

Urban Family Migration and Economic Livelihoods of Migrants in Colombo District, Sri Lanka

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ABSTRACT

Globally, there are numerous types of migrations in the internal migration process. Most of the internal migration studies have focused on individual migration than family or household level migration and their social and economic livelihoods. Therefore, this study explores the reasons for urban family migration and their status of economic livelihoods. The study uses the quantitative method to gather information and utilizes data from the Population and Housing Census, 2012 in Sri Lanka and primary data collected in 2015-2016 from the Municipal Council and Urban Council areas in the Colombo district in Sri Lanka. The unit of analysis is the migrant household. The Chi-square test and Contingency Coefficient were applied to examine the factors which influence family migration to urban areas and their economic livelihoods in the destination areas. A composite index was constructed using the PCA method to analyse the quantitative data. The findings of the study reveal that approximately two-thirds (60.79%) of families have migrated to urban areas in the Colombo district due to their children's educational attainments. The majority of migrant families in the study have migrated due to easy access to non-agricultural employment opportunities, good education facilities, public services and opportunities to utilize other infrastructure facilities available in the urban locations. The findings may assist policymakers and planners to implement new policies or making necessary changes to existing policies so as to reduce the urban migration in highly urbanized areas in the capital city of the country.

KEYWORDS: Economic livelihoods, Family migration, Sri Lanka

Introduction

This paper focuses on the links between family migration to the urban areas and the economic livelihoods of the migrants while looking in particular at the demographic characteristics, social and economic factors related to internal migration. There are various forms of migration including international, internal, economic, forced and voluntary migration and often overlooked dynamic interaction among forms of movement. Especially, in developing countries, the main contributing factor to urbanization remains both individual and family migration towards urban areas (UN Habitat, 2009). In Asian countries, migrants constitute a large and significant portion of the urban population.

The last five decades saw a population movement of an arguably unprecedented scale. In addition to the hundreds of millions of economic migrants at internal and international levels, the United Nations High Commissioner for Refugees (UNHCR) estimated that there are some 18 million refugees in international transit, 35 million people internally displaced, 100 million people uprooted by planned development, and an estimated 25 million people in danger of displacement as a consequence of environmental change (Caspary, 2007; McDowell, 1992, 1996). Such migrations are by no means restricted to developing countries. However, the majority of such migrants occupy the informal sector economic activities (Manel et al., 2017; Resurrection, 2005).

Migration studies have revealed the issues of the inter-connections of the place of origin and place of destination. As Kloos et al. (2010) have noted, internal migration is essentially a series of exchanges between places such as physical signs of its presence, remittances, birds, journeys home, goods and so on which are the links in the chain. Not only that, considerable research has examined the impact on the migrants' economic livelihoods in the urban setting and remittances sent to their relatives, school attendance of their children, infrastructure facilities including health facilities etc. However, most studies on internal migration have focused on individual migration than on family or household level migration and their social and economic livelihoods. In doing so, they have often failed to grasp the more dynamic nature of the inter-relationships which would see family migration towards urban areas and their economic livelihoods. Therefore, this study explores the reasons for urban family migration and their status of economic livelihoods.

Research Objectives

Although there are many research studies that have focused on internal migration in the urban setting, there is a vacuum regarding family migration towards urban areas and the economic livelihoods of migrant households.

Therefore, this paper examines the significant factors that influence urban-ward family migration and their economic livelihoods in the urban setting.

Methodology

The Study Area

Compared with the other districts of the country, Colombo, Gampaha and Kalutara districts showed a higher number of migrant population (Department of Census and Statistics, 2014). The Colombo Municipal Council area has around 15% of the total population in urban areas of the country. Further, the Department of Census and Statistics (2014) revealed that nearly 50 per cent of the urban population in Sri Lanka are constituted within the eight cities in the Colombo and Gampaha districts (Figure 1).

