Social Characteristics and Migration Patterns of Households Residing in the New Extension Townships of Mandalay City, Myanmar, after the Economic Liberalization of 1988

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Abstract This paper examines both social characteristics and migration patterns of dwellers in the new extension townships of Mandalay City, Upper Myanmar. In correspondence with the economic liberalization launched in 1988, the Mandalay City Development Committee has established new, large-scale townships in the southern suburb of Mandalay City. The present findings indicate that many of the residents of the new extension townships are engaged in informal economic activities, often small and part-time projects on a self-employment basis. The number of salaried workers, such as public servants and company staff members, is small. However, many of the residents in the new extension townships have land and housing tenures. They purchase their own land in order to achieve greater life security. Furthermore, a large percentage of the residents of the new extension townships are migrants not from other provincial regions but from other townships within the city, especially the inner city. Therefore, the study concludes that the remarkable spatial expansion of Mandalay City after the 1990s is recognized as a type of over-urbanization rather than a new type of urbanization due to foreign direct investment.

Key words Mandalay City, economic liberalizations, intra-urban migration, new extension township, inner city

I. Introduction

After gaining independence in 1948, Myanmar underwent three distinct epochs in its political economy. First, during the parliamentary democracy period, particularly from 1948 to 1962, the government pursued state-led industrialization as an attempt to establish an industrialized country. This industrialization did not materialize due to over-emphasis on industrial sector expansion and the lack of knowledge or training in the primary sectors

undergoing development, including the agriculture sector. Second, in the socialist period from 1962 to 1988, ignorance of market mechanisms, misallocation of scarce resources, less efficient production, and shortage in foreign exchange due to the closed market led to the failure of the planned economy. Finally, soon after the military government took over the powers of the state in 1988, the State Law and Order Restoration Council (SLORC), later reformed as the State Peace and Development Council (SPDC), implemented market liberalization policies which

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allowed the private business sector to engage in external trade and retain their export earnings, and started to legitimate and formalize the state's dealings with neighboring countries (Clark, 1999; Khin Maung Kyi *et al.*, 2000; Myat Thein, 2004; Fujita *et al.*, 2009). Myanmar opened its doors to the rest of the world during this period of globalization and regionalization. Due to these new policies, Myanmar experienced relatively high economic growth during the 1990s (Fujita *et al.*, 2009).

In conjunction with this economic growth, Yangon,

the previous capital and the largest city in Myanmar, grew much more rapidly during the 1990s than over the previous decade. The population of Yangon increased from 2.5 million in 1983 to 4 million in 2000. Furthermore, the expansion of the developed area into the surrounding regions was remarkable (Kyaw Sunn Wynn, 2006; Fujita *et al.*, 2009). In fact, the city began to resemble the megacities in other countries of Southeast Asia.

Regarding the urban growth of Bangkok and Jakarta after the late 1980s, it was led by Foreign Direct

Fig. 1 Location of Mandalay City and its townships.
Source : Mandalay City Development Committee

Investment (FDI) and characterized by a remarkable expansion of the suburban areas, in which both large industrial estates and housing estates for the middle class were developed (McGee and Robinson, 1995). Therefore, such urbanization has been recognized not as over-urbanization but as a new type of urbanization led by FDI and characterized by growth in the middle class (Browder and Bohland, 1995 ; Konagaya, 1999). However, in Yangon there has been only a limited amount of this type of suburbanization due to the small volume of FDI in the manufacturing sector. Accordingly, it is thought that the urban growth of Yangon is more characteristic of over-urbanization than FDI-induced urbanization.

This phenomenon also applies to the urban growth of the City of Mandalay, the second largest city in Myanmar, following Yangon. A substantial expansion of the urban area of Mandalay was seen after the late 1980s according to the national government policy. Before 1992 Mandalay consisted of three townships : Aungmyetharsan (AMTS), Chanayetharsan (CATS), and Maharaungmye (MHAM). In 1992, the recent extension of Mandalay's built-up area in the southern suburb constituted two new townships : Chanmyatharsi (CMTS) and Pyigyitagun (PGTG) (Fig. 1).

