population data is extracted from Ministry of Interior website

Apart from large numbers of ethnic minority peoples, Chiang Mai has increasingly accommodated a significant number of foreign residents. Table 3.3 lists the foreign population in Chiang Mai who have official registration; that is, they either reside permanently or are long-term residents (for the year 2000 to 2010). It is likely, indeed may be assumed, that the majority of them resides or works in the urban and peri-urban zones. People from America, Europe, the Pacific, and some countries in Asia such as Japan and Singapore, reside in Chiang Mai either for business purposes or because they have Thai partners.

Most of the foreign residents from other countries in Asia, particularly from Myanmar, Laos, Cambodia, Bangladesh and Sri Lanka, are assumed to be labouring workers. The workers from Myanmar constitute the largest group of migrant workers in Thailand; and Chiang Mai is one of the top provinces in the country that

accommodates Burmese workers. Most migrant workers in Chiang Mai from Myanmar are members of the Shan group, commonly called Tai Yai, who speak a dialect related to Thai. They are mainly work in the construction sector. The number of migrant workers has increased considerably: approximately 80% of foreign workers are Asian. Thai labourers are not prepared to accept low wages; for this reason, Thai workers prefer to work in the developed countries. Burmese workers, who live near the border, have filled this labour gap. Another reason is that the Myanmar and Thai governments introduced a policy in 2007 to facilitate workers from three neighbouring countries, Myanmar, Cambodia, and Laos to work in Thailand legally (Office of Foreign Workers Administration 2009). As long as these workers have passports and register as workers in Thailand, they will be protected under the national labour law. Thus, they can work continuously with extensions every 2 years.

Table 3.3: Populations residing in Chiang Mai by nationality between 2000 and 2010

Nationalities	Year	
	2000	2010
Thai	1,437,492	1,619,112
Foreigners	62,635	117,929
Asia	28,632	56,045
Myanmar	(13,208)	(44,844)
America	630	2,120
Europe	718	3,547
Pacific	147	285
Others	20,870	28,851
Unknown	11,638	27,080
Total	1,500,127	1,737,041

Source: Adapted from the National Statistical Office website (2012b)

It is clear that Chiang Mai is home (either temporarily or permanently) to diverse groups of people. It also attracts Thai people from other parts of the country due to its rapid economic development.

3.3.3 Economy

Chiang Mai has become a major centre in the north for various reasons. For example, Chiang Mai has 12 universities and 8 international schools. Chiang Mai University was the first regional university of Thailand to be established (in 1964). As regards health care, Chiang Mai has the best medical facilities after Bangkok. As well, it has 17 consulates to serve foreign visitors and residents (Chiang Mai Creative City 2012). In the area of transportation, trains reached Chiang Mai in the 1920s; the airport was established in the 1950s. In the 1970s, it became an international airport and later became a regional node for international transportation. Because the roads in the area are well maintained and continuously developed, Chiang Mai has attracted huge numbers of people including tourists, business people and academics and other intellectuals. However, the focus of development in general has mostly been upon the inner city area where most of the business and academic institutes are concentrated. Development in the surrounding district towns has been slow.

Chiang Mai, as well as other remote provinces located some distance from Bangkok, has agriculture as a leading economic sector. However, as Table 3.4 shows the GPP (Gross Provincial Product) of Chiang Mai has for a long time been dominated by the service sector that are trading, real estate, education, finance, tourism, and education (Office of the National Economic and Social Development Board 2012). Nevertheless, these services activities are very much concentrated in the urban areas, with tourism prominent in rural areas. Agriculture does not contribute much in term of returns due to (a) the low price of the products; and (b) to the fact that most products are sold in raw form.

Table 3.4: Gross Provincial Product at current market prices (reference year 1995)

Sector	1981	1985	1990	1995	2000	2005	2010p
Agriculture	3,509	2,911	5,758	7,033	7,516	19,387	35,242
Industry	1,937	2,905	5,422	14,507	11,009	18,657	26,760
Services	7,895	12,272	26,052	39,450	47,436	69,086	85,559
G P P	13,340	18,088	37,232	60,990	65,962	107,130	147,561

Source: NESDB with assistance of its staff who recalculated the most up-to-date data.
 Note: Industry includes mining, manufacturing, construction, and electricity and water supply; services include trading, real estate, education, finance, tourism, and education

Data obtained from the Office of Agriculture, Chiang Mai Province (Office of Agriculture 2011) show that Chiang Mai has 12,566,911 rai (20,107 square kilometres) of land in total. In year 2009, Chiang Mai had only 1.45 million rai of farm holding land or 11.57% of the total area. Of this farming land, approximately 35% was in irrigated zones, with most of the farm land dependent upon rain-fed practice.

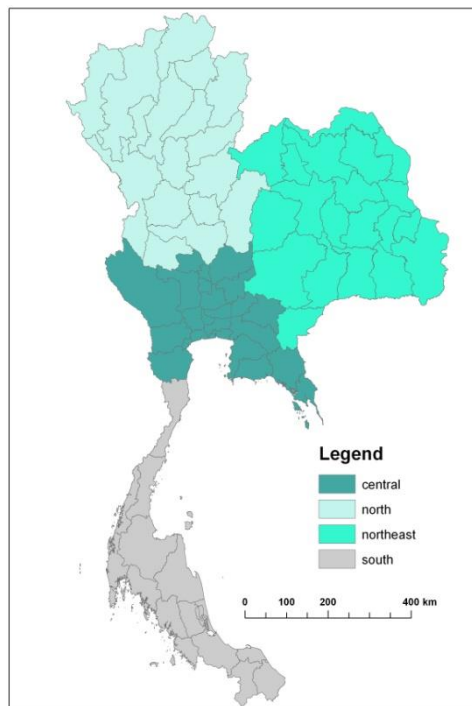


Figure 3.4: Regions in Thailand

On average, the farmland holding size for the whole country in 2010 was approximately 26 rai per farming household, while regionally the centre had 37, the north 25, the south 24, and the northeast 23 rai per farming household. However, among 76 provinces of Thailand, Chiang Mai is the fifth rank of the provinces that have the least area per farming household, with 13.25 rai (Office of Agricultural Economics 2012). All these 5 provinces that have the least land per farming household are in the north because of the physical valley landscape of the

area with limited plains areas.

Concerning farming area of Chiang Mai, paddy, which constitutes the main agricultural fields, is mostly for domestic consumption or trading in Chiang Mai and with neighbouring provinces. With the exception of orchards, farming area in Chiang Mai in general showed little increase over the last decade (2000-2010); in fact, farming land of all type steadily decreased. Rice fields have shown overall decrease, perhaps most drastically in the urban and peri-urban zones (see Table 3.5). Only in San Kamphaeng district have rice fields increased. An official at the Chiang Mai Provincial Agricultural Office explains that since the government has introduced the policy to support rice farming, it has encouraged farmers in sub-districts distant from the urban and peri-urban zones to expand the rice fields (Napatarawimon Yingyote 2012)³.

Table 3.5: Change of rice-planted areas by district between the years 2000 and 2010

Districts	Rice area (rai)		Change	Orchard area (rai)		Change
	2000	2010	%	2000	2010	%
Mueang	3,721	2,479	-33.38	4,917	2,223	-54.79
Mae Rim	20,195	19,404	-3.92	7,360	10,280	39.67
San Sai	34,009	21,325	-37.3	9,304	11,596	24.63
San Kamphaeng	35,100	50,584	44.11	3,355	4,275	27.42
Saraphi	12,117	5,621	-53.61	24,970	26,933	7.86
Hang Dong	22,291	15,522	-30.37	10,602	16,712	57.63
Urban and peri-urban districts	127,433	114,935	-9.81	60,508	72,019	19.02
Rural districts	425,811	400,851	-5.86	267,381	388,791	45.41
Whole province	553,244	515,786	-6.77	327,889	460,810	40.54

Source: Adapted from web site of Office of Agriculture, Chiang Mai Province (2011)

In addition, labour used in the agricultural sector is also decreasing rapidly due to improved agricultural technology (Office of the National Economic and Social Development Board Northern Region 2004). An interview undertaken at the

³ I suspect that this figure is erroneous nonetheless, but this local authority believes it is correct.

Provincial Office of Agriculture, Chiang Mai revealed that rice farming will continue to decrease because the major plains areas in the peri-urban zones are being converted into residential areas. Moreover, some paddy lands adjacent to the residential areas have problems with blocked water channels. As a result, some farmers are converting their rice fields into orchards. Additionally, in 2015, when the region becomes part of the ASEAN Economic Community, and ceases charging tax at the border, cheaper rice from neighbouring countries will dominate the rice market in Thailand. Thus, even though the price of the rice is high in 2012, it is not stable, being dependent on the policy of each government. Therefore, rice fields in Chiang Mai may keep decreasing (Pichet Chaiyarit 2012).

