

Impact of Remittance on Food and Non-Food Poverty in Nepal

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Abstract: *Remittances inflow plays pivotal role to generate income for developing countries like Nepal. As such, an increase of remittance flow can have a significant impact on poverty reduction in Nepal. This study used data of Nepal Living Standard Survey (NLSS) II to examine the implication of remittances on food and nonfood poverty in Nepalese context. The research design of the study is both qualitative and quantitative by using cross sectional secondary data of Nepal Living Standard Survey (NLSS) II. The study employed three variants of the Foster-GreerThorbecke poverty index. By using the STATA software, the study has used the Probit Model as remittance and poverty effect function to observe probability of being non poor. This study finds out that remittance plays an important role in reducing food and nonfood poverty in all analytical domains. The study found that nonfood poverty has been experienced more than food poverty in national level. The pattern is similar in rural, urban and geographical area. Rural area Nepal has experienced high food and nonfood poverty in comparison to urban area. Similarly, both types of poverty level is high in mountain, than in hill whereas comparatively low in Terai.*

Keywords: *Remittances, Food Poverty, Non-Food Poverty, Nepal, NLSS II*

Introduction

Migration is a continuous phenomenon which refers to a process whereby people or group of people move from one place to another. In human history migration is considered as a gradual process for the betterment of the world. Nowadays, People migrate from domestic region to the destination region to achieve the better economic benefits and social securities.

The volume of international migrants has continuously increased from 175 million in 2000 to more than 247 million in 2013 (Remittance Fact Book 2016). There will be significant impact of remittance for the poverty reduction in remittance receiving countries.

Officially recorded remittance flows to low- and middle-income countries (LMICs) are expected to increase by 4.2 percent on 2022 to reach \$630 billion. This follows an almost record recovery of 8.6 percent in 2021. (Migration and Development Brief. WB 2022). Above information justify that remittance is the major source of transfer earning for third world economies which significantly decrease the poverty in developing country like Nepal.

Poverty has its different dimensions such as relative poverty, absolute poverty, food and nonfood poverty, multidimensional poverty, human poverty and so on. This study is only concerned with food and nonfood poverty. For poverty analysis, this study has used the cross-sectional data from Nepal Living Standard Survey (NLSS) III(2010/2011), which is the latest NLSS of Nepal. NLSS III shows that 25 percent of Nepali people are below the absolute poverty line. Nepali citizen who has consumed approximately 0.6 dollar per day is known as non-poor. This level is far less than that of the World Bank's 1.25 dollar a day.

NLSS III used Cost of Basic Need (CBN) approach to measure the poverty. As mentioned by the survey, the official monetary poverty line (19261) has been decomposed into food and nonfood poverty. Out of the total poverty, food poverty occupies two third weight whereas nonfood poverty occupies one third of the weight. In Nepal, national food poverty line is Rs 11929 and nonfood poverty line is Rs 7332 annually. That person is categorized as food poor who consumes less than 2220 calorie per day in aggregate. Similarly, nonfood poverty focuses on basic needs such as food, shelter, clothes, education, health, and other different physical and social services.

The interesting fact is that Kathmandu spends more on non-food items, almost double the food items against the high expenses in food items for other parts. In northern mountain, the proportion of people living below poverty line is highest in the northern mountains while it is lowest for urban hill. The western part of the nation is suffering from poverty in comparison with the eastern part (Pokhrel Trilochan 2015).

Research questions: This research has two questions:

1. What is the relationship between remittance and food poverty in Nepal?
2. What is the role of remittances on non-food poverty in Nepal?

Literature Review

In 21st century, globalization and economic interdependence make easy to move people and their service throughout the world which has increased foreign remittance significantly. Similarly, different push and pull factors of the economy and internal migration have been taken as natural phenomena, which help to increase internal and external remittance. The volume of migration and flow of remittance is increasing day by day since last twenty years,

so it is necessary to study about the role of remittance for the development of physical and human capital. The chapter has studied different theories as well as empirical findings related with the impacts of remittances on poverty.

Theoretical Perspective of Migration, Remittance and Poverty

Neo-classical macroeconomic theory argues that countries with surplus labour have a low wage rates in developing countries. On the other hand, countries with high capital and less labour have higher wage rates than developed countries. So, the wage difference is the main cause for international migration. The high employment rate in the destination country is another key factor for international migration. It is also stimulated due to education, training, and experience.

