



Title	A Geographic Study on Migration in Mandalay City
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# A Geographic Study on Migration in Mandalay City

May Thu Naing <sup>1</sup>

## ABSTRACT

This research is focused on migration in Mandalay City. According to the data gathered from Immigration and Population Department, 5 wards which have maximum numbers of immigrants and another 5 wards which have minimum numbers of immigrants were selected. The data required for this research were collected by using questionnaires from these 10 wards in five townships. Among these wards, sample of 1789 respondents, who were the immigrants in Mandalay City, were interviewed. The results showed that migration process depends on various reasons. Most of the responses showed that the immigrants wanted to get better environment of Mandalay City related to job, business, education and health opportunities and security. These factors directly influenced on the migration in Mandalay City. In that migration, both pull factors and push factors are interrelated.

## Introduction

### Objectives

Main objectives of this research are:-

1. To study the effects of migration in the urban growth of Mandalay City
2. To emphasize on push and pull factors of migration into Mandalay City
3. To search for a relationship between immigration and urban expansion of Mandalay City.

### Methodology

To depict a general picture of migration, secondary data are obtained from various offices, institutions and departments. Primary data and information are gathered by questionnaires and interviews in both structured and semi-structured forms. Several field observations were done for both urban areas and rural areas. In urban areas, samples are selected by using Random Sampling Method. Data and observations for immigrants in Mandalay were carefully checked and sample villages are selected purposively. The final result of immigration into Mandalay City was measured by the combination of quantitative method and qualitative method.

### Definitions

In General Certificate for Secondary Education, Geography course, *migration* is defined as follows. "Migration is the movement of people from place to place". Reasons for migration can sometimes be simplified into push factors and pull factors. These are reasons that people to move to a city (or to a rural area) and reasons that push them away from their homes ( or from the city)."

In a text, Human Geography: An Integrated Approach, migration is defined as follows. " Migration is the relocation of home..."

" Migration can be categorized as Cyclical Migration, Long -term Migration and Chain Migration."

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## **Literature review**

### **Migration studies in Myanmar**

In Myanmar, there are very few studies on migration. Most of the studies were described as part of a project or text. Population migration is included as a small portion of socio-economic conditions of a certain area. The lack of data and difficulty in observation hindered detail studies on migration in Myanmar.

In the study "City Growth of Mandalay", Kyaw Myint Aung (1988) focused on the growth of the city, changes in population and changes in socio-economic traditions of Mandalay City. In the consequent study of Bauk Taung (2002), the author only touched the reasons for both population and area changes.

There is a paper on "Migration into Yangon City: The Case of Kamayut Township", presented by , Maung Maung Aye (1989). The author emphasized on migration into Yangon City, changes of occupation and push and pull factors of migration.

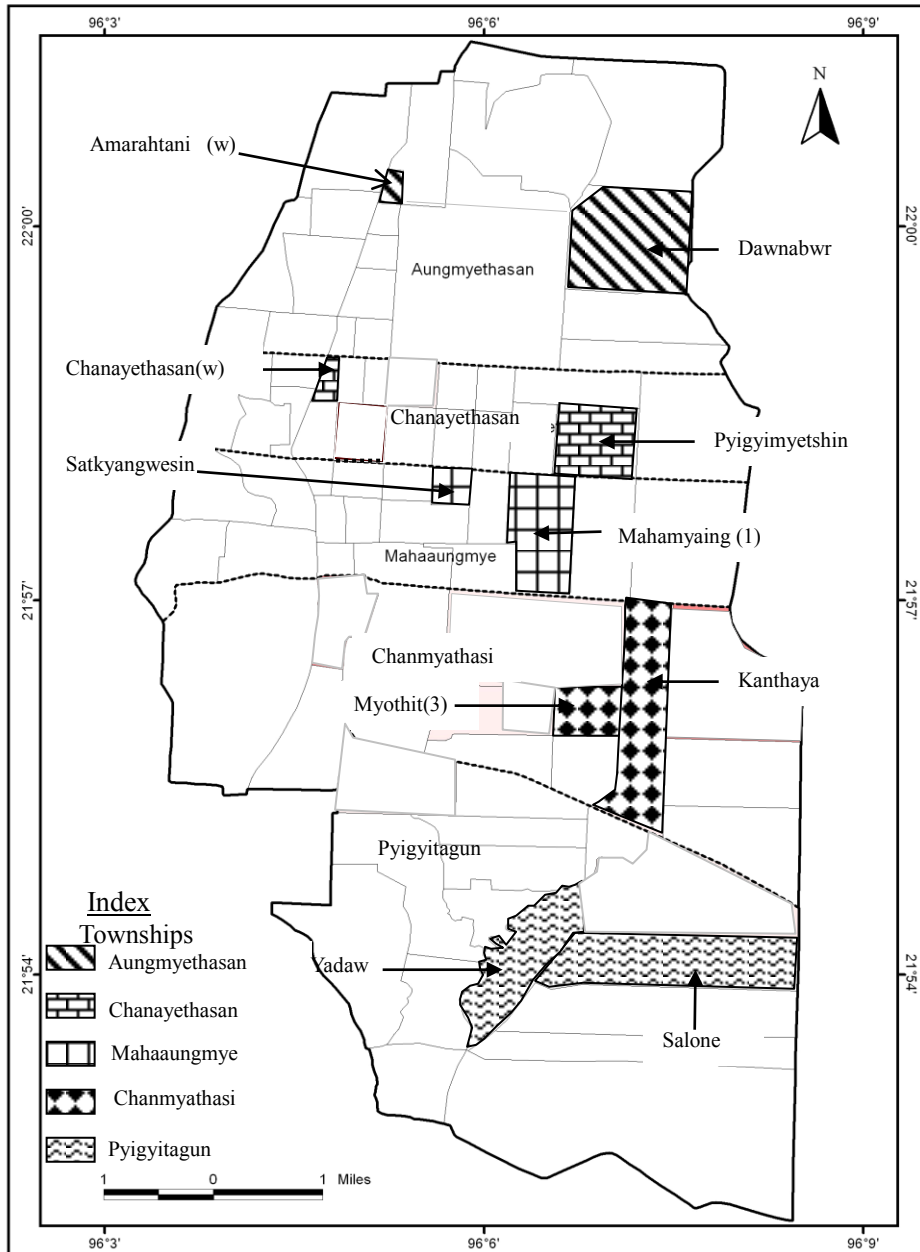
Saw Pyone Naing and May Thu Naing (2004), presented a paper on "Rural-Urban Migration Pattern: The Case of Monywa and Kyeemon villages, Monywa Township" in the paper presentation session of School Family Day of Mandalay University. The paper emphasized on migration patterns, and push and pull factors based on intensive survey in the two case study villages. A detailed study on migration of Mandalay City was done by May Thu Naing as a research.

