

# Impact Evaluation of Remittances: A Case Study of Dhanusha District



Nepal Rastra Bank



Banking Development and Research Unit  
Janakpur  
July, 2012

## Contents

List of Tables.....	iii
List of Figures.....	iv
Dhanusha District: Facts .....	v
List of Abbreviations .....	vi
Foreword .....	vii
Executive Summary .....	viii
Chapter 1: Introduction .....	1
Chapter 2: Literature Review .....	5
Chapter 3: Research Methodology and Survey Design.....	8
Chapter 4: Results and Discussion .....	11
Chapter 5: Conclusion and Recommendations.....	20
References .....	24
Appendix .....	27

## List of Tables

### Chapter 3

Table 3.1: Distribution of Sample Size.....	10
---	----

### Chapter 4

Table 4.1: Fuel used for cooking.....	12
---------------------------------------	----

Table 4.2: Annual household expenditure .....	15
---	----

Table 4.3: Impact of remittances on socio-economic indicators (simple mean difference approach).....	17
--	----

Table 4.4: Impact of remittances on socio-economic indicators (propensity score matching approach)..	19
--	----

## List of Figures

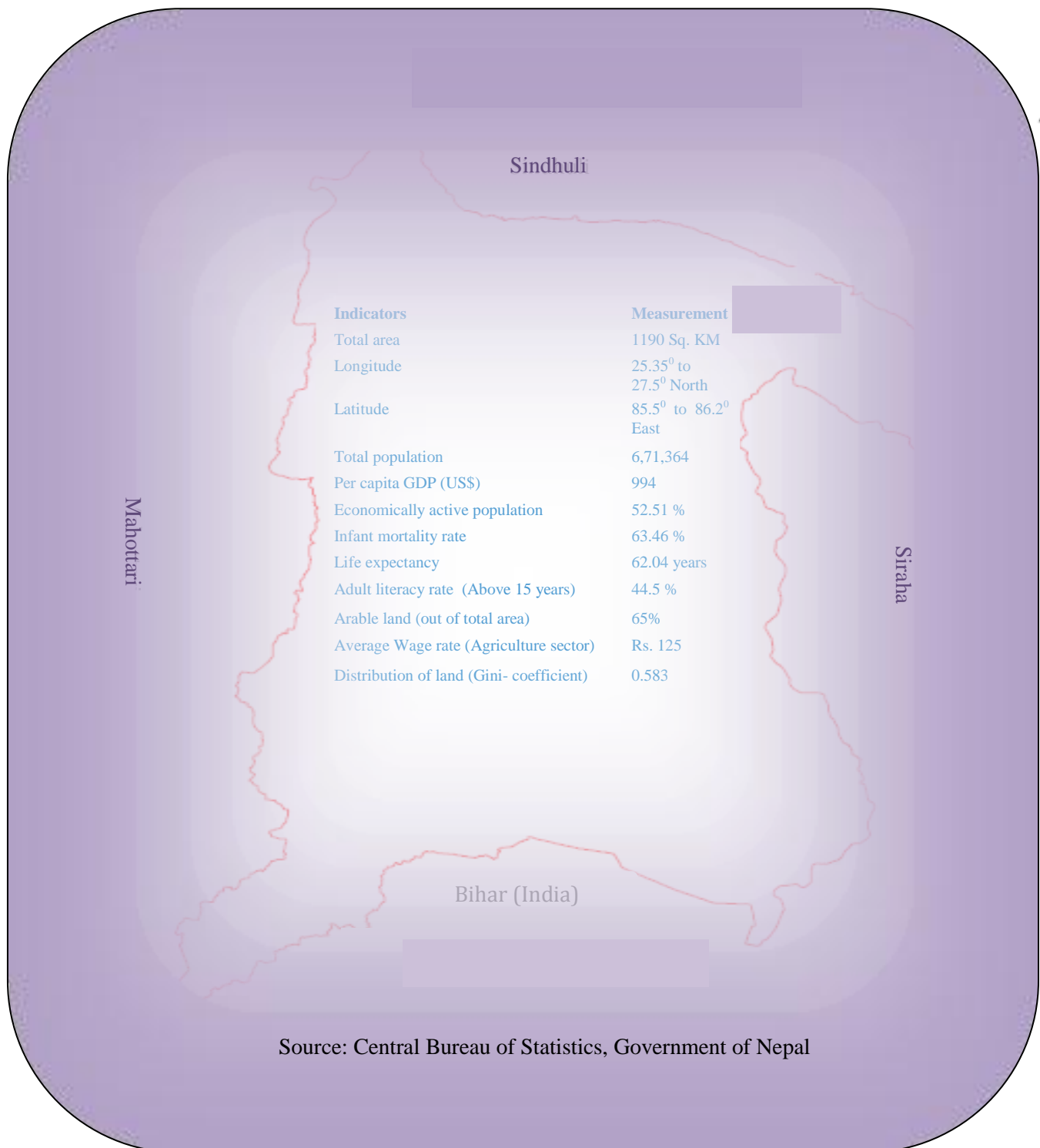
### Chapter 1

Figure 1.1: Migrants' Remittances in the World .....	1
Figure 1.2: Remittance vs. Foreign Aid: A Case of Nepal .....	2

### Chapter 4

Figure 4.1: Average family size .....	11
Figure 4.2: Schooling .....	11
Figure 4.3: Toilet use .....	12
Figure 4.4: Average annual expenditure in education .....	13
Figure 4.5: Average annual health expenditure .....	13
Figure 4.6: Child birth .....	13
Figure 4.7: Regular child vaccination .....	13
Figure 4.8: Access to information.....	14
Figure 4.9: Land purchase in past three years .....	14
Figure 4.10: Purpose of land purchase of migrant workers .....	14
Figure 4.11: Possession of bank account .....	15
Figure 4.12: Decision regarding household's financial transaction .....	16

## Dhanusha District: Facts



## List of Abbreviations

CBS	Central Bureau of Statistics
GoN	Government of Nepal
HTA	Home Town Association
NRB	Nepal Rastra Bank
NRs	Nepali Rupees
PSM	Propensity Score Matching
UNCTAD	United Nations Conference on Trade and Development
VDC	Village Development Committee

## Foreword

Nepal Rastra Bank, Janakpur conducted the research entitled 'Impact Evaluation of Remittances: A Case Study of Dhanusha District'. Dhanusha district has been one of the largest migrant-sending districts in the country. The issue, however, is that the impact of remittances in the migrant-sending households of this district has not been properly assessed as of now. On this ground, this research was motivated to identify the impact on various socio-economic dimensions of the households who are receiving remittances from abroad. The study includes a large cross-section of socio-economic indicators to assess the impact, comprising education, health, financial access, women empowerment, and others.

I hope the findings of this research and suggested policy recommendations therein would be useful, yet maybe little, to all interested readers for their knowledge enhancement and the concerned authorities for formulating necessary policies to facilitate foreign employment strategies and make remittances most productive possible for the economic development of the country.

At the moment, I am extremely glad to offer this gratitude and heartfelt thanks to all members of Research Unit of NRB Janakpur for completing this task rigorously. Particular thanks go to Dr. Bamadev Paudel and Mr. Medani Prasad Pokhrel for conducting statistical analysis whereas Mr. Rambriksh Pandit and Mr. Amar Kumar Karna for data compilation and processing. Mr. Panchalal Yadav in the Unit also deserves thanks for managing logistic support during the study.

Thanks are also due to all other staff of Nepal Rastra Bank, Janakpur office who helped collecting data during the survey. Mr. Uttam Guni deserves most among them for his sincere help in the compilation of voluminous survey data. On top of that, I would like to extend my gratitude to all survey respondents who offered their valuable time to impart their experience.

Finally, I would like to thank Corporate Planning Department and Research Department of Nepal Rastra Bank for providing moral support, budget allocation and the comments and suggestions on the research proposal.

Parbat Karki  
Manager  
Nepal Rastra Bank, Janakpur

## Executive Summary

Remittance sent by international migrants to their countries of origin has now grown to be substantially higher. Nepal has been one of the greatest shareholders of global remittance but the issue is how such flows have been used in the livelihood of remittance-recipient households. The objective of this study is to identify how remittances impact various socio-economic dimensions of remittance-recipient households. This study conducts an impact evaluation based on propensity score matching (PSM) approach by surveying both remittance-recipient households (treatment households) and non-recipient households (control households) in Dhanusha district, one of the largest migrant-sending districts in Nepal, and analyzes the impact gain resulting from remittance flows in the study area.

### *Summary of Findings*

The impact evaluation of remittances in Dhanusha district revealed that of the total 25 socio-economic variables the study took for granted, more than half of them received expected impacts from remittances. The land purchase was most significantly affected variable from remittance income. Similarly, the agricultural income was also substantially affected by remittances. Remittance-recipient households experienced a substantial rise in agricultural income after they started receiving remittances.

The households of migrant workers were also found to be allocating a significant amount of their income in educational expenses. Consistent with that, study hours at home of their children were also positively affected. This outcome was in contrary with the results some prior studies had revealed that educational efforts of the children of migrant-sending households had adversely affected (Siddhiqi (2005)).

The positive effects were also observed in the access of communication means such as radio, TV, and telephone. In the same line, the migrant households' radio listening and television watching habits were also increased significantly.

The results in women empowerment were mixed, however. The women's decisions regarding children's education and financial transactions were positively affected whereas the effects were negative for women's health consciousness and child birth. Besides, the remittance-recipient households were found to be less conscious on their health conditions. The tendency of using open toilet in bushes and fields, for example, was higher in remittance-recipient households than in non-recipient households.

The analysis with only treatment households demonstrated that there was no female worker among those who went abroad for foreign employment. Middle East was the most favorite destination of the migrants in the study area followed by Malaysia. The income from migration per migrant worker stood NRs 169,000 resulting in income of NRs 14,000 per month, indicating that the income of migrant workers is relatively low. Most of migration expenditure was financed by borrowing and only a trivial amount from savings. In borrowing, the average interest rates these households paid was 28.3 percent per annum, which was mostly from moneylenders who charged them as much as 40 percent per annum on average. Only 14 percent of total borrowings of these households was from formal bank and financial institutions at the average interest rates of 16.6 percent per annum.



The channel by which the workers send money was reportedly formal channels (84 percent of households reported this). Only 14 percent reported that they sent money through hundi and 4 percent remitted with their friends.

The migrant-sending households had higher consumption than those of non-sending households. Both of the groups spent a sizable fraction of their income on food and wedding expenses followed by land purchase.

### *Recommendations*

- It was observed that migrant-sending households mostly borrowed money to meet their migration expenses rather than used their savings and the interest rates they pay in borrowing were as high as 40 percent per annum. Moreover, they have to rely mostly on informal money lenders to borrow money, yet paying even higher rates. Formal banks and financial institutions, on the other hand, were found to be charging substantially less than those informal lenders. In this regard, the NRB has responsibility to encourage banks and financial institutions to open up of their branches in rural areas and make loans available to migrant workers in convenient way. Besides, Nepal Rastra Bank has already made provision to offer loans to migrant workers through A, B, and C class financial institutions under deprived sector lending, which needs to be publicized more and make extra convenient.
- While the country is experiencing an enormous rise in remittance inflows, it still falls short of what it could be collected by doing more. The countries who have large experiences of migration abroad, the migrant communities maintain ties with home country by forming informal clubs called Home Town Association (HTAs). Such associations have very successful stories in Mexico to bring money home and help develop communities, such as opening of schools, build community halls, build health clinics, and others. The government even shares fraction of total expenditure incurred to build such facilities. The government of Nepal should consider promoting such associations and attract diasporas to participate in community development in their home countries.
- Nearly two and half million young individuals have left Nepal for foreign employment primarily for the reason that the employment opportunities in the country are virtually nonexistent. Literally speaking, the country is exporting unemployment to other countries rather than bringing sound policy action to retain this workforce within the country. Even more surprising is that the people abroad are mostly unskilled workers without being able to earn enough money necessary to raise their living standards in a substantial way. The households were found to be saying that they were sending their beloved ones to foreign employment because no other option is available for them to stay within the country. In this regard, the government should consider offering necessary skills before the workers leave the country, or to the extreme, the government should design concrete policy measures to retain within the country the most productive workforce who are desperately leaving the country.
- The studies on migration have revealed that remittances can be made productive by pursuing various policy actions. The important options available are the taxation of remittance income and channel this revenue for productive use, issuance of remittance bond, and outreach in collaboration with microfinance institutions. Among these, microfinance institutions have turned out to be the most effective channel because such institutions have great penetration in rural areas and most migrant-receiving households live in those areas. Nepal also does have extensive networks of microfinance institutions in rural underdeveloped areas. In this regard,

Nepal Rastra Bank should consider allowing microfinance institutions in the country to bring remittances into their transactions, even making legal provisions when necessary.

