

Demography: A Case Study of Internal Migrant Workers in Food and Beverage Industry, Mandalay

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Abstract

Migration is one of the demographic components of population change, and today demography studies the size, composition and distribution of a population. The composition of a population includes measurable characteristics of population like place of origin, age, sex, marital status, education, job performed, and duration. Mandalay is economically active and fast becoming a major commercial and communication centre with border trade routes to China and India. Since Myanmar's adoption of a market economy in 1988, Mandalay has seen rapid urbanization. The operation of Mandalay industrial zone is based on orders; therefore, there is a huge demand for labour. This has created favorable conditions for an influx of workers from surrounding areas. The city labour market gradually requires more unskilled workers, male and female migrants stemming from rural areas (Mandalay, Sagaing, and Magway Regions). How does internal migration affect demography? The research methods and designs chosen to collect the research data were based on qualitative approaches using Focus Group Discussion (FGD) and In-depth-interviews (IDI). The aim of the study; to examine the demographic characteristics of migrant workers and the objective is to explore demographic characteristics of migrants to be working in food and beverage industries.

Introduction

Demography is the study of a human population including its size, distribution, composition, and the factors that determine changes in these variables. Population composition refers to the numbers of persons in sex, age, and other "demographic" categories. Migration is one of the demographic components of population change, and it has often been described as the most difficult to measure, model and forecast. Demography studies the size, composition and distribution of population. The size includes the population of a place in different periods. The composition of population includes measurable characteristics like age, sex, marital status, education, religion (Umar Farooq, 2013). For example, because migration, like many demographic behaviors, is not uniform by age (in many populations, age-specific migration rates tend to be highest among young adults and their dependent children), migration can have significant impacts on the age structure of both the source and receiving populations (Rogers & Castro 1981).

Demographic researchers have attempted to use migration models to describe the migration process, and those models can be described broadly by their method of analysis. For example, several early models were macro in scale, focusing on the economics of entire nations or even multi-national regions (Fields 1976; Muth 1971). In addition, poor nations may act as sources of migrants whereas wealthy nations may act as sinks for them. Over time, the focus on macro-scale models was largely replaced by a focus on micro individual-scale models (Lee 1966; Sjaastad 1962; Stark and Bloom 1985; Todaro 1980). This change of focus largely followed the realization that migrants are not homogenous. That is, not every person in a poor region migrates; in fact some people who live in wealthy regions migrate as well. A variety of factors has been considered in micro-level models, including the lure of increased capital and the escape from poor economic conditions, as well as the draw of migration flows that are already in place (e.g. cumulative causation) (Bohra-Mishra and Massey 2011; Massey 1990; Massey and

Espana 1987). Finally, some more recent models have realized that there is an important middle ground in the level of focus. Individuals live in households, communities, villages, cities, and regions; these higher levels of organization, and the interactions between them, should not be ignored (De Jong and Gardner 1981; Portes and Sensenbrenner 1993).

On the other hand, household surpluses and shortages are not only a function of agricultural production; they are also related to the demographic structure of the household. One measure of the demographic structure of a household is the consumer-producer (C/P) ratio. A.V. Chayanov (1925, 1966) was probably the first person to calculate C/P ratios and include them in a model of household economics. Household size can be a profound factor in the decision to migrate. For example, a big family or big household may be important with regard to migration decisions.\

Internal migration is the main factor in the population growth and more importantly in the socio-economic development in the country. Most of internal migration is strongly associated with rural-to-urban flow. Why did they migrate especially as it relates to job creation for the unskilled workers? How does internal migration affect of demography? (Because, majority of migrant workers are young (age 20-35), the concentration of migrants in the young age groups they have no chance to live with their family members and cannot take responsible of reproduction.)

The study area for the research reported here is Mandalay industrial zone which operates based on orders; therefore, there is a huge demand for labour. This has created favorable conditions for an influx of workers from surrounding areas. The city labour market gradually required increased numbers of unskilled workers, male and female migrants stemming from rural areas (Mandalay, Sagaing, and Magway Regions). The survey cited shows that the majority of migrants used to work in manual jobs such as food and beverage industries in Mandalay Industrial Zone, Mandalay.

1.1 Aim and Objective

The aim of the study is to examine the demographic characteristics of migrant workers and the objective is to explore how internal migration affects the demography of the food and beverage industry.

