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# **Impact of rural to urban labour migration and the remittances on sending household welfare: A Sri Lankan case study (Draft: work in progress)**

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## **Abstract**

Migration is the oldest action against poverty. Thus, temporary labour migration from rural to urban areas is a common phenomenon in the developing world. Since 1977, with more open economic policies, there has been a huge trend of young people migrating from rural to urban for industrial employment in Sri Lanka. Export Processing Zones (EPZ) are the main attraction for this temporary labour migration. The sample survey was conducted in Sri Lanka from February to April 2011, covering 377 respondents who have temporarily migrated from rural farm households in 20 urban factories. The paper employs Probit, Tobit analysis in an effort to examine the determinants of remittances and usage of remittances in sending communities. Results demonstrated the remittance accounts for one fifth of household income in the place of origin. The decision to remit regularly depends positively on the monthly income, number of students of the household, and negatively depends on the amount of farmland owned by the household.

**Keyword: Rural urban migration, remittances, sending communities, Sri Lanka**

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## Table of Content

### Contents

1. Introduction.....	4
2. Literature Review .....	6
2.1. Internal migration and sending communities.....	10
2.2. Rural urban migration and Sri Lanka .....	13
3. Objectives .....	15
4. Data and Methods .....	16
4.1. Data.....	16
4.2. Methodology.....	17
4.3. Tobit Regression Model.....	18
4.4. Probit Regression Model .....	19
5. Results and discussions.....	20
5.1. Descriptive statistics .....	20
5.1.2. Education of the respondents: .....	21
5.1.3. Reasons for migration.....	22
5.1.3. Future Plans of the respondents .....	24
6. Determinants of urban to rural remittances .....	24
7. Use of internal remittances in rural farm communities .....	28
9. Conclusion .....	32
Map of survey region.....	33
References.....	34

## **Table**

Table 1: Migrant workers' remittances behaviour.....	21
Table 2: Reasons for the first migration to cities.....	23
Table 3: Future plans of migrants .....	24
Table 4: Determinants of rural to urban worker remittance: probit and Tobit Results.....	26
Table 5: Determinants of remittances and usage of remittances in origin household.....	31
Table 6: Migrant workers individual and family characteristics .....	37

## 1. Introduction

Labour migration is not a contemporary action and the temporary labour migration from rural sector is a universal concomitant of economic modernization. Although international labour migration has been taken more attention than rural to urban labour migration in the recent debate on migration and development, both migration practices and the remittance<sup>2</sup> are coming to the stage as a significant livelihood development strategies for many poor groups in the developing World (Deshingkar & Grimm, 2005). Different views can be examined with the increasing attention of rural to urban migration research among scholars. Oberai and Singh (1980) demonstrated that the rural urban migration research in developing countries has been mainly focused on urban communities, and paid less attention on the effects on rural communities in early decades. In contrast, some studies pointed out, in recent decades the impact of rural urban migration on sending communities is highly focused not only by economics but also other areas of geography, sociology and demography (De Hass, 2006; Taylor & Martin, 2001). However, the migration is neither international nor internal, it releases some of the labour market pressures which arise due to the regional disparities in many developing nations.

Some studies on migration demonstrate that internal migration is important than international migration (Deshingkar & Grimm, 2005). For example, countries such as China, Viet Nam, India the number of internal migrants are higher than international migrants. Further, they indicate that internal migration and remittances are noteworthy in poverty reduction in developing countries. Unfortunately, Sri

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<sup>2</sup> Remittances refer to the money and in-kinds that are transmitted to back homes by the people working away (migrant workers) from their place of origin.

Lankan studies on migration have not paid satisfactory attention to examine economic impact of rural urban migration and remittances on sending communities and/or rural development relatively to the international migration.

Agriculture remains one of the main sources of employment generating since independence in Sri Lanka. Although services sector has overcome it recently, still near one third of population has been employed by the agriculture sector contributing 12.8 to GDP by 2010<sup>3</sup>. With the economic liberalization since 1977, there was a huge trend of moving rural labour which is predominantly agricultural to the urban cities aiming Export Processing Zones' (EPZ) employment opportunities. EPZs are the main pull factor followed by education for rural urban migration in Sri Lanka in last few decades. In addition, inadequate arable land, capital constraints, low productivity<sup>4</sup> and personal attitudes push rural workers to urban sector jobs.

Although very few have attempted to study internal migration in the context of Sri Lanka and they did not address the economic impact of the internal labour migration and remittances on sending communities. Most of the studies have been attempted to identify the migration patterns and economic and social consequences of international migration in Sri Lanka (Shaw, 2010; Ukwatta, 2010). Therefore, it can be seen a huge gap in internal migration literature in Sri Lanka. This effort is to fill this literature gap by measuring the economic impact of rural -urban migration in Sri Lanka targeting agriculture communities. Further this study adds value to the Sri Lankan migration literature by offering a new empirical evaluation of the

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<sup>3</sup> Press release issued by Central Bank of Sri Lanka in 12.07.2011

<sup>4</sup> Nearly one third of labour force produces just over 10% of the GDP signal low productivity of agriculture.

characteristics the rural to urban labour migrants and their families, determinants and usage of remittances in sending communities.

Further , we examine empirically the rural urban migration process and its economic impact on Sri Lankan farming communities with a view to propose a research agenda to address policy implications of rural urban migration for rural development (poverty alleviation in rural sector) in Sri Lanka. Findings and their implications shed lights to the literature on rural to urban migration and poverty reduction in Sri Lanka. This study uses the first ever largest sample survey in Sri Lanka on the temporary rural to urban migrants in cities.