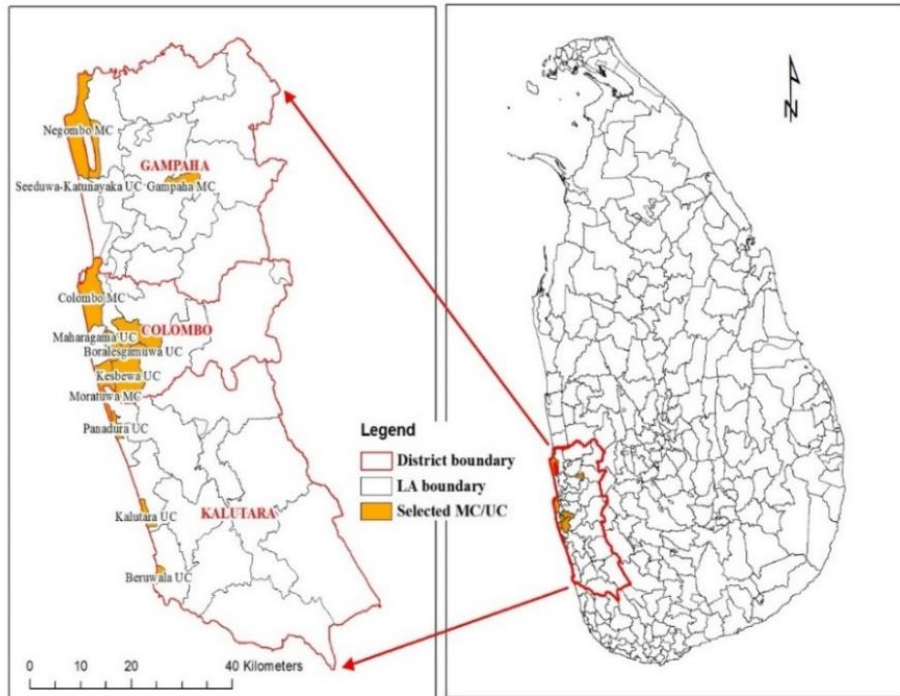


Figure 1: Study Area Selected

Source: Compiled by the researcher, 2021

Sampling Procedure

There are nine provinces and twenty-five districts in Sri Lanka. Compared with the other districts of the country, Colombo and Gampaha showed a higher number of migrant population (Department of Census and Statistics, 2014). The highest volume of the urban population in the country is reported in the Western Province. Colombo Municipal Council area has around 15% of the total population in urban areas. Further, the report of key findings published by the Department of Census and Statistics revealed that nearly 50 per cent of the urban population in Sri Lanka is constituted within eight cities in the Colombo and Gampaha districts. However, among the two districts, the most migrant families were in the Colombo district.

Therefore, the Colombo District was selected for this study since it showed the highest volume of urban population and the in-migrant population in the 2012 census. There are five Municipal Council (MC) areas and five Urban Council areas in the Colombo district. Two MCs and three UCs within the Colombo district were selected considering their urban characteristics and the volume of the migrant population. The electoral voting list available for each Grama Niladhari (GN) division is used to identify the migrant families and to prepare the sampling frame.

The sampling frame was prepared by including all in-migrant families in each GN division. It consists of recent migrants, medium-term migrants and long-term migrants.

Similarly, equal size migrant families (40) were included from each GN division in selected urban areas.

Sample Size

The total sample size was determined as 400 migrant families from the selected urban areas in the Colombo district of the Western Province in Sri Lanka. According to the process described previously, 40 migrant families were selected from each GN division using a prepared sampling frame including migrant households and is presented while considering the urban characteristics' mainly the population diversity. The total number of households for each GN division were examined and in addition, the migrant families in each GN division were identified according to the GN officer's information. Since the Colombo district reported the highest number of migrants as well as urban population, out of the 400 migrant households, more than half of the sample was allocated to the Colombo Municipal Council area while the remaining sample was equally allocated among other selected urban areas in the district.