- As was claimed, the households earning remittances mostly spent their money in non-productive areas such as in real estate and consumption. This study revealed that remittance earnings from abroad have crowded out the investment in local businesses and the remittance-recipient households mostly engaged in conspicuous consumption. With due consideration in this situation, the government is required to promote local businesses so that the households with remittance earnings will have option to make investment in such businesses.
- The study also revealed that Hundi has been still one of the channels the money is being remitted from abroad (14 percent of remittance-recipient households reported this), even though the NRB issued licenses to operate money transfer agencies and their number is growing. In this context, the NRB should consider promoting more money transfer agencies including other parts of the world from where money is being mostly sent on one hand and on the other initiate policy measures on its own or request government if necessary to control illegal hundi businesses.

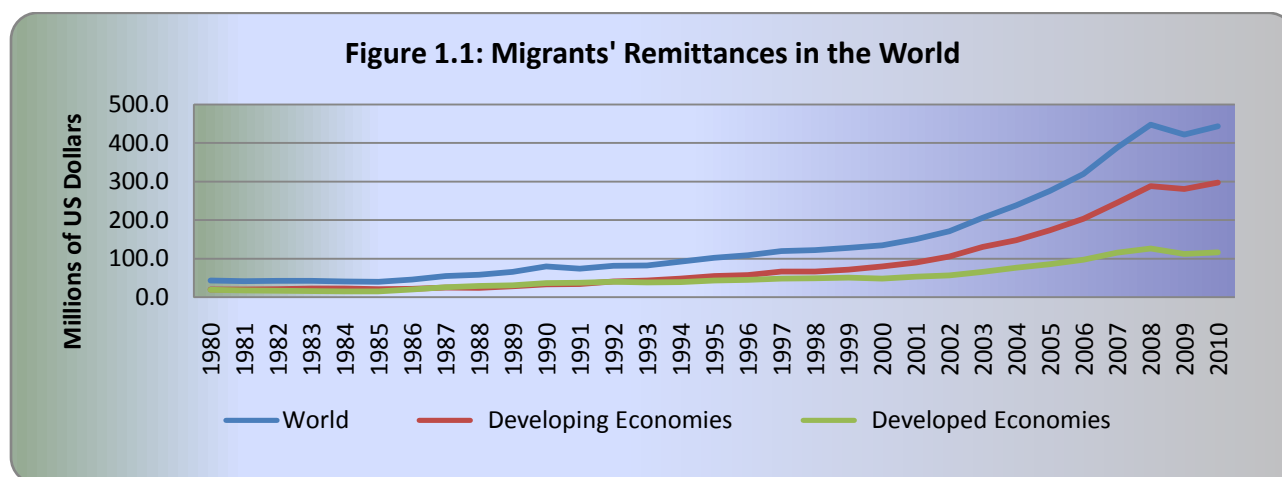
## CHAPTER 1

## INTRODUCTION

**1.1 Background**

Remittance has proven to be one of the significant international financial flows in recent years. Workers' remittances have overshadowed traditional sources such as official aid and private capital flows (Giuliano and Ruiz- Arranz (2009)) and currently amounts to US \$444 billion (UNCTAD). This amount is nearly three times the amount of official aid and equivalent to foreign direct investment (FDI) flows to developing countries, and the remittance income comprises more than 10 percent of gross domestic product (GDP) in many developing countries (World Bank, 2011).

The increased global integration and the enhancement in communication technology have facilitated the movement of labor from one country to another and, as a result, the flow of remittances started growing at a higher pace. While there is a moderate rise in remittances transmitted to developed countries, the remittances sent by migrants to developing countries has witnessed dramatic surge recently. This happened precisely after 1990s when the migration from developed countries in the North accepted many migrant workers from the poor South. The remittance sent to developing countries, as a result, stood slightly less than threefold the amount remitted to developed countries (Figure 1) as of 2010.



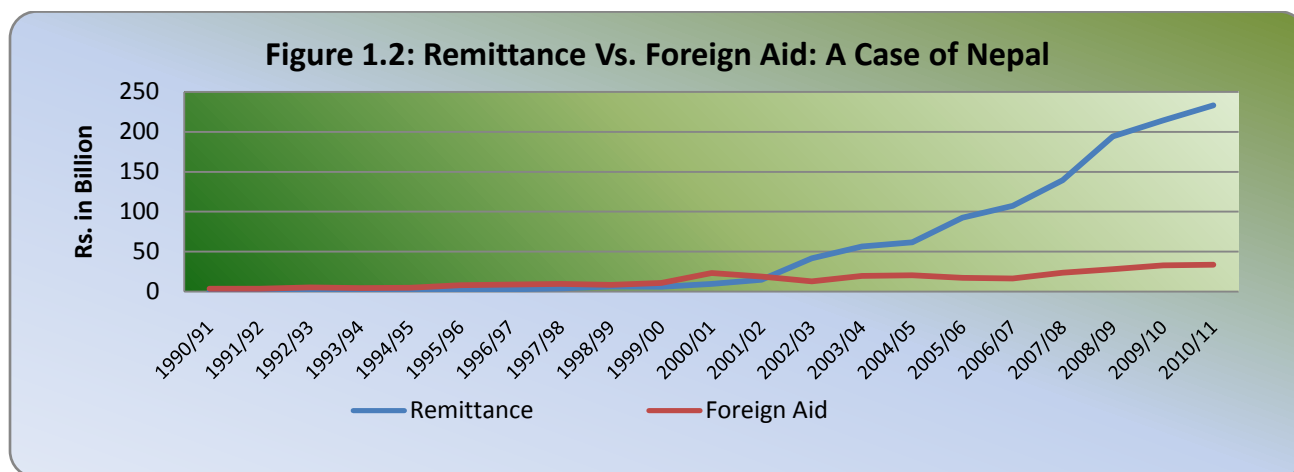
Source: UNCTAD

Remittances deserve strategic importance both in macro and micro level. On the macro level, the evidences confirm that remittance happens to be an increasingly important and relatively stable source of external finance for the countries afflicted by economic and political crisis (Kapur, 2003). Such countries regard remittances as one of the most secure and reliable sources of foreign currency than other capital flows such as foreign direct investment and official development assistance. On the micro level, remittance has become panacea for the marginalized poor people to enhance their livelihood by providing an alternative source of income. The remittance is believed to have direct impact on the poor and thus contributes to alleviate poverty in a significant way than other sources of external finance. The remittance has been observed as a means to affect well-being and capacities

of not only the households getting the remittance but also the sending community as a whole (de Hass (2007a)).

Nepal has also the long tradition of overseas employment which started particularly after the people started migrating to neighboring Indian cities<sup>1</sup>. The trend now, however, has shifted and the overseas employment has become one of the attractive options for many leaving the country to work abroad. The argument for the people's interest for foreign jobs, be it in neighboring country or overseas, is attributed to low absorptive capacity of domestic economy caused by the sluggish performance of manufacture and non-manufacture sectors, rapid growth of population and labor force, prolonged political instability, changing attitude of the people in their livelihood, and others.

With growing number of people leaving for foreign jobs, the remittance has convincingly become one of the reliable sources of foreign exchange for the Nepalese economy. Nepal in 2010/11 earned remittance income of NRs 233.0 billion (NRB, Quarterly Economic Bulletin), which amounts to be 17.3 percent of its gross domestic product. This significant share of remittances indicates that any decline in remittance could potentially disturb the functioning of the economy at macro level, particularly in external sector. A total of 2.4 million people went abroad as migrant workers, which is a significant number for its total 26.6 million (Central Bureau of Statistics (CBS), Nepal) people in the country. A majority of them have been to Qatar followed by Malaysia (Department of Foreign Employment, Ministry of Labor and Transportation Management, GoN). A number of villages in rural Nepal have been deserted of young working age individuals, turning the Nepalese economy from rural agro- based economy into the remittance economy. The striking increase in remittances has now dwarfed the foreign aid, which was earlier thought to be a significant source of development finance for the Nepalese economy (Figure 2).



Source: Quarterly Economic Bulletin, Nepal Rastra Bank

Turning to Dhanusha district of Nepal, where this study has been based, there has been substantial increase in the number of people migrating overseas from this district as well following the national trend. A 6.7 percent of total migrant workers in the country are from Dhanusha district, and this district has stood first in the country in sending people abroad for foreign employment (Jha (2011)).

<sup>1</sup> A recent research by Nepal Rastra Bank reveals that the Nepalese migrants to India are estimated to send NRs 22.9 billion per year to Nepal (Nepal Rastra Bank (2007)), and ironically, only 3 percent of that remittance enters into the country from formal source.

The potential reasons behind increased migration in the district may include the high population growth rate in this region, exclusion of this region in development process, disinclination of young people to work in home country, demonstration effect, low growth of agriculture sector and an increasing insurgency by underground groups.

## 1.2 Statement of the Problem

Despite a constant rise in remittance earnings, the productive use of remittances has been the matter of concern<sup>2</sup>. While the direct economic impact of remittances to alleviate poverty is not much controversial, the non-pecuniary consequences of remittance, such as impact on health, education, gender issues, social participation, politics, women empowerment, and cultural and social changes in origin societies have been still under-plowed areas. Apparently, for instance, the increased income resulting from remittance inflow urges households to reconsider their decision on health and education expenditure. In addition, the increase in household consumption resulting from remittance income, provided that they occur locally, can transmit positive impacts to other households in the community through increased economic activities (de Hass (2007a)). Besides, the increased number of migration help raise local wage rate leading to the direct benefits to the people stay behind in the community.

Adding to all this, the channel by which workers sent their money has been another debatable issue. It is said that most of the money transferred by migrant workers does not come through formal banking channels but instead they sent money through informal channels such as hundi and relatives. It poses the problem of figuring out the exact volume of foreign exchange that the country earns, affecting then the foreign exchange policy of the country. Besides, the money sent by informal channels keeps government from receiving tax revenue that accrues when it is sent through formal channels.

Yet another less explored area so far regarding remittances is how the people going abroad finance their migration cost. Most of the people going for foreign job belong to the families who are economically very poor and they often live in the areas where there is acute lack of financial services. On this ground, this research also aimed at identifying how migrant workers finance their cost of foreign trip.

Dhanusha district has remained one of the most remittance-recipient districts in the country. With an enormous number of people residing outside for the foreign job, however, the question is that how money sent by those workers in the district has affected the livelihood of their families and neighborhoods back in the country. This study is expected to answer this question by conducting a comprehensive survey in migrant-sending communities of the district.

## 1.3 Research Objectives

The major objective of this study is to identify socio-economic impacts of remittances in migrant-sending households in Dhanusha district. The study also aims at offering policy recommendations regarding foreign employment and an effective use of remittances. The specific objectives are:

1. To analyze the socio-economic impact of remittance on receiving households of Dhanusha district. The socio-economic aspects include education, health, information access, income and expenditure pattern and women empowerment.

<sup>2</sup> See Pant (2008), Pant (2011), de Hass (2007a), Ellerman (2003), and Carling (2004) for detail.

2. To identify whether migrant workers use their remittance earnings in productive or non-productive areas.
3. To identify how migrant workers send their money in their country of origin.
4. To offer policy recommendations designed to make the most productive use of remittances.

#### **1.4 Limitation of the Study**

Owing to time and resource constraint, the study was conducted only in Dhanusha district. Further, only 12 VDCs were chosen out of total 104 VDCs and one municipality in the district. The VDCs were chosen randomly for the reason that this approach reduces bias in the estimation, this approach has a limitation that the VDCs may have chance to concentrate in one area – and in fact this has been the case for this study – limiting the coverage of VDCs from all parts of the district. The policy prescriptions have been forwarded based on this limited coverage of the survey, which makes readers to be cautious to make general conclusions.

In addition, yet again because of limited budget and time constraint, this study takes account of only few socio-economic variables for the analysis and observes the impact of remittances on these variables. The broader coverage of other impact areas might have been missed. Similarly, the time constraint also limited the enough training needed for the enumerators to conduct effective survey.

It is also assumed that there is no recall (memory) bias. As per this assumption, the households were believed to be capable of remembering their household status three years before, which may not be accurate for all household involved in the survey.

The rest of the study unfolds as follows: Section 2 presents the survey of the literature. Section 3 discusses the research methodology and survey design. An analysis of survey data and empirical results are presented in Section 4. The conclusion of the study and policy recommendations are summarized in Section 5.

---

---

## CHAPTER 2

---

---

---

---

### LITERATURE REVIEW

---

---

Today the term remittance has taken a central place in debates among development experts all over the world owing partly to the fact that its volume is growing at an exponential rate in recent years. The renewed debate started particularly after 1990s when it was observed that the dependency theory and structural views on remittances, which dominated the decades of 1970s and 1980s and maintained a pessimistic view on remittances, witnessed a downfall. The dependency theorists were of the view that remittance never contributes to the development of underdeveloped countries mainly for the reason that international migration encourages brain drain from the developing countries depriving them of the human capital that they desperately need to meet their development goals. Prior to the dependency and structural views, however, the developmentalist and neoclassical thinkers during 1960s and 1970s had maintained optimistic views on remittances believing that capital and knowledge transfers by migrants would help achieve development needs of least developed countries in the world. The same views have taken incarnation at the start of this century bringing back the debate about remittances on the floor once again.