## **2. Literature Review**

Migration is not a new phenomenon and it is the oldest action against poverty (Galbraith, 1979) and most direct impact of migration is remittances. Thus, the enormous contribution of economist, demographers, sociologists and geographers is being enriching migration literature since 1960s (Greenwood, 1975). Thus, migration emerged as a debatable global development strategy with profound opportunities and challenges for both sending and receiving destinations (Todaro, 1980). Although increasing attention of these researchers take migration issue to the center stage in development debates, the history of migration goes back to the 1880s. Theory of migration history starts from the Furr's remark on migration<sup>5</sup> and Revenstein's response to the Furr's remark which is called "Laws of Migration" (Lee, 1966). Thus, this section attempts to summarise and reproduce the significant explores of

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<sup>5</sup> It was a remark of Farr's to the effect that migration appeared to go on without any definite law.

labour migration focusing on classical and neo-classical migration theories, the theory of new economics of labour migration.

Conceptual framework of migration can be reviewed in a broad range of studies starting from Ravenstein's Laws of migration, to the famous Todaro model, and the new economics of labour migration (De Haan, 1999a). All these studies discuss both internal and international migration. However, Lewis (1954) initiated the idea of rural urban migration using his two sector model. He pointed out the two sectors: a traditional (agriculture) sector and a modern (industrial) sector and showed that expansion of the modern sector absorbs cheap labour shifting from agriculture sector. Although the population size is large compared with land, the marginal productivity of rural labour is close to zero. The industrial sector continues to expand; rural surplus labour of the agriculture sector will ultimately vanish, pushing up wages. This conceptual framework follows closely that of Ranis and Fei (Fei & Ranis, 1961). Nevertheless, these studies did not consider the urban to rural financial and in-kind transfers or the remittances or the welfare impact of migration on the left behinds in rural sector and the in-kind flows from rural to urban through migration.

Although E.G. Ravenstein did the first attempt to work on rural urban migration, Sjaaseds' (1962) decisive work on rural urban migration persuaded economists' thinking on this debatable issue. He was focusing the differences in earnings emphasized that how effective is migration in equalizing inter-regional earnings of comparable labour.

The new economics of labour migration (NELM) emerged in 1980s and 1990s, mainly with the American research context as a response to both developmentalist theory (the migration optimists) and structuralist theory (the migration pessimists) (Taylor, 1999). NELM is pioneered by Stark (1982) and documented by some micro-econometric studies that have attempted to test it (Lucas & Stark, 1985; Taylor, 1995). According to the NELM theory, migration is hypothesized to be an effort by households to overcome market failures that constrain local production. Further Stark (1991) and Taylor (1999) demonstrated the same idea stating that NELM scholars argue that migration plays a vital role in providing a potential source of investment capital. This is very important in the context of the imperfect credit and risk (capital and insurances) markets that prevail in most developing countries. As such these markets are weakly developed; migration can also be considered as a strategy to overcome various market constraints. Further this will enable households to invest in productive ways (De Hass, 2006).

The NELM represents a fundamental change in the way of connection between migration and development is conceptualized and modeled. Further NELM views migrants as financial intermediaries, providing capital for investing on their farm activities in sending communities and provide insurance to their households.

It is necessary to widen our understanding of rural livelihoods in the developing countries, without concerning only the agriculture or natural resource, as the households are diversifying their livelihoods. In this process, migration is one of the main tools to diversify, secure and potentially, durably improve livelihoods. As well

as agriculture intensification and local non -farm activities support with the combination of the said strategy (McDowell & Haan, 1997).

Role of migration in economic development is extensively acknowledged. Over the last five decades migration research and policy have focused on internal and international migration separately. Since last two decades, internal migration in general and rural to urban migration in particular are scrutinizing favorably in the economic development literature (Todaro, 1980). Migration is generally considered as a development issue with profound opportunities and challenges for both source and destination areas. Thereby, Rural to urban migration can release the pressure of the labour market in rural sector *ceteris paribus*.

However migration and development relationship is complex. Migration implies the change of the place of usual residence and the development implies the better living conditions, assessing the relationship of these two is not an easy task (Skeldon, 1997). Migrants' remittances are the main visible indicator that can be used to assess this relationship.

The empirical studies on migration and development reveals different impacts on development, depending on the type of movement, effect of remittances and the development nature of the place of origin. Zohry's (2009) findings of Egyptian study indicate that both internal and international migrations are deployed to escape poverty and mal economic development. Further, he indicated that migration is a strategy to decreased vulnerability among poor groups than maximizing benefits. Hence both internal and international migrations are important in enabling livelihood

diversification among households through migrant remittances. According to the internal migration and development theories, internal migration is a means to escape poverty and narrow regional economic imbalances. Anh (2005) demonstrated based on data from China, Bangladesh, Vietnam, and the Philippines, that migration is a driver of growth and there is an key path out of poverty with remarkable positive impact on livelihoods and well-being of the poor.

Although the correlation between migration and development is vastly tested both in macro and micro level, the huge interest of investigating this relationship shows that the results of migration is not yet clear. Both theories and empirical studies seek to examine aggregate moves and the best answer the questions on socio-economic development and labour market concerns about the impact of migration on sending and receiving countries. Especially the impact of rural to urban migration on development is needed to be empirically tested more widely.

### **2.1. Internal migration and sending communities**

There is an emerging concern of the academia, policy makers and researchers on the rural to urban migration, remittances and its impact on the left-behinds of the place of origin recent decades relatively international migration took more weight though. The overall impact of rural to urban migration on the migrants and their households in origin communities are viewed positively. The main characteristic of the rural to urban migration which is seasonal or circular labour migration is that the migrants leave the place of origin for various employment opportunities for varying lengths of

time and usually with the idea of returning. Their main purpose is work in cities but not to settle in cities permanently. Mostly, they are supporting their communities through remittances while being a part of the communities. Hence, migration is considered as a factor which supports to improve consumption and income levels and lead to poverty reduction directly in migrant households and indirectly the rural sector.

Wide range of countries in Latin America, Africa, and Asia has studies on rural urban migration with different views of economic, sociology and demography. Todaro (1980) indicated in his study on internal migration in developing countries by generalizing the findings, migrants typically do not represent a random sample of the overall population. On the contrary, they tend to be disproportionately young, better educated, less risk-averse, and more achievement-oriented. Also they have better personal contacts in destination areas than the general population in the place of origin. Further his study pointed out both descriptive and econometric studies on migration show that people migrate primarily for economic reasons. If there is larger difference in economic opportunities between urban and rural sectors, it can be observed larger flows of rural to urban migration in any country.