Two possible mechanisms may explain this recent expansion of Mandalay. The first is that the new townships in the urban fringe area may consist of homes for rural-to-urban migrants finding jobs created by industrial development. The second is that the expansion of the urban area may reflect a process of suburbanization in which longtime urban dwellers move out (or are forced to move out of the urban center) in order to capitalize on new opportunities for land and house acquisition, or lower housing rents and

informal business opportunities.

In order to determine which of these mechanisms is responsible for the expansion of Mandalay, this paper examines both social characteristics and migration patterns of dwellers in the new extension townships of Mandalay City, including the employment characteristics of the households, and the dominant land and housing tenure types. In particular, the following questions were focused on by this study :

1. What are the economic activities of the households in the new extension settlements ?
2. What are the dominant land and housing tenure types in these settlements ?
3. What is the dominant migration pattern in the new extension townships ? Is the expansion mainly due to rural-to-urban migration or a result of intra-urban migration ?

II. Data sources and methods

The last census survey in Myanmar was performed in 1983. Therefore, it is impossible to obtain accurate data on the population size of Mandalay after that time. However, there were the statistics of residents recorded by the Immigration and Registration Department for the population after 1983. So, in the present study, the above data was used to identify population changes since the last census.

In addition, questionnaire survey was done in order to obtain data on the socio-economic characteristics of residents in the new extension townships. A simple random sampling method was applied to select household samples. The administrative areas of townships are divided into wards. There are 13 wards in Chanmyatharsi Township (CMTS) and 16 wards in Pyigyitagun Township (PGTG). In the case of PGTG, 30 households were randomly selected as samples

from every ward. In CMTS, 25 households were selected for each ward by the same method. The total number of samples was 805. The questionnaire survey by placement method was done from 9th May to 22nd June in 2009. During the survey, interviewers visited households and interviewed the heads of the households using the questionnaires. The questionnaires items were as follows: name of the head of the household, family size, number of earners in the household, type of economic activities of the head of household, housing and land tenure types, the place and duration of residence before moving into the new settlement township, and the main reasons for moving to the present residence.

As a result responses to questionnaires were obtained from all samples: 325 respondents from the CMTS Township and 480 respondents from the PGTTG Township. The sex composition of the response group was 89.2% male and 10.8% female.

III. Overview of Mandalay City

Mandalay was established as the capital of the country by King Mindon in 1857, when it consisted of about 1.6 square miles and had a population of less than 90,000 (Yadanabon Bomatsu, 2009; Kyaw Myint Aung, 1988, p. 28; Fig. 2). In 1885, the British ruled the whole country of Myanmar. At that time, the capital moved to Yangon under British colonial rule. The British colonial government divided Mandalay built-up area into four administrative units — the Eastern Territory, Western Territory, Southern Territory, and Northern Territory — according to the four districts of the old capital: Mindon's East part (*Ashepyin*), West part (*Anaukpyin*), South part (*Taungpyin*), and North part (*Myaukpyin*). The Mandalay Municipal Committee was constituted in 1887, and tar-roads

Fig. 2 Expansion of the built-up area of Mandalay City.

Source: Kyaw Myint Aung (1988)

and drainage ditches were constructed in the city. In 1903, the Zegyo Market was constructed and tram-transport was introduced in the next year. Between 1904 and 1931, the residential area expanded to Obo ward in Mandalay's Northern Territory, the Thirihema East and Thirihema West wards in the Western Territory, and the Sekkyanwesin ward, Mahanwesin ward, and Mandalay University Estate in the Southern Territory (Fig. 3). Although the built up area extended to the south along the national highways of Mandalay-Yangon and Mandalay-Amarapura and

Fig. 3 Establishment of industrial zone and resettlement for fire victims.

Source : Field survey and Mandalay City Development Committee

to the west along the Shwetachaung canal, the filling of vacant lands and low density areas in existing townships were dominate. That's why the extension

of urban area was limited, so that the administrative area of Mandalay City changed from 1931 to 1988 as mentioned later.