### **Study Area**

In order to study immigration, field survey was done in all five townships of Mandalay City. For questionnaires and interviews, 1789 respondents from selected 10 wards of five townships were taken as samples. These sample wards were Myothit (3) Ward and Kanthaya Ward from Chanmyathasi Township, Amaratani (west) Ward and Dounabwr Ward from Aungmyethasan Township, Mahamyaing (1) Ward and Satkyangwesin Ward from Mahaaungmye Township, Pyigyimyetshin Ward and Chanayethasan (west) Ward from Chanayethasan Township and Salone Ward and Yataw Ward from Pyigyitagun Township.

Questionnaires, including 22 questions, were distributed to all sample households for disaggregate measure. Map (1)

Map ( 1 ) Sample study wards in Mandalay City, 2005



Source: Land Records Department, MCDC, 2005, redrawn by May Thu Naing

## **Results and findings**

### **Population growth of Mandalay City**

Population growth is an important factor on Rural-Urban migration in Mandalay City. Therefore, it is essential to study the population of Mandalay City. In 1857, the population of Mandalay was about 100,000 people. In the census of 1891, the total population of Mandalay was 188,815 persons. In 1901, it was only 183,816 persons. During the 10 year period, the population decreased by 5,000 persons. The decrease in population was due to migration to Yangon (Rangoon). There was more stability in the economic and political conditions in Yangon than in Mandalay at that time .

In 1911, the total population of Mandalay was 138,259 persons. It was decreased by 45,517 persons and the annual average decrease of population was 2.2 per cent. There was an outbreak of the epidemic disease of plague in Mandalay. Consequently many inhabitants migrated to other regions.

According to the census of 1973, the total population of Mandalay was 417,938 persons. The annual average rate of population growth was 5.9 per cent. Table (1).

According to 1983 census, the total population of Mandalay was 532,949 persons. During 10-year period from 1973 to 1983, the growth of population was 115,011 persons. The annual average population growth was 2.5 per cent. After the Independence, there was insurgency in the rural region. Many people had migrated into the big towns, such as Yangon and Mandalay.

On 6<sup>th</sup> May 1993, Mandalay was re-established into five townships instead of four, namely Aungmyethasan, Chanayethasan, Mahaaungmye, Chanmyathasi and Pyigyitagun townships. The total population of these townships was 661,427 persons. There was an increase in population by 128,478 during the ten-year period. In 1997, the residential quarters, which had increased, were Myothit, Ngwedawkyigon, Thinbinkon, Yardaw, Tagundaing, Taungmyint and Hteinkon wards. In 2003, the urban area increased to 41.38 square miles or 107.17 square kilometers. The total population in Mandalay City was 712,255 persons.

During the 10-year period from 1993 to 2003, the increased population of Mandalay was 50,828 persons. From 2003 to 2005, the population of Mandalay had also increased by 65,424 persons. The total population of Mandalay City was 777,679 persons. There were stability, security, development of communication and commerce, and economic and employment opportunities in Mandalay City. In 1995, according to the Mandalay Industrial Zone Project, the industrialists, entrepreneurs and owners, especially of the industrial activities, had shifted to the Industrial Zone. Table (1)

**Table 1 Total population of Mandalay City, 2004-2005**

No	Year	Total population	Increase	Decrease	Growth rate
1	1891	188,815			
2	1901	183,816		-4,999	-0.3
3	1911	138,259		-45,517	-2.2
4	1921	148,917	10,658		-0.7
5	1931	147,932		-985	-0.1
6	1941	163,243	15,311		1
7	1953	185,867	22,624		1.1
8	1973	417,938	232,071		5.9
9	1983	532,949	115,011		2.5
10	1993	661,427	128,478		2.2
11	2003	712,255	50,828		0.7
12	2005	777,679	65,424		3.1

Source: Immigration and Population Department of Mandalay District, 2004-2005

### **Urban Expansion of Mandalay City**

In the history of Mandalay, it passed three distinctive periods such as Yadanabon Period, Colonial Period and After Independence Period.

