The Impact of Remittances on the Living Standards of the Households in Nepal

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Abstract

This study estimates the impact of remittances on the indicators of living standards of the households of Nepal by using the panel data of 422 households obtained from the three rounds of Nepal Living Standard Survey. I used the unobserved effect panel data model to consistently estimate the effect according to the sources of remittance to the six indicators of the living standards used by the Nepal Multidimensional Poverty Index Report 2018. I find that remittances have a significant impact on the aggregate indicators of living standards. All the coefficients of remittance sources dummies are positive and significant at 1% level. A household that receives domestic remittances, is 6.1% less likely to deprived of the living standard. The effect is 6.5% for the households receiving international remittances. Remittance recipient households are 18.4% less likely to deprive of the improved drinking water compared to the non-recipient households. Remittances reduce the deprivation on the ownership of household assets by 9.7% if the household receives remittances from overseas. For the cooking fuel, improved sanitation, and flooring and roofing I did not find any significant impact from the remittances. Remittance received from foreign countries has a larger impact on the collective score of indicators than the remittance received by households from domestic sources.

Keywords: Remittance, Poverty, Poverty Dimensions, Living Standards, MPI, Rural

CONTENTS

Introduction

Remittance is a transfer in cash or in-kind sent or received by a resident household to or from a non-resident household. Usually, a migrant worker sends the money they earn to their home countries in the form of remittances. The inflow of those monetary resources as well as skills, knowledge, and technology transmitted by foreign workers, helps to bring economic prosperity to their home country. Remittances sent by foreign workers to their families become the monetary income of their family helping for a better quality of life. Furthermore, remittances help to boost the standard of living of the remitter's family and, in turn, to the social prosperity of the country.

The inflow of remittance to the least developed countries is increasing rapidly (World Bank Report 2019). The personal remittance received by the United Nations (UN) classified least developed countries (LDCs) was US$53.21 billion in 2019 which is more than twice, US$ 26.4 billion, in 2010 (WB). Nepal, one of the least developed countries in the world follows a similar trend and receives a huge amount of money through remittances by many migrant Nepalese. According to the Nepal Economic Survey Report 2018/19 (NES 2018/19), published by the Ministry of Finance, Nepal, 4.4 million Nepalese are working overseas. The number of work-related emigrants per year to countries other than India has increased by over 36 times from about 10 thousand in the early 1990s to about 361 thousand in 2018 (NES 2018/19, Ministry of Labor). If we include the emigrants working in India the number would be much higher (Acharya & Gonzalez, 2012). The inflow of foreign remittance in Nepal has increased sharply since the 2000s, increasing from US$ 55 million in 1993 to US$ 8.13 billion in 2019 (World Bank, 2019). In 2018, the amount was US$ 8.3 billion, of which 28% was from Qatar. Figure (1) shows the highest ten remittance sending countries to Nepal in

2018. While comparing to GDP, the contribution of remittance increased from 1.5% in 1993 to 28.56% in 2018. The highest was 31.43% compared to the GDP of Nepal in 2015 (Figure 2). Currently, as a share of GDP, Nepal is among the top five largest remittance recipient countries in the world (World Bank, 2018). Indeed, the contribution of remittance to the remitter's family as well as to the economy through the balance of payment of the country is incomparable.

One of the major reasons for migrants to make their move to a new location is because of poverty, as well as a lack of opportunity in the homeland (IOM). Poverty is a leading cause because within a poor economy like Nepal, people are left to struggle themselves to find their means (Immigration Causes, Immigration Laws). In Nepal, the headcount poverty index, which is also known as the monetary-based poverty measure, was 41.76 percent in 1996 and declined remarkably to 30.85 percent in 2004 (NLSS I & II, CBS 2011). The 3rd living standard survey (NLSS III, CBS 2011) conducted in 2010/11 revealed the poverty index declined to 25.16 percent. Moreover, the recent 15th periodic plan of the government of Nepal primarily expects that poverty has declined to 18.7 percent (NPC, 15th plan, p.5). Figure (3) showing the declining poverty rate, increasing remittance recipient households, and the distribution of population helps to make some intuition about the relationship between remittance and poverty.