Data and Analytical Methods

The quantitative methods were employed to explore the reasons for the family migration and economic livelihoods. The data were collected primarily from first-hand sources and the primary data have been supplemented by secondary material. The main methods of collecting the primary data were observation, face to face interviews with the household heads to obtain information on each surveyed migrant family, using a structured interviewer-administered questionnaire. Data was collected on the household information; migration information of family members and employment information covering the socio-economic variables including family income, savings and investment of the families, education, occupation, health status and social security status of the family members. Moreover, questions about their purpose of migration, motivation factors (push and pull factors), their perception about urbanization and its consequences were asked as well.

The unit of analysis was the migrant household. Quantitative techniques were applied to analyse the data. The qualitative data were transcribed, classified, grouped, and then analyzed to derive narratives from various informants. The survey data were coded, and the SPSS programme was used to generate tables of frequency and cross-tabulation.

Significant factors that influenced urban-ward family migration were identified from the Chi-square test and Contingency Coefficient. A composite index was constructed using the PCA method to identify the status of the economic livelihood of the migrants (Antony and Rao, 2007).

Results and Discussion

There are several reasons for the urban-ward population mobility. Causes for family migration to urban locations, in particular, are more complex.

Even though, the causes of individual and family migration are usually known as two categories (Lee, 1966; Todaro and Smith, 2003); namely the origin pushing and destination pulling factors, in addition, the decision of family migration to urban areas may also be influenced by economic and non-economic factors such as the need for better employment opportunities and better living facilities, to utilize the urban services and other cultural, political, family restrictions and so on. Further, while providing the reasons for urban-ward migration, several scholars conclude that migration is a response by humans to a series of economic and non-economic determinants (Lewis, 1954; Stark, 1982). However, in developing countries, the current researchers of internal migration, agree that urban-ward family migration also happens largely as a response to economic factors than non-economic reasons (Cooke et al., 2009; Gemici, 2006). In the Sri Lankan context since 1981, the proportion of the in-migrant population has gradually increased due to economic and non-economic reasons (Department of Census and Statistics, 2012; Department of Census and Statistics, 2014; Manel, 2021; Manel et al., 2017; Perera and Jampaklay, 2011). However, the existing data on urban-ward migration is limited according to the migration status and their reasons. The empirical analysis carried out in this study is aimed at answering the following questions: What factors significantly influenced the household level migration to urban locations? In order to conduct the descriptive analysis of in-migrant household heads' characteristics before and after migration, the determinants influencing family migration to urban areas were discussed while using statistical analysis. Widowed and divorced female-headed migrant families were high in the Colombo urban areas due to such females living in the urban areas with their children engaged in different types of informal activities. Out of the total surveyed migrant household heads, around one-third of household heads were migrants from rural origin to urban areas in the district searching for employment opportunities in the industrial sector. Among in-migrant household heads around, the proportion of (rural origin) urban migrants (24.3 per cent) is greater than those who have come from urban origin areas (8.3 per cent).

In addition, descriptive analysis reveals that approximately two-thirds (60.79%) of families have migrated to urban areas in the Colombo district to fulfil their children's educational attainments. The Colombo district consists of largely urbanized areas as well as highly migrated locations since it is the economic hub of the country. The majority of migrant families in the study area migrated due to easy access to non-agricultural employment opportunities, good education facilities, public services and other infrastructure facilities.

The composite index was developed using the multivariate analytical method through the wealth information of the households to evaluate the economic livelihoods of migrant families in the urban areas of the Colombo district in Sri Lanka.

Before moving to statistical techniques to develop the index and evaluate the economic livelihood conditions through the wealth index the reliability and validity of the collected data must be measured.

The reliability and validity of the data set were measured separately.

In the Colombo district, Cronbach's Alpha value was measured for the fourteen variables under six categories (Economic factors, Durable goods, Dwelling facilities, Household characteristics, House construction materials and health status) through the data set of household wealth. The Cronbach's Alpha (based on standardized items) is 0.657. Since the above-considered values are more than 0.6 no item will be deleted. This Cronbach's Alpha test was performed to check the reliability of questions or items (Taber, 2016). According to the above description of the reliability test value which is higher than 0.6, it moderately indicates the internal consistency of the items.