#### **(1) Mandalay during Yadanabon Period**

In 1857, King Mindon first founded Mandalay. On the 23<sup>rd</sup> of May 1859, it was recorded as "The Great Yadanabon City". It was later known as Mandalay because of the Mandalay Hill. Mandalay lies in the Mandalay-Madaya plain. Mandalay was founded by as a capital and its boundary was demarcated using the "Gold Chain" (Shwegyo). From North to South was about 32 miles and from east to west was about 30 miles. There were 235 villages within "Gold Chain" in that time. Mandalay was divided into four divisions such as Eastern, Western, Southern, and Northern sections. The area of Mandalay City was 16.265 square miles.

#### **(2) Mandalay during the Colonial Period**

The British captured Mandalay on the 28<sup>th</sup> of November 1885 and Colonel Saladen had governed the city temporarily. Mandalay Municipal Committee was constituted in 1887. The city was divided into two divisions known as the Eastern Division and the Western Division. In 1939, the area of Mandalay was 20.76 square miles.

#### **(3) Mandalay after Independence Period**

Myanmar (Burma) got her independence on the 4<sup>th</sup> of January 1948. In 1951, Mandalay was re-demarcated as municipal area. In July 1968, the city was divided into

4 administrative sectors as follows;

- (1) South - East Township
- (2) North - East Township
- (3) South - West Township
- (4) North - West Township

In August 1978, these were changed as 4 administrative units. As the residential land use increased, the area of Mandalay gradually increased. In 1985-86, the area of Mandalay increased to 35.55 sq miles or 92.1 kilometers.

On the 10<sup>th</sup> of December 1992, Mandalay was divided into 5 townships. They are:

- (1) Aungmyethasan Township,
- (2) Chanayethasan Township,
- (3) Mahaaungmye Township,
- (4) Chanmyathasi Township, and
- (5) Pyigyitagun Township.

In 1997, the area of Mandalay City had increased to 41.38 sq miles or 107.17 square kilometers with 86 wards of five townships. Map (2)

### **Migration Pattern in Mandalay City**

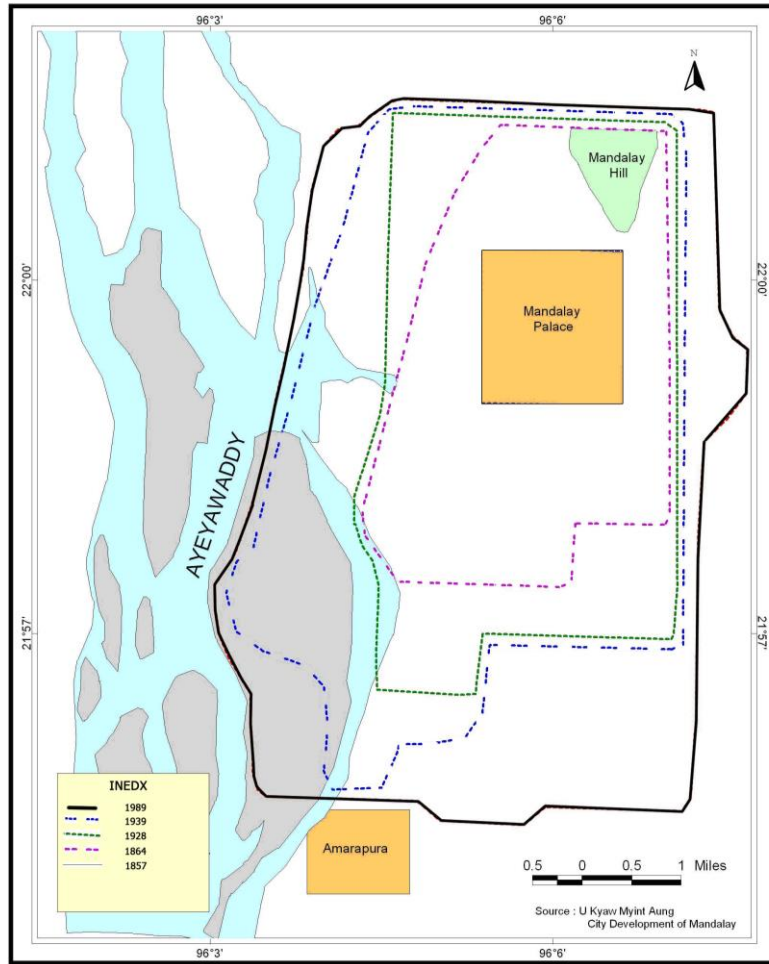
According to the office data of Immigration and Population Department during 2004-2005, there were 2,426 families who migrated into Mandalay City from various districts of Myanmar. There were 65 districts in which migration occurred. There were 1988 families or 82 per cent of total migration in urban-urban migration, and 438 families or 18 per cent of total migration in rural - urban migration. It means that most of the families who migrated into Mandalay City was urban-urban migration pattern although there were substantial amount of rural- urban migration in Mandalay City.