On the other hand, a new approach to measure the poverty index has been developed in 2010 by the Oxford Poverty & Human Development Initiative (OPHI) and the United Nations Development Program (UNDP) following the Alkire and Foster 'counting method' (Alkire & Foster, 2011, MPI Report 2018). This approach captures the deprivations in non-monetary factors that contribute towards well-being and is called

the Multidimensional Poverty Index (MPI). The poverty dimensions include health, education, and the living standard of the households with equal weights. For each dimension, there are different indicators of deprivation cutoffs with equal weights for each indicator (MPI, 2018).

Multidimensional Poverty Indices use the household as a unit of analysis. A household is marked as deprived for a given indicator if they fail to satisfy a given 'cutoff' (Alkire & Foster, 2011). For example, a household is deprived of cooking fuel if the household cooks using dung, wood, or charcoal. A household is assigned a 'deprivation score' determined by the number of indicators they are deprived of and the 'weights' assigned to those indicators (Nepal MPI Report, 2018). Each dimension (Health, Education, Standard of Living, etc.) is typically given an equal weighting (in Nepal MPI report 2018 the weight is 1/3), and each indicator within the dimension is also typically weighted equally. For example, 6 indicators fall under the ‘Standard of Living’ and each indicator has an equal weight 1/18. If the household deprivation score exceeds a given threshold (in case of Nepal threshold is 1/3) then a household is 'multiply deprived'. The final 'MPI score' (or 'Adjusted Headcount Ratio') is determined by the proportion of households deemed 'poor', multiplied by the average deprivation score of 'poor' households (Nepal MPI Report, 2018, UNDP, OPHI).

The MPI report of Nepal published by the National Planning Commission in 2018 found that 28.6 percent of the total population are multidimensionally poor. Figure (4) shows the deprivation rate by indicators in Nepal. The report was based on the data of the Multiple Indicator Cluster Survey conducted in 2014 (a survey conducted according to the norms of the World Bank’s Living Standard Measurement Survey).

The interesting factors that I am curious to know and motivated me for this study are; First, the MPI report of Nepal stated that multidimensional poverty is more severe than the headcount poverty based on the monetary measure. Next, the national target for the first goal, "Eradicate Extreme Poverty" of the Global Sustainable Goals is "to bring down the extreme poverty to less than 5% by 2030" (SDGs, Baseline Report 2017). And the final fact is the growing trend of foreign employment, increasing remittance income in Nepal, and the government effort for bilateral labor agreement to the developed countries like Japan (Ministry of Labor, Report 2019).

Therefore, it is a more interesting subject to study on the relationship between the remittances and the poverty dimensions for me. Due to the lack of panel data for education and health dimensions in NLSS I (1995/1996), in this study, I analyzed the impact of remittances on the living standards of households. Given the above scenarios, this research addresses the questions: To what extent the remittance contributes to the indicators of the living standard of the households in Nepal? And, does the increase in remittance-receiving households improve the living standard of the people and in-turn to the poverty reduction in Nepal?

To my knowledge, no research to date has examined the impact of remittances overtime on each indicator of the poverty dimensions in Nepal. Previous studies have mainly used the cost of living approach to meet basic consumption needs to examine the impact of remittances on households (Mughal, 2007). Another widely used method is taking the remittance income as household earnings and finding its impact on the per capita expenditure of the household (Acharya & Gonzalez, 2012), which examines the impact

of remittances on the monetary-based poverty index. Furthermore, the propensity-score matching approach was used to obtain treatment effects from the migrants' remittances on the well-being of remittances-recipient households (Bouoiyour and Miftah, 2014).