1. 2 Study area and population

Mandalay is economically active and fast becoming a major commercial and communication centre with border trade routes to China and India. Urban population has grown from 722,235 in 1994 to 875,252 in 2005 at a rate of 2.3 % per annum and urban area to 117 square kilometer (Mandalay's Immigration and National Registration Department, 2005). City's municipal area consists of five administrative townships; Aung-Myay-Tharzan, Chan-Aye-Tharzan, Maha-Aung-Mye, Chan-Mya-Tharzi and Pyi-Gyi-Dagun. Geographically Mandalay is located on the point where between North Latitude 20° 30' and 22° and East Longitude 96° and 96° 30'. The township is bounded by Chan-Mya-Thazi Township in the north and the west, and Amarapura in the south. Two industrial zones have been established at the southern urban fringe of Mandalay City at Pyi-Gyi-Dagun Township and 1,255 factories (2016-2017): workshops, food and cottage industries are operating providing employment to 15,932 persons. The study focused on Industrial Zone (1), which is located in Pyi-Gyi-Dagun Township, Mandalay Region. Among

them, five food and beverage industries were selected as the study site. Those industries are located in the west and south-west of the industrial zone (1). There are 182 food and beverage industries and 3,414 persons are working in industrial zone (1), Mandalay.

From five food and beverage industries, migrant workers (male= 249, female=151) were chosen randomly for the study according to the permission of their respective managers. The respondents are 400 in total. They are Bamar nationals and Buddhists.

2. Methodology

The study was based on a review of existing literature, observations and interviews with the migrant workers. The study used a questionnaire, and qualitative approaches to collect data, namely In-depth-interviews (IDI) and Focus Group Discussions (FGD). Twenty-five in-depth interviews were conducted with male and female migrant workers. In addition six focus group discussions were also conducted with male and female migrant workers.

2.1 Questionnaire survey

The aim was to carry out 400 standardized interviews. The primary instrument used to collect quantitative data was a both open and close ended questionnaire. The questionnaire dealt with the background characteristics of the respondents and sought to obtain information on certain survival strategies and demographic variables such as age, marital status, religion, level of education, place of origin, and occupation, among others. The questionnaire was obviously constructed in such a way as to provide some data for answers to many of the research questions. This was to collect evidence for an objective assessment of how, and to what extent, demography affects migration.

2.2 In-depth interviews

Detailed interviews were conducted with migrant workers in food and beverage factories, Industrial Zone (1), Mandalay. The 34 interviewees in this research had generally worked as migrant workers in food and beverage industries. Several respondents found their way into this occupation because of their experience and knowledge of the migrant worker context (e.g. workplaces, employers, local geography). An in-depth- interview is a more personal form of research than questionnaires. In the personal interview, the respondents were spoken with directly. In addition, interviews were generally easier for the respondents, especially what was sought as opinions or impressions. This technique was used in order to better understand the life history as well as their situation during the migration process. The interviews took place in June and July, 2016-2017 and were for 30-40 minutes.

2.3 Focus group discussion

Six focus group discussions enabled to find general information on the experiences of these migrant workers with regards to the research objectives, to get information how internal migration effects of demography in food and beverage industry. Therefore, one male group and one female group were interviewed who had less than two years working experience for focus group discussion. Two male groups and two female groups were interviewed who had over two years working experience. Every focus group discussion was organized in a group of 7 discussants. The duration of the discussions ranged from 40-50 minutes. The discussions were recorded in accordance with their permission.

2.4 Limitations of the study

The study limitations include the fact that workers had to wait for their leisure time in order to participate. There was also difficulty getting permission from a factory owner or manager. This was minimized by providing them with the questionnaires and data collected from the respondents.

3. Migration background in Myanmar

Myanmar's population is estimated at over 55 million and is largely rural, still reliant on a primarily agrarian economy, contributing about 36 % to the gross domestic product of the country and accounting for 60-70 % employment. It is also one of the world's most ethnically diverse and politically complex countries. The little information gathered through certain surveys (such as Fertility and Reproductive Health Survey) reveal that internal migration in Myanmar is very high and that the predominant migration pattern is rural-rural rather than rural-urban (Nyi, 2013).