Regarding the current farming situation in the district level, the Table 3.6 shows that among the total number of 663,240 households, 164,512 households are farmers (or 39.26%). Almost half of total households are crowded into the districts adjacent to Chiang Mai city which are Mueang, Mae Rim, San Sai, San Kamphaeng, Saraphi, and Hang Dong districts. However, only 11.52% of these households are farmers. Unfortunately, there are no statistics relative to previous decades showing the changes in farming in each zone.

Table 3.6: Farming land and households in different district zones

District	Total area	Farm holding land	% of farming area	Total HH	Farming HH	% of farming HH
	rai	rai				
Urban and peri-urban districts	908,419	239,008	26.31	320,160	36,884	11.52
Mueang	95,244	9,517	9.99	132,796	2,441	1.84
Mae Rim	277,271	47,573	17.16	33,760	7,069	20.94
San Sai	178,137	59,232	33.25	52,310	8,077	16.06
San						
Kamphaeng	123,646	51,784	41.88	34,230	8,402	23.62
Saraphi	60,911	32,379	53.16	30,626	5,073	16.56
Hang Dong	173,210	38,523	22.24	36,438	5,815	15.96
Rural districts	11,646,512	1,596,417	13.71	343,080	134,697	39.26
TOTAL	12,566,911	1,835,425	14.61	663,240	164,512	24.80

Source: Adapted from the web site of the Chiang Mai Provincial Agricultural Office

Data: Agricultural land and household from Office of Agriculture, Chiang Mai

Province, 15 February 2011; total households from Ministry of Interior at 31

December 2010

In sum, over its long history, Chiang Mai has established cultural distinction from the other parts of the country. The north, including Chiang Mai, has been regarded by the centre as having sophisticated traditions, with people of local background and attached to agriculture. The northern dialect is perceived as a pleasant dialect, second only to the official central Thai, according to what is often shown in the Thai mass media. In addition, due to rich natural landscape and enjoyable temperature, urban people from outside generally regard Chiang Mai as more impressive than other parts of the country for living and working in. They bring with them economic capital for investment in housing, and moreover the rapid increase in land prices generated by the popularity of the area for housing also generates new capital amongst local landholders who have been selling off inherited

agricultural land. Furthermore, the city and countryside are located very close to each other; within half an hour, people can commute from a busy shopping area in the inner city to areas of the countryside with the paddy fields, orchards, mountains, waterfalls and conservation areas. Apart from this, Chiang Mai is also a northern centre for business and development facilities. Therefore, for all these reasons, Chiang Mai has attracted people from various social groups and places.

3.4 Peri-urban Chiang Mai

The above admixture of urbanity and rurality has created certain characteristic landscapes, both physically and socially peculiar to peri-urban Chiang Mai. There are particular influential factors that determine the characteristics. One of the significant results of peri-urban development has been the in-migration of different social groups. In this section, I will discuss the transformation process of peri-urban Chiang Mai, focusing mainly on significant factors of the in-migration of several social groups into the area, and how they are connected to the city by road networks, natural landscapes and backgrounds, and the mega development projects of each area. These conditions have transformed the former agrarian landscape and rural economy of the area into a fast growing peri-urban zone based upon an urban-oriented economy and a mixture of social classes. More details about the transformations and class are discussed in detail in the following chapter.

In order to understand the in-migration that increasingly defines the peri-urban zone around Chiang Mai, it is also useful to consider the wider context that lies behind such migration. Perhaps the most generalisable political-economic context of peri-urban growth is uneven development in Thailand and even between Thailand and its neighbours. On the one hand, we see movement in of those with limited economic opportunities in more remote rural areas and who are seeking to move out of agriculture. This also extends to migrants from Myanmar. On the other hand, the affluence of the city and the values that go with it help to explain the movement of middle class people into the peri-urban countryside. Again, this extends to foreigners as well as to those born in Thailand.

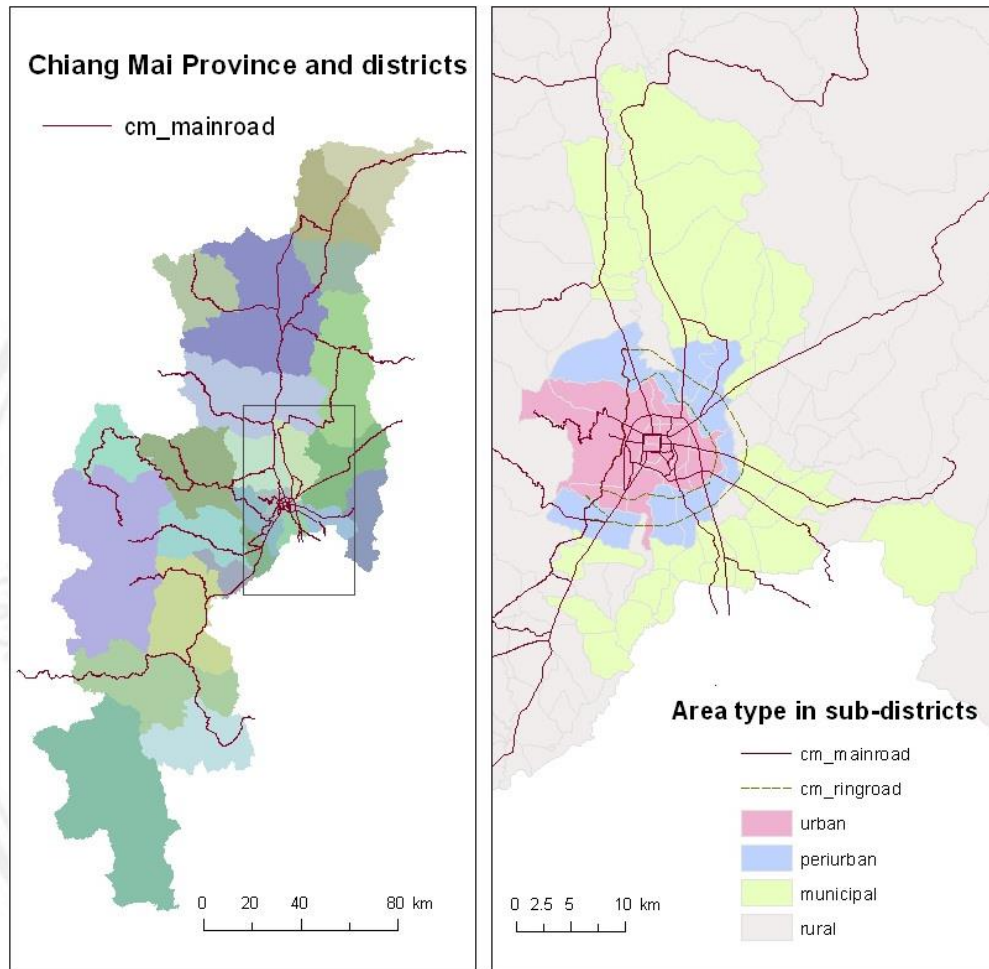


Figure 3.5: Maps of districts and area types in peri-urban Chiang Mai

In this study, the area under consideration is divided into 4 zones: urban, peri-urban, municipal and rural zones. The urban zone covers most of Mueang District in the core of the inner city: the peri-urban area is the area surrounding the inner city. ‘Municipal’ refers to the sub-districts located next to the peri-urban area that gained municipality status when they reached the required level of population and income. This municipal zone has the potential to be incorporated into the peri-urban zone; therefore, it is split from the rural area. Several TAO are now slowly gaining more income and will soon become municipalities.

3.4.1 Road development

The road system in Chiang Mai city is shaped like a spider web. The inner city in the middle square is surrounded by a moat dating back to the old Lanna. Roads stretched out from the centre square to the surrounding districts. Three ring roads connect the main roads together. This road network, together with the rapid economic growth of Thailand as a whole, will determine the direction of physical growth of Chiang Mai. These main roads have been built by the central government as part of the overall growth plan for Chiang Mai. The local sub-district authorities are mainly responsible for improvement of small roads in the villages.