According to Dual market theory the main reason for international migration is demand base industrial growth in developed countries whereas low economic growth in developing countries. On the one hand, the main motto of the employers is to recruit new workers at a low wedge rate and maximize the profit so they demanded labour from developing countries on another hand, high comparative high wage rate attract labour from developing countries.

Network theory has argued that major cause of migration is development of network among the labours. If a labour resettles abroad, she/he will know well about the destination country then invites other family members and relatives about foreign employment. This caused the decrease migration costs and job risks in the destination country.

A theory of remittances called 'weak altruism,' whereby households use international remittances to repay debts to their parents. With respect to the amount remitted results suggested that the amount sent home is positively related to migrants' income and the intention to return, and is negatively related to the level of migrants' education.

Empirical Prospective of Remittances and Poverty in Global Context

Almost all of the empirical studies have found an inverse relationship between remittances and poverty. Migration reduces poverty because people migrate from low-income rural areas to high-income city areas or from low-income to high-income countries.

Adams and Page (2005) in a wider study used the results of household surveys in 71 developing countries to analyze the impact of international remittances on poverty. Their result suggested that a 10 per cent increase in per capita international remittances in a developing country will reduce 3.5 per cent decline in poverty (US\$1.00/ person/day).

Zhut and Luo (2010) showed the effect of remittance on rural inequality and poverty in China. Poverty headcount, poverty depth and poverty severity are signification lower in the presence of migration in the cause of Hubei. By using the basic poverty line development by Ravallion (2004) for rural areas which is equal to 850 Yuan in 2002, the study found that

remittance leads to decline in the incidence of household poverty from 27.5 percent to 14.5 percent.

Anyanwu and Erhijakpor (2010) tried to seek the answer to question: “DO international remittances affect poverty in Africa?”. The main finding of this study was international remittance has strong statistically significant impact on reducing poverty in Africa. 10 percent increase in remittance as a percentage of GDP lead on average to a 2.9 percent decline in the share of population living in poverty.

The ratio of worker’s remittances to gross domestic product (GDP) is gradually increasing except a marginal drop to 13.8 percent in the 2006/07 from 14.9 percent in the 2005/06. It increased 21.8 percent in 2008/09 against 17.4 percent in 2007/08 (NMYB 2008). In 2009, foreign remittance flow into Nepal was US\$3Billions. These figures showed that Nepal stands as the fifth largest recipient when remittances are expressed as a share of GDP, making 23 % of GDP from remittance in 2009 (Ratha et al. (2009).

Upadhyay (2007) analyzed the role of remittance for poverty alleviation in Nepal in secondary data. Secondary data were taken from Nepal living standard survey 1955/96 and 2003/04 on headcount poverty rate of several types of households according to their migration status in 2003/04.

If the pattern of receiving remittances remained at the same as in 1995/96, then poverty rate among households with internal migration would have been higher than the observed one by 4.2 percent points, whereas poverty rates among households with migrants abroad would have been higher than the observed one by 19.5 percentage points. In overall, the increase in the incidence of remittance accounts for a 3.9 percentage points decline in poverty rate.

Bhadra (2007), aimed to analyze the international labour migration of Nepalese women and the impact of their remittance on poverty reduction. The research was concluded that Nepalese women international labour migration reduced poverty at home and has significant impact of their remittance on overall poverty deduction at the household level.

Sharma, Gurung (2009) tried to examine the impact of global economic slowdown on remittance inflows and poverty reduction in Nepal. The study recommended that the private sector should take the initiative to make the most productive use of remittance income, which is now largely invested in land, housing, and buildings. In the long term it would be not sustainable for the economy.

Research Gap

It has been clear that remittance is the backbone of Nepalese economy similarly it significantly reduced poverty. Very few studies have compared the remittance receiving and

non-receiving household and related it with poverty. Research work on the effect of remittance and poverty with different economic variables has been increased by year. However, contribution of remittance on food and nonfood poverty is not found properly so this study has tried to find out the impact of remittance on food and nonfood poverty in Nepal.

Research Methodology

The research design for this study is both qualitative and quantitative with using cross sectional secondary data of Nepal Living Standard Survey (NLSS) III. The main objective of this study is to review the role of remittance on food and nonfood poverty in Nepalese context. For this purpose, Rs. 11929 and Rs. 7332 income per year has been considered as a food and nonfood poverty line, respectively. It is the national standard to measure the poverty line used by NLSS III.