In the data set of household wealth in the district, a value of Kaiser-Meyer-Olkin and Bartlett's Measure of sampling adequacy (KMO) was measured for all the variables and it is as follows:

Table 1: KMO and Bartlett's Test for Household Wealth

| District | District Kaiser-Meyer-Olkin Measure of Sampling Adequacy | Approximate Chi-Square Value | df | Sig. |
|----------|--|------------------------------|----|------|
| Colombo | 0.85 | 3294.16 | 78 | 0.00 |

Source: Compiled by the Researcher based on Surveyed data, 2015

According to Fonseca et al. (2013), the Kaiser-Meyer-Olkin Measure and Bartlett's Test of Sphericity (KMO) indicated the suitability of data structure detection. As mentioned in the reliability test of the previous studies, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy is a statistic that indicates the proportion of variance of the variables that might be caused by underlying factors. High values (closer to 1) generally indicate that an advanced analysis like factor analysis may be useful with those data. Since here the KMO Measure gives values of 0.85 which is higher than 0.7, it proves that data indicate a considerable proportion of variance and is suitable for further analyses.

Data related to household's economic factors and household heads' characteristics with reference to monetary assets are important to construct a household wealth index. In this study, data are collected through the survey in the urban areas of the district under six main categories. The first category has seven items as household ownership of durable goods (bicycle, radio, television, computer, motorbike, telephone, car/van) while the second category has three items for characteristics (source of drinking water, cooking fuel and sanitary facilities). The household economic factor includes monthly income, expenses, land ownership and land size. Household heads' health status is another important single variable of this analysis.

The fourth category is the household's characteristics including household size, number of bedrooms, number of dependents in the household, and housing construction materials (roof, wall and floor materials). Then after checking the reliability and validity of the data, these variables are used to create the index for household wealth. The statistical procedure of Principal Components (Deon and Pritchett, 2001) is used to create the wealth index.

A composite wealth index was constructed based on survey data on urban-ward family migration in the urban areas by using the PCA of 14 variables.

Various economic variables, households level variables, household heads' health status, housing construction variables were included to ensure a multidimensional approach to understand the differences in the economic status of migrants. The study followed the variables that can be used to build the wealth index to measure economic livelihoods as explained by Deon and Pritchett (2001).

Interpretation of the Results from Principal Component Analysis

The 14 variables were included in the factor analysis for the Colombo district and the results are presented in Table 2. According to the technique of Kaiser's criterion, the eigenvalue rule for only four factors was selected to explain the total variance. In addition, the present study also used a graphical method in Figure 1. This is a plot of each eigenvalue of the factors. The scree plot graphed the eigenvalues against the component number. From the scree plot representing the Colombo district, it can be clearly seen that the line representing the four components is almost flat. It means that each successive component is accounting for smaller and smaller amounts of the total variance. In general, what is needed is to keep only those principal components whose eigenvalues are greater than 1. Components with an eigenvalue of less than 1 account for less variance than the original variable (which had a variance of 1).

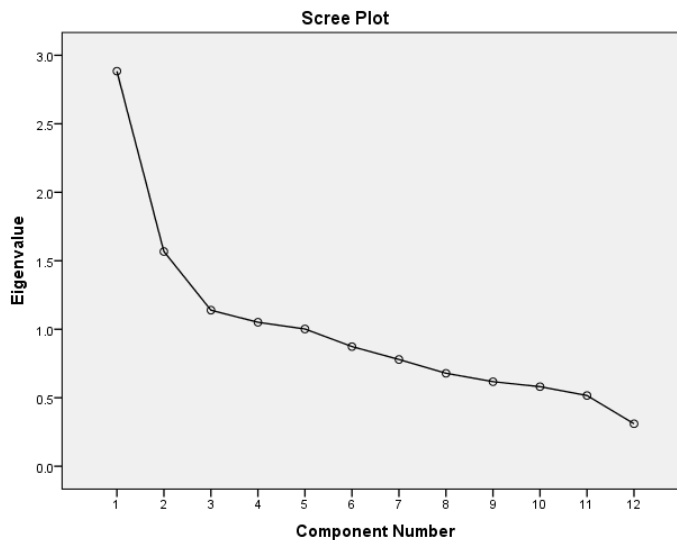


Figure 1: Scree Plot of Eigenvalues of Factors of Colombo District

Source: Constructed Based on Survey Data, 2015

Table 2 shows that only four components have been extracted from the principal component analysis for the Colombo district's data. The percentage of variance account for the first four principal components is 62.3 per cent of the total variance.