Moreover, it is well known that migration within the country is one of the most common coping strategies adopted by poor households to stabilize their livelihoods and to adapt to climate, social, political and economic changes. It is also one of the only means for poor rural farm households to overcome shortfalls of seasonal agricultural income and employment.

The central regions of Mandalay, Magway and lower Sagaing are known as the "Dry Zone" and cover 13% of the country. This area receives the lowest rainfall levels in the country. According to a 2014 survey jointly administered by the World Food Programme (WFP), Save the Children, and the Ministry of Livestock, Fisheries and Rural Development (MoLFRD), 18.5% of Dry Zone households face food insecurity, while 60% of households are farmers and 40% are landless. The main agricultural commodities are sesame, groundnut and other oil crops, the area also being called the oil pot of the country. Uncertain rainfall, high degree of near-landlessness, low farm-gate prices and diminished margins, a low technological base resulting in lower productivity of crops, lack of job opportunities all act as push factors for people to migrate. The motivations for migration as well as the reasons why people left their place of origin to live or to find jobs for improving their income are many and vary in different places. They are influenced by factors such as local socioeconomic conditions in migration destinations. Better wages in the industrial sector and work opportunities for improving livelihoods act as pull factors for local peoples from place of origin to destination locations, mostly to rural areas in the urban cities such as the Industrial Zone, Mandalay.

4. Demographic characteristics of migrant workers

Internal migration is becoming an important form of migration in the industrialization and development of Myanmar.

4.1 Place of origin

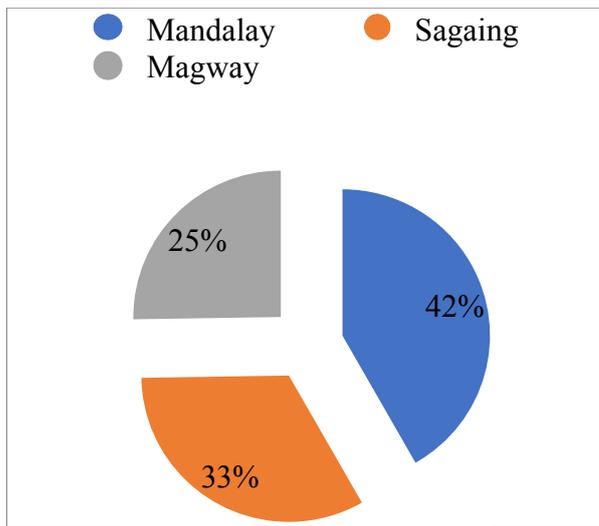


Figure 1. Place of origin

Internal migration is increasing significantly and is becoming an important form of migration in the industrialization and development of Myanmar. In selected food and beverage industries, Figure No.1 shows that most migrant workers in urban areas and industrial zones come from Mandalay Region, Sagaing Region and Magway Region. This reflects increasingly strong rural urban migration flows since decrease of local economy. In Mandalay Region, 169 migrants representing 42% of migrants from rural areas; most of them moved from Myitnge, Palate, Nathtogyi, Myingyan, Kyaukpadaung, and Patheingyi Township. These figures show the migrants in Sagaing Region (Total=132) 33% and they come from Sagaing, Ayartaw, Yinmarpin Township and from Magway Region is (Total=101) 25% and they moved from Magway, Yaysakyo, Myaing Township respectively.