Among the urban-urban migration by families, Yangon, Sagaing, Amarapura, and Patheingyi townships are the most important. Except Yangon, other townships revealed the distance decay effect. These townships were relatively close to Mandalay City.

Among the townships for rural-urban migration, Sagaing, Natogyi, Taungtha, Mogok, Myingyan, Monywa and Bhamo were the most significant.

In the total migration pattern, for both urban- urban migration and rural -urban migration, Sagaing, Monywa, Tada-U, Mogok, and Patheingyi townships were the most important.

**Map (2) The Development Area of Mandalay City, 2006**



Sources : U Kyaw Myint Aung (1987-1988), redrawn by May Thu Naing



### Types of Migration in Mandalay City

Migration types of Mandalay City can be categorized as: (1)General Migration, (2) Inter -Regional Migration,(3)Regional Migration,(4) Intra-Urban Migration and,(5) Neighborhood Residential Relocation within each township of Mandalay City.

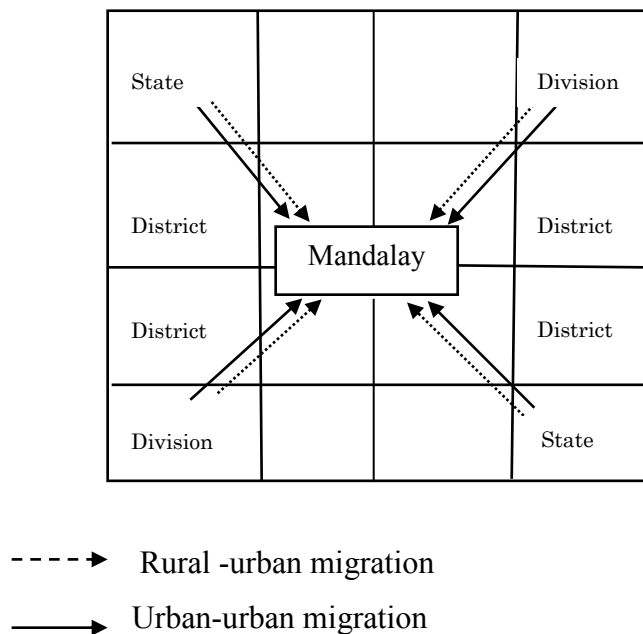
#### General Migration

##### Urban - Urban Migration of Mandalay City

In a general migration, urban-urban migration of Mandalay City in 2004 revealed that most of the families migrated from Sagaing, Magway and Yangon divisions, and Shan and Kachin states.

Among the urban migration families, 33 per cent came from Mandalay Division itself, 25 per cent came from Sagaing Division and 10 per cent from Magway Division .These three divisions accounted for 68 per cent of the urban-urban immigrant families into Mandalay City. Figure(1) shows the simplified pattern of general nation-wide migration .

**Figure(1) Simplified diagram of general nation-wide migration pattern of Mandalay Myanmar**



Source: Field Observation ,2004-2005

**Rural- Urban Migration into Mandalay City**

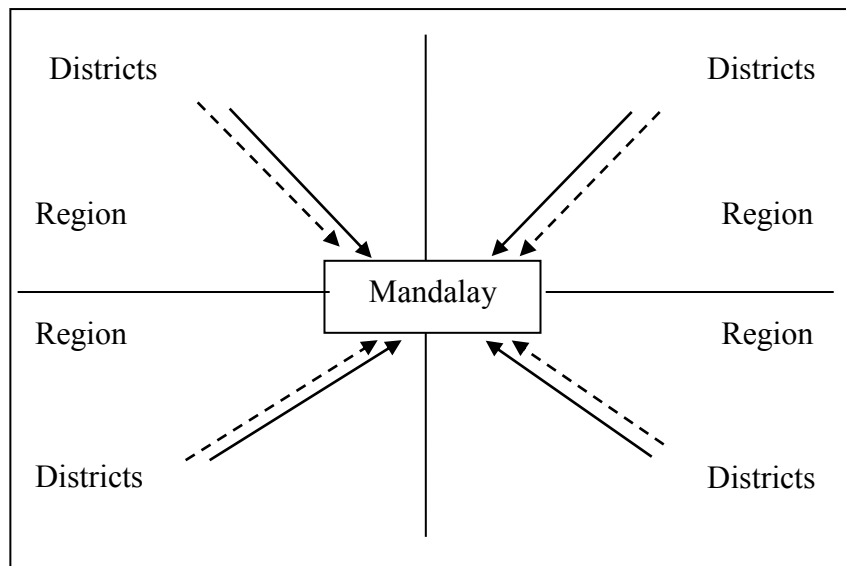
In the national scale migration, rural- urban immigrant families showed that most of the families came from Mandalay Division (33.1 per cent), Sagaing Division (31 per cent) ,Shan State (11 per cent) and Kachin State (7.1 per cent) respectively.

**Inter - Regional Migration between Districts of Myanmar**

The flow of regional migration occurred between various districts and Mandalay City. It includes both rural-urban migration and urban -urban migration.