For this paper, I use the fixed effect panel data model (Wooldridge, 2002, 10.5) that allows the correlation between remittances and unobserved time-invariant factors. This model is widely used by researchers to find the impact on poverty and was also followed by Acharya and Gonzalez, 2012 to find the impact of remittances on poverty and inequality in Nepal. Moreover, like Acharya and Gonzalez, 2012, I include many control variables in the model to address the problem of endogeneity. I find that the remittance-receiving household has a better living standard than the non-receiving households. The impact is better for households who receive remittance from international sources. Like the status presented in the report MPI 2018, households are largely deprived of cooking fuel than the other indicators in the panel households too.

The rest part of this paper is organized as follows: Chapter II reviews the literature related to remittance and living standards in Nepal and the other countries. The first part of Chapter III includes the sources and description of data and the second part discusses the econometric methodology of regression model estimation. Chapter IV presents the results and the conclusion is in Chapter V.

Literature Review

There have been several types of research about the contribution of remittances on poverty reduction. Most of the prior research has applied per capita expenditure and the remittance amount income models to find out the impacts on poverty. Using household data from 11 Latin American countries, Acosta, Fajnzylber, and Lopez (2007) found that the impact was modest and varied across nations. Moreover, through its effects on human capital, remittances can have lagged effects on household income and, consequently, on monetary defined poverty indexes (Acosta et al., 2007). A study of a sub-district of Thailand by J. Nilsen, 2014 explores that remittances reduce household inequality and improve food security. Furthermore, remittances function quite like what the social welfare system works to the poorer households (Nilsen, 2014).

There has been some research about Nepal on the influence of remittances on poverty. Acharya and Gonzalez 2012, using the first two rounds of NLSS data of Nepal, have found that remittance has conditional impacts on both poverty and inequality, which largely depends on how the lower quintile households participate in this process. Moreover, estimating both the remittance dummy and amount model, they got a significant positive impact on the per capita expenditure of the households. Studies conducted by Pandey (2015), and Dhakal and Phuyal (2014) reveal that the past decade has seen the rapid growth in the volume of remittances and the rate of reduction on absolute poverty brought about by the remittance amount. In other words, the amount of remittances is directly proportional to poverty reduction. These studies also found that a large percentage of the remittances are used to address the basic needs of each remitter's family rather than being used by each family as savings that can be used for investment to generate extra capital.

A comprehensive description of the impact of remittances on livelihood strategies can be found in the study by R. Nepal (R. Nepal 2012). She had studied the households of eastern Nepal to estimate the impact of remittances through performing a logistic regression using cross-section data. She found that remittance is significant in accumulating household assets in the formation of land and housing and adds that migrant households were found to enjoy an improved standard of living in terms of better housing quality. In contrast to R. Nepal, a study of the Sri-Lanka household survey published by The World Bank (2013) finds no evidence that households use remittance income in building assets.

Another study of Emigrants' Families in Gujrat-Pakistan compares the proportional difference in two situations (before and after the emigrants send remittances) observed a significant change in household accessories and facilities (Khan et al., 2009). Furthermore, they observe the difference in before and after the situation for quantitative characteristics - monthly income, expenditures on food, clothing, education, and health and carry out a clear sense of satisfaction in the emigrant's families about their living standards and emigrant. Like Khan's finding, an empirical study by Bouoiyour and Miftah, 2014, of Moroccan households using propensity score matching methods find that migrants' remittances can improve living standards and negatively affect the situation of poverty. The results show a statistically significant and positive impact of remittances on recipient households' expenditures. They are also significantly associated with a decline in the probability of being in poverty for rural and urban households by 11.3 and 3 percentage points, respectively (Bouoiyour and Miftah, 2014).

A report on the study of Tajikistan households published by the International Organization for Migration (IOM 2007) finds that remittances are widely used to meet basic current consumption needs by the remitters family and the remainder is spent on real estate purchase (Mughal, IOM 2007). This trend is quite like the expenses of Nepalese households too (Figure 5). Furthermore, Mughal concluded that 50 percent of extremely poor households benefited from remittance since 1999 have now risen above the poverty line.

Although studies have been conducted by many authors, the impact of remittances on each indicator of the living standard of the households is still insufficiently explored. Additional studies to understand more completely the key tenets of remittances are required. This paper studies the impact of remittances according to its sources and remittance dummies on each indicator and total weights of the living standards.