Deshinkar (2006) focusing her study on short term internal or circular migration compiling villages and regional case studies, emphasis that internal migration has greater potential for poverty reduction and contributing to economic growth in developing countries. She indicated further that international remittances reach for fewer people while internal migration stems from a broader base where smaller sum of money are evenly distributed to specific areas and poor families through

remittances. She argues further that the potential benefits of internal migration are not completely recognized due to an inadequate understanding of this process.

Empirical studies show that comparatively China has done a lot of contribution to the literature on rural to urban migration. Millions of Chinese farmers moved to urban areas to seek employment both temporarily and permanently (Ha *et al.*, 2009; Li & Zahniser, 2002). Also rural to urban migration has been viewed as a positive factor in China. Deshinkar (2006) indicated most of the common factors to Asian countries such as regional disparities, high unemployment and underemployment in rural sector and spread of labour intensive industries in urban areas under open market economy, motivate rural labour to migrate to urban cities. However, the results change according to the time and space. Thus, the benefits of migration are needed to be examined or reevaluated.

Mendola (2008) argues that richer and larger households are more likely to participate in costly high return migration (international Migration) and employ modern technology and achieve higher productivity. However, the poor the households tend to receive lower the returns of migration due to the unaffordable nature of the entry cost of migration. Thereby, they engage with internal migration which does not help them to achieve production enhancements comparatively to the international migration.

Migration is a decision that impacts the welfare of the household, the home community, and in the end the whole economy in various ways (Ratha *et al.*, 2011) . Both the international and internal migration will work in the same way. The welfare implications of the international migration on the origin country are more often

positive and sizable. However, we need ample literature to judge whether the welfare implications of the temporary rural to urban migration is positive and sizable in the context of rural development. Compare to international migration, still it is peripheral to generalize the findings of rural to urban migration on community development.

## **2.2. Rural urban migration and Sri Lanka**

Sri Lanka is a small island which was under foreign rule for four centuries and regained independence in 1948. Prior to independence, the economy was dominated by the commercial plantation sector, including mainly tea, rubber and coconut (Kelegama, 2007). Although since 1950's Sri Lanka entered in to the path of industrialization, she adopted a liberal economic model instead of inward looking economic policies in 1977. These economic reforms transformed Sri Lankan economy from the one based on a colonial export structure to an economy based on export-led manufacturing. This is the center stage where rural to urban migration<sup>6</sup> come to the scene. With the establishment of the Export Processing Zones with highly labour intensive factories, demand for the both skilled and unskilled labour increased tremendously. Hence, there was a flood of migration from rural communities to the main cities. Thus, since 1978, majority of young unmarried female have formed the backbone of an economic shift in Sri Lanka toward export-led industrialization. As most of the workers are migrants who come from rural

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<sup>6</sup> Although internal migration exist prior to the market reforms in Sri Lanka ,the rural to urban migration which this study focuses emerge significantly after establishment of export processing zones in 1978. Especially with the economic reforms and accompanying changes in socio economic conditions in Sri Lanka, female migration was accelerated through EPZs.

villages, they contribute through remittances to develop the rural economy in Sri Lanka by supporting households of origin. Export Processing Zones have made a large contribution to the poverty alleviation in Sri Lanka<sup>7</sup>. It is noted that high unemployment and youth unrest has inevitable that many young female majorities have become primary breadwinners of their households. This demonstrates that rural to urban migration contributes significantly to the rural communities and it is worthwhile to examine and quantify the direct impact of internal migration on sending communities.

Sri Lankan internal migration process which this study focuses is rather different from the classical migration theory which indicated that rural urban labour movements occur due to agrarian systems and agricultural seasonality. It is similar to quite similar to Zohry's study (2009) which indicated that Egyptian internal migration is independent of agricultural seasonality as any time surplus labour can exist. Similar to this Egyptian case, there is no other survival for Sri Lankan rural young labour, especially female other than migration locally or internationally. Due to the higher travel cost for international migration, the only way for their survival is migrating to the cities. Nearly 80 percent of the population in Sri Lanka is belong to rural sector where the source income of the household is predominantly agriculture, and 83% of the total poor belong to the rural sector in Sri Lanka (DCS, 2011)<sup>8</sup>.

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<sup>7</sup> [http://www.enewsbuilder.net/globalcompact/e\\_article000776336.cfm](http://www.enewsbuilder.net/globalcompact/e_article000776336.cfm) access date 9/10/2011. Submitted by: Kamani Jinadasa, Manager- Women's Empowerment & Go Beyond, Corporate Branding & Strategic CSR, MAS Capital (Pvt) Ltd, under the topic of MAS Holdings: Championing Women's Empowerment in the Apparel Sector"

<sup>8</sup> Further details please refer to the [http://www.statistics.gov.lk/HIES/HIES2009\\_10FinalReport.pdf](http://www.statistics.gov.lk/HIES/HIES2009_10FinalReport.pdf)

Thus, the migration and remittances will be more focus area of survival and adding diversification to the source of income in the rural sector in Sri Lanka.

However, there is no migration survey planned for Sri Lanka yet. The Population Censuses<sup>9</sup> is the only reliable source of data on internal migration. Due to the lack of data and statistics, there are dearth of studies on internal migration and development in the country. Sri Lanka needs to be examined the impact of migration and remittance on rural communities and how migration contributes to transform rural sector in micro perspectives.

As per my knowledge, this is the first study attempt to examine the economic impact of rural to urban labour migration in Sri Lanka. Thus, this study fills the literature gap of rural to urban migration in Sri Lanka indicating the importance of internal migration on poverty reduction and rural development in Sri Lanka. Further, this study highlights the timely importance of detailed and systematic survey of internal migration in Sri Lanka.

### **3. Objectives**

This study explores the economic impact of rural to urban labour migration on sending communities paying particular attention to the determinants and usage of remittances on the development of the wellbeing of the rural communities and income gains through rural to urban migration in Sri Lanka.