At present, Mandalay is the major trading, communications, and cultural center for northern and central Myanmar. Much of Myanmar's external trade to China and India are done through Mandalay, and the city has developed its urban-based service sectors such as banks and finance, insurance, and tourism. As of 2007, the area of the city was 41.35 square miles and the population had reached about 921,741. The administrative area is limited by the Shan Plateau in the north and the east and the Ayeyarwady river in the west. The geographical location of Mandalay City leads its spatial expansion to mainly the south.

The plan of the city was based on a grid pattern of east-west and north-south roads running parallel to each other. However, all areas of the townships were not covered by these grid road networks. The fringe areas of the townships, particularly the new townships, still included rural settlements. Some rural settlements were forced to remove for residential and industrial development. In Myanmar, the growth and form of cities are critically linked to the political processes. In Mandalay, urban population growth, area extension, and the resultant change in the city's shape have been influenced significantly by the government's policies.

Between 1981 and 1984, there were two fire outbreaks in the inner areas of Mandalay, resulting in the destruction of 7,000 homes. The fire victims were resettled in land lots in Myothit, CMTS and Pephyukon village in the southern part of Mandalay City after the late 1980s (Fig. 3). Furthermore, in 1986, some of the government employees began to be allotted house plots in Myothit in order to compensate for the lower salaries, and to control corruption.

In the years after 1988, the government started to introduce market-oriented economic policies,

including allowing trade freedom to encourage foreign investment in the country. The new economic policy has brought about urban population growth. To cope with the increasing population, the Mandalay City Development Committee was formed to undertake systematic urban management and development, including plans to carefully expand the urban areas so that they absorb the surrounding villages. In addition, squatters on the roadsides, religious compounds and government servants were made eligible for house plots in the new southern extension area (Bawk Taung, 2002). After 1990, commercial centers and highway bus terminals were built in the new extension area. Industrial zones were established according to the government policies and various industries from the inner city areas were reallocated to the industrial zones to clean up the industrial pollution in the city (Aung Win Kyi *et al.*, 2005) (Fig. 3). As mentioned above, the administrative area of Mandalay was transformed into five townships and 86 wards following an announcement of the Ministry of Home Affairs on December 10th 1992. That is, the southern extension areas became two new townships: Chanmyatharsi (CMTS) and Pyigyitagun (PGTG) (Fig. 1).

IV. Population growth of Mandalay City

The population of Mandalay was about 90,000 in 1857 when the city was founded by King Mindon (Kyaw Myint Aung, 1988, p. 28). From 1857 to 1891, the population gradually increased at an annual growth rate of 2.2% (Fig. 4). From 1891 to 1911 the population decreased from 183,000 to 138,000 due to the outbreaks of plague and fires. Another cause was that a large number of troops were relocated from the city to a military base at Pyin-Oo-Lwin (formerly Maymyo) in Upper Myanmar during this period. From 1931 to

Fig. 4 Total population and extension of the city area.

A census was taken by the British Colony Government for the first time for the whole country in 1891, and from then on every ten years, up until 1941. After independent in 1948, censuses for 1953, 1973, 1983 were taken as a national movement. After 1983 census, population statistics were used from Immigration and Registration Department of Mandalay.

Sources : Census 1953, 1973, 1983, and Immigration and Registration Department of Mandalay

1953, the annual growth rates were 1% to 1.1%.

After 1953, the population of Mandalay increased rapidly due to the natural increase in population, the improvement in health care and rural-urban migration. The annual population growth was an extraordinarily high 6.0% for each year from 1963 to 1973. After 1962 “The Burmese Way To Socialism” was declared as the official development and guideline for future development. Under the socialist regime, all enterprises being engaged in foreign trade, wholesale and banks, industries, forestry, fishing, and mining, as well as the hospital and schools were nationalized (Myat Thein, 2004, p. 4). Between 1963 and 1973, there was political unrest in the rural regions (Kyaw Myint Aung, 1988, p. 29). Many people had migrated into big cities such as Yangon and Mandalay. Because a large percentage of these migrants lived in the inner area of Mandalay, the city’s population density increased remarkably. According to Kyaw Myint Aung (1988, p. 41), the area of Mandalay City was 25.55 square miles in 1985. Using this figure to determine

the population density of Mandalay City in 1963 and 1973, we calculate that there were 9,103 persons per square mile in 1963 and 16,358 persons per square mile in 1973.