The oscillations on the views regarding the development impact of remittances were not just hypothetical claims; they were the results of mixed theoretical and empirical justifications. The literatures so far are vastly mixed and they offer no conclusive answer regarding whether remittance is good or bad for a country<sup>3</sup>.

Of the studies that demonstrate adverse effects, Merkle and Zimmermann (1992) and Ghosh (2006) claim that the remittances is an unreliable source of external revenue for families, regions and states because the observation is that remittances would rapidly decline after migrants settle and integrate at the destination in the long-run. This tendency is famously known as decay hypothesis as referred by Brown (1997). Chami et al. (2003), on the other hand, argue that remittance encourages reducing efforts to engage in economic activities. Davis and Carr (2003) conducted the study in Latin America and Caribbean and found that in rural areas, migration may reduce the incentives for land conservation because the land conservation activities are mostly labor intensive.

Other studies have challenged these views, however. As pointed out earlier, the worldwide flow of remittances has become one of the dominant sources of financial transfer to developing countries. The global remittance transfer is emerging as a substitute to traditional financial transfers such as official development assistance and foreign direct investment that were designed to help underdeveloped countries. To the greater extent than the traditional sources, the remittance transfer directly reaches the hands of the people who mostly need it, contributing to alleviate poverty right on the ground. To counter the decay hypothesis, for example, researches have pointed out that the longer duration of stay of migrants may not invariably reduce the size of remittances but instead may increase the remittances when a rise in income in the destination countries increase the capability to remit. This might partly or entirely oppose the view of possible weakening of ties with origin countries over time (de Haas and Plug (2006)). In addition, the cyclical fluctuations in economic

---

<sup>3</sup> A far from complete list includes Stark (1978), Stark and Levhari (1982), Stark (1991), Taylor (1999), and Taylor (1986) who claim a positive effect of remittance. King (1996), Massey, et al. (1998), Papademetriou and Martin (1991) and Taylor and Wyatt (1996), on the other hand, observe the negative effects.



activities in destination countries explain most of the variations in remittance inflow rather than the migrants' loosening ties with their home country (Puri and Ritzema (1999)).

Besides, Amuedo-Dorantes and Pozo (2006) concluded that the increased remittance in receiving country provide a cushion for income risk for receiving migrants. An increasing number of studies indicate that economic and currency crises in origin countries tend to increase remittance transfers corroborating the idea that remittances serve to spread income risks and smooth consumption (Blue (2004)). Edelman et al. (1988) used a social allocation matrix (SAM) approach for a rural village in Mexico and found that there is a significant role of remittances from both domestic and international migration to affect economic activities in the village.

The study by Adams and Page (2005) with the extensive coverage of 71 developing countries concluded that international migration and remittances significantly reduce the level, depth, and severity of poverty in the developing world. It is believed that international remittances flowing from north to south hemisphere have reduced poverty directly or indirectly. This result can be explained by the fact that the households in low income countries receive a very large share of their total household income from remittances. When these very poor households receive remittances, their income status changes dramatically, resulting in a large effect on poverty reduction (Adams (2004)). This study revealed that the mean income of a migrant household is 17.3% higher than a non-migrant household. The shares of household expenditures on food, education, clothing, and recreation all increased with the availability of remittances.

The evidences have been divided regarding the socio-economic effect of remittances in the short-run or in the long-run. The economic impact of migration can initially be negative through the lost-labor effect, but the positive consequences through remittance expenditure and investment may take decades to fully materialize. In a study of migration from five African countries to South Africa's mines, Lucas (1987) concluded that migration diminishes domestic crop production in the short run, but enhances crop productivity and cattle accumulation through invested remittances in the long run and results in increased domestic plantation wages as well. Taylor (1994) confirmed that the combination of lost-labor and remittance inflow may originally have a negative effect on production in migrant-sending regions but have a positive impact in the long run.

The positive effects were not universal in all parts of migrant-sending communities, however. de Haas (2007a) reveals that the extent to which the investment made by migrants fundamentally depends on the migrants' legal rights in destination countries, the household's income, and the specific political and economic conditions in the countries of origin. In some cases, remittances have enabled migrants to invest in land and cattle (VanWey (2005), de Haas (2006a)), in other cases remittances have generally not been dedicated to agricultural improvements and overwhelmingly invested in housing and land (Jokisch (2002)). Similarly, while in some cases most remittance-driven investments have remained within the sending region (de Haas (2006a)), in other cases migrants prefer to invest in urban areas (McCormick and Wahba (2003)).

The effects have been either positive or negative when observing the impacts in multi-dimensional social and psychological aspects. Siddiqui (2005) found that in some instances migration afforded children better educational opportunities whereas in others children's education suffered because of the absence of their mothers. Likewise, most women reported greater confidence following migration but some felt guilty for the misfortunes that struck their families in their absence.

For the case of Nepal, the studies carried out so far have been very limited, despite the fact that Nepal stands as one of the major remittance-recipient countries in the world. A NRB study



conducted in 2002 revealed that migrant workers in Nepal invested their money mainly for loan repayment, purchasing houses, land and jewelry and depositing in banks (NRB (2002)). In another study by Thieme and Wiss (2005) conducted in western part of Nepal found that there was an increased financial capital, education of children, migration specific knowledge and increased social capital in the remittance-recipient households. The study also showed that migrants were found to be sending their money back home personally or by informal hundi system.

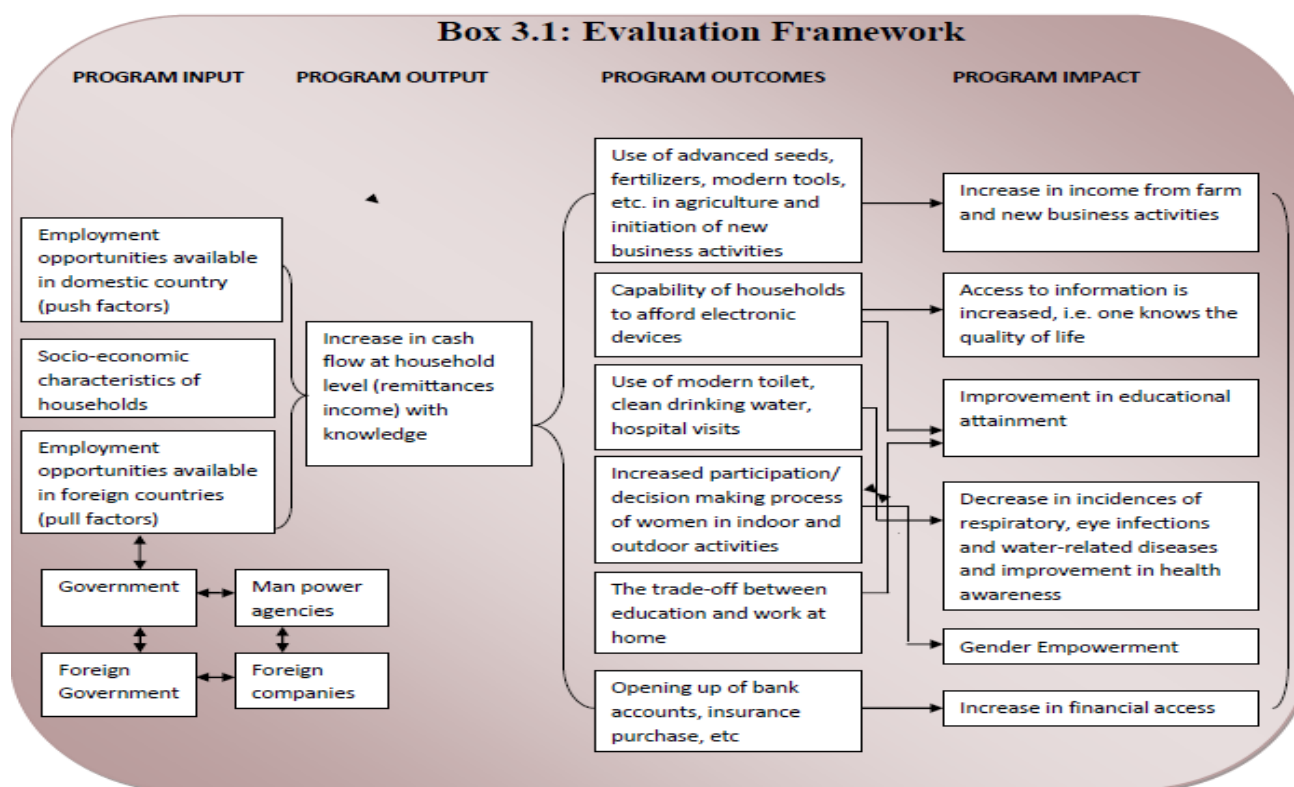
Bhadra (2007) observed the mixed impacts on the children of migrant mothers in Nepal: positive impacts were seen on the opportunities for education, health care and lifestyle but worsening psychology of their children as their mothers apart for a long time. By being able to earn an income, support the family financially and have the freedom of financial decision-making, traveling to foreign countries with new experiences, seeing new places, and meeting with people from different parts of the world and interacting with them brings the feeling of independence and confidence for the migrants and this effect impart to their immediate family as well.

## CHAPTER 3

## RESEARCH METHODOLOGY AND SURVEY DESIGN

**3.1 Research Methodology**

This study employs the concept of impact evaluation to examine the role of remittances in socio-economic indicators in the study area (see detail on the evaluation framework of this study in Box 3.1). While this technique is specifically applied to identify the effects of a particular program, the study adopt this approach assuming that the receipt of remittance by households in the study area is regarded as a treatment and those household who falls on this group are known as treatment households. The counterparts who do not receive remittances offer the basis for providing a comparative judgment with treatment households and these households are called control households. Evaluations of such type are viewed as a state-of-the-art approach in order to achieve best evaluation of a particular treatment in any study area. The explanation that follows helps understand how the bias in estimation is eliminated when using the technique of impact evaluation by using propensity score matching (PSM) approach, one of the important semi-experimental approaches to conduct the impact evaluation.



The following equation measures the average gains in socio-economic indicators as a result of a particular treatment:

$$T = E(V_{1,i} | P_i=1) - E(V_{0,i} | P_i=1) \quad (1)$$

Here, the term  $E(V_{0,i} | P_i=1)$  is a counterfactual which is defined as what would have happened in the treatment group in the absence of the program. The problem is that the counterfactuals are

unobserved and the evaluators never know what would have occurred in program participants in treatment group when the program was absent.

When a simple mean difference is taken, as given in equation (2), between the variables in treatment and control groups to measure the treatment effect, it is subject to a bias as given in equation (3).

$$M = E(V_{1,i}|P_i=1) - E(V_{0,i}|P_i=0) \quad (2)$$

$$B = E(V_{0,i}|P_i=1) - E(V_{0,i}|P_i=0) \quad (3)$$

This bias originates from two sources: selection bias and self-selection bias. The selection bias is defined as the bias resulting from the effect of the variables that determine the individuals to be allocated either in treatment or in control group. The household heads' occupation, education, wealth of few years ago, to name a few, belong to this category of variables. The selection bias is the matter of concern in this study. Certainly, there are factors that determine who will be going abroad for work and others will not. The PSM approach is capable of handling the issue of selection bias, which this study employs (see below for detail).

The self-selection bias, on the other hand, occurs when some policy action determines whether they belong to control group or treatment group. The government, for example, brings a policy to help alleviate poverty in a particular region or offer help to flood victims, the people belonging to those regions automatically fall into the treatment group and others will belong to the control group. The self-selection bias is believed to be nonexistent in this study because there is no policy action from the government that focuses a particular group to send abroad for a foreign employment.

When conducting impact evaluation, another aspect known as confounders must be accounted for to obtain unbiased results. The confounders are those variables that affect outcome variables in the absence of treatment and cause variations in those outcome variables. In other words, confounders are correlated with the intervention and may affect the outcomes, which confounds the intervention's effect. The examples of confounders include the variables that affect people's decision regarding going abroad for foreign employment and they also affect socio-economic outcomes such as income, education and health decisions. When the effect of confounders are failed to account for, this leads to a bias called omitted variable bias. The problem associated with confounders is eliminated when the sample is selected in a random basis, which is what this study has pursued.

As mentioned earlier, the PSM approach overcomes the problem of selection bias. This so-called best known and most used approach matches treatment households with similar control households using statistical modeling (Ravallion (2007) and Todd (2007)). The propensity score is defined as the probability of participation in a program as a function of several socio-economic and other factors. The selection bias is eliminated by ensuring that treatment and control groups can be compared in all aspects except that they have not received the intervention. The probability of participation in a program, known as propensity score, is obtained from estimating a logit or probit model with a set of observed characteristics as explanatory variables. This approach helps to calculate a score for everyone in the whole sample and then the households in the treatment and control group are matched accordingly with the propensity score estimated.

### 3.2 Survey Design

A survey entitled 'Impact Evaluation of Remittances: A Case Study of Dhanusha District' was administered in 459 households of 12 VDCs of Dhanusha district in order to garner information on multiple dimensions of socio-economic aspects of the households of both remittance-recipient and

non-recipient households. Of total households, nearly two-fifth of them were the households who had been abroad for foreign employment at least three years before the survey was conducted and they belonged to the households in the treatment group. The three-fifth households were chosen in the same VDCs who did not go for foreign employment abroad and these households belonged to the comparable control group. The data on the households who had been abroad was collected from district administration office in the district.