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<sup>9</sup> The population Census conducted by the Department of the Census and Statistics is the most reliable source of data on internal migration in Sri Lanka. Although it has been conducted since 1946 detailed information on internal migration was collected in 1971 and 1981. Then, due to the Civil War no Population Census was conducted until 2001 which was the latest. Internal remittances data includes in HIES surveys.

The working objectives are,

1. To identify the characteristics of rural to urban migration?
2. To scrutinize determinants of remittances and the choices of remit for different usages by the sending communities?
3. To examine asset accumulation through migration of the sending communities?

## **4. Data and Methods**

### **4.1. Data**

Data for this analysis comes from a distinctive survey conducted by the author since January to April 2011 in Sri Lanka. The survey comprises 377<sup>10</sup> rural to urban migrant workers drawn from non-randomly<sup>11</sup> selected 20 urban factories located in Gampaha district in Sri Lanka. The respondents were interviewed based on a set questionnaire focusing on migration and work history, demographic characteristics of the worker and the household members, place of origin, purpose of remit and the usage of the remittances of the household members etc.

The problem associated with the survey data is common to developing countries. It is the representative nature of the sample. Especially it was difficult to get a represent sample from each factory due to the restrictions of the factories. As the factories are

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<sup>10</sup> Although 400 migrants were surveyed, there were incomplete records and we have to reject few.

<sup>11</sup> Random sampling was not possible due to the factory restrictions. Thus through the BOI contacts I got approval to go to these selected factories.

very much concern on minimizing the production cost, we had to be very patient to get respondents released from the production lines (one by one). As workers do not get much time for lunch break<sup>12</sup>, it was unable to get enough time to talk to the respondents at lunch time. As well as it was the case of selecting the sample of matching the migrants with the pre-requisites of the survey; one year experience in the factory, living temporarily outside of the place of origin and coming from farming background.

Majority of the interviews carried out inside the factories. A few interviews were carried out outside of the factories; inside the hostels and boarding places. Responding rate of the migrant workers was in a very high level.

There were five supporters for the field work from the Department of Economics, University of Kelaniya Sri Lanka for this survey. Two of them are PhD holders and others have completed Master degrees. All of them were well trained for the purpose of the survey after having detailed discussion about the survey and the questionnaire. However, due to the EPZ restrictions author had to complete all the interviews inside the EPZs by herself. All the interviews carried out using local language. Consequently, the accuracy of the data collection is very high.

## **4.2. Methodology**

The remittance data in this survey comprises both positive and zero values as usual. Because there are both migrants who remit and do not remit in the sample. Hence, employing OLS regression analysis for estimating the factors affecting remittances

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<sup>12</sup> Each worker gets 15-30 minutes for lunch break. But it depends on the factory. Respondents were not happy to spend that time for interviews. In very few factories I would be able to talk to very limited respondents in lunch time.

may be inconsistency and bias due to the restrictions (censored variable) of the dependent variable. Tobin (1958) pointed out Tobit model overcomes the nature of this type of data (censored regression). Thus, Tobit regression model is tested using censored remittance data of the migrant workers to identify the determinants of internal remittances in Sri Lanka. The Tobit estimations have the limitation of taking both effects of determinants of remittances and the magnitude of the remittances are as the same, probit model also was employed to examine the decision of remittances (Brown, 1997). Consequently, probit estimations provide the factors influence on the decision of remittances while Tobit estimates provide the simultaneous decisions of whether to remit or not and how much to remit. Stata software was being used to examine the results of these models.

### 4.3. Tobit Regression Model

The first investigator who used the remittance data in a Tobit regression: Banerjee (1984) adds new avenue to migration literature. The standard Tobit model assumes a linear model for a latent variable and the censoring nature which places the remittance values equal to the latent variable if it is non-negative and to zero otherwise.

Tobit equation can be written as follows,

$$R_i^* = X_i\beta + u \dots\dots\dots(1)$$

We assume  $\tau=0$ , as the remittance data are censored at zero. Hence we have

$$R_i = R_i^* \text{ if } R_i^* > 0 \text{ for the migrants who remit}$$

$$R_i = 0 \text{ if } R_i^* \leq 0 \text{ for the migrants who does not remit}$$

Where,  $R$  represents the amount of remittances send to the destination of origin by each migrant worker.  $R^*$  is the corresponding latent variable that observes the values greater than zero and censored otherwise.  $X$  denotes variety of explanatory variables including migrant characteristics, migrants' family information, regional dummies, etc.  $u$  is a normal error term.

#### 4.4. Probit Regression Model

Probit model is estimated as follows;

$$R_i = \beta x_i + \varepsilon_i \dots\dots\dots(2)$$

Where  $R_i$  denotes the decision of remit or not of the each migrants ( $i$ ),  $x_i$  is a matrix of covariates which supposed to determined remittances ( $K \times 1$  regressor vector),  $\beta$  is a vector of parameters to be estimated and  $\varepsilon_i$  is the error term, which is assumed to be normally distributed. Binary variable  $R_i$  can be defined as follows:

$R_i = 1$  if receipt of the regular remittances are positive

$R_i = 0$  otherwise

## 5. Results and discussions

### 5.1. Descriptive statistics

The survey information was covered by 377 individuals' information such as migration behavior, work history, remittance patterns, future plans and their family information of the place of origin. Descriptive statistics shows (Table 08) that 84 % of the rural to urban migrants are below 30 years of age and average age of the respondents is 25.7 years. Compare to the internal migration process in China, Sri Lankan situation is quite similar. 70 % of the Chinese internal migrants are aged between 16 and 35 years. Majority of them migrate as a life stage between leaving middle school and returning home to marry and have children (Deshingkar, 2006). Although majority (Table 3) needs to continue the same job, it means that they need to work until they get marry, because more than two third of the respondents are never married females.