The study employed three variants of the Foster-Greer-Thorbecke poverty index (FGT, 1984). It has some appealing properties over other poverty decomposable techniques. This concept not only decomposed and sub-group consistent but also shows the depth. FGT is the index which shows whenever a pure transfer is made from a poor person to someone to rich when there is a reduction in a poor person's income, where other incomes are constant. Following FGT (1984), the poverty index is given as:

$$P_{\alpha} = \frac{1}{n} \sum_{i=1}^q \left[\frac{z - y_i}{z} \right]^{\alpha}$$

Where $\alpha \geq 0$

Where, $y = y_1, y_2, \dots, y_n$ represents the income vector of a population, Z is the poverty line, Q is the number of poor individual and α is the weighted parameter that can be view as α measure of poverty aversion which range from 0 to 2 ($0 < \alpha < 2$) where the FGT index measures the poverty head count ratio (i.e., the percentage of poor in the population).

Tools of Data Analysis

By using the STATA software, the study has used the Probit Model as remittance and poverty effect function to observe probability of being non poor. This model tries to explain the relationship between poverty and its different explanatory variables

$$\text{Prob. } (y = 1 \text{ If non poor }) = \beta_0 + \beta_1 \text{hhedu} + \beta_2 \text{sex} + \beta_3 \text{land} + \beta_4 \text{hssize} + \beta_5 \text{geog region} + \beta_5 \text{urban, rural} + \beta_6 \text{geog belt} + \beta_7 \text{migration} + \beta_8 \text{remittance} + \dots + \mu$$

Here, the remittance receiving house is coded as $y=1$ if household is not poor, and $y=0$ otherwise. Independent variables are education of household head (*hhedu*), sex of household head (*hhsex*), household land size (*lands*), household size (*hs size*), household heads' developmental region (*geog region*) and geographical region (*gepbelt*).

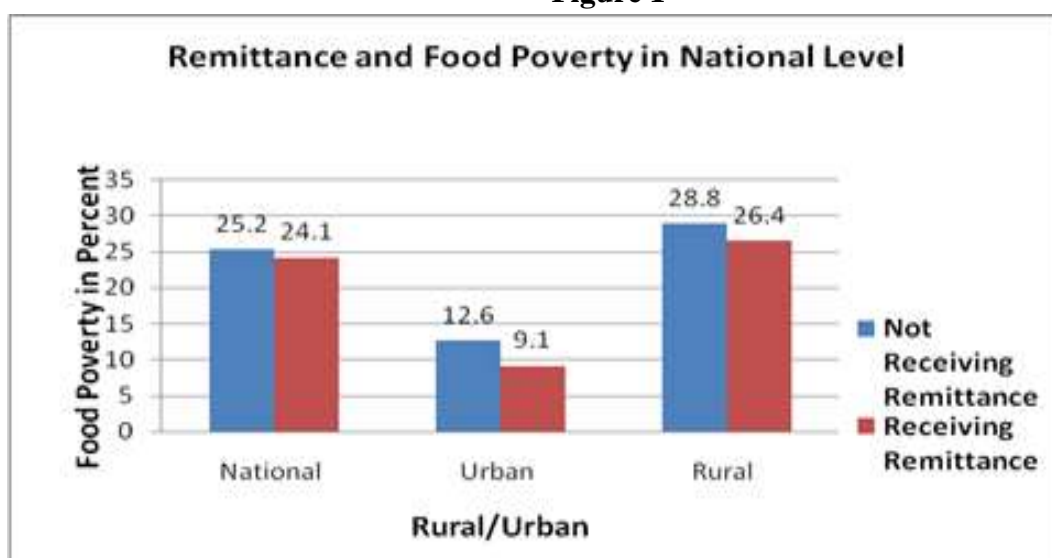
Result and Discussion

In Nepalese context study of poverty remains incomplete if the study avoids the impact of remittance. In 2015 remittance contributed 29.1 percent on GDP. If the unrecorded amount of remittance from India to Nepal is added, the contribution of remittances could be as high as 33 percent of GDP (World Bank, 20015). The volume of remittance can contribute for capital formation, hydro electricity production, banking sector and government revenue. Our currency has been gradually depreciating against US dollar since October 2011, which has caused to raise the volume of remittance as well as. 23.4 percent household have received remittance on 1995 which increased to 55.8 percent in 2010. Average remittances per household also increased to NRS from 15160 to 80,436 during the same time (CBS, 2011a, 2011b, 2009).