### *Questionnaire*

The questionnaire was designed in such a way that it became possible to garner as much information as possible in all socio-economic aspects of households. The entire questionnaire was divided into eight sections, ranging the coverage from household profile to household information on health, education, income, expenditure, information access, and women empowerment. A separate section was designed for the households in treatment group that provided data on only remittance-related aspects.

### *Sample Size*

The sample size was set as 459 households from 12 VDCs in Dhanusha district. The VDCs were chosen in a random draw from the total of 104 VDCs and one municipality in the district. The total number of respondents from sample VDCs has been presented in Table 3.1.

**Table 3.1: Distribution of Sample Size**

VDCs	No. of Respondents		Total
	Treatment Group	Control Group	
Balabakhar	15	23	38
Dhanushadham	9	18	27
Khariyani	9	26	35
Mahendranagar	42	24	66
Nakatajhij	19	29	48
Paterwa	18	23	41
Sapahi	15	23	38
Satosar	8	16	24
Sonigama	13	23	36
Thilla Yeduwa	8	16	24
Yedukush	13	19	32
Yagyabhumi	16	32	48
<b>Total</b>	<b>185</b>	<b>272</b>	<b>457</b>

Before conducting a final survey, a pilot survey was conducted in 10 households in order to avoid any limitations the initially designed survey questionnaire could have possessed. The entire process of data collection was carried out by the employees of NRB, Janakpur office. The data collectors were given orientation on questionnaire before they departed to collect the data. The STATA statistical software was applied for processing the quantitative data.

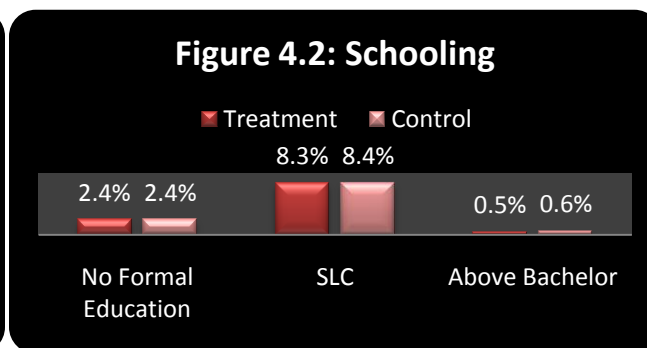
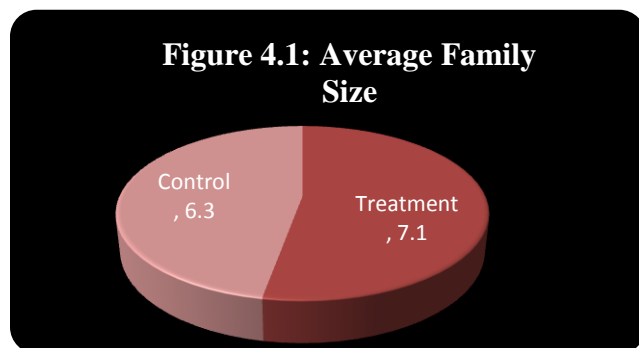
## CHAPTER 4

## RESULTS AND DISCUSSION

## 4.1 Descriptive Analysis

This section of the report presents comparative analysis of the various socio-economic aspects of treatment and control households. The comparison is first made based on the simple graphical and tabular presentation of the survey data. Then the results from a simple statistical approach called the test of mean differences are discussed before examining the complete rigorous analysis based on propensity score matching approach. While the first approach may lead to a wrong conclusion due to the possible existence of selection bias, they are presented here just to take a preliminary view on the data and see how they behave in treatment and control groups.

To start out, the survey data showed that the average family size of treatment and control group remained almost similar: 7.1 persons in treatment group and 6.3 persons in control group (Figure 4.1). This makes comparison a little straightforward with having less chance of distortions in outcome variables emanating from the family size. Turning to education level, both control and treatment groups were not also found to be much different. 8.3 percent members of the entire family members in the treatment group, for example, were reported to have School Leaving Certificate (SLC) Examination (equivalent to 10<sup>th</sup> grade in Nepal) degree whereas 8.4 percent households reported this in the control group. The bachelor level degree-holders in the entire sample was almost non-existent. In treatment group such degree holders were only 0.5 percent and in control they were 0.6 percent (Figure 4.2).



In the study area, tube well was found to be the major source of drinking water. 87 percent households in the treatment group and 84 percent in the control group were using this source of water in their livelihoods. Only about one-tenth of the people in the survey area were using piped water.

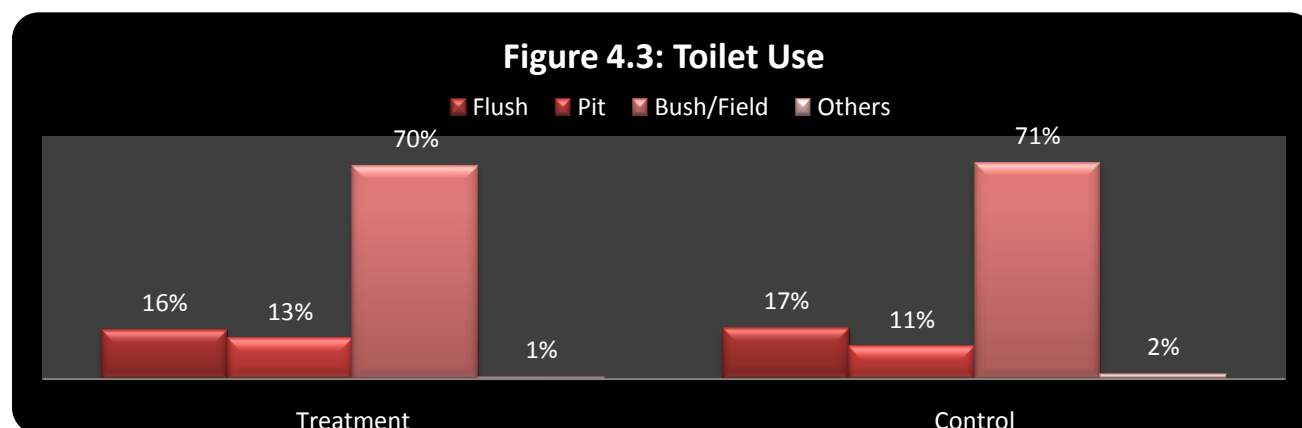


Comparing the use between treatment and control groups, the difference was minimal in almost all kinds of drinking water sources the households were using in the study area. The insignificant difference needs no further explanation because the provision of

such utilities in the villages requires big infrastructure investment and they are not determined by individual household's affordability but rather to the extent the government provides such services in

the villages. A little higher use of tube well water in the treatment group, however, can be attributed to the higher purchasing power of households in this group resulting from remittance income.

For the use of toilet facility, the similar tendency was observed both in treatment and control households: 70 percent households in the treatment group used open toilet in the bushes and fields whereas in the control group it was 71 percent. Only around 17 percent of households in the study area were using flush toilet followed by little higher than 10 percent using pit toilet. The traditional means of toilet use in bushes and fields has been predominant in most rural parts which also found to be prevalent in the study area.



Nearly half of the households in the survey area used wood as their major fuel to cook food in their households followed by straw, shrubs and grass (Table 4.1). As was expected that animal dung could be the major source of fuel in rural villages, it stood only in the distant third: only 2.7 percent in treatment households (6.9 percent in control households) were found to be using this traditional source of fuel in cooking their food. The use of LPG gas was little higher in treatment group (4.4 percent) than in control households (3.8 percent).

**Table 4.1: Fuel Used for Cooking**

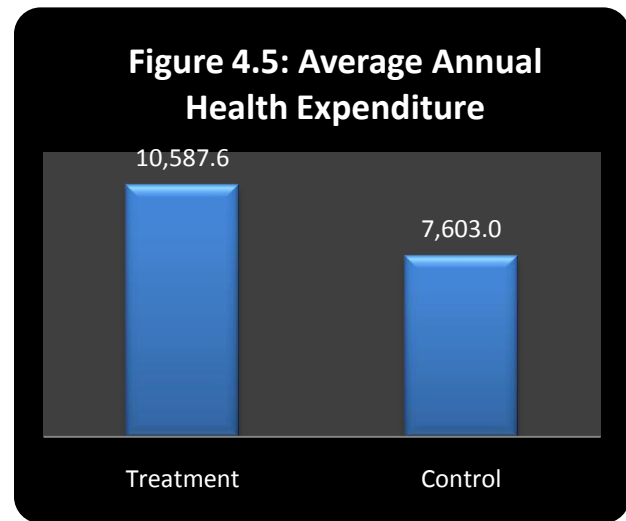
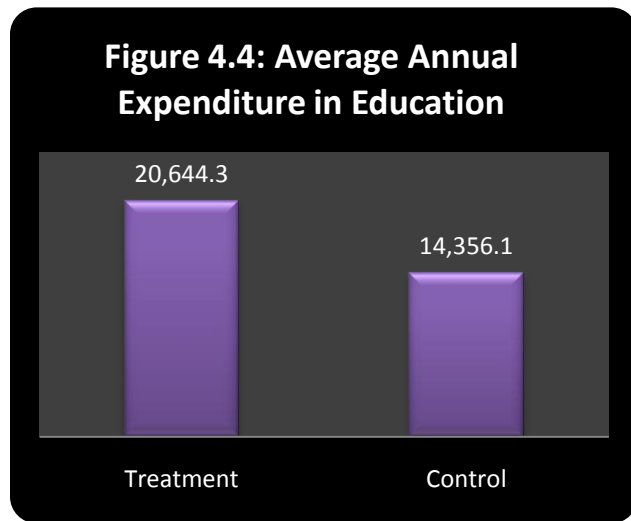
Group	Electricity	LPG	Biogas	Wood	Straw/Shrubs/ Grass	Animal Dung	Agricultural Bi-products	Total
Treatment	2.5%	4.4%	1.9%	47.8%	35.6%	7.2%	0.6%	100%
Control	3.0%	3.8%	2.0%	47.6%	36.4%	6.9%	0.2%	100%

The impact of remittance earnings in the creation of human capital such as the investment in health and education has taken the central space in debates among academia and policy-makers. Many studies, as cited in Chapter 2, have revealed that the remittance-receiving households were observed to be spending a significant proportion of their income in health and education-related expenditure. This evidence was further substantiated by this study as well. An annual average

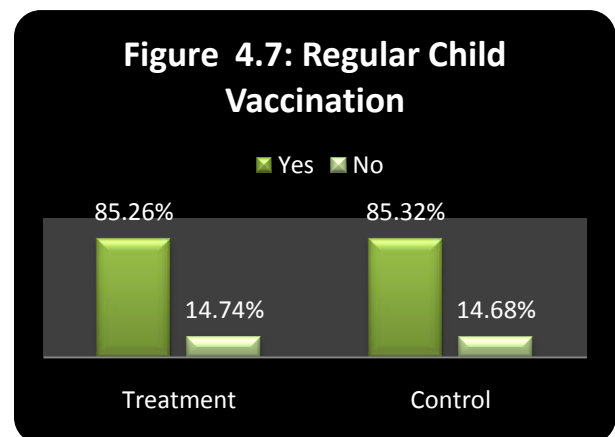
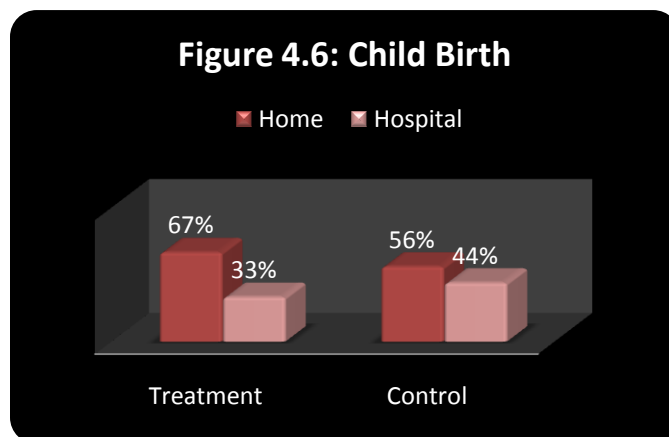




expenditure in education in treatment households, for example, was nearly six thousand more in treatment households than in control households, and for annual average health expenditures, it was three thousand more in treatment households than in control households (Figure 4.4 and 4.5)