However, several studies on migration in developing countries have indicated that migration was dominated by single male (Campbell, 2010; De Haan, 1999b). Zohry (2009) concludes in his study on rural to urban migration in Egypt that there are male migrants over females and young over old. However, his sample represents different segment of the population in Egypt compare to the sample of this study in Sri Lanka. Young female migrants are leading the internal labour migration process in Sri Lanka due to the huge demand generated for female labour in certain services and manufacturing industries. Accordingly, migrant characteristics of rural to urban migration are depending on the structure of the economy and migrants are not the exact representation of the different population groups in the economy.

Remittance is the most important part of migration. Table 01 indicates remit

**Table 1: Migrant workers' remittances behaviour**

	Percentage	n
Frequency of remittances		
Monthly	67.1%	253
Once in two months	2.9%	11
Once in three months	10.1%	38
Twice a year	1.3%	5
Occasionally	15.9%	60
Never	2.7%	11
Purpose of remittances		
Day to day expenses	31%	117
Education of household members	11.1%	42
Farm work	17.2%	65
Durables and savings	15.5%	57
Loan repayments and housing	14.2%	52
Other	11.7%	44
Total observations		377

*Source : Author calculations using field data*

frequencies and the purpose of sending remittance to the household of origin. 67% of the respondents remit monthly while nearly 80% of the respondents remit regular basis<sup>13</sup>. 31% of the remittances go for the daily expenditure purpose. Although highest percentage of remittances use for the consumptive purposes, nearly 30 percent of remittances use for the investment purpose of education and farm work.

### **5.1.2. Education of the respondents:**

Interestingly, Sri Lankan internal migrants are relatively educated. Usually temporary rural-urban migrants are not having higher education level. However, the 80%

<sup>13</sup> Regular basis means respondents remit either once in two months or once in three months continuously.

respondents in this study have completed ten to twelve years of school education<sup>14</sup>. Nearly 15% of the respondents have more than twelve years of education. Majority of these respondents out of this 15% were engaging degree programs while working. Only 7% of the respondents were having primary education only (Table 8). This is quite different from other internal migration literature. Although thanks to the free education system, majority obtains maximum education level in Sri Lanka, the mismatch of the education system and labour market requirements recorded relatively high educated unemployment is in Sri Lanka. Thus, most of the school dropouts (after O/L's and A/L's ) join with the EPZs.

### **5.1.3. Reasons for migration**

The motives for migration are overwhelmingly economic despite of the context. Both skilled and unskilled migrants are participated in the migration process not only by an individual decision but also by the household decision more often. Table 2 indicates unemployment of the rural sector leads majority to migrate to the urban sector, and the members of economically fragile households tend to migrate as it is the only possible alternative foe economic wellbeing. Accordingly, more than 70% of the respondents migrated to urban employments due to economic reasons. Also seasonal unemployment and underdevelopment nature of the rural sector could be indentified under other reasons.

Although some of the migrants are willing to engage farming activities and live in rural sector, landlessness, capital constraints, less market access, inconsistency of

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<sup>14</sup> According to Table 8 nearly 50% of the respondents have completed O/L and 30% of the respondents have completed A/L exams. O/L means completed ten years of education and A/L means completed twelve years of education in Sri Lankan education system.

income and yield came across as hampering factors for continuation of farming activities.

**Table 2: Reasons for the first migration to cities**

Reason for first migration	Male	%	Female	%	Total	%
Education/training-related	15	16.67	15	5.28	30	8.02
Unemployment	43	47.78	135	47.54	178	47.59
Expectation of high salary	7	7.78	16	5.63	23	6.15
Marriage	2	2.22	3	1.06	5	1.34
Migration with family	0	0.00	1	0.35	1	0.27
To be independent	2	2.22	8	2.82	10	2.67
To shift from farm work	7	7.78	25	8.80	32	8.56
Economic problem(s)of family	14	15.56	77	27.11	32	24.33
Other	0	0.00	4	1.41	4	1.07
Total	90	100.00	284	100.00	374	100.00

*Source: Field survey data*

The most significant motivation for rural to urban migration in Sri Lanka is employment opportunities<sup>15</sup> with higher wages and better education opportunities in comparison to rural sector. This is a common motive for rural to urban migration in many developing economies. Zohry (2009) confirms this idea indicating the similar reasons such as declining economic opportunities in rural areas, increasing number of landless households, increasing fragmentation of land-holdings due to inheritance, low level of wages, scarcity of services and other social amenities for internal migration in Egypt. Better education opportunities in the urban sector inspire the migrants who are willing to continue with their education while work. Table 02 shows that 8 percent of respondents migrated for education purpose but majority migrate for finding a job.

<sup>15</sup> EPZs generate more employment opportunities for both skilled and unskilled labour since 1977.

### 5.1.3. Future Plans of the respondents

Table 3 demonstrates that the respondents' future plans. 33% of the respondents need to continue the same job as they need to get the remunerations by completing five years of the service. Nearly 18% of the respondents stated that they need to go back to village and do some farming or non-farm activity after accumulating some basic capital for that. This indicates that rural urban migration is having considerable economic impact on the sending communities. Most of the female said that they plan to get marry which included the "other".

**Table 3: Future plans of migrants**

<b>Future Plan</b>	<b>Male</b>	<b>%</b>	<b>Female</b>	<b>%</b>	<b>Total</b>	<b>%</b>
Go abroad	8	9.09	14	4.93	22	5.91
Do a different job	5	5.68	15	5.28	20	5.38
Continue the same job	29	32.95	92	32.39	121	32.53
Go back to village & do farming	19	21.59	27	9.51	46	12.37
Go back to village & do non-farm job	11	12.50	48	16.90	59	15.86
Start a business in the city	9	10.23	15	5.28	24	6.45
No idea	2	2.27	23	8.10	25	6.72
Other	5	5.68	50	17.61	55	14.78
Total	88	100.0	284	100.0	372	100.0

*Source: Field survey data*

## 6. Determinants of urban to rural remittances

Worker remittances play a very important part of income in many groups of households in many developing countries like Sri Lanka. As the Chapter three indicated remittance was one of the main factors to reduce poverty in Sri Lanka last

two decades. Hence, it is important to examine the determinants of remittance for a fruitful framework of internal migration.