Remittance and Food Poverty in National Level

In the Nepalese context, all the remittance has been used for daily consumption, so internal as well as external remittance shows the effect on poverty. It has been observed that there is negative relationship between the volume of remittance and food poverty. This study separates the remittance receiving and non-receiving households and compares the level of poverty between the two categories. This study has found that national food poverty is 24.89 percent whereas remittance receiving household experienced 24.18 percent food poverty but non receiving household has experienced 25.23 percent food poverty. In urban areas, food poverty of remittance receiving household experiences only 9.1 percent whereas non receiving household experienced 12.63 percent food poverty.

Figure 1

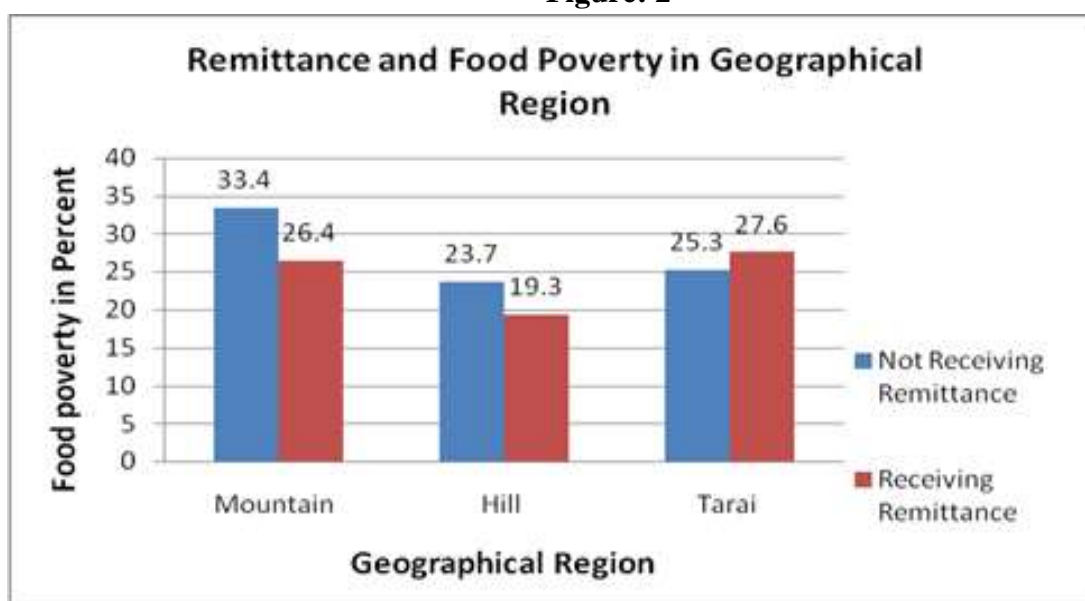


Source: NLSS III, (CBS, 2011)

Nepal has three geographical variations: Mountain, Hill and Terai. These are considered as Geographical Regions. Remittance affects the poverty in Geographical Regions too. Out of

31.56 percent of food poverty in mountain, remittance receiving households have experienced 26.49 percent where as 33.47 percent has experienced by others. In Hill too remittance has reduced more than 4 percent of food poverty. But there is no effect of remittance on food poverty in Terai. In Mountain and Hill, we have less fertile land, so resources from remittance are spent on food which reduces the food poverty but Terai experiences easy access of food grants, so remittance does not affect food poverty. (Figure 2).