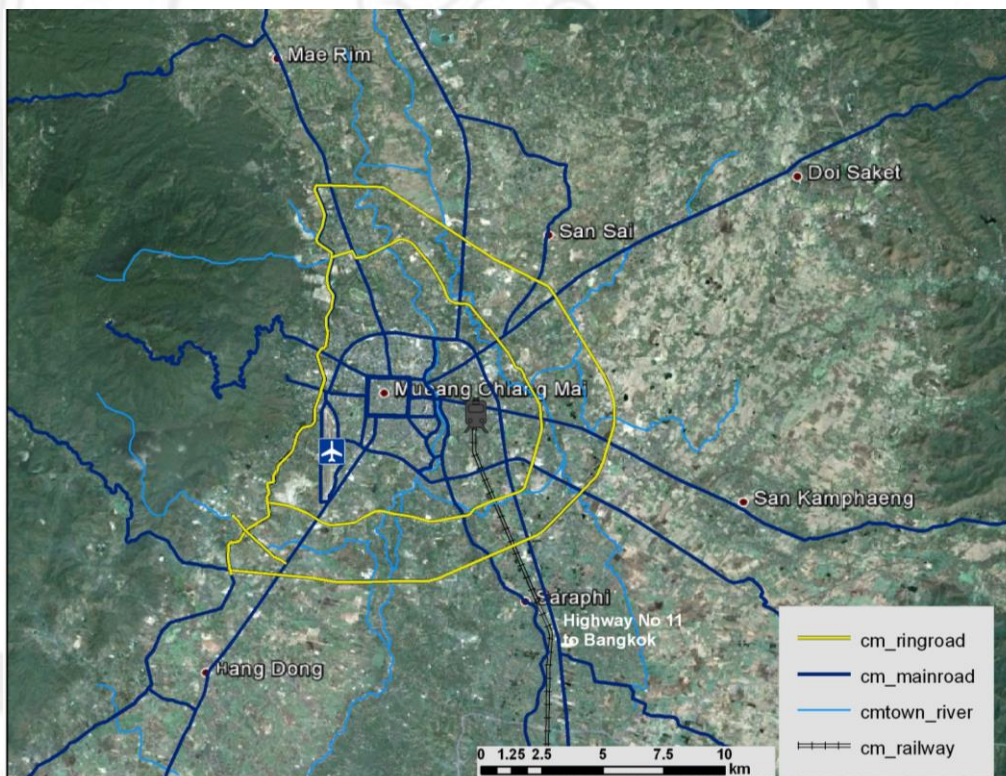


Figure 3.6: Map of main roads and ring roads in peri-urban Chiang Mai

Before Chiang Mai was annexed by Bangkok, there was already a road connecting the northern and central regions. This two-lane road, which stretched from the central part to Myanmar, was built in 1895. The northern national highway (Road No. 11) reached Chiang Mai in 1968. At that time, the only main roads connecting Chiang Mai city and its surrounding districts and neighbouring provinces

were in basic condition. These old routes to Bangkok in the south were linked to the road to Mae Hong Son Province and Myanmar. The road to the west led to Samoeng District; the road to Fang District in the northwest; the road to Chiang Rai Province in the northeast; and, the road to San Kamphaeng District in the east. These main roads were gradually improved, became paved and were expanded to accommodate more lanes from the late-1900s onward.

Later ring roads were steadily developed. A Provincial Highway official explains a common process of road planning, that the Chiang Mai Department of Public Works and Town & Country Planning (DPT), sets a rough plan for the physical development direction of the town such as zoning for commercial, industrial, residential, agricultural, and conservation areas, and to include tentative new roads in the plan as a guideline. The DPT sends this plan to all of the relevant provincial government ministries. Regarding transportation development, the Ministry of Transportation, when requested by the province, will consider the possibility and construct the road. The road line follows the DPT's guideline but has to adjust and negotiate within the expropriation process at ground level. Agricultural areas are more likely to be converted as they are cheaper than business or residential areas. Land owners will receive money according to official rate of each land type, which is updated every few years. However, because the official rate is lower than the market rate, negotiation can take a long time and affect its cost, shape and continuity (Somchai Ingkatirawat 2012).

To date, there are three ring roads in Chiang Mai which were built at different times. The inner one, which is about 7 kilometres in length, was built to connect with the main highway (Road No. 11) and completed in 1977. It is within a radius of approximately two to three kilometres from the inner city. The middle ring road which comes under the Department of Rural Roads is 26 kilometres in length. The outer ring roads are 32 kilometres long and come under the Department of Highways. The middle and outer ring roads come within a radius of approximately 3-7 and 7-10 kilometres from the inner city, respectively.

Both the Provincial Bureau of Highways and the Provincial Department of Rural Roads, which were jointly in charge of the construction of these roads, received their budgets at the same time in 1993. However, they took approximately a decade to complete (2005). The middle ring road was built continuously section by section, starting from the north, then to the east and finally to the south. The outer ring road, on the other hand, started in the south and continued to the north, being constructed in somewhat patchy style. This was because some sections required long negotiation for land expropriation. In addition, the outer ring road was first built temporarily from asphalt and without road shoulders. The shoulders expansion and surface improvement were completed later. The development around both of the ring roads occurred in directions related to their different locations of road completion.

Both the middle and outer ring roads have an irrigation canal road that joins them together. The canal road runs north to south from Mae Rim District in the north, through Mueang and Hang Dong districts, and ends at San Patong District. This road was developed from the old two-lane road into four lanes in two sections. The upper part connects Chiang Mai city with the sporting complex built for the SEA Games (Southeast Asian Games) held in Chiang Mai in 1995. Then in 2004, the lower section, from Suthep Road to the outer ring road at the intersection with the road to Samoeng District in the west, was extended from a one-sided two-lane road at the city side to four-lane roads on both sides of the canal. This was to facilitate the government's Night Safari project and a vast national Royal Flora Expo that opened in 2006. Having these mega projects in the area also brought transportation and rapid development to the area. The road along the canal at the last section has been improved on one side of the canal to the city further down to San Patong District in the south. The road on the other side of the canal in this section is already subject to planning. During my interview with a Chiang Mai Highways official in early 2012, he revealed that a discussion of initiating the new fourth and fifth ring roads had started during a visit by the cabinet. These ring roads would be approximately two to five kilometres from each other. However, as yet there has been no official announcement; but, this news has already increased interest in the land market.

At the time of this research, the area along the long-established main roads connecting Chiang Mai to other districts and provinces had been completely occupied by business groups and some housing estates. The newer ring roads and the canal road are mainly dominated by recently completed residential estates and diverse commercial business buildings. Businesses include shops, restaurants, garages, entertainment facilities and schools designed to serve the new residents. However, these ring roads took a decade to be completed; so, there is still some temporary use of areas along the road, especially those located far from intersections, communities and markets. These businesses take the form of small, temporary thatched roof stalls such as plant shops, small local food outlets, karaoke bars and local drinking kiosks rented out from the real owners, who have occupied the land but do not as yet have an urgent development plan. These small stalls are somewhat characteristic of new road development in Thailand. When the area becomes more crowded, these temporary stalls will gradually be replaced with permanent low-rise commercial buildings.



Figure 3.7: Temporary shops along the ring road (2013)

In this picture, they are small restaurants and behind there are houses in one gated community.



Figure 3.8: Temporary shops along the ring road (2013)

In this picture, they are karaoke, car care, and small accommodation.

As regards the zones located away from the main and ring roads, including areas around the local communities, the continued existence of disused or remaining active agricultural field was noted. However, there is a strong likelihood that most of these remaining agricultural fields have already been bought and belong to outsiders. With reference to the existing active rice fields, normally it is the case that the land is below road level, and, because the owners have yet to fill it up, they rent it out to local landless farmers, many of whom are ethnic minorities.

In cases of land development in newly-developed areas, the usual process is that business groups are already aware of impending development of transportation routes through their connections with local politicians and officials during the planning phase. Meanwhile other groups, including the local people, tend to hear by word of mouth or when they are faced with the actual construction, and even then, the details remain unclear. Business groups, especially the housing estates, usually aim for a large area. This means that many small pieces of land, mostly agricultural fields, are compiled as one whole section, large enough to accommodate a housing estate

project. However, due to the nature of the valleys in the north, the household holding size of farming land is quite small; therefore, buyers need to recruit local agents so that they do not have to cope with complications such as price negotiation or unwilling land owners. There are many cases where some land owners, especially those whose lands are in the middle of other pieces of land owned by persons keen to sell, want to keep the lands but their neighbours and or the local land agents encourage or sometimes force them to sell and in this way everyone receives money. The shape of the gated communities is hardly a neat straight line; it is rather a zigzag pattern following the shape of the rice fields formed by water channels following land contours. Most of the housing estate groups obtain permission from the province, then fill up their lands and start construction. Some owners have kept their land for a while and rent it out to local or landless ethnic minority farmers. Then again, there are cases of individual buyers who buy land for speculation. Some sell the land quickly while others keep it as a long term investment. They rent out the land for some years until the land price reaches their expectations.

However, the construction of ring roads was not the sole reason why outsiders bought land in this zone. An earlier, substantial number of outsiders bought land in the area during the national economic boom. When the cold war in the region ended, Prime Minister Chatichai Choonhavan (1998-1991) announced his leading regional economic policy to transform mainland Southeast Asia from the battlefield to the marketplace. Several infrastructure projects were approved as Thailand became the fifth Asian tiger, along with South Korea, Hong Kong, Singapore and Taiwan. Land speculation occurred country-wide but more heavily in well-developed provinces and cities like Chiang Mai, especially around the peri-urban zone. At the time, only main roads connected the city to the districts, but people believed that Chiang Mai would grow rapidly. From interviews with several local authorities, they recalled that a number of business groups, and middle class people from big cities like Bangkok and Chiang Mai, bought considerable amounts of land at the time. Business groups procured big plot of land mainly for housing estate development. Some were gradually built and some are now abandoned land or active rice fields.