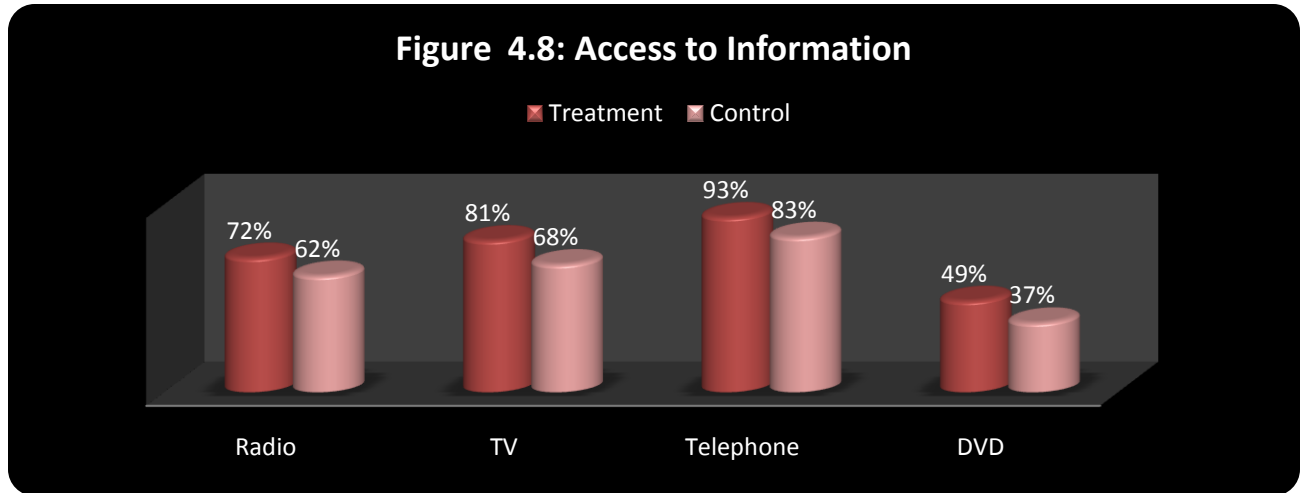


The women in a majority of the households in the study area gave birth in home rather than in hospital. A 33 percent births in treatment households took place in hospital whereas a higher 44 percent in control households, a contrary that the behavior of remittance-receiving households regarding maternal health by giving birth in hospital was not as expected (Figure 4.6). It was reportedly heard during the survey that the services of child birth had long been provided by well-experienced women working since long in the villages and people had much reliance on them when it was time to give birth by the women. In contrary to this tendency, however, a significant number of households in both groups were found to be giving regular vaccination to their children (85 percent of them do this in both groups) (Figure 4.7).

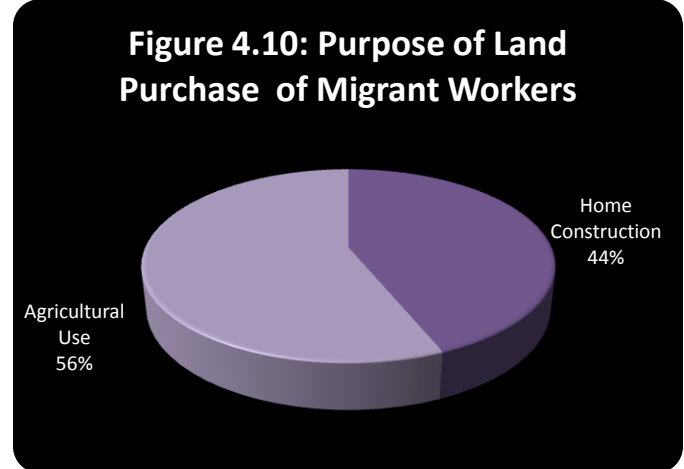
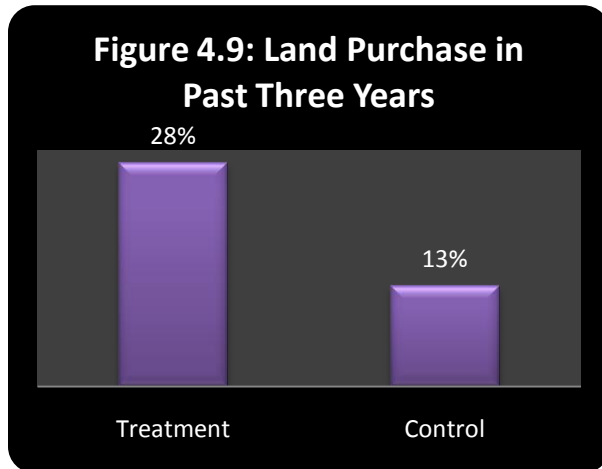


Access to information was found to be higher in treatment households than in control households. The ownership of media items such as radio, television, telephone and the DVD players all is higher in treatment group than in control. Telephone remained to be the most used means of communication in the study area, which was 93 percent in treatment households and 83 percent in control households. The use of television was found to be higher than the use of radio, indicating that the

tendency of households had switched to adopt the new means of communication rather than relying on the traditional means (Figure 4.8).



Land purchase had been the most favored means of creating wealth by remittance-recipient households. A 28 percent of households in treatment group purchased land during past three years whereas only 13 percent households in control group did this during the same period (Figure 4.9). The purpose of land purchase by the households in treatment group was mostly to use it for agricultural purpose (56 percent of households said this) while the rest reported that they purchased land for home construction purpose (Figure 4.10).



Quite contrary to the general expectation, business ownership was found to be higher in control group than it was in treatment group. Only 9 percent of households had some sort of businesses in treatment group as opposed to 17 percent in control group. The explanation behind such unexpected tendency could be that the households in control group had already owned the businesses that potentially prevented them from going abroad.

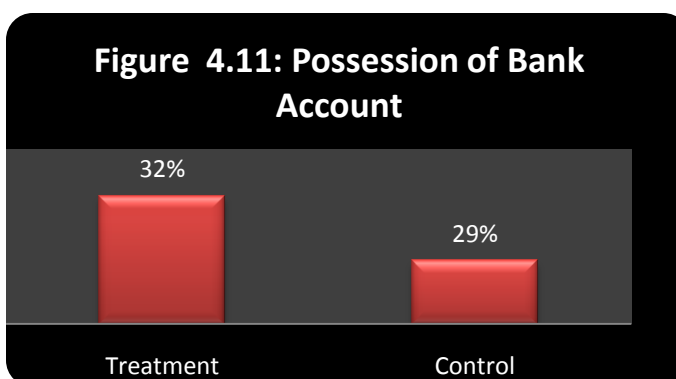


**Table 4.2: Annual Household Expenditure**

Particulars	Treatment (NRs)	%	Control (NRs)	%
Durable Goods	9,988.5	4.8%	6,293.6	4.8%
Clothes	19,051.9	9.2%	15,773.0	12.0%
Food	64,192.2	31.0%	57,764.7	44.0%
Alcohol	1,869.1	0.9%	1,332.1	1.0%
Entertainment	1,453.6	0.7%	1,090.4	0.8%
Tobacco	812.9	0.4%	637.8	0.5%
Festival	15,992.9	7.7%	11,356.6	8.7%
Wedding	47,122.0	22.7%	25,179.4	19.2%
Home purchase and maintenance	41,110.7	19.8%	7,489.4	5.7%
Transportation	3,931.1	1.9%	3,067.0	2.3%
Others	1,805.4	0.9%	1,198.8	0.9%
<b>Total</b>	<b>207,330.3</b>	<b>100%</b>	<b>131,182.7</b>	<b>100%</b>
<b>Monthly Average</b>	<b>17,277.5</b>		<b>10,931.9</b>	

In consistent with the belief that the remittance-recipient households use their income mostly in consumption, the treatment households in the study area were found to consuming more than the control households. The average monthly household expenditure in treatment group, for example, stood six thousands higher than it was in control group. Item wise, the food stood the major component in which a significant amount of household budget was spent for both types of households: it was 31 percent for treatment group and 44 percent for control group. The expenditure on wedding stood second in both of these households, which was customary because the wedding cost, particularly for the bride's side, is enormously high in the societies where the survey was conducted. In the treatment group, the expenditure on home purchase and maintenance took a substantial share (nearly 20 percent) of total household expenditures, which is consistent with the tendency that a significant proportion of treatment households purchased land to construct homes as explained above. The expenditure pattern of treatment households indicate that remittance earnings are mostly being used for non-productive areas such as in real estate and consumption.

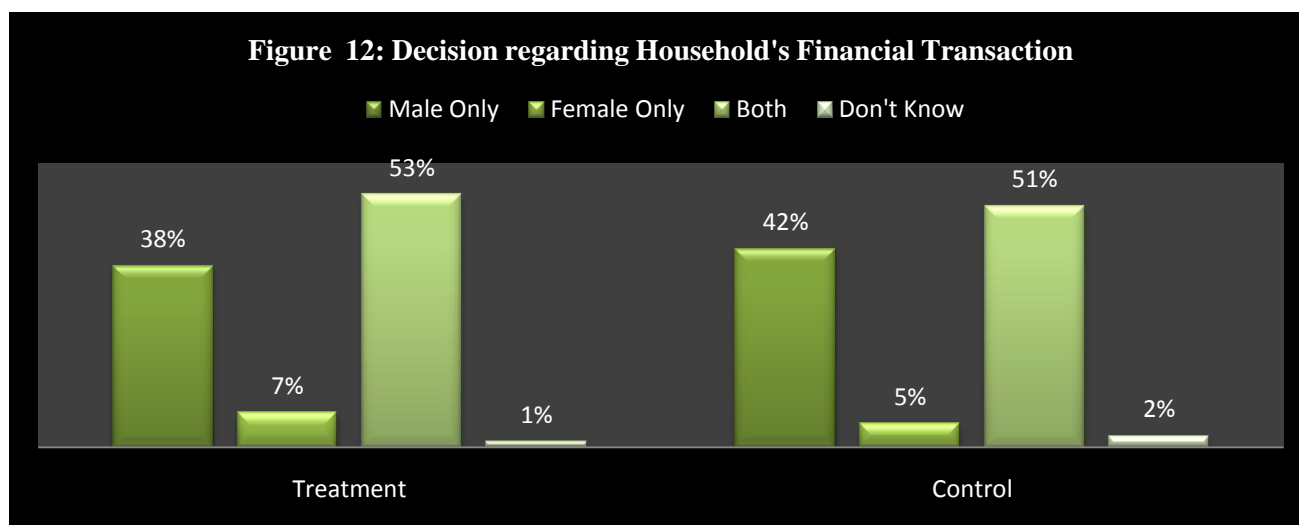
The use of financial services was also found to be higher in treatment group. A 32 percent of households in treatment group, for example, possess a bank account whereas in control group, it was only 29 percent (Figure 4.11).



A marginal increment in women empowerment was also observed in remittance-recipient households. The decision regarding financial transactions, for example, was carried out both by male and female household members, which was observed in 53 percent of total households in treatment group as compared to 51 percent households in control group (Figure 4.12). In other empowerment indicators, such as decisions regarding children's education, child birth, women's health, and involvement in social activities, the treatment households stood higher in making combined collaborative decisions by both male and female.



**Figure 12: Decision regarding Household's Financial Transaction**



A section in the survey administered questions only to treatment households. Based on the information collected from 185 households in this group, it was observed that 227 individuals had been abroad for foreign employment, meaning that 1.2 persons per household were leaving for foreign employment among treatment households. Surprisingly, among total migrant-workers, none of them were female, in contrary to the observation that total number of migrant workers in the country comprises a discernable fraction of women.

Middle East was the most favorite destination of the migrants in the study area. Of them, 71 percent had been to Saudi Arabia and Qatar only whereas 14 percent had left for Malaysia. The migration expenditure per household was reported to have NRs 120,000, and most of the expenditure was financed by borrowing (91 percent) and only a trivial amount from savings (9 percent). The borrowing was reasonably expensive for these households. The average interest rate these households paid was 28.3 percent per annum, and of the total borrowings, mostly was from moneylenders who charged them nearly 40 percent per annum on average. Only 14 percent of total borrowings of these households was from formal bank and financial institutions at the average interest rates of 16.6 percent per annum.

The remittance income per household in the study area stood NRs 169,000 per year. This low income is consistent with the account described by the remittance-sending households who reveal virtually no improvement in their livelihoods even after receiving remittance income. To justify this fact, the majority of the households said that they left the country because they saw other people were leaving in their communities (81 percent of them said this).

**Table 4.3: Impact of Remittance on Socio-economic Indicators  
(Simple Mean Difference Approach)**

Impact on	Mean Differences (treatment - control)	t-value
Business ownership	-7.77	-0.85
Health problems	-0.09	-1.88***
Water related diseases	-0.02	-0.47
Toilet use (open toilet vs. others)	0.02	0.35
Ownership of radio	0.11	1.97**
Ownership of television	0.14	3.09*
Land purchase	7.91	1.60
Total landholdings	-66.06	-1.53
Log of net agricultural income	-3.85	-1.30
Ownership of telephone	0.07	1.20
Ownership of DVD	0.09	1.31
Daily radio Listening	0.05	1.11
Daily television watching	0.07	1.65***
Possession of insurance	-0.02	-0.75
Possession of bank account	0.00	0.02
Women's decision regarding children's education	0.04	2.05**
Women's decision regarding their health	0.16	1.49
Women's decision regarding child birth	0.00	0.08
Women's decision regarding their community participation	-0.01	-0.25
Women's decision regarding household financial transaction	0.01	0.57
Log of livestock income	-3.56	-1.11
Children's study hours	7.57	0.84
Working hours at home	-15.52	-1.18
Drop-out rate	0.27	1.01
Log of educational expenses	-3.64	-1.20

\*significant at 1 percent level, \*\*significant at 5 percent level, \*\*\* significant at 10 percent level

So far as the channel by which the workers send money home, 84 percent respondents said that they sent money through formal channels such as banks and financial institutions. Only 14 percent reported that they sent money through hundi and 4 percent remitted with their friends. In the study

area, most of the migrants were hardly literate because the average school year of them was 8 years and most of them had passed their school exams in second or third division. Such a low education level of migrant workers justifies the fact that the income of the migrant workers is meager.