Table 2: Total Variance Explained in Colombo District

| Component | Initial Eigenvalues | | | Expectation Sums of Squared Loadings | | | Rotation Sums of Squared Loadings | | |
|-----------|---------------------|---------------|--------------|--------------------------------------|---------------|--------------|-----------------------------------|---------------|--------------|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 4.35 | 33.45 | 33.45 | 4.35 | 33.45 | 33.45 | 3.63 | 27.95 | 27.95 |
| 2 | 1.54 | 11.81 | 45.26 | 1.54 | 11.81 | 45.26 | 1.68 | 12.91 | 40.86 |
| 3 | 1.15 | 8.84 | 54.11 | 1.15 | 8.84 | 54.11 | 1.63 | 12.57 | 53.43 |
| 4 | 1.06 | 8.16 | 62.27 | 1.06 | 8.16 | 62.27 | 1.15 | 8.84 | 62.27 |

Source: Constructed based on Surveyed Data, 2015

Accordingly, it is clear that there are a few more factors hidden from the variables. The results of PCA in the Colombo district, using varimax rotation are presented in Table 3. Four components accounted for 62.3 per cent of the total variance in the data.

Table 3: Results of PCA: Varimax Rotation Component Matrix for Household Wealth Data in Colombo District

| Variable | Component 1 | Component 2 | Component 3 | Component 4 |
|-----------------------------|-------------|-------------|-------------|-------------|
| Monthly income | | | 0.65 | |
| Land ownership | 0.76 | | | |
| Household size | | 0.88 | | |
| No. of bedrooms | 0.57 | | | |
| No. of dependants | | 0.91 | | |
| Wall materials | | | | 0.86 |
| Dwelling Tap water | 0.83 | | | |
| Cooking fuel | -0.46 | | | |
| Radio | 0.84 | | | |
| Telephone | 0.66 | | | |
| Computer | | | 0.77 | |
| Motor Bike | 0.67 | | | |
| Health status | 0.48 | | | |
| Percent of variance (62.3%) | 27.95% | 12.91% | 12.57% | 8.84% |

Source: Constructed Based on Field Survey Data, 2015

The first component accounted for 62.3 per cent of the total variance in the household wealth data. For the first component, land ownership, number of bedrooms, dwelling tap, radio, telephone, motorbike and health status of household heads showed positive loadings while cooking fuel showed negative component loadings. A negative loading indicates that the results need to be interpreted in the opposite direction.

The higher value of household wealth in the original data indicate a better economic livelihood. Therefore, the negative sign of the variable cooking fuel means a higher economic livelihood.

The second component, accounted for 12.913 per cent of total variance while the household size and number of dependents showed strong positive loadings. The third component included two variables, monthly household income and one of durable goods; computer. This component measures the purchasing ability and the fourth component accounted for 8.835 per cent out of the total variance and explains the wall materials among housing construction materials.