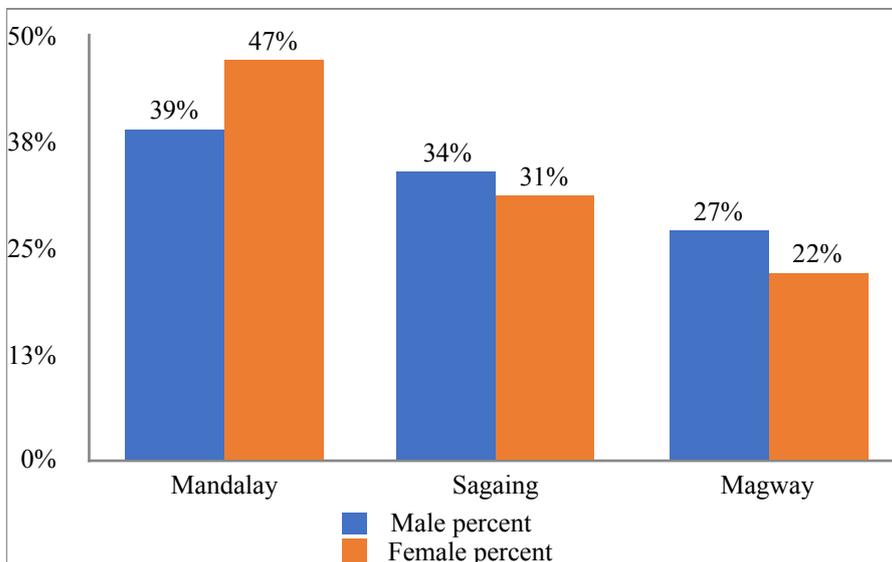


Figure 2. Place of origin of male and female migrants

Figure 2 shows that food and beverage industries hold the highest percent 39% of male migrants (96) from Mandalay Region, second highest percent 34% male migrants (85) from Sagaing Region, and 27% of male migrants (68) from Magway Region. 71 female migrants come from Mandalay Region 47%, (47) female migrants from Sagaing Region (31%), 33 female migrants from Magway Region (22%). Regarding location, Mandalay Region has the highest percentage of migrant workers from rural areas, whereas this figure in Sagaing Region is second and Magway Region is third respectively.

Migration is often seen as an event that is primarily undertaken by males, in fact single males are generally said to predominate in migration (Amassari and Black, 2001). However, females also migrate in response to opportunities and constraints, as shown in the above figures.

However, the migrants face major challenges at their destination. Obviously, migrating from rural to urban areas involves a process of adaptation and adjustment to an urban lifestyle. Nevertheless, most migrants prepared for this change. This result showed that migrants had sought information before migration. For example, friends and relatives would typically provide a base from where work could be sought, including accommodation and introductions to important contacts.

4.2 Education Level of Migrant Workers

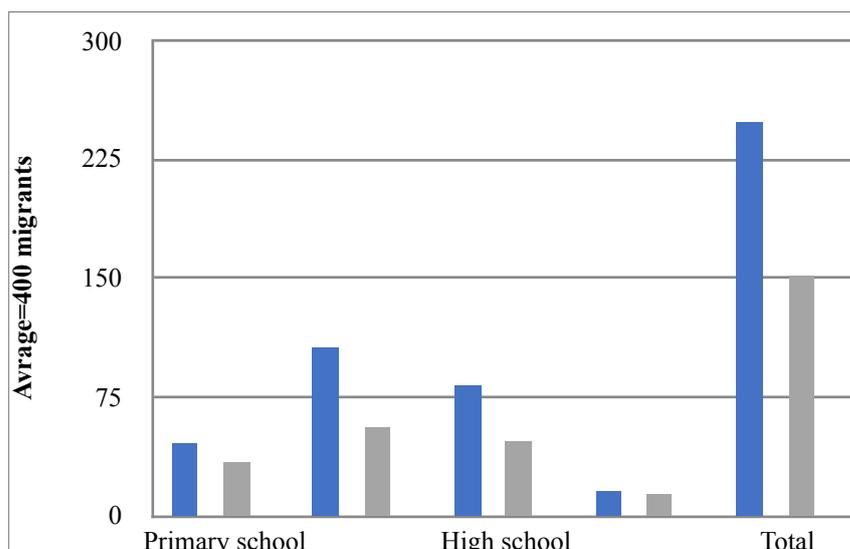


Figure 3. Education level of migrant workers at food and beverage industries

Figure 3 shows that food and beverage industry jobs do not require skills or a particularly high level of education. Education levels of male and female migrants (based on Ministry of Education, Myanmar) can be divided into four groups: primary education (from 1st to 5th grade), secondary education (from 6th to 9th grade), high school education (from 10th to 11th grade), and college or University level (graduated from college or higher level of education). Those of the migrant workers with primary education were 18% of males (N=46) and females were 23% (N=34). In the food and beverage industries the greatest proportion of male and female migrants have lower secondary education (males= 106 or 43%, females=56 or 37%). Those with high school education were 33% male (N=82) and 31% female (N=47). These figures from the 2017 questionnaire means that most female migrants are literate but the proportion with skills (being trained by vocational training) is relatively low. Majority of migrants at food and beverage industries in Mandalay have primary or secondary education, with only a relatively small proportion with college or university qualifications (15 males and 14 females or fewer than 10% of all migrants surveyed).