Determinants of internal migration and remittances are varying and depend on the characteristics of the economy. The first attempt to elucidate the motivations of remittances was done by Lucas and Stark (1985) with firm theoretical basis. They have indicated two broad motives for remitting: altruism and self-interest. Nevertheless, these two motives are inadequate to explain variations in remittances, since very often migrants and their families in the place of origin benefit from migration through embedded contractual arrangements. Hence, motives can be taken as combine elements of altruism and self-interest such as insurance and loan repayments (Atamanov & Van den Berg, 2010). As well as they demonstrated that proximity of the migrant and the left behind members of the family should influence the choice of remittance. As closer the relationship strengthens the importance of household in the migrants' utility; remittance should increase with the said proximity.

Although internal migration derives significant economic gains, remittance is the most tangible direct impact of migration. We employed Tobit, probit and OLS regression models for analyzing the survey data to investigate what factors influence for the remitting decision. As all the migrants do not remit for the left behinds in the place of origin, data consist with truncation problem. Therefore, Tobit regression is well suit for addressing the censored or truncation data. Nevertheless, Tobit estimations have the limitation of taking both effects of determinants of remittances and the magnitude of the remittance the same (Brown, 1997). Therefore we employed probit model specially for examining the determinants of the purpose of

remit. Hence, probit estimations provide the factors influence on the decision of remittances while Tobit estimates provide the simultaneous decisions of whether to remit or not and how much to remit. These two estimation models are checked the robustness of the results. OLS regression is also used to compare the coefficients.

**Table 4: Determinants of rural to urban worker remittance: probit and Tobit Results**

Determinants	Tobit		OLS	
	Regular <sup>1</sup> remittance	Annual <sup>2</sup> remittance	Regular <sup>1</sup> remittance	Annual <sup>2</sup> remittance
Average salary	0.174 (3.95)**	1.126 (1.99)*	0.163 (2.49)*	1.142 (2.00)*
Savings	-0.048 (0.75)	4.022 (4.95)**	-0.034 (0.44)	3.985 (2.07)*
Seettu	-0.049 (0.39)	2.959 (1.87)	-0.013 (0.13)	2.823 (2.01)*
Age2	-0.001 (0.38)	-0.032 (0.88)	-0.000 (0.02)	-0.027 (0.89)
Age	0.081 (0.40)	2.396 (0.93)	-0.007 (0.03)	1.979 (0.97)
Gender(male =1)	0.511 (0.93)	12.440 (1.77)	0.470 (1.11)	12.285 (1.78)
Education (No of years)	-0.274 (2.48)*	0.368 (0.26)	-0.224 (2.39)*	0.417 (0.24)
Total land owned by family	-0.313 (4.12)**	-2.538 (2.71)**	-0.223 (3.96)**	-2.545 (2.88)**
bonus	0.150 (4.37)**	1.164 (2.60)**	0.129 (1.96)	1.146 (1.75)
No of students of family	1.064 (4.22)**	2.749 (0.84)	0.890 (4.00)**	2.507 (0.86)
Experience	0.089 (1.08)	0.479 (0.45)	0.110 (1.65)	0.575 (0.50)
Marital(single=1)	1.497 (2.93)**	0.521 (0.08)	1.013 (2.51)*	-0.354 (0.05)
In-kind received	-0.209 (1.25)	-4.531 (2.15)*	-0.160 (1.26)	-4.087 (1.98)*
Constant	0.253 (0.08)	-22.667 (0.53)	1.972 (0.78)	-16.024 (0.45)
Observations	357	357	357	357
R-squared			0.23	0.19

\* significant at 5%; \*\* significant at 1% Robust t statistics in parentheses  
Absolute value of t statistics in parentheses

Note : 1. Regular remittance consider monthly or once in three months regular remittances in 1000 rupees

2. Annual remittances include in-kind (1000 rupees) send by the migrants.

Table 04 indicates the results of Tobit and OLS analysis regarding factors affecting remittance decision. The results confirm that altruistic remittances depend positively on migrants' monthly income and negatively on household farm income<sup>16</sup> considering both regular and annual remittances. Because altruism implies that the migrant derives utility from his/her consumption and the consumption of the household of origin.

Annual bonus of the respondents is a highly significant and positive determinant of sending remittances. As it is extra earnings, most of the respondents indicated that they use it for housing purpose, buying durables, or savings. Never married respondents are more likely to remit regularly. Households having more students are more likely to receive regular remittances. Considering the amount of annual remittances, it is clear the savings of the migrants and the annual remittances send back home are positively correlated. It is because migrants send money to households for the purpose of savings.

Education has a negative impact on the decision to remit and the amount of the remittances. It was identified that the respondents those who have higher education work to earn for their own education expenses. Hence, they would not be able to remit for the left behind members of the household.

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<sup>16</sup> We have included farmland ownership as a proxy for household income as income data is not much reliable.

Most of the researchers are trying to estimate only the impact of remittance and in-kind flows to sending communities. However, there are in-kind flows (mostly in-kind but rarely money) occurs from sending communities to working destinations. This study first time examines whether there is a considerable impact of the in-kind flows to the migrant worker form the households of origin. According to the results, although in-kind variable shows negative insignificant impact of regular remittance decision, there is a significant positive impact on annual remittance decision. It is because, migrants does not receive in-kind monthly but few times a year. However, in-kind flows from rural to urban also an important factor which determines the annual remittances in the process of rural to urban labour migration in Sri Lanka.

## **7. Use of internal remittances in rural farm communities**

The effects of rural to urban migration on the development of rural communities (migrant-sending areas) can be examined through the usage of remittances by the household of origin. We examine the determinants of the use of remittance using probit regression. We disaggregated the data of remittance according to the purpose of the remittances such as household daily expenditure, education of the household members, spending on farming activities and spending on durables and housing. As most of the other studies show more than half of the remittances are used for the consumptive purposes (Table 01) (De Brauw & Rozelle, 2008; Zhang, 2010). This is a common phenomenon of the migration in developing countries. Nevertheless, considerable proportion: nearly one third of the remittances go for the productive

investment which can generate multiplier effects in terms of income and employment. These are education and farming. Higher the number of students in the family is receiving higher the remittance on the purpose of education and a household that increases farm lands is more likely to receive remittances on the purpose of farming.