Now the statistical analysis of testing mean differences in various socio-economic indicators between treatment and control groups is conducted. The results presented in Table 4.3 show that in most of the variables, it is not observed any significant difference in mean values. While the test fails to reject the mean equality in these indicators, a majority of mean differences between treatment and control groups turn out to be positive, indicating that average treatment effect is larger. The ownership of television and radio, for instance, was found to be increasing in treatment households, which is as expected and also supported by the analysis presented above.

These results should be interpreted with caution, however. As explained in the methodology section, the analysis based on plain simple mean differences is not free of selection bias that may lead to wrong conclusion. The semi-experimental approach proposed in this study is believed to overcome the problem of this bias and the results based on this rigorous analysis have been discussed in the next section.

## 4.2 Econometric Diagnosis

As mentioned elsewhere, the selection bias distorts the results and this bias arises when there are some variables that determine program participation. In the context of this study, these variables determine people's choice of going abroad for work. The survey was designed to capture these variables and used them for the estimation. These variables include education, sex and religion of the household head, pension earnings, and land holdings, the type of floor, and the type of roof three years before. In conducting PSM estimation, a probit model was first estimated for the treatment on these variables as explanatory variables, and then based on these estimation (known as the probability of going abroad and also called propensity scores) the households in the treatment and control group are matched accordingly, and finally average treatment effects were calculated for the treated. Different approaches are available to match the treated and control households based on propensity score. Among others, Kernel approach of matching uses the information from all untreated observations to construct a match for a treated observation. However, untreated observations that have similar propensity score to the treated observation receive more weight than those that are dissimilar. The exact weight on each observation depends on Kernel distribution and its variance.

The results presented in Table 4.4 confirm the substantial improvements in the results than the results in the previous section. The average treatment effects were found to be statistically significant for 15 socio-economic indicators now from this approach as opposed to only five indicators in the approach above.

The results revealed that land purchase was substantially increased for the treated households after they started receiving remittances. Similarly, the significant positive effects were also observed in ownership of television, ownership of telephone, agricultural income, daily television watching, and the women's decisions regarding education and financial transactions. The treatment gain was positive for other indicators, such as possession of land holdings, livestock income, possession of insurance, the prevalence of water-related diseases, but the gains are not statistically significant.

**Table 4.4: Impact of Remittance on Socio-economic Indicators  
(Propensity Score Matching Approach)**

Impact on	Average Treatment Effect on Treated	t-value
Business ownership	-0.04	-0.82
Health problems	0.10	1.18
Water related diseases	0.08	0.92
Toilet use (open toilet vs. others)	0.11	2.02**
Ownership of radio	-0.08	-2.93*
Ownership of television	0.09	4.86*
Land purchase	12.61	2.13**
Total landholdings	53.02	0.93
Log of net agricultural income	3.99	2.74*
Ownership of telephone	0.09	2.49**
Ownership of DVD	-0.29	-3.30*
Daily radio Listening	0.16	1.67***
Daily television watching	0.16	2.05**
Possession of insurance	0.02	1.01
Possession of bank account	0.16	1.39
Women's decision regarding children's education	0.06	2.67*
Women's decision regarding their health	-0.15	-2.90*
Women's decision regarding child birth	-0.23	-5.77*
Women's decision regarding their community participation	0.03	1.40
Women's decision regarding household financial transaction	0.06	3.80*
Log of livestock income	3.57	1.14
Children's study hours	13.01	1.85***
Working hours at home	-0.90	-0.11
Drop-out rate	-0.01	-0.11
Log of educational expenses	3.70	1.76***

\*significant at 1 percent level, \*\*significant at 5 percent level, \*\*\* significant at 10 percent level

The results in this approach differs from the results in simple mean difference approach for the reason that the PSM approach takes account of the biases that existed in simple mean difference approach. Children's study hours, for example, was not significant in simple mean difference approach whereas it turned out to be significant in PSM approach after correcting the bias.

## CHAPTER 5

## CONCLUSION AND RECOMMENDATIONS

## 5.1 Conclusion

A growing trend of remittances worldwide has drawn attention of both academia and policymakers in recent years. Remittance income is emerging as one of the most significant and reliable sources of external finances for many developing countries. Not only in the macro level, the contribution of remittances has been direct and sizable in migrant-sending households in micro level as well. A significant number of people in developing world are now receiving remittance earnings to finance their expenditures in home consumption, health and in children's education.

The controversy, however, revolves around how remittances affect households' socio-economic aspects. There is no conclusive answer that remittances always throw positive effects on all dimensions of people's economic and social life. While some studies have shown that remittances directly contribute to reduce poverty level, others point out towards a cost of social and economic distortions that the migration causes. In particular, remittances contribute positively for children's better educational opportunities in one hand whereas children's education suffered because of the absence of their mothers and fathers on the other.

In middle of flourishing literatures coming out with diversified results, this study offers a complementary analysis on the existing literatures to add to the evidences presently available. This study is carried out in Dhanusha district of Nepal, a region where a significant number of people are migrating abroad to seek their better life.

The study applies a semi-experimental approach called propensity score matching to evaluate the effect of remittance earnings on various socio-economic dimensions of migrant households. Twelve VDCs were randomly chosen in the district and a survey was conducted in 457 households both from migrant-sending households (treatment group) and non-migrant-sending households (control group). The survey administered the questionnaire that included a number of socio-economic aspects of households, including children's education, family's health, financial access, women empowerment, business ownership, and others.

A preliminary comparative analysis between treatment and control households revealed that the education level was not found to be much different between migrant-sending and non-sending households. Because education benefits take a longer time to materialize but this study takes households in consideration who were abroad only for three years, the similarity between households in education level is plausible. Interestingly, the survey showed that very few people (less than one percent) were found to have college level degree both in treatment and control groups. This indicates that the people going abroad for foreign employment were mostly low-skilled workers, which raises concern for the policymakers that sending low-skilled workers abroad do not benefit both the migrant-sending households and the country in general.

Both migrant workers and non-migrant workers were found to be using tube well as their major source of drinking water. A very low ten percent of them were using piped water. Moreover, it was not found any significant difference between treatment and control groups in the use of different kinds of drinking water available in the community. As with the education level, the significant



difference was not observed potentially for the reason that it is beyond the control of remittance-receiving households to acquire piped water on their own due to a large investment such facilities require. For the toilet facility, the households in both groups predominantly used the open toilet in bushes and fields. Flush toilets were used only by 17 percent of households both in treatment and control groups.

The effect was not observed also in fuel used by households for cooking. In both groups nearly half of the households used wood as their major source of fuel. Only about 7 percent of the households were found to be using animal dung as one of the sources of fuel in their households. LPG gas was used in cooking by trivial 4 percent of households both in control and treatment households. A majority of children receive regular vaccination in the study area and there is no significant difference in this pattern between treatment and control households. 85 percent of them do this in both groups.

The important distinction between treatment and control households was observed in the expenditure in family health and children's education. Treatment households spent nearly six thousands more than the control households in children's education, whereas it was three thousands more in health expenditure in treatment households. This is consistent with the results of many studies that migrant workers spend more money in health and education when they start receiving remittance income.

Information access has attained significant advancement in the study area. Importantly, access to information was found to be higher in treatment households than in control households. Television listeners, for example, were found to be higher in treatment households than in control households.

Land purchase was another important transaction that treatment households were found to be involved in. During past three years, 28 percent of remittance-recipient households purchased land while only 13 percent belonging to non-remittance-recipient households purchased land. A majority of remittance-recipient households reported that they purchased their land for agricultural purpose.

The consumption expenditure of treatment households was also observed to be higher than that of control households. Both of the groups spent a sizable fraction of their income on food and wedding expenses, besides land purchase. In the study area, the expenditure on wedding happens to be high because of the prevalence of dowry system. A close observation of expenditure pattern of treatment households indicates that consumption was mostly on unproductive areas.

The use of banking services was more prevalent in treatment households. A 32 percent of households in treatment group, for example, have opened up a bank account as compared to 29 percent in control group. In addition, women empowerment in remittance-recipient households were higher in treatment households. The decisions regarding financial transactions, children's education, child birth, women's health and involvement in social activities were made both by male and women, which was in greater extent in treatment group than in control group.

The results from PSM approach also confirm these results, yet with a little difference in them for the reason that PSM approach addresses the problem of selection bias which could have existed in previous analysis. Average treatment gain was observed in 12 socio-economic indicators. The incidence of land purchase substantially increased for the treated households after they received remittances. Likewise, the ownership of television, ownership of telephone, agricultural income, daily television watching, and the household decisions regarding education and financial transactions received gain after remittance started coming into the households.

## 5.2 Recommendations

Based on the analysis above, the following recommendations are forwarded for the policy prescription:

- i. The study revealed that the interest rates prevailing in migrant-sending communities are significantly high amounting to an average of 40 percent per annum. These rates were also observed to be quite higher in comparison to the rates charged by formal banking institutions. Due to unavailability of enough formal banking services in rural areas, the migrant workers heavily rely on informal sector to borrow money in order to finance their foreign trip. In this regard, the NRB has already made provisions to make loans available to the people who wish to go for foreign employment and this loan is counted as the loan allocated for deprived sector lending which is mandatory for A, B, and C class financial institutions. In fact, such loans have low interest rates but the problem is that people are seemed to be unaware about such provisions available to them. In addition, the existing provisions are a little complicated so a relatively low-skilled individual who wants to go for foreign employment does not feel comfortable to acquire this service. Therefore, it is crucial to make people aware about the facilities already available to them on the one hand and make those services as uncomplicated as possible so many people would involve in the program on the other.
- ii. Home town associations (HTAs), which are mostly found in the communities of Mexican immigrants in the U.S., have been one of the effective means to enhance development in migrant-sending communities. Mexican government has started promoting such schemes by donating local projects (3 to 1 with a municipal match, see pp. 20, Ellerman (2003)). This hasn't yet seemed to materialize in the case of Nepalese migrants even though the large communities of Nepalese migrant workers, such as in Middle East and Malaysia, are already in existence. The government of Nepal should promote these kinds of schemes to attract funds for the development of migrant-sending communities.
- iii. Nepal is facing pressing problem of widespread unemployment among youth. The employment opportunities are virtually nonexistent in rural areas, yet still predominant in city areas as well. This situation led many youngsters to leave Nepal seeking employment in foreign countries with an expectation to make their life better. Literally speaking, Nepal is exporting unemployment by just allowing people to leave the country and seek employment opportunities abroad instead of trying to create employment opportunities for them. Even if this is the case, the irony is that the living standard of migrant workers has not improved as expected due to the fact that Nepal is sending mostly unskilled workers. While the national figure of remittance is enormously high, the survey revealed that per household remittance earning is trivial owing to this fact. The households were found to be saying that they were sending their beloved ones to foreign employment because no other option is available for them to stay within the country. The government, on the other hand, becomes reluctant to hold workforce within the country because the remittance earnings help achieve stable BOP on one hand and it relieves burden of mass unemployment on the other. In this regard, it looks urgent to take concrete measures to retain most productive workforce within the country.
- iv. The question regarding productive use of remittances has long been debated. There are several options available to make remittances productive. Among them are taxing the remittances and channel the revenue for productive use, issuance of remittance bond, outreach through microfinance institutions, and others (Carling (2004)). Of these approaches, the productive use of



remittances through microfinance institutions is considered to be most effective (see, for example, Bruyn (2006) for summary analysis and Bryun and Kuddus (2005) for detail). Since microfinance institutions have deeper penetration in rural areas, Nepal can consider utilizing these institutions to mobilize remittance earning in poverty-stricken areas.

- v. The expenditure pattern of treatment households indicate that remittance earnings are mostly being used for non-productive areas such as in real estate and consumption. This study revealed that there is no significant impact of remittance in the establishment of businesses by migrant-sending households. This trend needs immediate amend by bringing appropriate policy measures to encourage remittance-recipient households to use their money in productive areas.
- vi. A 14 percent of remittance-recipients in the survey reported that Hundi had been one of the channels they are using to send their money from abroad. While NRB issued licenses to operate money transfer agencies and their number is growing rapidly, they seemed to be far from enough. Besides, the individuals who send money seemed to be comfortable with hundi rather than formal money transfer agencies. In this situation, the strong corrective measures are necessary to discourage the operation of hundi businesses. In addition, it is necessary of increasing networking of money transfer agencies to include many parts of the world where the money is mostly coming from.