Accordingly, male and female migrants with primary and secondary education level account for the highest percentage, with more than 80% in food and beverage industries. Whereas, there is a relatively small percentage of male and female migrants (Male=15, Female=14) holding college/university levels (below 15% in this study). The studies of migration found that relatively better educated migrants were aged between 20-35 years. Moreover, these results suggest that education still matters even though it was

not the most important factor determining internal migration. Males and females with higher education level are more likely to find a job.

In China, earlier studies found that migrants had a higher level of education (de Haan, 2000). Drought out of school increases the propensity to migrate, and highly educated workers are much more likely than others to migrate frequently and for longer distances (Waggoner, 2004) since more jobs are open to the educated and experienced ones.

The majority of migrants had middle school education (from 6th to 9th grade). Most of their job opportunities were not directly connected with their education. The food and beverage industry needs workers who are young, healthy and active for manual labor (physical labour).

Educational and economic characteristics are often the focus of demographic studies, forexample, causes and consequences of differential educational attainment and the poverty status of the population. In fact, they are closely related in important ways. For example, an increase in education represents an increase in human capital; this in turn contributes to the productivity of the labour force; and a rise in labour productivity affects wages and salaries, hours of work, the demand for labor, and consumer behaviour.

4.3 Age of migrant workers

Age	Male	Percent	Female	Percent
50-60	12	5%	8	5%
46-55	36	14%	20	13%
36-45	69	28%	45	30%
20-35	132	53%	78	52%
Total	249	100%	151	100%

Table 1. Age of migrant workers

Table 1 shows that male and female migrants in this survey are mostly around the age of 20 - 35. It is the largest group (male=53% and female=52%). Secondly, migrants aged between 36 - 45 years are male (28%) and female (30%). 14% male and 13% female migrants are around 46-55 years of age. Only 5% of males and females are over 56. Of those over 40 years, most of male migrant workers have got a job such as factory manager, office worker, cleaner and security guard. Female migrant workers over 40 are factory managers, office workers, cleaners, and cooks. Besides, over 50% of male and female migrants are 20-35 years of age (many of them are unmarried). However, Table No.1 shows that the young migrants are leaving their village to find work and support their families and to get job opportunities at work destination.

Studies of migration in small-scale, indigenous agricultural populations are important not only for demographic research, but also for understanding the mechanisms behind the distribution of populations across landscapes and the spread of infectious diseases (Ferrari et al. 2008; Fix 1999; Stoddard et al. 2009). For example, because migration, like many demographic behaviours, is not uniform by age (in many populations, age-specific migration rates tend to be highest among young adults and their dependent children), migration can have significant impacts on the age structure of both the source and receiving populations (Rogers & Castro 1981).

Migrants are predominantly young adults from low-income families (Asfar, 2003). But Table No.1 show that the young migrants leaving their village to find work and support

their families is changing as more and more join their ranks and, increasingly, migrants are more informed about job opportunities at a work destination. In terms of recent migration, that is movement during the 2017 survey, the highest movement was seen among the youth aged 20 to 35 in the study area. Many studies found that young adults were much more mobile than older people (Long, 1988; Ammassari and Black, 2001). In my study area, migration is selective by age, so the concentration of migrants in the young age groups means they have no chance to live with their family members and cannot take responsibility for reproduction.