Probit analysis findings reveal that choice of annual remittances decrease significantly as migrants' stay in the city lengths. Hope the beginning of the migration process will send more remittances and for the time being households would get more other channels of income. For example some respondents indicated that they do not remit regularly now compare to previous years as there are other members to spend and take care of the parents. Also some respondents have created some sort of income sources such as small shops at the place of origin, or bought vehicles for hiring; those would generate income for the family members at the place of origin. The probit results also confirm that in-kind variable have significant positive impact on ever remit decision (Table 5). However, an in-kind flow to urban sector is also a considerable factor in determining the remittances. Although 86% of the respondents receive their lunch from the factory, nearly 63 percent of the migrants receive in-kinds from their places of origin. Almost 80 per cent of these migrant workers who received in-kind are female migrants because male migrants do not tend to cook at boarding places and they buy foods from outside when and where necessary. The respondents reported in-kinds are mostly row foods such as rice, vegetables and coconuts and they received cooked food items as well. The types of in-kind depend on what sort of crops household cultivates and the frequency of receiving in- kinds depend on the frequency of the visit of the place of origin or the number of visits of the household members in the city.

Although never married (single) respondents are more likely to remit, there is a negative impact of remittances on the purpose of daily expenses. Higher the students in the household lower the remit for daily expenses but higher the remit for education purpose. There are no any impact of any of these determinants on the likelihood of remittances on the purpose of housing, durables and savings purposes. Higher the age is more likely to remit on the purpose of education. Although higher the extent of arable land own by the household lessen the likelihood of being remit, considering the purpose of remitting: if it is farming activities likelihood of being remit is higher. This explain that respondents more likely to remit on investment purpose rather than consumptive purposes in Sri Lanka.

**Table 5: Determinants of remittances and usage of remittances in origin household**

Determinants	Ever remit <sup>1</sup>	Daily expenses	Education	Farm work	Housing and durable	Loan repayment	savings
Average salary	0.000 (0.84)	-0.001 (0.31)	0.003 (1.15)	0.001 (0.37)	0.004 (1.35)	-0.003 (1.37)	-0.004 (1.53)
Total land owned	-0.001 (2.04)*	-0.027 (2.65)**	0.005 (1.04)	0.016 (2.59)**	-0.005 (1.02)	-0.009 (2.25)*	-0.001 (0.10)
No of migrants	-0.004 (1.56)	-0.053 (1.29)	0.004 (0.18)	0.029 (0.97)	-0.032 (1.41)	0.019 (1.37)	-0.050 (1.87)
No of years of schooling	-0.003 (1.97)*	-0.004 (0.27)	-0.005 (0.57)	-0.012 (1.24)	0.019 (1.67)	-0.004 (0.93)	-0.005 (0.64)
Marital (single=1)	0.049 (3.72)**	-0.171 (2.77)**	0.052 (1.78)	-0.009 (0.20)	0.032 (0.93)	0.044 (1.80)	0.070 (1.94)
In kind received	0.009 (1.98)*	-0.070 (1.38)	0.058 (1.91)	0.053 (1.35)	0.013 (0.46)	-0.026 (1.34)	0.053 (1.73)
Age	0.006 (3.78)**	0.005 (0.22)	0.028 (2.35)*	0.022 (0.96)	0.019 (0.91)	0.002 (0.26)	-0.007 (0.51)
Age2	-0.000 (3.65)**	-0.000 (0.05)	-0.000 (1.92)	-0.000 (1.25)	-0.000 (1.29)	0.000 (0.06)	0.000 (0.44)
no of years of experience	-0.001 (2.59)**	-0.010 (1.06)	-0.008 (1.40)	0.001 (0.08)	0.010 (1.46)	-0.006 (2.06)*	0.002 (0.34)
No of students of family	0.004 (1.75)	-0.070 (2.11)*	0.077 (4.17)**	-0.004 (0.19)	-0.033 (1.44)	-0.006 (0.72)	0.027 (1.71)
Observations	373	373	373	373	373	373	373

Robust z statistics in parentheses \* significant at 5%; \*\* significant at 1%

Note: ever remit dummy variable consider annual remittances including in-kind send by migrants, if the amount is positive the value takes 1 other wise zero.