In rural-urban migration, the highest number of families migrated from Sagaing District, Pyin-Oo-Lwin District, Shwe Bo District and Monywa District. High potential of migration appeared between Mandalay and neighboring districts. With distances, potential for migration gradually decreased. Districts with high number of families in urban-urban migration were Myingyan, Sagaing, Mandalay, Pyin-Oo-Lwin , Kyaukse and Shwebo districts.(Figure .2)

**Figure( 2 ) Simplified diagram of inter-regional migration in Mandalay City**



—————> Urban- urban migration

-----> Rural- urban migration

Source: Field Observation ,2004-2005

### Regional Migration (within District of Mandalay Division)

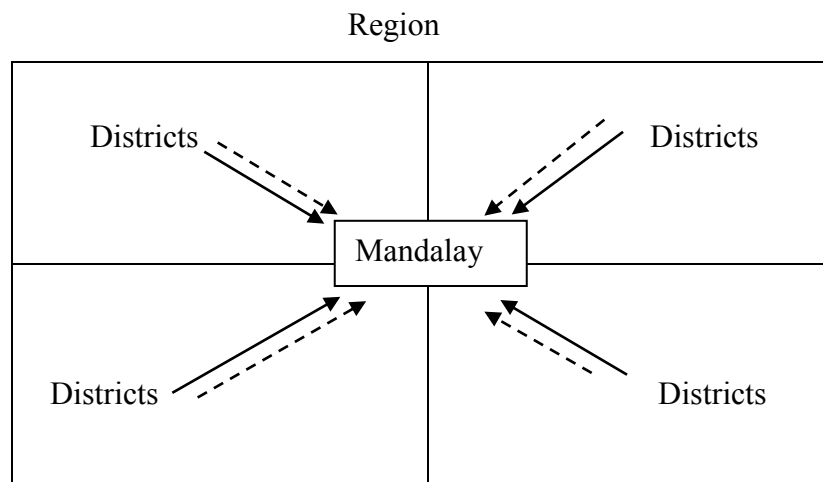
Regional migration is the flow of families between districts of Mandalay Division. It includes various townships of Mandalay Division itself.

In the urban-urban migration, Amarapura, Myingyan, Meiktila, Mogok and Patheingyi townships were more important. Myingyan Township has the highest number of migrated families.

For the rural-urban migration, Patheingyi, Singu, Myingyun and Mogok have high number of migrated families .

In the regional immigration in Mandalay Division, 93 per cent was urban-urban migration and 7 per cent was rural-urban migration. The higher number of urban-urban migration revealed the chain migration. Figure (3).

**Figure( 3 ) Simplified diagram of regional migration**



Source: Field Observation, 2004-2005

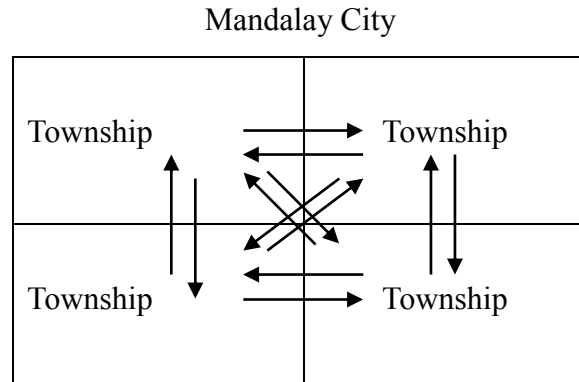
### Intra- Urban Migration

Intra -urban migration includes the flows between five townships of Mandalay City. It was actually, a kind of urban-urban migration. About 40 per cent of urban migration occurred in Chanayethasan Township and 23 per cent in Chanmyathasi Township.

Chanayethasan Township, Mahaaungmye Township, and Aungmyethasan Township have more immigration than emigration whereas Chanmyathasi Township and Pyigyitagun Township have more emigration than immigration. This pattern showed the relative stability and importance of the townships. In fact, Chanayethasan Township

occupied the Central Business District (CBD) of Mandalay City, whereas Pyigyitagun Township includes new town and industrial zone of Mandalay.(Figure 4)

**Figure (4) Simplified diagram of intra -urban migration in Mandalay City**



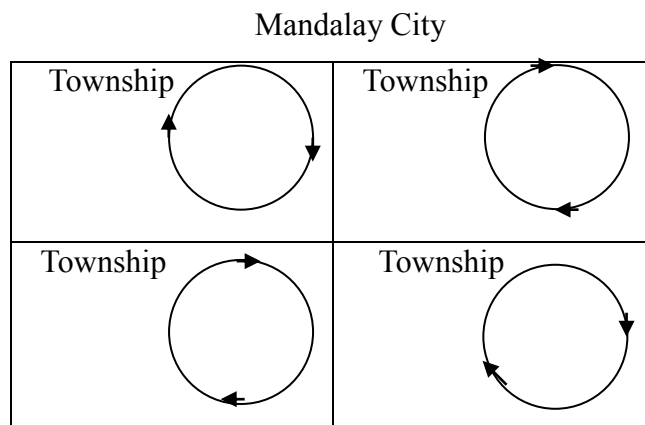
Source: Field Observation ,2004-2005

**Neighborhood Residential Relocation**

Another pattern of migration within Mandalay City is neighborhood residential relocation. Most of the flows (95 per cent of total relocation) appeared in Chanayethasan Township which is Central Business District of Mandalay City. This township is old residential area and well established with various types of businesses, services and commercial activities. Other townships are less common in neighborhood residential relocation than Chanayethasan Township.(Figure 5)

Because of the east-west declination of township's shape, residential relocation usually followed in east-west direction of flows. This pattern rarely affects the total migration of Mandalay City for both urban-urban migration and rural-urban migration.