## References

- Adams, R. (2004). "Remittances and Poverty in Guatemala", *World Bank*, Washington D.C..
- Adams, R. H. and Page, J. (2005). "Do International Migration and Remittances Reduce Poverty in Developing Countries?", *World Development*, 33 (10), pp. 1645-1669.
- Adelman I, Taylor, J.E., and Vogel, S. (1988). "Life in a Mexican Village: A SAM Perspective", *The Journal of Development Studies*, EBSCO Publishing.
- Amuedo-Dorantes, C. and Pozo, S. (2006). "Remittances as Insurance: Evidence from Mexican Immigrants", *Journal of Population Economics*, 19 (2), pp. 227-254.
- Bhadra, C. (2007). "International Labor Migration of Nepalese Women: The Impact of their Remittance on Poverty Reduction", *Asia-Pacific Research and Training Network on Trade*, Working Paper Series, No. 44, September.
- Blue, S.A. (2004). "State Policy, Economic Crisis, Gender, and Family Ties: Determinants of Family Remittances to Cuba", *Economic Geography*, 80 (1), pp. 63-82.
- Brown, R.P.C. (1997). "Estimating Remittance Functions for Pacific Island Migrants", *World Development*, 25(4), pp. 613- 626.
- Bruyn, T.D. (2006). "Dynamics of Remittance Utilization in Bangladesh", published in Bangladesh Support Group.
- Bruyn, T.D. and Kuddus, U. (2005). "Dynamics of Remittance Utilization in Bangladesh." *IOM Migration Research Series*, International Organization for Migration.
- Carling, J. (2004). "Policy Options for Increasing the Benefits of Remittances", *Paper presented at the Ninth International Metropolis Conference*, Geneva.
- Chami, R., Fullenkamp, C., Jahjah, S. (2003). "Are Immigrant Remittance Flows a Source of Capital for Development?", *IMF Working Paper*, 03/189, IMF, Washington D.C..
- Davis, J. and Carr, D. (2003). "The Effect of Remittance on Population Growth, Conspicuous Consumption and Agricultural Change in Latin America and the Caribbean", *Department of Geography, University of California*, Santa Barbara.
- de Haas, H. (2006a). "Migration, Remittances and Regional Development in Southern Morocco", *Geoforum*, 37 (4), pp. 565-580.
- de Haas, H. (2007a). "Remittances, Migration and social Development: A Conceptual Review of the Literature", *Programme on Social Policy and Development*, Paper No. 34. UNRISD, Geneva.
- de Haas, H. and Plug, R. (2006). "Cherishing the Goose with the Golden Eggs: Trends in Migrant Remittances from Europe to Morocco 1970-2004", *International Migration Review*, 40 (3), pp. 603-634.
- Ellerman, D. (2003). "Policy Research on Migration and Development", World Bank, Washington D.C..
- Ghosh, B. (2006). "Migrants' Remittances and Development: Myths, Rhetoric and Realities", *International Organization for Migration, Geneva, and The Hague Process on Refugees and Migration, The Hague*.

- Giuliano, P. and Ruiz-Arranz, M. (2009). "Remittances, Financial Development, and Growth", *Journal of Development Economics*, vol. 90, pp. 144-152.
- Jha, H.B. (2011). "Madhes and Madhesis of Nepal", *South Asia Analysis Group*, Paper No. 4777.
- Jokisch, B. D. (2002). "Migration and Agricultural Change: The Case of Smallholder Agriculture in Highland Ecuador", *Human Ecology*, 30(4), pp. 523-550.
- Kapur, D. (2003). "Remittance: The New Development Mantra?", *United Nations Conference on Trade and Development*, Geneva.
- King, R. (1996). "Migration and Development in the Mediterranean Region", *Geography*, 81(1), pp. 3-14.
- Lucas, R. (1987). "Emigration to South-Africa's Mines", *The American Economic Review*, 77(3), pp. 313-330.
- Massey, D. S., Arango, J., Hugo, G., Kouaouci, A., Pellegrino, A. and Taylor, J.E. (1998). "Worlds in Motion: Understanding International Migration at the End of the Millennium", *Clarendon Press*, Oxford.
- McCormick, B. and Wahba, J. (2003). "Return International Migration and Geographical Inequality: The Case of Egypt", *Journal of African Economies*, 12(4), pp. 500-532.
- Merkle, L. and Zimmermann, K.F. (1992). "Savings, Remittances and Return Migration", *Economic Letters*, 38, pp. 77-81.
- Nepal Rastra Bank (2002). "Foreign Employment and Nepal's Remittance Economy" (in Nepali language), Nepal Rastra Bank.
- Nepal Rastra Bank (2007). "Remittances from India", Nepal Rastra Bank, Nepal.
- Pant, B. (2008). "Mobilizing Remittances for Productive Use: A Policy-oriented Approach", *NRB Working Paper*, NRB/WP/4, December.
- Pant, B. (2011). "Harnessing Remittance for Productive Use in Nepal", *NRB Occasional Paper*, NRB/OP/23, April.
- Papademetriou, D. G. and Martin, P.L. Martin (1991). "The Unsettled Relationship. Labor Migration and Economic Development", *Greenwood Press*, New York.
- Puri, Shivani and Ritzema, T. (1999). "Migrant Worker Remittances, Micro-Finance and the Informal Economy: Prospects and Issues", International Labor Organization, Geneva.
- Ravallion, M. (2007). "Evaluating Anti-Poverty Programs. In T. P. Schultz and J. Strauss (eds.)", *Handbook of Development Economics*, 4, pp. 3787-3846.
- Sindiqui, T. (2005). "Migration as a Livelihood Strategy of the Poor: the Bangladesh Case", *Refugee and Migratory Movements Research Unit*, Dhaka University, Bangladesh.
- Stark, O. (1978). "Economic-Demographic Interactions in Agricultural Development: The Case of Rural-to-Urban Migration", *Food and Agriculture Organization of the United Nations*, Rome.
- Stark, O. (1991). "The Migration of Labor", *Blackwell*, Cambridge and Oxford.
- Stark, O. and Levhari, D. (1982). "On Migration and Risk in LDCs", *Economic Development and Cultural Change*, 31(1), pp. 191-196.

- Taylor, J. E. (1999). "The New Economics of Labor Migration and the Role of Remittances in the Migration Process", *International Migration*, 37(1), pp. 63-88.
- Taylor, J. E. and Wyatt, T.J. (1996). "The Shadow Value of Migrant Remittances, Income and Inequality in a Household-Farm Economy", *Journal of Development Studies*, 32(6), pp. 899–912.
- Taylor, J.E. (1986). "Differential Migration, Networks, Information and Risk", *Migration Theory, Human Capital and Development*, JAI Press, Greenwich.
- Taylor, J.E. (1994). "International Migration and Economic Development: A Micro Economy-Wide Analysis", *Development Strategy, Employment and Migration*. OECD, Paris.
- Thieme, S. and Wiss, S. (2005). "Migration Patterns and Remittance Transfer in Nepal: A Case Study of Sainik Basti in Western Nepal", *International Migration*, 53(5), pp. 60-98.
- Todd, P.E. (2007). "Evaluating Social Programs with Endogenous Program Placement and Selection of the Treated. In T. P. Schultz and J. Strauss (eds.)", *Handbook of Development Economics*, 4, pp 3847-3894.
- Vanwey, L. K. (2005). "Land Ownership as a Determinant of International and Internal Migration in Mexico and Internal Migration in Thailand", *International Migration Review*, 39(1), pp. 141-172.
- World Bank (2011). "Migration and Remittances Fact Book 2010", *World Bank*, Washington.

## Appendix

The questionnaire was administered in Nepali language but the English version has been appended here.

### IMPACT EVALUATION OF REMITTANCES: A CASE STUDY OF DHANUSHA DISTRICT



STRUCTURED QUESTIONNAIRE FOR HOUSEHOLD SURVEY

NEPAL RASTRA BANK  
BANKING DEVELOPMENT AND RESEARCH UNIT  
JANAKPUR

**STRUCTURED QUESTIONNAIRE FOR HOUSEHOLD SURVEY**

NAME AND CODE OF VDC \_\_\_\_\_

WARD NUMBER \_\_\_\_\_

THIS HOUSEHOLD IS IN TREATMENT OR CONTROL GROUP \_\_\_\_  
(1 = TREATMENT, 2 = CONTROL)**ELIGIBILITY:**

(The household who falls on treatment group should have been at least for three years in foreign employment and control group household should not be in foreign employment to date)

NAME OF RESPONDENT \_\_\_\_\_

SEX OF THE RESPONDENT \_\_\_\_  
(MALE = 1, FEMALE= 2)**INTERVIEW DETAILS**

<b>DATE</b>	_____
<b>TIME STARTED</b>	_____
<b>TIME FINISHED</b>	_____

<b>INTERVIEWER</b>	<b>SUPERVISOR</b>	<b>ENTERED BY</b>
<b>NAME</b> .....	<b>NAME</b> .....	<b>NAME</b> .....



## INTRODUCTION

Namaste, my name is..... and I am working as part of research team of Banking Development and Research Unit, Nepal Rastra Bank, Janakpur. We are carrying out a survey of households to assess the socio-economic impact caused by remittances. We would like to ask a few questions about income, expenditure and other relevant information about your household. Please try and answer every question, but if you are not sure then please give the best answer you can. The information you provide will be strictly confidential. The interview will take approximately 30 minutes.

Participation in this survey is voluntary, and if you should come to any question you don't want to answer, just let me know and I will go on to next question or you can stop the interview at any time without having to give a reason.

However, we hope that you will participate in this survey since your views are important to us.

Before we start, do you want to ask me anything about the survey?

May I begin the interview now?

If so, please sign or mark below to indicate you are willing to be interviewed.

### **I am ready to be interviewed**

Signature:

Date:

(Interviewers, please ask for the respondent's signature but if respondent can't sign, ask to put a tick mark and sign yourself as a witness)

## SECTION 1: GENERAL INFORMATION OF HOUSEHOLD MEMBER

LINE NO Q. 1.1	HOUSEHOLD MEMBERS Q.1.1.1	SEX Q.1.1.2	AGE Q.1.1.3	MARITAL STATUS Q.1.1.4	NO. OF CHILDREN Q. 1.1.5	EDUCATION Q.1.1.6
	The names of the persons who usually live in your household, starting with the household head	Is (Name) male or female?  1= Male 2=Female	How old is (Name) ?	What is (Name)'s current marital status?  1 = Married 2=Unmarried 3=Widowed 4= Divorced 5=Separated	Ask only female members  Write '00' if the member does not have any children.	Write '00' if Member has not ever attended school. Write 97 for Nursery to KG 01-09 = Grade 1 to 9 10 = Completed SLC 11 = Intermediate(not completed) 12 = Intermediate (completed) 13= Bachelors (not completed) 14=Bachelors Completed/Higher 96 = Not formal education 98 = Don't know
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

Q. NO	QUESTIONS	CODING CATEGORIES	SKIP
1.2	What is your religion?	HINDU 1 BUDDHIST 2 MUSLIM 3 CHRISTIAN 4 OTHER 5 (SPECIFY)	
1.3	What is your ethnicity/ caste?	ETHNICITY _____ CASTE _____	
1.4	What is the major source of drinking water?	TUBEWELL 1 RIVER 2 PIPED WATER 3 OTHER 4 (SPECIFY)	
1.5	What type of fuel does your household mainly use for cooking?	ELECTRICITY 1 LPG 2 BIOGAS 3 WOOD 4 STRAW/SHRUBS/GRASS 5 ANIMAL DUNG 6 AGRICULTURAL MATERIALS 7 OTHER 8 (SPECIFY)	
1.6	What is the occupation of the household head? (Household head means the father/mother of migrated person/s in case of treatment group and father/mother of members in control group)	GOVERNMENT JOB..... 1 OWN BUSINESS ..... 2 AGRICULTURE .....3 WAGED LABOUR .....4 FOREIGN EMPLOYMENT .....5 OTHERS ..... 6 (SPECIFY)	
1.7	Did any member of your household receive pension during last year?	YES ..... 1 NO ..... 2 (If yes, ask the amount) NRs. _____	



**SECTION 3: HEALTH**

3.1 Did any of the family members suffer / is suffering from respiratory diseases or eye infection in the last one year?  
(Refer Diseases section below for the list of diseases)

1 Yes

2 No → Skip this table.

LINE NO.	DESEASES	HEALTH INSTITUTION	TYPE OF HEALTH INSTITUTION	MONEY
Q.3.1.1	Q. 3.1.2	Q. 3.1.3	Q. 3.1.4	Q.3.1.5
List the line no. of members who were suffered/ are suffering from such disease	1 = Runny Nose/ Cold 2 = Sinusitis 3 = Headache 4 = Flu/ Fever in past one year 5 = Cough/ Dry 6= Asthma 7 = Bronchitis 8 = Tuberculosis 9 = Eye Infection 10 = Other Specify _____	How many times did (Name) visit health institution due to this illness?  Write '00' if no visit is made.	1 = Health Post 2 = Hospital 3 = Clinic 4 = Nursing Home	How much money did you spend to cure the disease (including transportation cost)? (Write amount in words) (Write '00' if no money is spent).