## 9. Conclusion

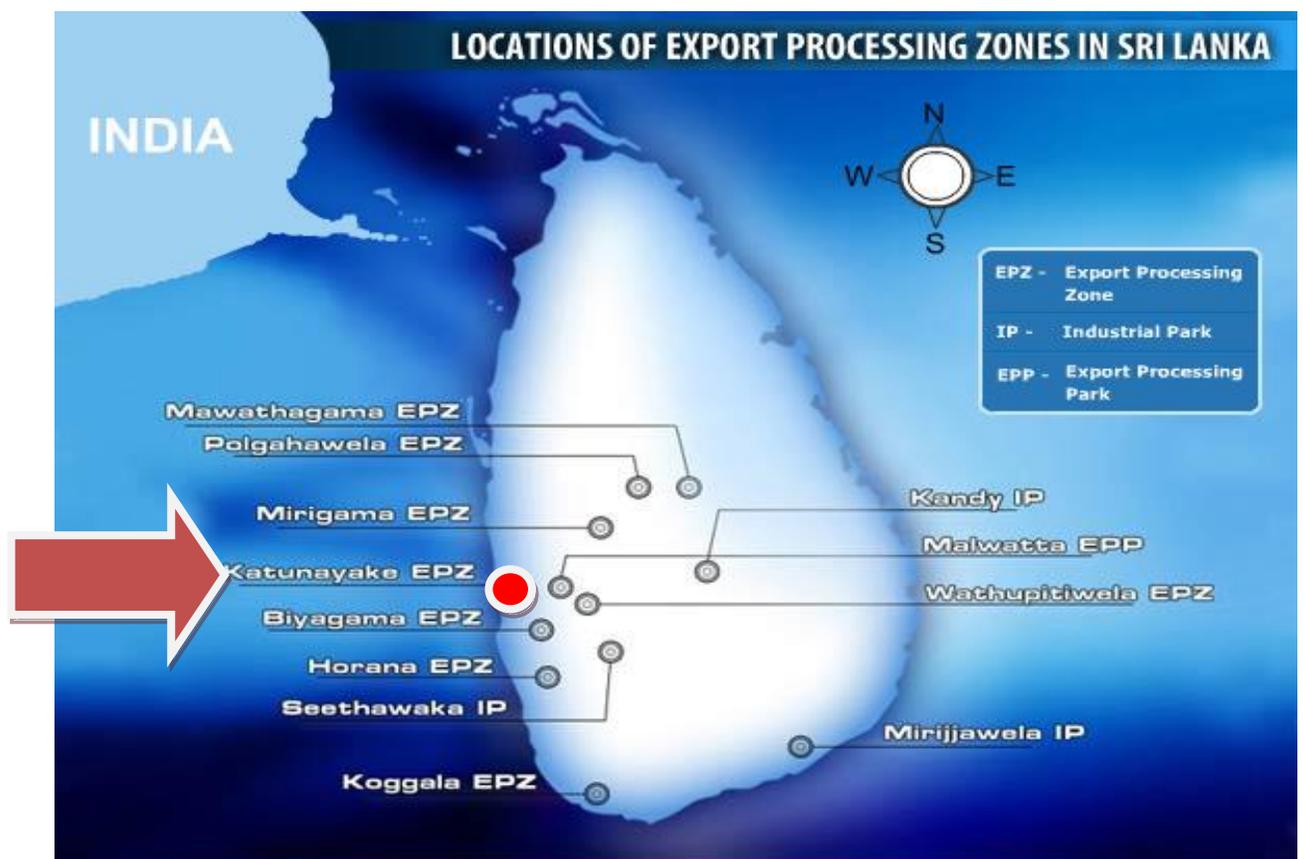
This paper investigated the process of rural to urban migration, remittances and its impact on sending communities in Sri Lanka. We have explored in determinants of remittances and the usage of them in rural communities using survey data which conducted by the author in January to April 2011 in Gampha District in Sri Lanka.

The determinants of remittances indicated that never married migrants are more likely to remit regularly, because elderly people and/or parents who cannot work and no proper income are left behind in the places of origin. The proportion of remittance is account for 21% of household income on average. Rural to urban migration contributes significantly to asset accumulation (including vehicle and land) in communities of origin. This confirms that 25% of the migrants built new houses. Although, higher the farmlands lower the receipt of remittances for daily expenses, migrants' households with more farmlands tend to receive more remittances on farming purpose as an investment. Migrants tend to remit for the purpose of education if there are students in the household of origin. This confirms that rural urban migration and remittances are not only for the consumptive purposes but also for the investment purpose.

Finally, based on the empirical literature and the findings of this survey, it can be concluded that internal migration will reduce poverty by improving the wellbeing of rural communities. Although the chances to enter international migration process is limited due to affordability of the cost of migration, internal migration is an alternative for any households with skilled or unskilled labour to participate and make

their way out of poverty. Hence, relatively internal migration is benefitting long term as migrants can spend longer periods in their jobs than international migration. Internal migration will be a better solution for brain drain which developing countries like Sri Lanka are facing today and lessen social consequences of families as migrants are visited their families often.

### Map of survey region



Source: [http://www.boi.lk/free\\_trade\\_zones\\_industrial\\_parks.asp](http://www.boi.lk/free_trade_zones_industrial_parks.asp)

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**Table 6: Migrant workers individual and family characteristics**

Variable	Percentage /mean	n
<b>Individual Characteristics</b>		
Age	25.7	377
Migrants below age 30years	84%	315
Marital status		
Never Married	71.9%	271
Married	26.5%	100
Separate/divorced/widowed	1.6%	06
Relationship with head of the household		
Head	9.3%	35
Spouse	18.8%	71
Children	71.9%	271
Education level		
Primary	7.1%	27
O/L*	48.8%	184
A/L**	29.2%	110
A/L+	14.6%	55
No schooling	0.3%	01
Gender		
Male	24.1%	91
Female	75.9%	286
Work History		
Job before migration		
No Job	62.1%	234
Government/semi government	0.8%	3
Private sector	8.8%	33
Farming	19.6%	74
Non-farm	3.7%	14
Other jobs	5%	19
Experience		

Experience before migration	2 .0 years	(1.5)
Experience in factory jobs	4.7 years	(3.5)
Male	5.1 years	(3.4)
Female	4.5 years	(3.6)
Type of job in the factory		
Machine operator	44%	
166		
Junior technician	21.8%	82
Supervisor	2.1%	8
Quality checker	14.6%	55
Helper	5.3%	20
Other	30%	113
Way of finding urban jobs		
Advertisement	9.3%	35
Relatives	44.7%	168
Migrant network	30.9%	116
Other	15.7%	57

#### Family Characteristics\*\*\*

Household size	4.4persons	(1.3)
Number of students	0.6 persons	(0.8)
Number of members under 16 years old	0.5 persons	(0.7)
Number of members over 60 years old	0.3 persons	(0.6)
Number of male labour	1.7 persons	(0.8)
Number of female labour	2.1 persons	(0.7)
Number of migrants	1.4 persons	(0.6)
Highest education obtained by the household members		
Primary and below	3.7%	14
O/L	50%	188
A/L		40.4%
152		
Degree /Diploma	5.8%	22
Assets		
Owning farmland or paddy land	92%	347
Farm land (acres)	1.2	(1.8)
Paddy land (acres)	1.7	(1.9)
<b>Total observations</b>	<b>377</b>	

Note: Standard deviations are in parenthesis

\*\*\* Family characteristics are including migrant workers itself.

\* Completed eleven years of education

\*\* completed thirteen years of education