**Figure( 5)Simplified diagram of neighborhood residential relocation**



Source: Field Observation ,2004-2005

## **Case study on Migration of Mandalay city**

### **Types of Respondents in the Study**

Age groups were classified as 0-15 years, 16-45 years, 46-65 years, and above 65 years respectively. Among respondents, only 1 percent of respondents fell in 0-15 age group. Most of the respondents represented for age groups between 16-45 and 46-65 years. Only 3 to 16 percent fell within age group of above 65 years. Therefore, respondents can be represented between 15 years and 65 years of age.

Respondents with primary school level are 11 to 56 per cent, middle school level was 18 to 49 per cent, high school level was 12 to 28 per cent and graduate was 6 to 37 per cent.

Respondents of primary school level were mostly found in Pyigyitagun Township whereas graduate level was higher percentage in Mahaangmye Township.

Most of the respondents are government staff, company employees, private businessmen manual labours, sellers and dependents. Higher percentage of private-business men was from Chanayethasan Township and higher percentage of manual labour was from Pyigyitagun Township. Percentage distribution of respondents in seller group was similar for all five Townships. These six groups of occupation were present occupation status of immigrants in Mandalay City.

Type of living in this case, means temporary living or permanent living in the city. The result of questionnaire can be categorized as several types of living such as temporary, permanent, settled as permanent, and not temporary but non-permanent types. In this case, 4 to 83 percent of respondents in sample areas fell into permanent and settled as permanent types. However, 5 percent to 28 percent of residents replied that they lived in Mandalay temporarily. They will move to other areas after searching new opportunities for them. About 3 percent of respondents from sample area showed that they settled non-permanently in Mandalay City. In the future they will move to other areas. But, their duration of living in Mandalay is relatively longer than that of temporary living.

### **Origin of Immigrants**

There was a distance-decay effect in migration of Mandalay City. There is a higher number of immigrants from nearby states and divisions of Myanmar to Mandalay City. Aggregate measure for 10 selected wards of the five townships of Mandalay city revealed spatial pattern of immigration into Mandalay City.

There are remarkable immigrants from all seven states and seven divisions of Myanmar into Mandalay City. However, the number of immigrants gradually decreases due to distance from Mandalay City.

In the selected 10 wards, 1 to 46 percent of immigrants come from Shan State which is adjacent to Mandalay City. Only 1.0 per cent each of immigrants came from Kayin State, Chin State and Kayah State. Immigrants from Mon State is 0.5 per cent to 6 percent whereas 0.1 per cent to 9 per cent came from Rakhine State. Kachin State, which is adjacent to Mandalay, shared 0.2 per cent to 6 per cent of immigrants. Therefore, in the migration pattern of Mandalay City, Shan State is the most important origin of immigrants. High number of people from Shan State, 46 per cent of respondents, was found in Mahaangmye Township. About 18 per cent of immigrants from Shan State settled in Chanmyathasi and Chanayethasan townships.

The highest percentage of immigrants revealed that their origins were within Mandalay Division. About 30 per cent to 62 per cent of respondents showed that their origins were various district of Mandalay Division. The second highest percentage of origin of immigrants was from Sagaing Division which is adjacent to Mandalay City. Magway Division also has high amount of percentage in respondents with 2 per cent to 32 per cent of total immigrants. Although Yangon is far away from Mandalay, the percentage of immigrants fell between 0.5 to 8 per cent. The lowest amount of percentage was found for Taninthayi Division which is located in the southern most part of Myanmar.

### **Reasons for Immigration : Pull Factor**

There are 7 groups of reasons for immigration into Mandalay City in the results of questionnaire survey within 5 townships of Mandalay City. Answers were grouped into 7 categories such as: (1) business opportunity especially for private business, (2) job opportunity especially for government service (3) education opportunity, (4) health opportunity, (5) religious contact, (6) security and (7) dependency. Among these 7 reasons, business opportunity, especially for private business, is the most prominent factor for all samples in five townships of Mandalay City. Government job opportunity is the second most important reason for residents of Chanmyathasi, Mahaangmyae, Chanayethasan, and Aungmyethasan townships. Education is the third important reason of migration for respondents in all townships of Mandalay City.

### **Business opportunity especially for private business**

This reason is the most important and common reason for respondents in all townships of Mandalay City. The range of percentages for this reason is between 55 percent and 97 per cent of all respondents. About 85 % and 97 % of respondents from Pyigyitagun Township revealed that business opportunity especially private business, was main reason of migration for them. Immigrants make the first move to set up the business in a new place. They send information back home and this encourages further migration from the originating area. The migration process leads to is chain migration .

### **Job opportunity especially for government service**

Among the reason for job opportunity, respondents especially emphasized on government services as job opportunity. About 13 per cent and 25 per cent of immigrants in 2 wards of Aungmyethasan Township revealed that job opportunity as a main reason for migration. In Mahaaungmye Township, 6 per cent and 13 per cent of respondents that showed job opportunity was main reason for migration. However, only very few percentage between 3 per cent and 5 per cent of respondents in Pyigyitagun Township emphasized job opportunity as main reason of migration for them.