After the city was reformed with five townships in 1992, the total population grew to 710,027 in 1993 and 875,252 in 2005 (Immigration and Registration Department of Mandalay City). During that period the population growth rate was about 1.8% annually. In fact, the population growth rate per year after the reformation into five townships (165,225 persons) was far less than that during 1973 to 1993 (292,089 persons). Thus, it is not possible to conclude that the population growth of Mandalay from 1988 to the present period was brought about mainly by migration.

In addition, the population growth rate of the extension townships was 13.6% for the period from 1993 to 2001, while the growth rate of the whole city was about 15.8% over this period. Although the population growth rate in the new extension townships was relatively low from 1993 to 2001, the growth rate

in these extension townships for the period from 2001 to 2005 (6.9%) exceeded the city's growth rate of 6.5%.

V. Social characteristics of households in the new extension townships

1. Family size of households

In Mandalay City, the spatial segregation of dwellings by socio-economic status is recognized: In general, upper- and middle-income households live in the inner areas, and low-income families live in the suburban areas. Because land prices in the central and inner area are too high to allow low-income households to own their houses, the availability of affordable land for low-income households is largely limited to the new extension townships. In addition, the low-income households, on average, have larger households with more children and more dependent family members.

Based on the results of the questionnaire survey, the family size of respondents was generally large. Households with 6 persons or more made up the largest percentage (36.2%) of the participating households (Table 1). The next largest percentages were for households with 4 and 5 persons, which accounted for 23.6% and 21.2% of all surveyed households, respectively. On the other hand, there

was only two household (0.3%) that consisted of a single person. That is, a large percentage of the households were composed of both nuclear families with children and extended families. Furthermore, the allotment of plots in the extension areas by the government was done based on the principle of one plot not per person but per household. In addition, our interviews indicated that the most heads of household were at the age of 40-50.

2. Household earners and their jobs

The household earners were examined next step. Most of the households surveyed had two or more income earners (Table 2). The percentage of households with one earner was only 24.5%. Two-earner and three-earner households accounted for 34.5% and 23.5% of the total, respectively. Households with four or more income earners accounted for 17.5%. No households lacking an earner were found. Therefore, it is assumed that the new extension townships had relatively favorable conditions for finding business and job opportunity. In addition, in these new townships, most of the principal earners were male.

In this study, the occupations of the household heads were classified into five types: government

Table 1 Household size in the new extension areas.

Household size	Chanmyatharsi Township		Pyigyitagun Township		Total	
	Household	(%)	Household	(%)	Household	(%)
single family			2	0.4	2	0.3
2 persons family	24	7.4	20	4.2	44	5.5
3 persons family	42	12.9	65	13.5	107	13.3
4 persons family	78	24.0	112	23.3	190	23.6
5 persons family	72	22.2	99	20.6	171	21.2
6 persons family & more	109	33.5	182	37.9	291	36.2
Total	325	100.0	480	100.0	805	100.0

Source: Field survey

Table 2 Number of earners in the households in the new extension areas.

No. of earner	Chanmyatharsi	(%)	Pyigyitagun	(%)	Total	(%)
0						
1	76	23.4	121	25.2	197	24.5
2	123	37.8	155	32.3	278	34.5
3	79	24.3	110	22.9	189	23.5
4 and more	47	14.5	94	19.6	141	17.5
Total	325	100.0	480	100.0	805	100.0

Source : Field survey

servant, company staff, business owner, temporary work, and miscellaneous jobs. Government servants and company staff possess steady jobs and receive a regular salary. Business owners refer to work in a self-employment capacity. Self-employment work is generally performed by family members, such as in retail shops, groceries, tea shops, jewelry shops, restaurants, bars, etc., although hired labor is used in larger works. Some of the people engaged in these occupations were considered as the old type of middle class in terms of holding asset, while a large part of them did petty business without social insurance. Therefore, a large number of the individuals engaged in this type of occupation could be classified into the informal sector. The designation off-job refers to temporary work. These jobs include temporary work as a salesperson or broker for motor vehicles, gems or house and apartment rentals. Such workers do not

register themselves officially as permanent workers. Miscellaneous jobs include daily wagers, street vendors, carpenters, trishaw driver and so on, who rely mainly on daily income as their means of living. This type of job is considered as a representative informal sector.