There was another type of land trading at that time. Several land agents would organise affordable land plots and sell them to individual middle class urbanites. They developed land by buying plots from villagers, cleared and filled the land up, then divided it into smaller sizes with proper shapes rendering them both practical and affordable for individual buyers. Most individual buying at that time was for investment. Some buyers, especially those from other cities, had not even seen the land when they bought it. Some of this land was later sold. Some still lies abandoned and has become a problem for local administrative organisations when there are cases of fire and garbage dumping. Some of the individual buyers include officials or lecturers in Chiang Mai who aim to make them their own residences after their retirement.

3.4.2 Demographic changes

As a result of road development in peri-urban Chiang Mai, residential areas and urbanity have expanded rapidly. This is evidenced in the demographic change which shows close relations with periods of road development. In addition, as the urban areas have been expanded, household sizes have changed drastically.

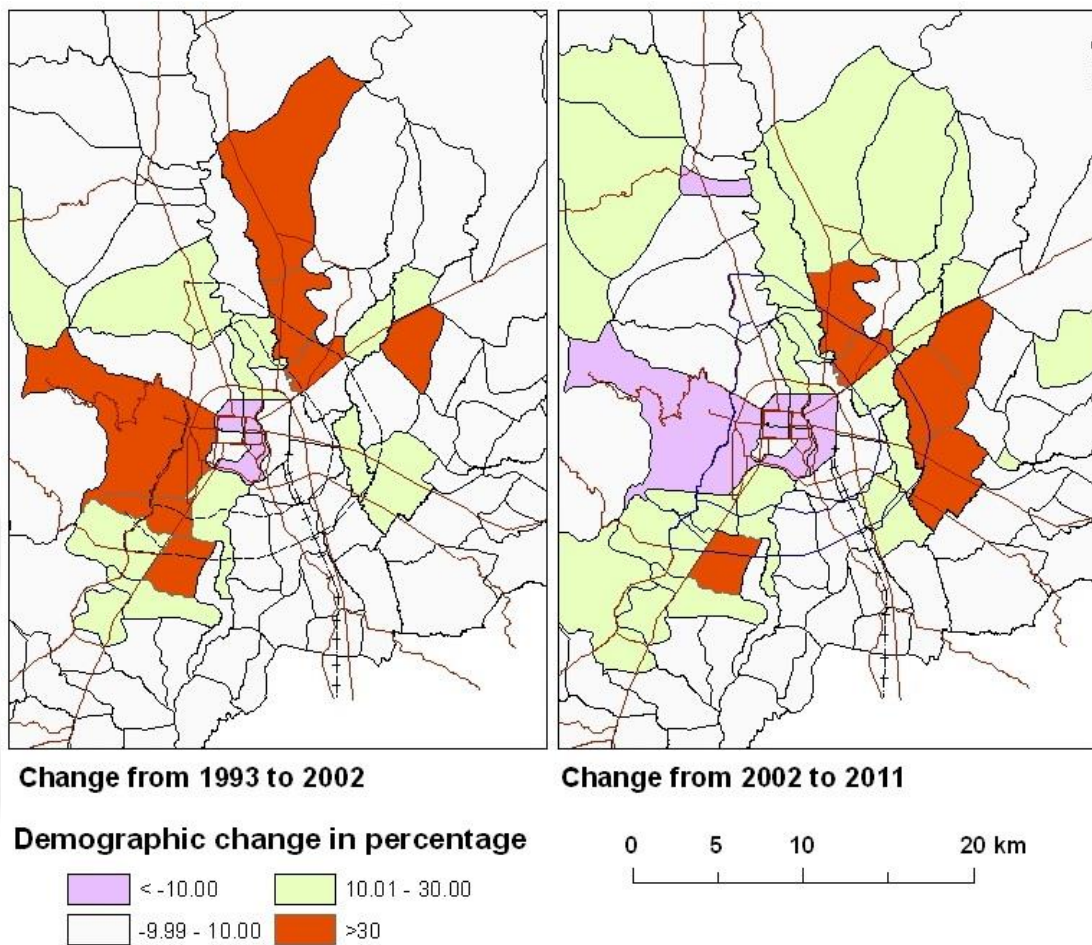


Figure 3.9: Map of demographic change in each sub-district

From the above maps, it may be seen from that demographic change occurred between from 1993 and 2002, before the middle and outer ring roads were completed. The area the main roads in the north and in areas in the west, especially near the urban and south areas, increased more than 30% while population in the inner city or urban zone decreased in some parts. Then, in 2011, when the ring roads were finally completed (2005), the peri-urban area on the east, which marked the final section of ring road construction, increased significantly while population growth in the earlier high growth areas (in 2002) was slowing down. This high population growth section in the east and northeast in San Sai has so many housing estate projects under construction that population growth is rapidly burgeoning.

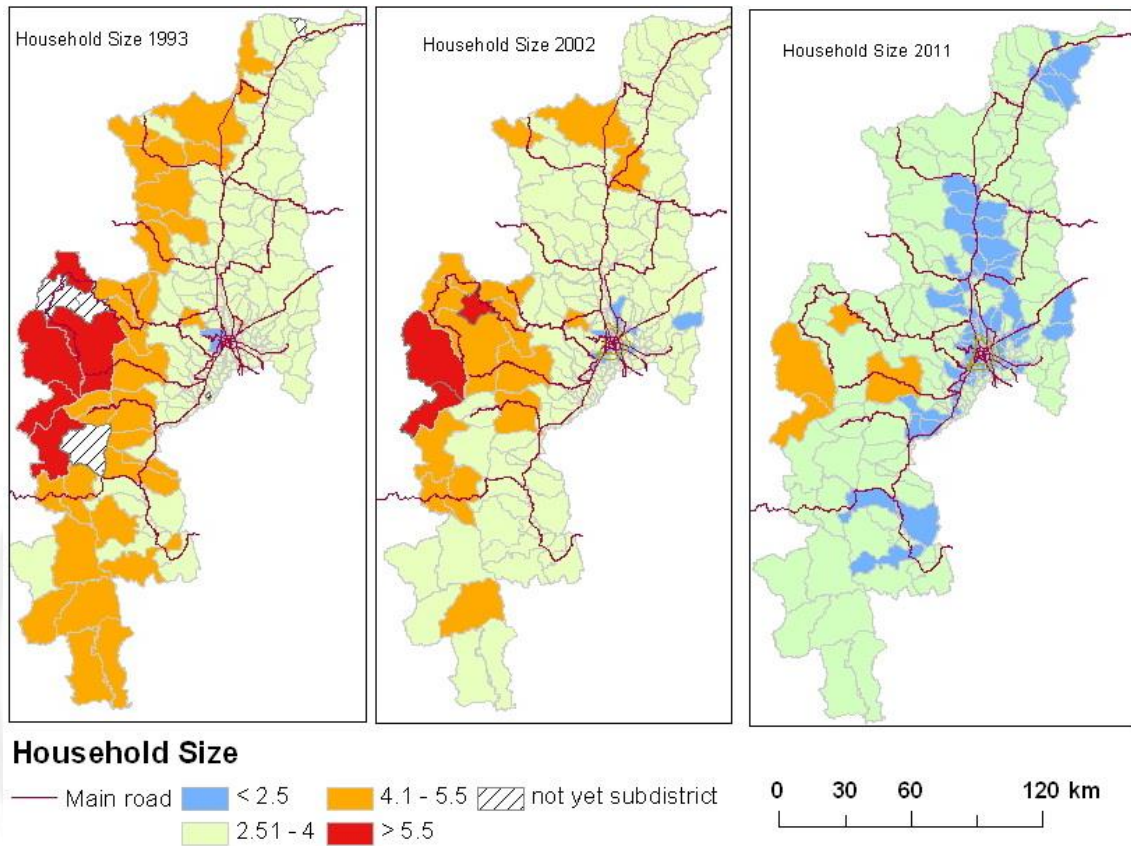


Figure 3.10: Maps show changing household size in each sub-district

It is clear from the above map that household sizes for almost the whole province are getting smaller (marked by the lighter colours, especially the areas in the urban, peri-urban zones and the area along the main road in the north). This may imply that ways of living and occupations have changed. Agriculture is less labour intensive; and former farmers or their children are changing their occupations to off-farm activities. Regarding the urban and peri-urban areas, there is an additional important factor of the high rate of in-migration. Urban dwellers tend to have smaller sized households than farmers. Many couples do not have a child and some dwellers remain single. This point will be discussed further in the case study in the following chapter.

3.4.3 Physical characteristics and conditions of peri-urban area

Apart from the transportation networks that heavily influence demographic change in the peri-urban zone, each particular area in peri-urban Chiang Mai has some distinct physical characteristics and conditions that determine the decision-making of certain groups of newcomers who migrate into the area.