### **Education Opportunity**

Education opportunity was the third reason of immigration for respondents who moved into Mandalay City. Among respondents of five townships, 14 per cent from Aungmyaethasan Township, 13 per cent from Mahaaungmye Township and 12 per cent from Chanmyathasi Township revealed that education opportunity was the main reason of migration for them. Only 5 percent from Chanayethasan Township and 3 per cent from Pyigyitagun Township showed that education was a reason for immigration into Mandalay City.

### **Health Opportunity**

Very few percentage of immigrants revealed that health opportunity was main reason of migration. Among them, 2 per cent of respondents from Mahaaungmye Township answered that health opportunity was main reason for immigration into Mandalay City. Only 1 per cent of respondents from Chanmyathasi and Chanayethasan townships revealed that health opportunity was main reason for migration. This reason is especially true for respondents who want to check up severe health cases with specialist medical doctors who are only settled in Mandalay City.

### **Religious Contact**

About 1 per cent each of respondents from Chanmyathasi and Mahaaungmye townships revealed that their main reason of immigration was religious contact. There were no answers for this reason from other townships of Mandalay city.

### **Security**

Only 0.5 per cent of respondents from Chanmyathasi Township revealed that security was main reason of immigration into Mandalay City. However, it was the response from families who moved into Mandalay City during the period of political upheaval between 1948 and 1958.

### **Dependency**

Dependency includes marriage, and lives with family as a dependent. It was found in all townships of Mandalay City.

### **Reasons for emigration : Push Factor**

There are 7 groups of push factors based on questionnaire results .These are (1) business, (2)government job, (3) education, (4) health, (5) religion, (6) security and (7) dependency. Among these factors, business opportunity was the most important reason for emigrants. Dependency (or marriage) was also important reason for emigration.

### **Business**

Most of the emigrants lost their jobs and business at their origin or gained less profit in their business. They seek new business in a big city such as Mandalay. About 97 per cent and 86 per cent of emigration in Pyigyitagun Township revealed that main reason of emigration from their natives was due to the loss of business. About 60 per cent to 86 per cent of respondents from other four townships of Mandalay City also revealed that main reason was change of business and loss of jobs in their native places.

### **Government Job**

If a person joins government service, he or she has to be transferred from one place to another. Therefore, a villager who joins government has to move to other places from his or her native village. This was a reason for emigrant moved out from their native village to Mandalay City. About 13 percent to 23 per cent of respondents from Aungmyethasan Township, Mahaaungmye Township and Chanayethasan Township revealed that change of job to government service was a reason to move Mandalay City from their native village.



### **Education**

For some emigrants, less opportunity of education in their native village led them to move to a big city to get better opportunity for education. About 13 per cent to 14 per cent of emigrants in Chanmyathsi, Aungmyethasan and Mahaaungmye townships responded that less opportunity of education in their native village was main reason to move to other areas for good opportunity in education.

### **Health**

About 0.3 per cent to 3 per cent of emigrants indicated that less access of health opportunity was the main reason for emigration from their native villages.

### **Religion**

Only 0.7 to 1 per cent of respondents revealed that religious contact was main reason for their emigration. But, it was also related to social network rather than the lack of religious opportunity in their native villages. Actually, most of the villages in Myanmar have various religious opportunity within a village area.

### **Security**

The reason of security in the emigration from their native village was due to the political condition of the country during 1948 and 1962 when insurgency reached the worst situation in Myanmar. At that time many families moved out from their villages and settled in big cities like Mandalay City.

### **Dependency ( marriage)**

Marriage is one of the push factors for emigrants especially for women. After marriage woman has to move along with her husband wherever he moves. In the sample wards, nearly 30 per cent of respondents in Aungmyethasan Township revealed that they moved to Mandalay because they are dependents. The reason of emigration due to marriage was evident in 6 per cent to 29 per cent of emigrants. Actually migration after marriage is one of the patterns of migration in Asia including Myanmar.

## **Discussion**

### **Reason for permanent living in Mandalay City**

Based on questionnaire results from immigrants in 10 sample wards of 5 townships, reasons for permanent settlement were classified into six groups. These reasons are:-(1) economic opportunity, (2)health opportunity, (3)education opportunity, (4)religion opportunity, (5)climatic condition for leisure and (6)security issues.

These reasons are assessed by using the preference of respondents supposed to be good, fair, or bad conditions for permanent living in the city.

### **Economic opportunity**

There is very little difference between good and fair conditions of economic opportunity for permanent living in Mandalay City. About 50 per cent of respondents revealed that economic opportunity is good for permanent living and another 50 per cent revealed that the economic opportunity is fair condition. However, only 1 per cent to 5 per cent showed in their answers that economic opportunity was bad although they decided to live in Mandalay permanently.

### **Health opportunity**

Most of the immigrants responded that health opportunity is good in Mandalay City for permanent living. Only 1 per cent from Chanmyathasi Township revealed that even health opportunity is bad, they tried to live permanently in Mandalay.

### **Education opportunity**

This reason is similar to that of health opportunity. More than 60 per cent of immigrants answered that education opportunity is good in Mandalay for permanent living. However, 17 per cent of respondents from Dawnabwr Ward of Aungmyethasan Township described that education opportunity is also bad for them even they lived permanently in the city. Nearly all immigrants thought that education opportunity is fair to good condition for permanent living in Mandalay City.