Table 3 shows the composition of the household heads by occupation. The “owned business” group was the largest, accounting for 44.2% of all respondents. A large part of the “owned businesses” were small family-operated shops. The households considered as middle class by property of corresponding were small number, based on observation in interviews. Therefore it can be said that a large part of owned business in this areas is recognized as informal economic activities.

The second most common type of occupation among the heads of the households was “off-job,”

Table 3 Type of occupations of household heads in the new extension areas.

Type of occupation	Chanmyatharsi	(%)	Pyigyitagun	(%)	Total	(%)
Government Servant	16	4.9	60	12.5	76	9.4
Company Staff	10	3.1	16	3.3	26	3.2
Owned Business	192	59.1	164	34.2	356	44.2
Off-job	59	18.2	154	32.1	213	26.5
Miscellaneous	48	14.8	86	17.9	134	16.7
Total	325	100.0	480	100.0	805	100.0

Source : Field survey

which accounted for 26.5% of the total. This was followed by “miscellaneous jobs,” which accounted for 16.7%. As these types of jobs were part of the informal job sector, a large percentage of the household heads living in the new extension townships were considered to be workers engaged in informal economic activities. On the other hand, although the “government servant” and the “company staff” jobs were classified as belonging to the formal job sector, only 9.7% and 3.2% of the household heads had these types of jobs, respectively. The percentage for the “company staff” jobs, which are considered to create employment for the new middle class, was particularly low. Therefore, it can be said that the expansion of a new middle class due to an increase in foreign direct investment has not yet emerged in Mandalay.

There were some differences in the breakdown of occupations between the two townships. The percentage of heads of households whose jobs were classified as owned business in CMTS was a remarkably high 59.1%, while that in PGTG was 34.2%. In regard to this difference, there are many dwellers who migrated from the inner city to the CMTS in response to fires and efforts by the municipality to clear the slums. It is thought that these workers were carrying on owned business originally and continued to do owned business after migration. As a result, the

percentage of owned business in CMTS is thought to be high. On the other hand, the percentage of off-job in PGTG was high. PGTG is situated mostly outside of the city, where development of the infrastructure is still proceeding. In such an environment, temporal brokers for various kinds of needs from new residents and petty business were able to find chances of their activities.

3. Land tenure and housing type

Table 4 shows the composition of land tenure of respondents. About 77.5% of all respondents were owners of their housing lots. Since a large number of these respondents were considered to be persons engaging in informal economic activities, their incomes were probably relatively not high, and thus it is not clear why they chose to purchase land. However, one reason might be the low price of land at the time when the lands were transferred to the residents. On the other hand, Yamazaki (1987, pp. 201-202) pointed out through a case study in Mexico City that people employed in the informal job sector were eager to own their land in order to enhance their life security in the absence of social security or other retirement assistance. The same rationale could apply to our respondents dwelling in the new extension townships of Mandalay City, since Mandalay residents engaged in the informal job sector are also not provided any social

Table 4 Housing tenure of residents in new extension townships by occupation.

Housing tenure type	Occupation											
	Government Servant	(%)	Company Staff	(%)	Owned Business	(%)	Off-job	(%)	Miscellaneous	(%)	Total	(%)
Ownership	70	92.1	22	84.6	304	85.4	114	53.5	114	85.1	624	77.5
Private Rental	5	6.6	3	11.5	42	11.8	83	39.0	18	13.4	151	18.8
Living with relative/free	1	1.3	1	3.8	10	2.8	16	7.5	2	1.5	30	3.7
Total	76	100.0	26	100.0	356	100.0	213	100.0	134	100.0	805	100.0

Source : Field survey

Table 5 Land purchasing of residents in new extension townships by occupation.