Calculating the Wealth Index

As the first stage of calculating the composite index, factor scores coefficients were obtained using the regression method under the PCA. Scores of each household were represented from the factor scores. To compute the factor scores for a given factor of each household, the household's standardized score on each variable is multiplied by the corresponding factor loading of the variable for a given factor (Krishnan, 2010; Vyas & Kumaranayake, 2006). In the Colombo district, the four components explained 62.3 per cent of the total variance with the first, second, third and fourth components explaining 27.95%, 12.91%, 12.57% and 8.84% respectively. The total variance of economic livelihood of households in the Gampaha district was 53.6 per cent. The five components explained 53.6 per cent of total variance with the first, second, third, fourth and fifth components explaining 18.12%, 10.83%, 8.57%, 8.43% and 7.63% respectively. Therefore, the proportion of these percentages is taken as weights on the component score coefficients, and the non-standardized indexes were constructed for each household in the three districts using the following formulas:

Non-Standardized Index for each household in Colombo district

$$NSI = (0.45) * (S_1) + (0.21) * (S_2) + (0.21) * (S_3) + (0.14) * (S_4) \quad [1]$$

Where,

S_1 : Score of the Component 1

S_2 : Score of the Component 2

S_3 : Score of the Component 3

S_4 : Score of the Component 4

The index measures the economic status of each household relative to the other on a linear scale.

Since it was difficult to interpret the positive or negative values of the index, a Standardized Index was constructed, the value of which can range from 0 to 100 using the following equation (Antony and Rao, 2007).

$$\text{Standardized Index} = \frac{X_v - L_v}{H_v - L_v} * 100 \quad [2]$$

Where,

X_v : The value of the non-standardized index of the given households

L_v : The lowest value of the non-standardized index for all households

H_v : The highest value of the non-standardized index for all households

Then they are averaged to produce a composite wealth index for economic livelihood. Generally, standardization is important as a necessary step before proceeding to an aggregation process. It is important to avoid giving variables with different measurement units and dis-appropriate ranges and undue importance to the expenses and income (Gilthorpe, 1995).

Household wealth was modelled into the index and its distribution was analyzed descriptively. According to the urbanization characteristics and volume of urban-ward migration in the Colombo district, the distribution of wealth index cannot be uniform across the Province. The index was right-skewed for urban areas of the Colombo district.

The Classification of Households into Economic Livelihoods

While considering the urban characteristics of the study area, the quintiles of households were constructed into five groups, ranging from the lowest status (1st quintile) to the highest status (5th quintile) (Antony & Rao, 2007). Table 04 shows the differences in the livelihood of the economic status of urban migrant families in the district.

Table 4: Descriptive Statistics of Five Quintiles

| Status of Economic Livelihood | Urban areas of Colombo District | |
|-------------------------------|---------------------------------|--------|
| | N | % |
| Lowest Status | 64 | 8.00 |
| Second Status | 231 | 28.90 |
| Middle Status | 264 | 33.00 |
| Fourth Status | 205 | 25.60 |
| Highest Status | 36 | 4.50 |
| Total | 800 | 100.00 |

Source: Constructed Based on Survey Data, 2015

The highest percentage of migrant families was 33% and similarly, the lowest percentage of migrant families' status of economic livelihood was indicated as 8% in the sample.

However, most migrant families in the Colombo district have gained intermediate level economic livelihoods at the urban destination because the majority of the migrant household heads are engaged in formal employment in the public and private sectors.

Conclusions

The study was conducted at the destination of the migration process to provide a better understanding of the urban-ward family migration and economic livelihoods. Accordingly, receiving migrant families to the urban areas in the Colombo district and their status of economic livelihoods were considered. The index of household wealth was used to identify the economic livelihood of migrant families. Most migrants, around 30 per cent in the Colombo district are more secure economically. Further, it is clearly evident that the poor economic livelihoods of migrant families impact the entire society in urban areas. However, the findings of this study confirm that the increase in family migration to urban areas directly impacts the economic vulnerability conditions of the migrants and the entire urban society.

Moreover, to prevent excessive urban-ward household level migration, governmental and non-governmental organizations should place emphasis on rural development activities which can generate employment opportunities for rural people in their home areas. Due attention should be given to actions that facilitate industrial economies by planning and promoting the growth and expansion of small and medium scale industries and infrastructure facilities to facilitate the flow of goods, services, skills and ideas, and thus create job opportunities in rural areas. Enhanced waged labour opportunities, skills training etc. should be part of the migrants' education in rural as well as urban areas of the country in order to improve the economic livelihoods of the people.

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