4.4 Marital status of migrant workers

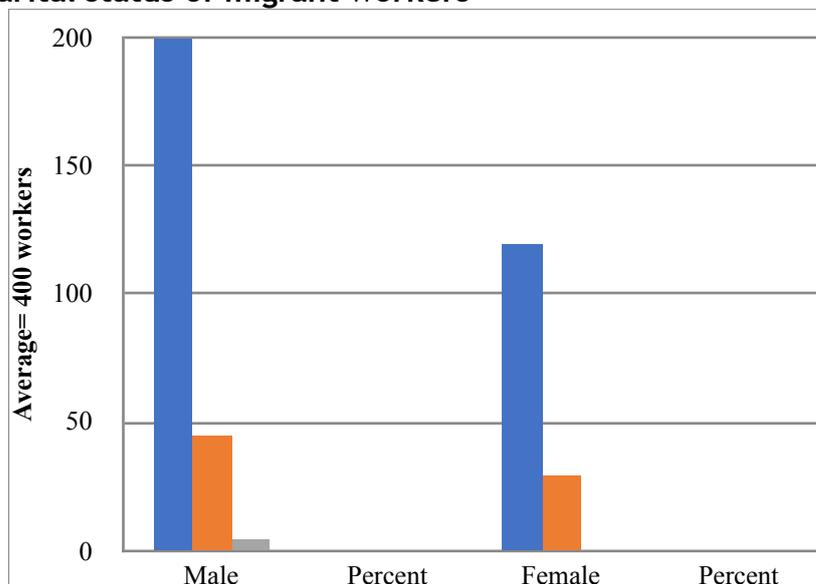


Figure 4. Marital status

Figure 4 shows that 18% of male migrants and 20% of female are married, and 80% of male and 79% of female migrant workers are single (most migrants are young and single), just a low proportion of male 2% and female 1% migrants are separated, divorced, or widowed.

Most of the married migrants married in their homeland and then migrated to cities after marriage. After migration, a few male migrants get married to a woman from another place. The proportion of separated or divorced male and female migrants tends to increase with the length of their migration. It might be a consequence of long separations.

Marital status is one of the characteristics conventionally accepted as closely associated with the propensity to migrate. Earlier studies of internal migration consistently found that married men (many accompanied by their families) and single women were most prevalent in Latin American migration patterns (Todaro 1976).

On the other hand, marital status categories are highly dependent on the age-sex structure. For example, the decline in period marriage rates in the United States during the 1970s and 1980s appears to be inconsistent with the rise in median age at first marriage. However, during that period, the number of marriages per 1000 women aged 15 and over (i.e. the general marriage rate) declined at a faster pace than the number of marriages per 1000 total population (i.e. the crude marriage rate). The shifts in the U.S. population age structure were responsible for this phenomenon (Teachman, Polonko, Scanzoni, 1999).

As noted above, only a few of the women married a man who is from another homeland. Moreover, the proportion of separated or divorced male and female migrants tends to

increase with the length of their migration. This may be the consequence of migration which leads to long separations.

Global shifts in mortality and fertility have had a profound impact on age structures, with the initial decline in mortality contributing to a rapid expansion of young age groups and the later decline in fertility bringing about an ageing of the population. One of the relatively few generalizations that can be made about migration is that the majority of those who move are young adults, a generalization that can be traced back to Ravenstein (1885), the “father” of modern migration studies, in the late nineteenth century.

In the present study area, migration is selective by age, so the concentration of migrants in the young age groups they have no chance to live with their family members and cannot take on the responsibility of reproduction. There is a considerable difference in current ages of male and female migrants to their ages at the first migration.

The studies have shown that being unmarried is a strong influencing factor for migration. Upon marriage at least one of the partners, and usually both partners, migrate. On the other hand, we found that single migrants (both males and females) increased during the study period in the food and beverage industry in Mandalay. One fourth of male migrants and one third of female migrants in the study were married. In fact, demographic changes have a very important effect on a society because single migrants (both males and females) declined during the over eight years in food and beverage industry, Mandalay.

4.5 Migrant’s job performed



Figure 5. Job performed by male and female migrants

4.5.1 Job performed by male workers

Figure 5 shows the main jobs of male migrant workers in the food and beverage industries: 168 workers (68%) are performing physical labour. The majority of migrant workers was in education or was engaged in agricultural work before migrating. Many were farmers or performing seasonal labour mostly in agricultural sector and having spontaneous jobs before migrating. This also reflects the actual average education level of male migrant workers.

In addition, it is important to see whether there is any significant change in their jobs from their first migration to the time surveyed (on average of 2-4 years - as analysed

below). Generally, physical labourers are more vulnerable than other workers, but they can find any jobs in any factories.

4.5.2 Job performed by female workers

The majority of female workers were farmers, small shopkeepers or working in the agricultural sector before migrating.

The rate of workers possessing degrees before their first migration is only 15%. In addition, it is important to see whether there is any significant change in their jobs after such a long period from their first migration to the time surveyed (on average of 2-4 years). This could be attributed to the limitation of learning opportunities during their migration (as discussed above). In this study have found that majority of job are performing for male workers in food and beverage industry. So, job performed is a part of demographic change, according to questionnaires, 2016-2017.