Land purchasing type	Occupation										Total	(%)
	Government Servant	(%)	Company Staff	(%)	Owned Business	(%)	Off-job	(%)	Miscella- neous	(%)		
Government Plan	28	18.2	4	2.6	65	42.2	33	21.4	24	15.6	154	100
Promissory note from land owner	19	7.7	6	2.4	129	52.4	40	16.3	52	21.1	246	100
Bought from real estate agent	19	9.6	11	5.6	92	46.7	37	18.8	38	19.3	197	100
Other forms	4	14.8	1	3.7	18	66.7	4	14.8			27	100
Tenant (rental & living with relative/free)	6	3.3	4	2.2	52	28.7	99	54.7	20	11.0	181	100
Total	76	9.4	26	3.2	356	44.2	213	26.5	134	16.6	805	100

Source : Field survey

security from public organizations.

Table 5 shows the methods used to purchase land. The first strategy is the government plan tenure type, in which land plots are transferred to the residents according to the implementation of government land use planning. The second is the promissory note type¹⁾, in which land plots are resold by immigrants who purchased their land from the existing land owners (the government or the native residents). The third is the purchase type, in which land plots are purchased from real estate agents. The fourth method is classified as other type, in which the respondents are natives of the land plots and obtained the land by succession or inheritance. The former three ways are the main methods of purchasing land. The use of a promissory note from the land owner was the most frequently observed method in this survey. This suggests that there were a large number of persons purchasing land lots for purposes of resale. In addition, the respondents classified into the off-job occupation category accounted for the highest percentage of tenants (54.7%) among the five occupation categories. This was thought to be related to the difficulty of purchasing land with a relatively low and unstable income.

In addition, there were no large differences in the composition of land tenure between the two townships. The percentages of ownership of the two townships were 74% in CMTS and 80% in PGTG, respectively.

Next, to examine the housing type based on data presented by the Mandalay City Development Committee, four types of private housing were recognized based on materials: bamboo houses, wooden houses, semi-brick houses and brick houses (Photo. 1). The new extension townships are characterized by a high percentage of bamboo houses, compared with the three older townships (Table 6). In the Chanayetharsan township, where the downtown is located, the percentage of bamboo houses was 39.2%, the lowest among the five townships. And semi-brick and brick houses accounted for 27.4% and 25.7%, respectively. On the other hand, in the two extension townships, the percentage of bamboo houses reached about 75.5% on average. The composition of housing type in the new extension townships can be said to correspond with the job composition mentioned above. That is, most of the residents engaging in informal economic activities were found to live in bamboo houses.

(a) The modern brick house of a wealthy resident, being located along the main road, Theikpan Road, which is the divided line between Maharaungmye township and Chanmyatharsi township

(b) Modern brick buildings in Myothit (1) ward developed early in Chanmyatharsi township

(c) A wooden house in Ga ward developed lately in Pyigyitagun township

(d) A bamboo house located in Myothit (5) ward in Chanmyatharsi township, to which fire victims migrated from inner areas

Photo. 1 Types of housing structure in the new extension townships.

Table 6 Private houses in Mandalay City (2006-2007).

Township	Bamboo house	(%)	Wooden house	(%)	Semibrick	(%)	Brick house	(%)	Total	(%)
Aungmyetharsan	13,566	55.6	1,991	8.2	5,742	23.5	3,102	12.7	24,401	100
Chanayetharsan	9,199	39.2	1,827	7.8	6,440	27.4	6,027	25.7	23,493	100
Mahaaungmye	14,491	59.3	1,815	7.4	5,800	23.7	2,325	9.5	24,431	100
Chanmyatharsi	17,086	76.4	715	3.2	3,146	14.1	1,425	6.4	22,372	100
Pyigyitagun	10,821	74.8	388	2.7	2,399	16.6	860	5.9	14,468	100
Grand Total	65,163	59.7	6,736	6.2	23,527	21.6	13,739	12.6	109,165	100

Source : Mandalay City Development Committee

VI. Migration pattern of household in the new extension townships

1. Spatial pattern of migration

The locations of the last residence of the respondents were surveyed to clarify the migration pattern. About 34.8% of the households reported that the inner-city region of Mandalay was their place of last residence before moving to their present residence (Table 7). These households constituted the largest group in terms of the last residence. After this group, households migrating from fringe settlements of Mandalay city were the second largest group (21% on average), followed by those migrating from urban areas of other states and divisions, which accounted for 16% of the total. On the other hand, the percentage of households from rural areas remained in 15.2%, in which rural areas of Mandalay division occupied 9.2% and rural areas of other states and divisions 6%. That is, it can be said that relatively few migrants came from rural areas (Fig. 5). This may be because migrants from rural areas are thought to look for homes in the inner city before seeking residence in the new

extension townships.