### **Religious opportunity**

Nearly all of the respondents indicated that religious opportunity is fair to good condition in the consideration for permanent living. However, it is particularly true for Mandalay City because religious opportunity is very high in Mandalay since the days of Myanmar Kings. Mandalay City is known as "cultural heritage of Myanmar."

### **Climatic condition**

Climatic condition is an interesting factor in the consideration of permanent living in Mandalay City. Most of the immigrants indicate that climatic condition is only as a reason for leisure of permanent living. In fact, climate of Mandalay is not favorable for living comfortably.

### **Security issues**

Above 70 per cent of respondents revealed that security condition is good for permanent living in Mandalay. Their preference showed that security for people's lives is very important for permanent living.

### **Conclusion**

Mandalay was not the city which had grown gradually from the stage of a village to a city which had economic development and population growth. It was systematically a well planned and laid out capital city built during the later period of Konbaung Dynasty by king Mindon. During the later period of 1980, according to the urban planning projects of Mandalay, the plots of New Town were being demarcated.

It was found that together with the population growth, Mandalay City had developed and there were gradual changes in the land uses. After 1992, the land use pattern of Mandalay had apparently changed. Due to the urban growth, the former cemeteries of the outskirts of the cities had become the town area. By demolishing the cemeteries, the land is used for high standard housing apartments, markets, bazaars and highway terminal. It is found that the former squatter wards are being systematically plotted and allocated and are used as residential lands, or as recreational lands. In 1997, the area of Mandalay had increased to 41.38 sq miles (107.17 km<sup>2</sup>) with 86 wards of five townships.

To study Immigration, field survey was done in all five townships of Mandalay City. For questionnaires and interviews, 1789 respondents from selected 10 wards of five townships were taken as samples.

By studying migration, it is evident that there are five major types of migration in Mandalay City. These are general migration, inter -regional migration, regional migration, intra -urban migration and neighborhood residential relocation.

Total migration includes both urban-urban migration and rural-urban migration between Mandalay City and other parts of Myanmar. Distance decay effect is also found in total migration of Mandalay City. The amount of migrated population decreased due to distance from Mandalay City.

In the national scale of migration, general migration of Mandalay City revealed that most of the families migrated from Mandalay, Sagaing, Magway and Yangon Divisions, Shan and Kachin States.

Among these 7 reasons, business opportunity, especially for private business, is the most prominent factor for all sample wards in five townships of Mandalay City.

Government job opportunity is the second most important reason especially for residents of Mandalay City.

Education is the third important reason of migration for respondents in all townships of Mandalay City. Education is classified into two types. One is education for him or herself and another is children's education.

The health opportunity is reason for immigration into Mandalay City because of the availability of private hospital and specialists. Although they recovered from their diseases they continued to settle in Mandalay City.

**Acknowledgement**

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ကျော်မြင့်အောင်၊ ဦး (၁၉၈၇-၇၈)၊ *မန္တလေးမြို့ကြီးထွားတိုးတက်လာပုံ*၊ သုတေသနစာတမ်း၊ ပထဝီဝင်ဌာန၊ မန္တလေးတက္ကသိုလ်။

လူဝင်မှုကြီးကြပ်ရေးနှင့်ပြည်သူ့အင်းအားဦးစီးဌာန (၂၀၀၂)၊ *အက်ဥပဒေနှင့်နည်းဥပဒေများနှင့် မှတ်တမ်းများ*၊ ရန်ကုန်မြို့။

အထွေထွေအုပ်ချုပ်ရေးဦးစီးဌာန၊ (၂၀၀၅)၊ *ခရိုင်မှတ်တမ်း၊ မန္တလေးခရိုင်*။

Table (2) Reasons for immigration : pull factors

No.	Wards	Reasons																	
		Government Job		Business		Education		Health		Religin		Security		Others		No Response		Total	
		Person	%	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%	Person	%
1	Myothit (3)	14	8	114	64	22	12	1	0.5	1	0.5	1	0.5	27	15	0		178	100
2	Kanthaya	51	9	487	82	10	2	4	0.5	4	0.4	0	0	35	6	2	0.1	593	100
	<b>Chanmyathasi</b>																		
3	Amaratani (west)	12	13	54	61	13	14	0	0	0	0	0	0	7	8	3	4	89	100
4	Dounabour	72	25	210	75	0	0	0	0	0	0	0	0	4	2	0		286	100
	<b>Aungmyethasan</b>																		
5	Mahamyaing (1)	21	13	90	55	21	13	4	2	1	1	0	0	19	12	7	4	164	100
6	Satkyangwesin	2	6	29	88	0	0	0	0	0	0	0	0	0	0	2	6	33	100
	<b>Mahaaungmye</b>																		
7	Pyigyimyetshin	32	18	121	69	9	5	2	1	0	0	0	0	11	7	0	0	177	100
8	Chanayethasan (w)	0	0	33	87	0	0	0	0	0	0	0	0	5	13	0	0	38	100
	<b>Chanayethasan</b>																		
9	Salone	11	5	169	85	6	3	0	0	0	0	0	0	13	7	0	0	199	100
10	Yataw	1	3	31	97	0	0	0	0	0	0	0	0	0	0	0	0	32	100
	<b>Pyigyitagun</b>																		

Source: Field observation ,2004-2005-2006