4.6 Duration of working away from village

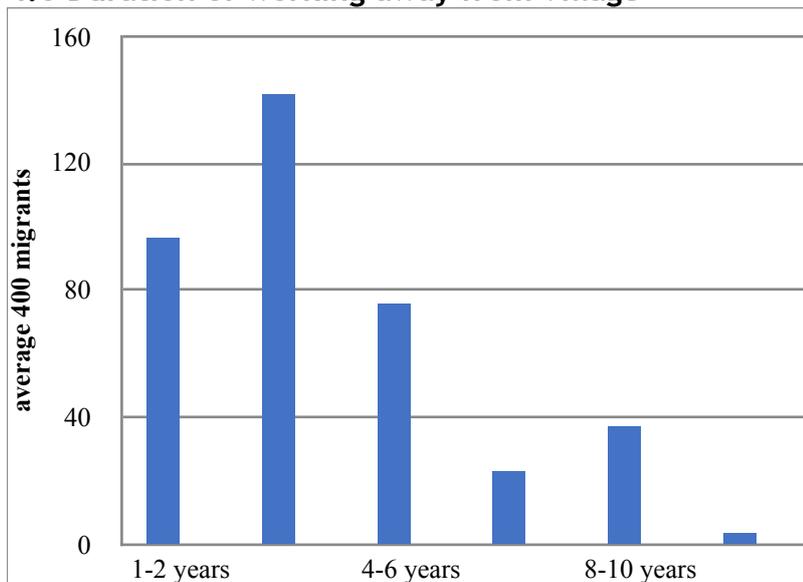


Figure 6. Length of stay in food and beverage industries

Figure 6 shows that the greatest proportion of migrants (37%) have been away from their native villages for 2-4 years. Then 26% of migrants have been away from their native villages for 1-2 years. Generally, absences range from 1 year to 10 years.

The correlation between age and duration of working away from the village is positive; a 40 year-old security guard has already worked for 8 years since he was 32 and a 24 year-old driver has worked for about 3 years as he migrated when he was 21. Therefore, generally the relationship between ages and duration of working away from the village is directly proportional. The longer the duration of working away from their village is, the older their ages. It is a survival strategy to get money, to support children and family members left behind in the village.

Piore (1979) mentioned about economic pull factors as creating economic opportunities for migrants in the short term, others see that in fact the economies of industrialized countries are structured to require the presence of low-wage foreign labour.

The migration outcomes are not clear enough to them before migration, so that they have little clear idea about the likely or probable duration of migration. Migration is not seen as a means of achieving planned long-term goals. It is a survival strategy, above all to get money to feed children and other family members left behind in the village.

5. Conclusion

The study examined the demographic characteristics of migrant workers to find out how internal migration affects demography based on migrant workers who moved from rural areas to Mandalay industrial zone. It was found that Mandalay Region has the highest percentage of migrant workers from rural areas, Sagaing Region is second and Magway Region is third. Migrating from rural to urban areas requires a process of adaptation and adjustment to fit a new working environment and speedy lifestyle at destination. Moreover, these results suggested that education still mattered even though it was not the most important factor determining migration. Migrants were generally young, between the ages of 20-35 years of age and were single and had lower educational levels. The study showed that being unmarried is a strong influencing factor for migration. Male migrants rather than the female ones are found in the food and beverage industry. Because migrants have values and attitudes towards gender roles within the household, female roles focus on caring activities such as looking after the children and the elderly. When males migrate, females are empowered to take a more prominent part of the community decision making, management of their own income and expansion of their life.

Migration demographics indicate that developing countries in particular may be seen as being in various stages of transition. In fact, demographic changes have a very important effect on our society because the majority of migrant workers are single (both males and females), at least during the study period and in the food and beverage industry, Mandalay.

6. Recommendation for further research

* Government should upgrade the education and agriculture systems. Doing so would reduce internal migration but not change its demography.

This study only provides information about aspects of the demography of internal migrant workers in the Industrial Zone, Mandalay. It cannot provide conclusive evidence regarding all migration issues, particularly pertaining to the determinants and consequences of internal migration in food and beverage industries. More detailed research on internal migration linkages with development is essential for evidence-based policy, and development planning. Migration needs to be understood from a livelihoods perspective and policies need to be designed through multidisciplinary and multi-sector study. Further research in these areas will certainly enhance the understanding of the socio-economic life of internal migrant workers in Industrial Zone (1), Mandalay.

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