The above interpretation adjusted to the result of the duration of dwelling at previous residence of migrants (Table 8). About 84.2% of migrants from the inner city had lived there for more than 10 years. Furthermore, the inner city of Mandalay was not their native place of residence. That is, they were immigrants from other areas into the inner city and had lived there for a long time. After that, some of them who could save some money purchased their own housing in the new extension townships.

2. Main reasons for moving to these settlements

The respondents were asked to identify the main reason among the following items for their migration to the surveyed townships : business opportunity, health, education, government job, proximity to relatives, and others. The frequency tabulation of the response to this question revealed that, although there were differences among the settlements, on the average about 67.3% of the households surveyed considered a “business opportunity” as the most important reason for their migration (Table 9). For households that

Table 7 Place of last residence of households surveyed.

Place of last residence	Chanmyatharsi Township	Percentage (%)	Pyigyitagun Township	Percentage (%)	Total	Percentage (%)
Inner City in Mandalay	92	28.3	188	39.2	280	34.8
Fringe settlements in Mandalay City	76	23.4	93	19.4	169	21.0
Urban Area of Mandalay Division	44	13.5	61	12.7	105	13.0
Rural Area of Mandalay Division	28	8.6	46	9.6	74	9.2
Urban Area of other States and Divisions	69	21.2	60	12.5	129	16.0
Rural Area of other States and Divisions	16	4.9	32	6.7	48	6.0
Total	325	100.0	480	100.0	805	100.0

Source : Field survey

Migrant families by other States and Divisions in the new extension townships

Source: Based on field survey

Migrant families by township in Mandalay Division in the new extension townships

Source: Based on field survey

Fig. 5 Original places of migrants into new extension townships of Mandalay City.

own small businesses, their houses are also the places of work, such as shops, workshops and restaurants, etc. In these cases, therefore, searching for a house is equivalent to searching for a place of employment. In other words, a large percentage of the migrants who reported a “business opportunity” as their main reason for migrating were determined to be migrants looking for a location to run their own home-based businesses. On the other hand, new commercial centers, highway bus terminals and industrial

zones have been constructed in these areas. The development of such infrastructure has provided many business opportunities in the new extension areas. Furthermore, many industrial works in the inner city were forced to migrate to the industrial zones after 1988. As a result, a large number of industrial jobs emerged in these areas.

Following the above factor, “other factors” occupied the second largest percentage, about 18.1% of the total respondents. This category included such

Table 8 Place of last residence of the respondents and the number of years they had stayed there before moving to new extension areas.

Number of years in place of last residence	Inner city in Mandalay		Fringe settlements in Mandalay city		Urban area of Mandalay Division		Rural area of Mandalay Division		Urban area of other Divisions and States		Rural area of other Divisions and States		Total	(%)
	household	(%)	household	(%)	household	(%)	household	(%)	household	(%)	household	(%)		
Under 5 years	4	1.4	14	8.3	2	1.9	4	5.4	6	4.7			30	3.7
6-10 years	40	14.3	45	26.6	14	13.3	14	18.9	30	23.3	3	6.3	146	18.1
11-15 years	67	23.9	22	13.0	31	29.5	14	18.9	39	30.2	7	14.6	180	22.4
More than 15 years	169	60.4	16	9.5	58	55.2	42	56.8	54	41.9	38	79.2	377	46.8
Native of previous place			72	42.6				0.0		0.0			72	8.9
Total	280	100.0	169	100.0	105	100.0	74	100.0	129	100.0	48	100.0	805	100.0

Source : Field survey

Table 9 Main reasons for moving these settlements by the households surveyed (%).