Figure: 2



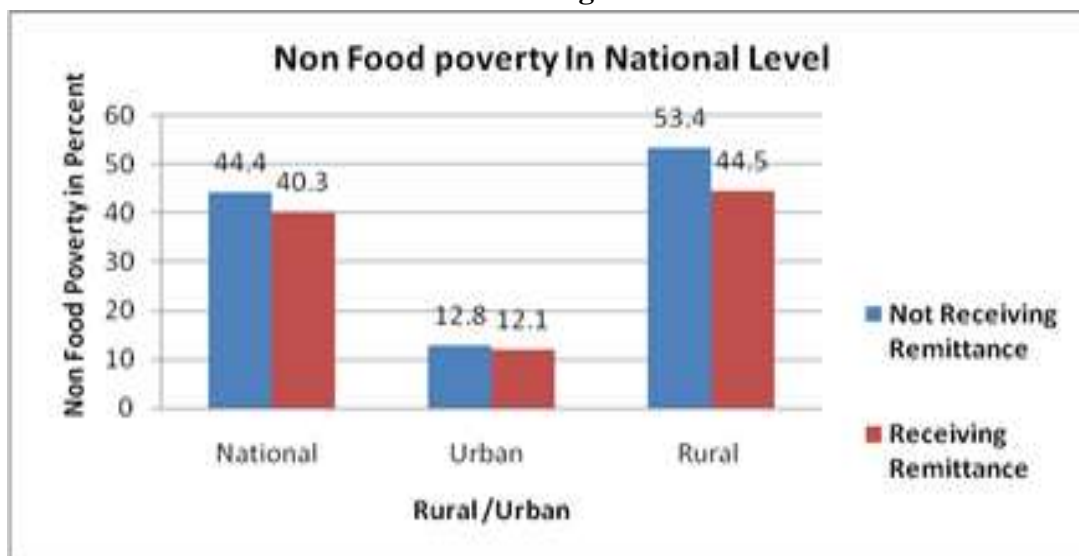
Source: NLSS III, (CBS, 2011)

Remittance and Non-Food poverty in National Level

As in the study already mentioned, Nepalese remittance has been used on daily consumption as well as debt payment. In this context there is less chance to invest of remittance on physical and human capital. NLSS III claims the nonfood poverty line to be Rs 7332 annually. To reduce nonfood poverty, it is necessary to invest in education, health, shelter, and other different physical and social infrastructures.

There is an inverse relationship between volume of remittance and nonfood poverty but the effect is very nominal in urban areas in comparison to rural areas. Overall, nonfood poverty of Nepal has been experienced as 43.13 percent out of which 50.28 percent in rural area followed by 12.67 percent in urban area. There is a vast gap between urban and rural poverty. In urban area school, hospital and other facilities are easily available which is difficult in rural area. In rural area remittance has reduced 9 percent nonfood poverty.

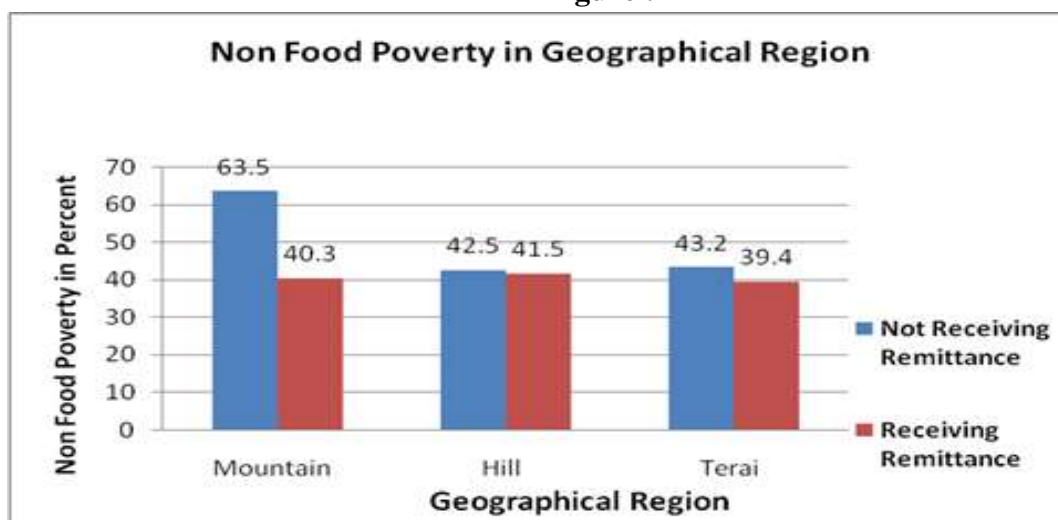
Figure:3



Source: NLSS III, (CBS, 2011)

From the above analysis, it can be concluded that the level of poverty varies according to the Geographical Regions. The trend of nonfood poverty is also approximately similar to food poverty. The nonfood poverty is higher in the Mountain region (53.25Percent) followed by 42.23 percent in Hill and 41.9 percent experienced by Terai region. In Mountain remittance receiving household have experienced 23.19 percent less nonfood poverty. Household receiving remittance, their expenditure on health, education, shelter, and other facilities has been increased which has reduced nonfood poverty. In Hill and Terai remittance has nominal effect on nonfood poverty.