Q. NO	QUESTIONS	CODING CATAGORIES	SKIP
3.2	Did any member's of your family have been suffered from water related diseases (Typhoid, Pneumonia, Diarrhea, Cholera, etc.) during last one year?	Yes ..... 1 No ..... 2	
3.3	How many times did you make regular health checkup? (Write '00' if not).	Total No. _____	
3.4	Is your child being vaccinated?	Yes ..... 1 No ..... 2 Not regular ..... 3 (mention which vaccines were not completed)	
3.5	Did any member of your family give birth during last year?	Yes ..... 1 No ..... 2 → →	3.6, 3.7, 3.8
3.6	How many times did you visit health care center for ANC (Antenatal Care)?	Visits. _____	
3.7	Where did she give birth?	At home ..... 1 Health care center ..... 2	
3.8	What is the total cost for ANC or/and for birth of the last child?	No cost at all ..... 0 Below NRs. 2000 ..... 1 NRs. 2000 – NRs. 4000 ..... 2 NRs. 4000 – NRs. 6000 ..... 3 Above NRs 6000 ..... 4	

**SECTION 4: ACCESS TO INFORMATION**

Q NO.	QUESTIONS	CODING CATAGORIES	SKIP
4.1.1	How many times in the last month have you or anyone in your household read newspaper?	_____ write in Number Didn't read at all = 00 Don't know = 99	
4.1.2	Does your household have the following items?	Yes No Radio 1 2 Telephone 1 2 Mobile Phone 1 2 VCD/ DVD Player 1 2 Television 1 2	

4.1.3	How often do you or anyone in your household listen to radio?	Everyday ..... 1 A few times a week ..... 2 Once a week ..... 3 Less than once a week ..... 4 Never ..... 5	
4.1.4	What kind of programs do you listen to radio?	News ..... 1 Entertaining ..... 2 Others ..... 3	
4.1.5	How often do you or anyone in your household watch television?	Everyday ..... 1 A few times a week ..... 2 Once a week ..... 3 Less than once a week ..... 4 Never ..... 5	
4.1.6	What is the total monthly bill of your household for using all these services (Radio, TV, Phone, etc.)?	No cost at all ..... 0 Below NRs. 1000 ..... 1 NRs. 1000 – NRs. 2000 ..... 2 NRs. 2000 – NRs. 3000 ..... 3 Above NRs.3000 ..... 4	
4.1.7	What are the most important sources of your information regarding government activities, such as Constitution Drafting, Peace Process and other government programs?  (Rank the different sources starting 1 for the most important)	Relatives, friends and neighbors _____ Community _____ Local market _____ Local newspaper _____ Radio _____ Television _____ Community leaders _____ An agent of the government _____ NGOs _____ Internet _____ Other _____ (SPECIFY)	
4.1.8	Compared to the last five years ago, has the access to information improved, deteriorated, or remained same, in general?	Improved .....1 Deteriorated .....2 Remained same ..... 3	
4.1.9	How long does it take time to reach the nearest market center?	_____ (Hours) _____ (Minutes)	
4.1.10	How long does it take time to reach the nearest road? (refers to the road where motor vehicles run)	_____ (Hours) _____ (Minutes)	

## SECTION 5: HOUSEHOD INCOME

## 5.1 FARM INCOME

5.1.1 How many kattha/ bigha of agricultural land do all the members of the household own?

BIGHA \_\_\_\_\_ KATTHA \_\_\_\_\_ DHUR \_\_\_\_\_ DON'T KNOW \_\_\_\_\_ (write '00') NONE \_\_\_\_\_ ( Skip to 5. 2)

5.1.2. Did the household purchase agricultural land during the last three years?

Yes .....1 No ..... 2 ( if yes, BIGHA \_\_\_\_\_ KATHA \_\_\_\_\_ DHUR \_\_\_\_\_ )

TABLE 5.1 FARM INCOME OF LAST ONE YEAR

TYPES OF CROPS Q. 5.1.3	UNIT (Kg/Qntl.) Q. 5.1.4	TOTAL HARVEST Q. 5.1.5	PRICE PER UNIT Q. 5.1.6	TOTAL INCOME Q. 5.1.7	TOTAL SPENDING INCLUDING SEED, FERTILIZER, PRESTICIDE, HIRED LABOR Q. 5.1.8
<b>FOOD CROPS</b>					
RICE					NRs. ....
MAIZE					
WHEAT					
MILLET					
BARLY					
OTHERS					
<b>CASH CROPS</b>					
OIL SEED					NRs. ....
PULSES					
SUGARCANE					
OTHERS					

<b>VEGETABLES</b>					
1					NRs. ....
2					
3					
<b>FRUITS</b>					
1					NRs. ....
2					
3					
<b>OTHERS</b>					
1					NRs. ....
2					
3					

Q. 5.1.9 Do you use advanced seed and fertilizer in your farm?

Yes ..... 1 No ..... 2

Q.5.1.10 How many hired labor did you use for producing crops?

\_\_\_\_\_ (no. of persons) wage rate \_\_\_\_\_ (NRs. per day)

Q. 5.1.11 Do you or any member of your family work in the farm?

Yes ..... 1 No ..... 2

## 5.2. LIVESTOCK INCOME

**TABLE 5.2.1 LIVESTOCK INCOME**

5.2.1. Does this household own any livestock, herds, other farm animals or poultry?

Yes ..... 1

No ..... 2 (Skip Table 5.1, 5.2 and 5.3)

5.2.2. Did your household sell any livestock in past one year?

Yes ..... 1

No ..... 2 (Skip Table 1)

	SALE		
	UNIT	PRICE PER UNIT	TOTAL INCOME
	Q. 5.2.3	Q. 5.2.4	Q. 5.2.5
BUFFALO			
COW			
GOAT			
PIG			
CHICKEN			
FISH			
OTHER(SPECIFY)			

**TABLE 5.2.2 EXPENDITURE ON LIVESTOCK**

Write money spent on:

LIVESTOCK	FEED	MEDICINE	VETERINARY SERVICES	TRANSPORTATION	HIRED LABOR COST	OTHER EXPENDITURE IF ANY
	Q. 5.2.6	Q. 5.2.7	Q. 5.2.8	Q. 5.2.9	Q. 5.2.10	Q. 5.2.11
BUFFALO						
COW						
GOAT						
PIG						
CHICKEN						
FISH						
OTHER(SPECIFY)						

5.2.12 Does your household make any income through the sale of live stock products?

Yes ..... 1

No ..... 2 (Skip 5.2.3)

**TABLE 5.2.3 INCOME FROM SALE OF LIVESTOCK PRODUCTS**

PRODUCTS	UNIT	TOTAL PRODUCTION	PRICE PER UNIT (NRs.)	TOTAL INCOME (NRs.)
Q. 5.2.13	Q. 5.2.14	Q. 5.2.15	Q. 5.2.16	Q. 5.2.17

**5.3 SALARY / WAGE INCOME**

5.3.1 Does any member of your household earn wage?

Yes ..... 1

No ..... 2 (Skip the following table)

LINE NO. OF HH MEMBER WHO ARE INVOLVED IN WAGE EARNINGS 5.3.1.1	NUMBER OF DAYS EMPLOYED 5.3.1.2	CASH WAGE PER DAY 5.3.1.3	WAGE IN KIND PER DAY 5.3.1.4	TOTAL WAGE INCOME PER DAY 5.3.1.5

5.3.2 Does any member of your household work for government/ salary earned job?

Yes ..... 1

No ..... 2 (Skip the following table)

LINE NO. OF HH MEMBERS WHO ARE INVOLVED IN SALARY EARNINGS 5.3.2.1	CASH SALARY PER MONTH 5.3.2.2	FRINGE BENEFITS 5.3.2.3	TOTAL SALARY INCOME 5.3.2.4

**5.4 REMITTANCE INCOME (THIS PART IS ONLY FOR TREATMENT GROUP)**

Line No. of the members who are migrated overseas 5.4.1	Is (Name) male or female? Male=1 Female=2 5.4.2	His or her last degree and division 5.4.3	Years of migration 5.4.4	Country 5.4.5	Expenditure (write '00' for free) (NRs.) 5.4.6	Source of expenditure (separately mention loan and saving in NRs.) 5.4.7	Income (amount annually sent, including goods sent) 5.4.8
		DEG ___ DIV ___				Loan ___ Saving ___	
		DEG ___ DIV ___				Loan ___ Saving ___	
		DEG ___ DIV ___				Loan ___ Saving ___	
		DEG ___ DIV ___				Loan ___ Saving ___	

Q.N	QUESTIONS	CODING CATAGORIES	SKIP
5.4.9	Did the household purchase land or home after migration took place?	Yes ..... 1 No ..... 2 →→→→	5.4.10, 5.4.11
5.4.10	What is the purpose of purchasing land?	To construct house ..... 1 To use for farming ..... 2	
5.4.11	How much land did the household purchase?	BIGHA    KATTHA    DHUR	
5.4.12	Are you inspired to go abroad to work when you see other people are doing so?	Yes ..... 1 No ..... 2 → →	5.4.13, 5.4.14
5.4.13	Is that person your relative?	Yes ..... 1 No ..... 2	
5.4.14	Did you take any advice from your relatives regarding your plan to go abroad?	Yes ..... 1 No ..... 2	
5.4.15	How do you receive your money sent from abroad?	BFI's ..... 1 Hundi ..... 2 Friends ..... 3 Others ..... 4 (Specify)	



**5.5 BUSINESS OWNERSHIP**

5.5.1 As you know, aside from household work, some people have a small business such as hotel, restaurant, rice mills, etc. or some make and sell handicrafts such as utensils made from mud, khukuri, etc from which they earn income. Does your household own such business?

- Yes ..... 1  
 No ..... 2 (Skip the following table)

SPECIFY ACTIVITIES	STARTING DATE	TOTAL REVENUE (monthly)	NO. OF HH MEMBERS EMPLOYED	AVERAGE NO. OF HIRED LABOR EMPLOYED	AVERAGE MONTHLY WAGES PAID TO HIRED LABOR	OTHER EXPENDITURE (monthly)
5.5.3	5.5.4	5.3.5	5.3.6	5.3.7	5.3.8	5.3.9

**SECTION 6: HOUSEHOLD EXPENDITURE**

EXPENDITURES ON	AMOUNT (NRs.)	EXPENDITURES ON	AMOUNT (NRs.)
Q. 6.1	Q. 6.2	Q. 6.1	Q. 6.2
DURABLES		FESTIVAL/CEREMONIES	
CLOTHING		HOME PURCHASE/MAINTENANCE	
FOOD		CLOTHING	
ALCOHOL		TRANSPORTATION	
TOBACCO		OTHERS	
ENTERTAINMENT			

**SECTION 7: FINANCIAL STATEMENT**

Q NO.	QUESTIONS	CODING CATAGORIES			SKIP
7.1	Have you had any insurance?	Yes .....1 No .....2 →			7.2, 7.3
7.2	What type of insurance do you have?	Life Insurance ..... 1 Health Insurance .....2 Other ..... 3 (Specify)			
7.3	How much insurance premium do you pay per month ?	NRs. _____			
7.4	Do you have any account in any bank and financial institutions?	Yes .....1 No .....2 →→			7.5
7.5	Please mention your deposit balance.	NRs. ...			
7.6	Borrowings		Amount (In NRs.)	Interest Rates (% per month)	
		From			
		Relatives			
		Friends			
		Saving Clubs			
		Banks			
		Money Lenders (landlords, shopkeeper, villagers, etc.)			
		Others			
7.7	Lending	Interest-bearing NRs. _____ Interest-free NRs. _____			

**SECTION 8: GENDER EMPOWERMENT**

Q.NO	QUESTIONS	CODING CATAGORIES	SKIP
8.1	Who does take the decision regarding the education of your children in your household? (e.g., whether to enroll children in private or government school/college)	Male ..... 1 Female ..... 2 Both ..... 3 Don't know ..... 4	
8.2	Who does take decision of women health related problems in your household? (e.g., whether to visit doctor after child birth or give birth of child whether in hospital or at home )	Male ..... 1 Female ..... 2 Both ..... 3 Don't know ..... 4	
8.3	Who does take the decision of giving birth of new child?	Father ..... 1 Mother ..... 2 Both ..... 3 Don't know ..... 4	
8.4	Who does take decision of financial transactions in your household?	Male ..... 1 Female ..... 2 Both ..... 3 Don't know ..... 4	
8.5	Who does take the decision regarding the participation in community activities?	Male ..... 1 Female ..... 2 Both ..... 3 Don't know ..... 4	
<b>(Ask only to the female informants)</b>			
8.6	Do you need to take the permission of your husband or other family members to get out of home? (e.g., shopping, visiting relatives and friends, etc.)	Need to take ..... 1 Need not to take ..... 2 Need to inform ..... 3 Need not to inform ..... 4	

**Thank you !**