Main reasons	Chanmyatharsi Township		Pyigyitagun Township		Total	
	Household number	(%)	Household number	(%)	Household number	(%)
Business opportunities	245	75.4	297	61.9	542	67.3
Health	4	1.2	4	0.8	8	1.0
Education			5	1.1	5	0.6
Government job	13	4.0	43	9.0	56	7.0
Proximity to Relatives	11	3.4	37	7.7	48	6.0
Others	52	16.0	94	19.6	146	18.1
Total	325	100.0	480	100.0	805	100.0

Source : Field survey

factors as allotment of land plots for fire victims and slum clearance. For example, 5 Myothit wards in Chanmyatharsi Township were established for the resettlement of fire victims in the 1980s. In addition, after 1988, residents of slums and squatter houses in the inner city were forced to migrate to the new extension areas.

On the other hand, migration of government employees, personnel transfers and allotment of land plots were the main reasons. About 7% of respondents in these extension townships revealed that a government job was the reason for migrating to these settlements. The allotment area of plots for

government employees extends along the main street in Chanmyatharsi Township. The remaining factors are of minor importance, all representing only 7.6% of the total respondents.

VII. Conclusion

In Mandalay, a marked expansion of urban area followed the economic liberalization in 1988. Under the administration of MCDC, new residential areas, markets, transportation terminals and industrial zones were constructed in the southern suburb. Therefore, as for the recent expansion of Mandalay, two interpretations are possible. One is that the

new townships in the urban fringe area consist of homes for rural-to-urban migrants. The other is that the expansion of urban area reflected a process of suburbanization in which longtime urban dwellers move out in order to capitalize on new opportunities for land and house acquisition.

We examined the socio-economic characteristics of residents and their migration experiences. As a result, it was clarified that a large part of dwellers in the new extension townships were engaging in informal economic activities, especially small self-employment and temporary work. The number of salaried workers, such as public servants and company staff members, was small. However, a large percentage of the residents in the new extension townships had land and housing tenures. They purchased their own land in order to obtain life security. Furthermore, a large percentage of dwellers in the new extension townships were migrants not from other provincial regions but from other townships within the city, especially the inner city. Figure 6 shows the general pattern of migration seen in Mandalay City.

On the other hand, regarding the urban growth of Bangkok and Jakarta after the late 1980s, it was led by the Foreign Direct Investment (FDI) and characterized by remarkable expansion of the suburban area, in which both large industrial estates and housing estates for the middle class were developed. However, in Mandalay City we observed no suburbanization of this type. Therefore, the study concludes that the remarkable spatial expansion of Mandalay City after the 1990s was attributable to over-urbanization rather than a new type of urbanization due to foreign direct investment. In other words, although economic liberalization was enacted in Myanmar, because of the

Fig. 6 Generalized Pattern of migration into new extension townships.

remarkably small volume of FDI in Myanmar compared to adjacent countries in Southeast Asia, the new type of suburbanization has not yet appeared.

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Note

- 1) Initial stage, lands were transferred to the residents according to the implementation of urban planning. The person who received land lots from the government has property right for their land lots. Secondly, the person who possessed land lots can sell or

share to another person by using a signed document in which contained a written promise or agreement. This phenomenon is defined the promissory note land purchasing type.

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ミャンマーにおける 1988 年経済自由化後のマンダレーの新市街地住民の 社会的特性と移動パターン

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ミャンマー北部の中心都市マンダレーにおいても、1988 年以降の経済自由化と経済成長に対応して市街地南郊に大規模な新市街地が形成された。本稿は新市街地の住民の社会的特性と移動パターンについて主にアンケート調査によってデータを収集し、検討した。その結果、住民の多くはインフォーマルセクターに分類される零細な自営業者であった。そのほか都市の雑業に従事する世帯主が多かった。一方、サラリーマン層である公務員および民間企業勤務者は少なかった。しかし、住民の多くは土地、家屋ともに所有していた。しかも、住民の多くは旧市街地からの転居者であり、地方農村部からの流入者はごく少数であった。したがって、マンダレーの新市街地の居住者の多くは、旧市街地の過密から逃れ、将来の生活保障になる不動産を購入したインフォーマルセクターの人々からなるとみなし得た。そのような市街地の拡大は外国からの直接投資に牽引された郊外の都市化というよりも過剰都市化による過密の解消を意図した動きと位置づけられた。

キーワード：マンダレー，経済自由化，都市内人口移動，新市街地，インナーシティ

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