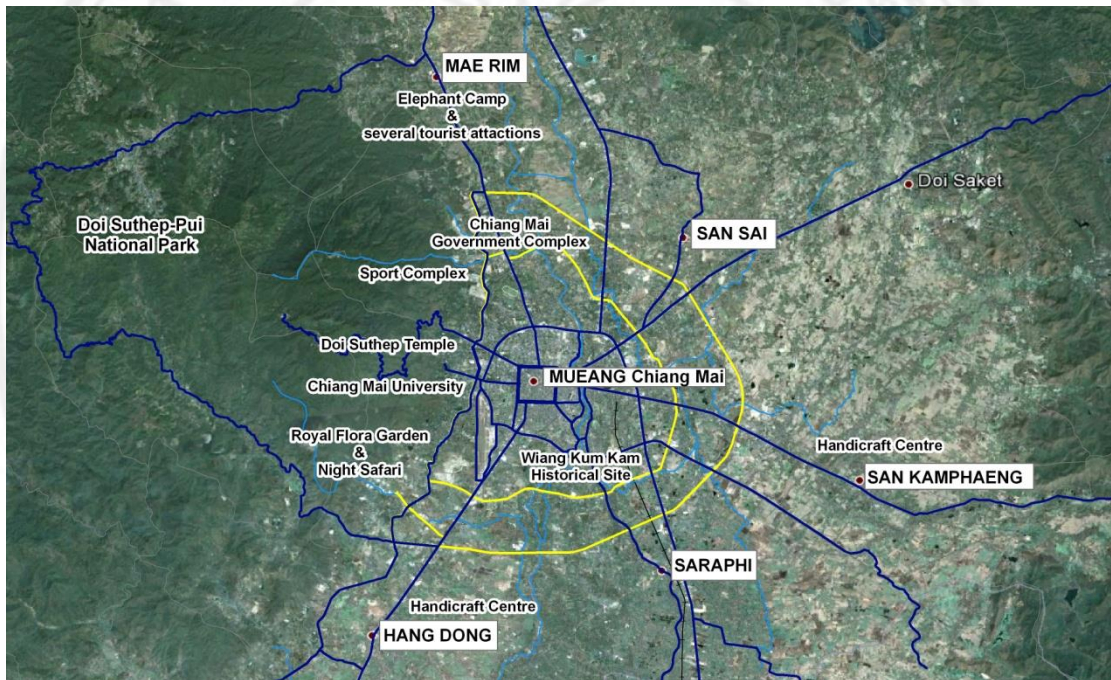


Figure 3.11: Physical landscape and important attractions in peri-urban Chiang Mai

The above topographical map shows the physical landscape and important attractions of urban and peri-urban zones. The inner city is located in the plains area, very much to the west near the foothills of Doi Suetep-Pui National Park. Several important places including Provincial Government Complex, Doi Suetep Temple, Chiang Mai University, Royal Flora Garden, Night Safari and the airport are also located on the west side of the city, making the west of Chiang Mai more crowded than other parts of the plains area.

Local administrative authorities confirmed in interviews that not only in the peri-urban zone, but also in another 3 northern sub-districts of Mae Rim District,

areas in valleys at the edge and foothills of Doi Suthep-Pui ranges, and the rivers that flow through the areas, provide a very attractive landscape for more affluent people undertaking lifestyle in-migration. The National Park in the above Figure, which is surrounded by road, is located in the north of Mae Rim District and extends to the west, and down in a circle to Hang Dong District in the south. Some ethnic minority villages are located here. The area is hilly and cooler than lowland Chiang Mai, and several Royal Projects are helping the villagers to grow different varieties of winter fruit and vegetables. There are also several tourist attractions, elephant camps, gardens, attractive resorts, restaurants and coffee shops dispersedly throughout the area. Urban upper to middle class groups and foreigners, often from Bangkok, have established second homes here. They come to stay, albeit only sometimes during the winter each year. Some retired urban middle class families, who can work from home such as artists and writers and do not need to travel to town very often, prefer to have their houses far from town and closer to nature.

Regarding the area in the peri-urban zone located at the foothills of Mae Rim District, it was noted that this area, along with part of Don Kaeo sub-district and the whole of Chang Phueak TAO, belong to the Army and the Treasury Department and are mainly used either as government offices or residences for their officials. Therefore, there are no business projects or housing estate developments in this area. In addition, the upper hill area of Chang Phueak sub-district is in Doi Suthep-Pui National Park. Hmong communities lived there before the government declared it a national park. This area has been negotiated between the state and the local communities and land use here is strictly for expansion.

Parts of Mae Rim District, Don Kaeo, and San Phi Suea and Chang Phueak sub-districts in Mueang District of the peri-urban zone are also located in this attractive landscape and in close distance to the city and Chiang Mai University. From some areas around the Ping River and its streams one has a beautiful view of mountains and river. The areas attracted many urban middle class people, among them university lecturers, of whom have now retired and live in the area.

In the town area of this zone, several budget dormitories are available for working class groups who work in the area or commute to the city. In the mid-2000s, a business group from Bangkok bought a huge piece of land in the area; but, as yet it has not been developed so it has been rented out for farming. In addition, in 1990, the provincial centre was moved from the inner city to Don Kaeo, and later the border was re-demarcated to come under the Chang Phueak sub-district. Therefore, a number of officials reside in the area. The local authority also suggested that residential areas have replaced approximately 60% of rice fields in the past and that now there is only 2% of rice field left. This change happened steadily but was significant approximately 10-15 years ago. The first generation of housing estate in Don Kaeo, which appeared in the mid-1970s, was mostly for officials and teachers who worked in the city. This housing estate development started prior to other areas in the peri-urban zone as it was located very close to the city. Construction became widespread in the late-1990s. The authority estimated that approximately half of those living in the area now are outsiders.

In the northeast and east of the peri-urban zone (Nong Chom, San Sai Luang, and San Phranet sub-districts) is San Sai District, a vast plains area with a good irrigation system for rice farming. Some of its areas can grow two seasonal rice crops each year. The ring roads in this area were part of the late section of development, and for this reason, the area has undergone considerable large-scale change. San Sai District's agricultural fields have now been converted into several real estate projects. The mountains can be seen from this area, but as they are some distance away, the area does not attract many upper middle class people. However, there have been a few cases where middle class families have bought rice fields that have been partly

filled in, and built houses and made gardens. In addition, they have rented out some rice fields to enjoy them as views.

San Kamphaeng District in the east is an old community area with a long-established road network from the city. The district town is well known as a tourist attraction, including for its various handicraft factories, its ceramics, silk, silverwares and wooden furniture. The district is urban, peri-urban and rural as some of its sub-districts are agricultural. San Klang sub-district is more urban, with only small areas of rice fields. It has 7 large to medium scale handicraft factories and 2 small factories. Most of the local people are wage labourers. They work in the local factories, in the service or tourist sections in the area, and in Chiang Mai city. Most of the housing estates were constructed after the middle ring road in this area was completed in 2000. The rice fields rapidly disappeared few years later. The rice fields that remain in the area mainly belong to local well off families who have sold parts of their land. Large numbers of dormitories serve the workers in the area.

Saraphi District is a long established area with old road connections. It is located in the southeast and is a border between Chiang Mai and Lamphun province where Lamphun contains a big industrial estate in the north. Therefore, numbers of workers from both provinces travel to work there. This zone is also well known for its longan orchards. In Nong Phueng sub-district, 70% of the total agricultural land in the area is in longan orchards and 30% in rice fields. This is because the area lacks an irrigation system so it is not suitable for rice farming. During the period of high land selling and buying rates, many of its Longan trees were cut down. In the Tha Wang Tan and Nong Phueng sub-districts, an archaeological site called Wiang Kum Kam is subjected to ministerial orders that limit the types of business and the height of its buildings. The area around the archaeological site in Nong Phueng sub-district in particular, is adjacent to Nong Hoi, an old crowded urban area along the Chiang Mai-Lamphun road. Nong Phueng has become an extension of Chiang Mai city. Small factories, shops and additional residential places have been built for people who commute to work in both Chiang Mai city and Lamphun. Chaiya Sathan sub-district has 4 main roads surrounding the area; the national highway No. 11 Chiang Mai-

Lampang, Chiang Mai-San Kam Phaeng Road, and two ring roads. Nowadays, the area is being rapidly developed. Regarding landownership, it is estimated that approximately 30%-40% of land in Chaiya Sathan is sold to outsiders.

San Phak Wan and Nong Khwai sub-districts in Hang Dong District are located to the south of Chiang Mai city. This area does not have an efficient irrigation scheme as lots of water is extracted by resort and tourist businesses upstream. Farmers depend mostly on rain fed agriculture. This zone has a nice scenic view of mountains, in particular Doi Suthep temple, which stands on top of a hill. In addition, it is very convenient in transportation from 2 main roads in parallel, Chiang Mai-Hangdong road and the canal road. Moreover, the canal road from Nong Khwai to San Patong District in the south has recently been completed, attracting more housing estates into the area. The canal road that was improved in 2005 to serve mega projects of Royal Flora Garden and Night Safari has been a key factor of land development. The case study is also located in this zone.

In sum, apart from road access, the particular locations and physical landscapes of each of the above areas have been crucial in determining how each social group has established itself in places or have opted to reside. For example, areas around the National Park in the north and west to southwest, which are hilly and have attractive views where road development is advanced, have drawn and been occupied by more affluent groups. The new road development areas in the east, and the mega projects that have followed, have also attracted in-migration by both residents and workers.