Figure :4

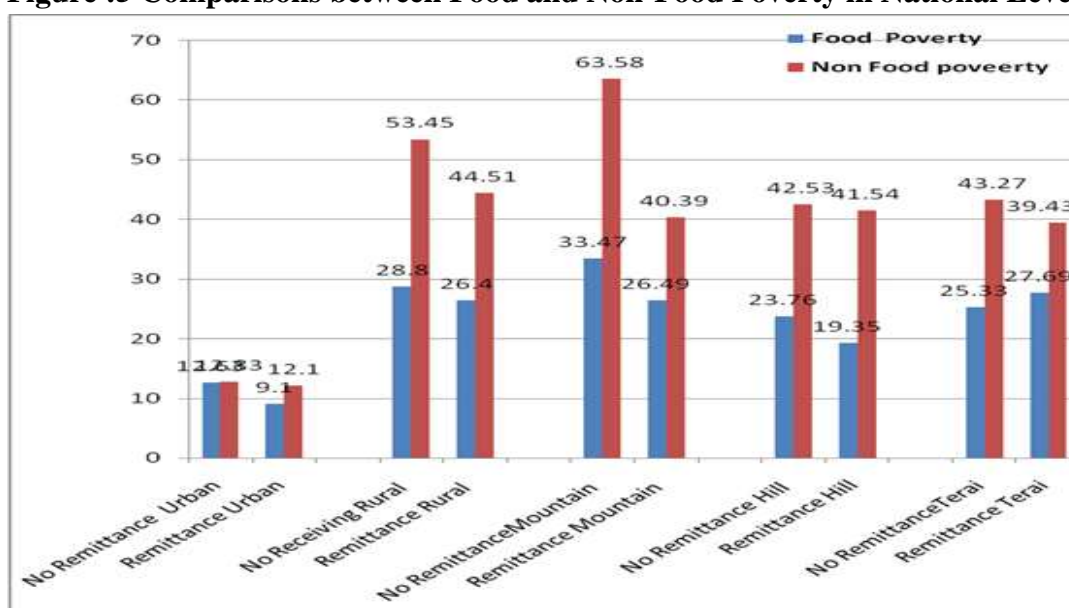


Source: NLSS III, (CBS, 2011)

Comparison between Food and Non-Food Poverty in National Level

In Nepalese context, the situation of nonfood poverty is more vigorous than food poverty. Country has experienced 25.23 percent food poverty where the figure of nonfood poverty is 44.49 percent. In urban areas both the figure of food and nonfood poverty is less than rural areas. Urban area has only experienced 12.1 and 12.8 percent food and nonfood poverty, respectively. Here remittance receiving household have experienced 3 percent less nonfood poverty in urban area. In rural Nepal, nonfood poverty has been experienced 53.45 percent but food poverty is only 28.8 percent where remittance not receiving household have 8.94 percent more nonfood poverty and 2.4 percent food poverty.

Figure :5 Comparisons between Food and Non-Food Poverty in National Level



Ecologically poverty situation is vigorous in mountains where nonfood poverty has been experienced 63.58 percent and food poverty is 33.47 percent. In hilly region nonfood poverty is 42.53 percent and food poverty are only 23.76 percent. In Terai, both nonfood and food poverty have less experienced where nonfood poverty is 43.27 percent and food poverty are 25.33 percent. In this area remittance has less effect on poverty.

Conclusion

This study examines the impact of remittances on food and nonfood poverty in Nepal. This study has used the latest NLSS III to find out the impact of remittances on food and nonfood poverty at the household level (5,977 sample size). Two hypotheses were set in this study. First, remittances decrease food poverty. Second, there is an inverse relationship between remittance and nonfood poverty. For that purpose, the study first segregates the total 5977 households in to remittance receiving and non-receiving and calculated the poverty on different analytical domain.

This study concludes that remittance plays an important role in reducing food and nonfood poverty in all analytical domains. The study found that nonfood poverty has been experienced more than food poverty in national level. The pattern is similar in rural, urban and geographical area. Rural area Nepal has experienced high food and nonfood poverty in comparison to urban area. Similarly, both types of poverty level is high in mountain, than in hill whereas comparatively low in Terai. In rural and almost of the mountain area of Nepal remittance receive from Gulf countries where the earning of labor is low so booth food and nonfood poverty is high. Similarly, in Urban area people receive remittance from high income countries (i.e US, Australia, UK, Canada etc) where their income is high which caused to deceases poverty level.

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