3.4.4 Patterns of development and change in peri-urban Chiang Mai

Interviews with local authorities and observation of the above areas have revealed some common patterns of how the peri-urban zone has been transformed. Road connections and mega development projects have been the key conditions. Before the ring roads were constructed (between the mid-1990s and 2005), the main roads connecting Chiang Mai and its neighbouring districts were the main routes of

transportation. A few dirt roads were used to commute between the areas. While areas along the main roads were developed, other areas remained rural. Gray, who undertook a study of peri-urban Chiang Mai in 1990, before the middle and outer ring roads were built, described the area as ‘mainly agricultural’. She noted field of rice and orchards. In areas that had good irrigation, people grew two crops of rice; in the dry season, some grew soybean. In addition, people worked as wage labourers in the fields and in service sector jobs such as construction, shops and garages. Groups of young workers commuted to work on the Lamphun industrial estate (Gray 1990).

The ring roads brought major changes to peri-urban Chiang Mai, changing its rural economy from an agriculture-based to an increasingly urban-oriented economy depending mainly on manufacturing, trade, and especially the service sector. Many local administrative organisation authorities said that they could approximately calculate when the rice fields disappeared and were replaced by housing estate projects in the area. Nowadays, they estimate that only approximately 10% of the remaining rice fields are owned by local people.

The large remaining rice fields in the peri-urban zone are in part owned by a few affluent families; but, most are owned by outside business people who bought the lands on speculation or for future housing estate development. These paddy fields are farmed annually by villagers who are mostly from outside, including landless ethnic minorities from areas located approximately 20-50 kilometres from the fields. These farmers pay a small rental fee of 500-1000 baht or 10 thang⁴ per rai, perhaps nothing at all in a few cases. This is also in the interests of the owner to have their lands cleared annually. There are cases where Hmong families travel approximately 150 kilometres from the hills to rent rice fields in San Phak Wan, suggesting that agriculture has become minimal vis-a-vis the local economy. However, recently the price of rice has been increasing, resulting in fierce competition in some cases. Local farmers living near the area have become re-interested in farming and are replacing some of the ethnic minority farmers.

⁴ one thang is equivalent to 20 litres of rice



Figure 3.12: Sign for selling a big plot of rice fields (approximately 11.50 hectares) along the canal road (2013).

Hmong farmers from Khun Wang (110 kilometres from Chiang Mai town) have farmed here for almost ten years.



Figure 3.13: Hmong farmers transplanting rice in a field along the outer ring road (2012)

Local authorities state that local people do not have a problem with people selling the land and not continuing their farming. In fact, a number of locals plan to sell their lands to outsiders but are waiting to get a better price. During a period of extensive land selling and buying, there was a popular saying: "*kon meuang khai din seu lhek* (steel), *jek* (Chinese Thai or people from other provinces) *khai lhek seu din*" meaning villagers sell land to buy cars while other people sell steel or construction materials. In other words, urban people buy land. Almost every farmer still farming is old now and farms mainly for domestic consumption. The authorities estimate that ten years from now, there will be no more rice farmers in this area.

The younger generation are better educated than previously, so they have more diverse options for occupations that are less tiring and bring a regular income to families. Thus, they are less inclined to work on farms. Off-farm workers have been supporting their older family members and keep farming activities viable.

Interviews with local authorities suggested that generation, education and jobs are highly relevant. People in their 50s, who have only basic primary school education, run private businesses at home such as small grocery stores or dormitories for rent. In the villages, many get money from selling their lands. People in their 40s, who mostly have attained high school education level, often work in the manufacturing or service sectors in town. Some sew garments at home and others become involved in trading. Increasingly, young people in their 30s (or less) are university educated and able to obtain work with regular salaries.

In the past, parents, especially those in the countryside, saw no future in being farmers. Their incomes were not secure and farming had natural risks. In addition, as there was welfare, farmers had no option but to stand on their own two feet. Therefore, where possible, they try to support their children's higher education. Frequently, parents sell their land to fund their offspring's education with the expectation that the latter will become government officials with secure jobs and status that will support both themselves and their parents. At present, the state is providing better welfare for peoples of all classes. However, the return from

agriculture is not as encouraging as the rapidly increasing price of land. People see that the peri-urban zone will gradually become urban both in appearance and socially, whereas the local communities will continue to be rural until the old generation has gone. Given the importance of ‘rurality’ to Thai identity discussed in earlier chapters, this point is crucial and will be discussed in more detail in the next chapter.

3.5 Residential categories of in-migration

Since the area has been developed and has a good transportation network, the rate of out-migration is decreasing while the in-migration is increasing. This is because development has expanded to include good public facilities and created diverse job opportunities. A number of urban middle class people have moved to residences outside of the city. Some have opted for gated communities while others prefer to live in non-urban areas. Some have bought land and built houses in the local villages. Apart from urban middle class in-migrants, the peri-urban zone has also attracted workers from outside areas. In-migrants can roughly be divided into two main groups: homogenous residents who live in the housing estates and in-filling groups who live in the local communities. The in-filling groups are further divided to two groups: the urban middle class, who build houses in the villages, and workers who live in budget dormitories in the villages.

3.5.1 Homogenous residents

Housing estates may be considered homogenous residences as they are determined by filtering factors such as location, price, and style of the estate. Therefore, people who share similar statuses, tastes and living lifestyles tend to select similar residences. There are various types of housing estates in Chiang Mai. The most common form in Chiang Mai is the gated community, a residential community equipped with a gate and a guard to restrict the entrance of outsiders. Condominiums are only found in the urban zones where land is expensive. They have become popular among single, younger people such as university students and those in the early stage of their careers. This is rather different from the case of gated

communities. Initially, they were widespread in the urban areas, especially in the last decade, along the ring roads in the peri-urban zone. When lands in the city became unaffordable and lands in the peri-urban zone are accessible, the gated communities have expanded their projects in this area.

The idea of gated community in Chiang Mai is not based as much on fear of serious crime as is the case in other parts of the world (Brazil, South Africa and Mexico), where high rate of violence is a key to gating in order to protect the residents from the crime outside. In the Thai context, gates and guards at the entrances of the housing estates are more for the purpose of privacy as outsiders and commercial vehicles are restricted, and also partly to represent ‘class’ of the residents.



Figure 3.14: Gated communities in San Sai Noi. (Imagery date 2010)

They are located between the ring roads, which agricultural fields around the estate can still be seen.



Figure 3.15: At the front of a gated community in peri-urban Chiang Mai. The advertising sign is in both the Thai and English languages.



Figure 3.16: The very grand entrance of a new gated community. Seewalee Choeng Doi (Seewalee at the foothills) on the middle ring road
Source: The gated communities' web sites.

Gated communities vary in size; they can be big projects with more than 2500 units or small projects with 10 units. Land releasing for ten units up has first to get the permission of the Provincial Land Department. There is also a wide range of gated communities from the low-end of less than 1 million baht to the high-end of more than 20 million baht per unit, depending upon the quality, size of land, and location. Significant numbers of high-end gated communities are located near the foothills. They have a pleasant view of the mountain. Gated communities in newly developed areas are mostly in the middle range and for people who are in their early working careers.





Figure 3.17: Gated communities with houses priced around 1 million baht (above); and 20 million baht (below).

Source: the gated communities' web sites

Several gated communities advertise their projects for their unique landscape designs, house styles, and projects' names in association with nature and classy lifestyles in order to attract their middle-class customers who search for modernised convenient living surrounded by nature.



Figure 3.18: Picture from the gated community facebook advertising for house styles of English country in Chiang Mai



Figure 3.19: Advertising sign of Seewalee Choeng Doi (foothills), 2013.

The mountain is Doi Suthep and the big lake is man made, converted from rice fields

Table 3.7 below shows the density of area and units of houses of housing estates as percentage of the total area and number of houses in each sub-district.

Table 3.7: Population and gated communities in each peri-urban sub-district (December 2011)

Sub –districts	Sub-district Area (km ²)	Number of Houses	Number of Population	Housing estate Area (km ²)	Housing estate unit	Housing estate area in %	Housing estate unit in %
San Phi Suea	6.35	6343	9853	0.48	971	7.56	15.31
Don Kaeo	35.22	6277	14788	0.21	453	0.60	7.22
Nong Chom	13.46	7812	16181	1.76	3792	13.08	48.54
San Sai Luang	11.07	2652	6729	0.05	141	0.45	5.32
San Sai Noi	6.59	8234	16933	0.86	2470	13.05	30.00
San Phranet	6.71	2940	6725	0.27	584	4.02	19.86
San Klang	6.77	3623	6984	0.06	168	0.89	4.64
Chaiya Sathan	5.27	2520	5156	1.89	1117	35.86	44.33
Nong Phueng	11.68	5854	12220	0.48	1368	4.11	23.37
Tha Wang Tan	12.90	4266	9864	0.14	298	1.09	6.99
San Phak Wan	9.39	5958	11363	1.23	3498	13.10	58.71
Nong Khwai	16.67	6826	9800	1.16	1642	6.96	24.06
Total	165.08	65,501	128,962	8.57	16,497	5.19	26.06

Source: The areas were calculated from the DPT's GIS map; data of registered population and houses are official data from the Department of Provincial Administration (The Bureau of Registration Administration 2012).

Note: Chang Phueak TAO does not have any housing estates because the whole area is under government authority.

The last 2 columns of the above Table (3.8) present the percentage of gated communities in each sub-district, both in area and in house unit. For the house units of gated communities, the numbers are shown in accordance with the land releasing permit; and, there are several housing estates under construction. Therefore, these data are not applicable to the current situation but to the 'soon to be'. The densest gated community concentration in the area is in Chaiya Sathan sub-district with 35.86% of the area converted to housing estates due to roads cutting across the sub-district. Chaiya Sathan has attracted several housing estates. It is important to note that the density of house units in the gated communities of several sub-districts of Nong Chom and Chaiya Sathan and San Phak Wan is more than half of the total households in the areas. This means that there are large numbers of urban middle class people living in the area. In the overall peri-urban zone, approximately a quarter of households are in housing estates; thus, there is a significant mixture of social classes in the area.

The maps below show the density of housing estates in the areas. Similar to the previous Table (3.8), the second column from the last illustrates how the gated communities have expanded over time in 1984, 1993, 2002 and 2011 in the area following the road development. Before the ring roads were concentrated, most of the gated communities were adjacent to the main roads and were quite crowded in some sub-districts (see darker colour in the maps). Then, when the ring roads were constructed, the gated communities gradually expanded into those areas. The last map shows that when the ring roads were completed (2005), the gated communities extended out further in all directions. Some sub-districts marked in black indicate high density of increasing gated communities.

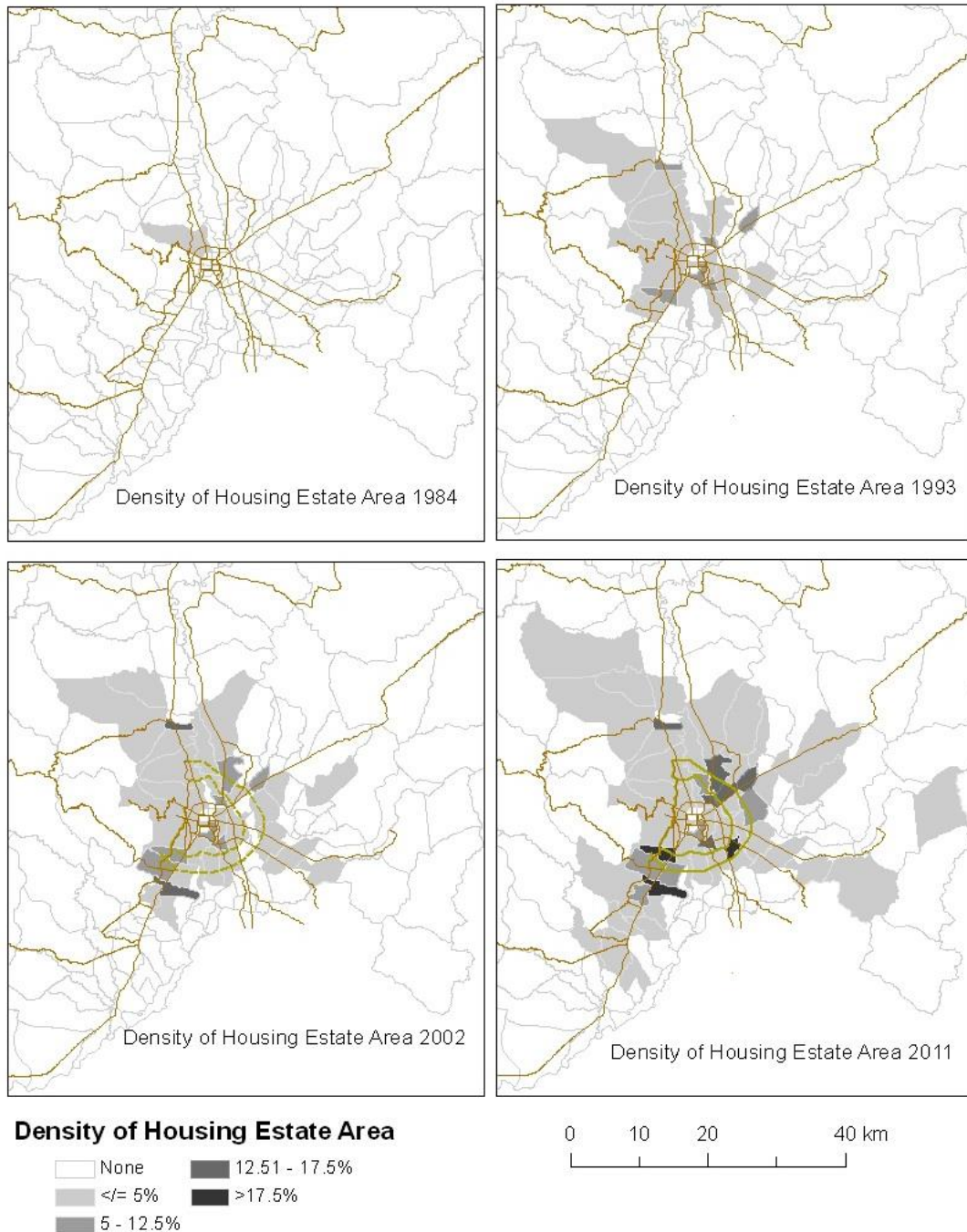


Figure 3.20: Maps of housing estate density in specific areas for each period of time

According to the available data, the early period of gated communities occurred in the urban zone. This was because good road networks were still limited to the inner area, and the demand for residential properties was not yet high at that time. The housing estates in Chiang Mai became popular in the 1990s concomitant with economic boom; but, their numbers sharply decreased from 1997 to 2001 during

the economic crisis that impacted on the region. No projects were undertaken in 4 districts of the peri-urban zone: Mae Rim, San Sai, San Kamphaeng, and Saraphi. From 2002 on, the housing estate business has grown back again and growth as been continued until the present.

Many sub-districts have gained substantial incomes from converting (or trading) former rural fields into estates. Thai local administrative organisations gain income from various sources such as allocation from the government, tax from services in the area, and particularly significant sources are the fee and taxes that accrue from land trading that the Provincial Land Department transfers to local administrative organisations. In several sub-districts, this income is the highest among their overall sources of income. The TAO and municipalities' incomes are spent for development in the area. Some authorities say that sub-districts that still have a lot of agricultural land (San Sai Noi, Nong Chom, Chaiya Sathan, Nong Khwai, San Phak Wan) have the potential for further development. However, the sub-districts that are already crowded are not able to compete with others and their development has had to be slowed down.

Table 3.8: TAO and Municipalities' incomes from land sales fees (million baht)

Year	San Phi Suea	Don Kaeo	Nong Chom	San Sai Luang	San Phranet	San Klang	Chaiya Sathan	Nong Phueng	Tha Wang Tan	San Phak Wan	Nong Khwai
1996	n/a	5.12	n/a	n/a	n/a	n/a	n/a	16.20	n/a	n/a	n/a
1997	n/a	3.94	n/a	n/a	n/a	n/a	n/a	8.74	n/a	n/a	n/a
1998	n/a	2.17	n/a	n/a	n/a	n/a	n/a	2.78	n/a	n/a	3.85
1999	n/a	1.78	n/a	n/a	n/a	n/a	n/a	1.79	n/a	n/a	3.87
2000	n/a	2.27	n/a	n/a	n/a	n/a	n/a	4.28	n/a	n/a	4.39
2001	7.69	2.22	n/a	n/a	n/a	n/a	n/a	2.95	n/a	3.11	3.58
2002	7.81	3.46	n/a	n/a	n/a	n/a	n/a	3.92	n/a	3.58	5.07
2003	8.23	3.62	n/a	n/a	n/a	n/a	n/a	3.66	n/a	8.20	6.17
2004	14.76	11.43	17.33	n/a	n/a	n/a	n/a	5.54	n/a	9.73	10.23
2005	17.28	6.60	18.63	n/a	n/a	n/a	n/a	6.01	6.37	10.80	14.40
2006	14.52	9.94	17.15	n/a	n/a	1.37	n/a	6.87	5.25	9.70	15.02
2007	16.54	6.88	18.07	18.67	n/a	7.85	n/a	6.78	7.33	7.66	12.70
2008	14.31	5.06	11.33	14.35	n/a	4.19	4.28	6.03	8.20	n/a	8.87
2009	7.25	2.69	6.47	7.62	2.15	3.60	2.28	5.73	5.58	5.30	5.96
2010	11.02	6.00	10.55	9.64	2.08	5.06	4.98	6.58	5.67	7.22	5.98
2011	16.00	7.26	23.50	23.36	6.09	10.52	12.54	11.52	8.65	14.34	13.76

Source: Interviews with local administrative organisations.

This Table shows the annual recipients of each sub-district's fees and taxes from land trading in their areas. Clearly their incomes in this category are gradually increasing, especially in 2011. Between 2008 and 2010, the government of that time introduced a policy of reducing fees in order to stimulate the local economies during the 'slow down' period; thus, this category of income was very low.

A large part of the development in the area was attributable to land trading, which was also a large part of the gated communities' development. In addition, the increasing population attracted shops and services such as schools, health care and restaurants to the area, opening up more jobs and facilities that local people from rural

backgrounds could benefit from. Conversely, the large numbers of gated communities in the rural areas created several problems for the rest of the farmers, especially for the rice fields. The waterways became blocked and several areas of rice fields had to be converted into orchards. Other were abandoned or had to be sold. Therefore, the numbers of rice fields decreased in this development expansion zone.

There is a paucity of studies on who constitute the residents in the gated communities in Chiang Mai. However, from interviews with the owner of one gated community, who started his housing estate business two decades ago, and from interviews with local authorities, I ascertained that most of the people who live in gated communities already lived and worked in Chiang Mai. However, they might rent a place until they can afford to buy a house in the gated community. Small but noticeable numbers of male foreigners live with Thai partners. Thai law only allows foreigners to buy property in the form of apartments or condominiums, not houses with land. With the low cost of living in Thailand, foreigners can afford better than average housing and to live comfortable lifestyles. There are some cases of second homes, where urban middle class people built houses mainly in the more attractive zones for seasonal leisure visits. Even though their numbers are small, their land area and house styles are significant in the area. As for gated communities' buyers, if they are Chiang Mai people, they consider location of the estate vis-a-vis convenience of commuting more than the natural landscape of the area. On the other hand, if the buyers are not from Chiang Mai, they may be seeking a beautiful prospect; but location is still a priority especially for the middle-range gated community. There are also increasing numbers of people who buy houses in gated communities for rental purposes and for investment to sell in the future.

Why do people opt for gated communities where every house is the same instead of buying land and building their own styles of houses? In answer to this question, a housing estate owner whom I interviewed explained that the majority of people prefer to live in gated communities because they have good security systems and are well managed. Residents do not have to cope personally with builders and often problematic facilities. Some gated communities have several house styles, so

their customers can select to match their personal preferences. Residents will live in a community with similar groups of people, such as working age, demand for privacy, and economic and social status. He stated that “living in a good gated community is also a sign of being modernised”, a notion which has also become popular with the new generation of villagers, especially with the ones who work outside of the village and prefer privacy.

The prices of the houses in each gated community can define the group very well. For example, take a house costing 3 million baht. If the prospective owners borrow money from the bank, they have to pay a 20,000 – 30,000 baht monthly mortgage. This means that a family has to have at least a 50,000 baht income. To be able to pay for a house, residents are likely to be a couple around 30-40 years old; both will be working; and, many couples these days do not have children. They may be intellectuals, officials, and or company workers. If the house costs ten million baht, they are rich business people, a more mature generation with many working from home. Furthermore, gated community living is quieter and cleaner than living in the village. Unlike the local villages, where outsiders and commercial vehicles can drive through freely, the gated communities have restriction for the outsiders. In addition, most of the people are working and no one wants to know too much about his or her neighbours. The housing estate owner accepts that it is not 100% secure in the gated community. However, the village is in fact not entirely safe and urban people who live there have to be aware of security as well. Because urban middle class houses are very different from local residences, they have become a good target for thieves.

3.5.2 In-filling groups of people

The villages in the peri-urban area have changed a great deal. Almost every village in the peri-urban zone has newcomers residing in the village. This is vastly different from the rural communities in Thailand that only have out migration of villagers. Scrutiny of the villages in this area reveals different house styles such as houses of long-standing local residents who have re-styled their houses, replacing

wood with concrete, leaving little wooden material. Nowadays, there is little evidence of rice barns and farming gear in the area. There are several low budget dormitories owned by villagers. Not too far from the local houses and dormitories, new and distinct houses with proper fences are appearing, indicative of the in-migration into the local villages. In-migration in this case, does not mean people who have married into or have relatives in the village; rather, it means people from outside who have become residents in the community.

These in-filling groups of people can be divided into two main groups according to their backgrounds and reasons for moving into the area. They include: (1) urban middle class newcomers who buy land and build houses; and, (2) the workers who live in dormitories in the village. In the next section I discuss who they are and what they do.

1) Urban middle class newcomers

There is no specific statistical data about urban middle class newcomers at every level. However, some pictures and understandings could be formed from interviews with local authorities and from the case study. As suggested above, physical landscape, location, and price of land were crucial to decision-making. The area with a pleasant view, especially near the river, is more expensive and was occupied by the higher class group. Location and facilities in the area, especially the internet were important factors.

Newcomers have bought land in the village mainly through local agents, who could be local leaders or others in the village. The more affluent urban middle class tend to buy bigger pieces of land, 1-3 rai, while the average urban middle class group bought less than one rai. In cases where they bought abandoned rice fields, if the size was too big, they formed a group and bought the land together and divided it later. However, even though their houses were in the village, they opted not to locate in the middle of the community and mix with the local villagers; rather, they chose the edge or near the agricultural fields for reasons of privacy. They were in their late 30s and

had clear individual identities. Among them were university lecturers, Non-Governmental Organisation (NGO) development workers, artists, writers, retired officials and foreigners with Thai partners. Local officials mentioned that most of foreigners' Thai partners came from other provinces. Some local land agents noted that several foreigners occupy big houses at the fringe of the forest conservation area where there is no land title. This group had opted for a nice, quiet corner. They were individualistic and did not maintain contact with their local neighbours.

2) Workers

Budget dormitories are common in the peri-urban zone due to development and the increase in numbers of new jobs available in the area. For many, it was easier and cheaper to live in the village and commute to work in the city. They are budget rooms costing about 800-1200 baht per month. Those who stay in this type of residence are mostly young, between 20 and 30, and are from the more remote areas of neighbouring districts and provinces. Many of them are ethnic minorities: some work in the city and some work on the project sites in areas nearby. These dormitories are often located in the middle of the village where the local owners have divided their land to build dormitories.

Migrant workers in Chiang Mai, who mostly are from Myanmar, constitute another group of workers residing in the village. In the whole of Chiang Mai in 2010, there are 68,371 recorded migrant workers (Office of Foreign Workers Administration 2011). Almost half of these work in the construction sector, then the agriculture sector and the service sector respectively (Chiang Mai Province n.d.). Many workers stay in temporary sheds following the construction sites. Some stay in working camps organised by the local construction contractors and some in dormitories if their work is more permanent.

Table 3.9: Number of owners and dormitory rooms in each local administration

Number of	San Phi Suea	Don Kaeo	Nong Chom	San Sai Luang	San Phranet	San Klang	Chaiya Sathan	Nong Phueng	Tha Wang Tan	San Phak Wan	Nong Khwai
Owner	197	100	115	173	55	51	79	65	45	59	190
Room	971	460	1,031	1,567	516	382	643	950	321	467	792

Source: Data collected from each administrative organisation during December 2011 – September 2012

Table 3.9 shows the numbers of local owners of dormitories and of rooms in each local administration. Clearly, areas near the city - San Phi Suea, Nong Chom, San Sai Luang, Nong Phueng and where there are mega projects in Nong Khwai have more dormitories than in the other areas. Numbers of owners appertain to local villagers who were once farmers and may have sold land and built dormitories for investment and long term benefit.

3.6 Conclusion

Chiang Mai has provided an alternative to Bangkok in terms of degree of development, modern facilities and job opportunities. It is considered pleasant due to its nature and culture. These characteristics attract numbers of in-migrants of different social groups, who move to Chiang Mai for different purposes.

For the urban middle class group, people can enjoy working there while at the same time enjoying a comfortable lifestyle. Its attractiveness and attraction have led to urban expansion. This results in the incorporation of rural areas into the peri-urban area, mostly for residential purposes. Large numbers of newcomers from various social groups have moved into the area. Residential areas like gated communities have constrained similar groups of people to live together on the same housing estates. In this way, they do not have to encounter socio-ethnic differences. The situation in the villages, which are the focus of this study, is vastly different due to the diverse social classes and in-filling groups living in proximity to one another.

For in-migrant workers, urban and peri-urban Chiang Mai have seen rapid

development from construction of road networks, mega projects and a number of tourist attractions, all of which pull people from remote areas where job opportunities and incomes are more limited. This group of migrants is mostly of a young working generation. They live in budget temporary residences in order to make their living and save money.

In the peri-urban villages, where farming lands have been bought and converted into residential areas, local people have had to make a series of adjustments. The change from agrarian activities to working in the urban service sector improves their economic and social status. This juxtaposition of cosmopolitan lifestyle and locality has contributed to a complex mix of urbanity and changing rurality of the physical and social landscapes of peri-urban Chiang Mai. Class mobility is significant among villagers as different households have adapted differently to various aspects of development; and with in-migration of different social classes into the village. The issues of agrarian transformation and class mobility at the community level will be discussed in detail in the next chapter.