Data

For this study, I analyzed the survey data collected by the Central Bureau of Statistics, a government agency for data management in Nepal. The data includes three rounds of the Nepal Living Standards Survey (NLSS) conducted in 1995/96, 2003/04, and 2010/11. All the surveys had followed the methodology developed by the World Bank, which is known as the Living Standard Measurement Survey (LSMS). The sampling method was the two-stage stratified random sampling. In the first stage, primary sampling units were determined, and then the households were selected from the primary sampling unit. In this paper, I use the balanced panel data of 422 households that were enumerated in all three surveys. The survey used two types of questionnaires in each survey and are similar in all three rounds. First, the household questionnaire includes information on household expenditure, demographic composition, land, housing, access to facilities, asset holdings, health, education, employment, remittance, farming and livestock, credit and savings, durable goods, transfers, etc. The community questionnaire for rural and urban wards includes information on community structure, facilities, infrastructure, market, and prices of goods in local markets.

For the dependent variable, I constructed a living standard score for each household. At first, to determine whether the household deprived or not on each indicator, I follow the deprivation cutoffs used by the MPI report of Nepal 2018 which is illustrated in the table below.

Dimension	Indicator	Household is deprived if,
Living Standard	Cooking Fuel	The household cooks with dung, wood, or charcoal
	Improved Sanitation	The household's sanitation facility is not improved, or it is improved but shared with other households*
	Improved Drinking Water	The household does not have access to improved drinking water or safe drinking water at least a 30-minute walk from home, roundtrip**
	Electricity	The household has no electricity
	Flooring and Roofing	The household has a dirt, sand, dung, or 'other' (unspecified) type of floor or has a roof made of thatch/palm leaf, sod, rustic mat, wood planks, or 'other' (unspecified)
	Assets Ownership	The household does not own more than one of these assets: radio, TV, telephone, bicycle, motorbike, or refrigerator, and does not own a car or truck.

* A household is considered to have access to improved sanitation if it has some type of flush toilet or latrine, or ventilated improved pit or composting toilet if they are not shared.

**A household has access to clean drinking water if the water source is any of the following types: piped water, public tap, borehole or pump, protected well, protected spring or rainwater, and it is within 30 minutes' walk (roundtrip).

In addition to the above explanation of deprivation cutoffs, the household is deprived if agricultural waste and, leaves are used as cooking fuel. Furthermore, if the household has installed a solar panel set for a source of light and using during the survey time the household is not considered as deprived of access to the electricity. Next, the household is not taken as deprived of flooring and roofing if the floor is made of plain wood and the roof is constructed by galvanized iron.

To calculate the aggregate living standard score of each household, I assigned equal individual weight 0.1667 or (1/6) to each indicator so that the aggregate score normalized from 0 to 1. If a household is deprived in any indicator the weight score is 0 and if not, it is 0.1667 for each indicator. Therefore, if the aggregate living standard score is zero the household is fully deprived of the living standard, and higher the score, less likely to be deprived, and the score is 1 for non-deprived households. For the indicator specific model, I create the indicator dummies for each and simply denoted by whether the household is deprived of the indicator or not.

Limitations

For the first two surveys NLSS I & II, due to the lack of data it is hard to determine whether the household receives remittances from the absentees of the household or relatives from other households or a friend. The information is available only for the data of NLSS III. Therefore, a borrowing transfer is hard to control completely in this study. The number of observations may constrain the study because of the limited panel data of 422 households taken from the NLSS I, II and, III. Moreover, to generalize the result, detailed research with a large sample may be necessary.

Methodology

Since the unobserved effect model is widely used to find the effect on household poverty and living standards because a correlation between receiving remittance and the household characteristics are allowed. Characteristics of remittance-receiving and non-receiving households may be different, and the unobserved factors might determine both the remittance decision and the household facilities (Acharya and Gonzalez 2012) and the living standard indicators. I used the following unobserved effect panel data model (Wooldridge, 2002).

$$LScore_{it} = \beta_1 R_{it} + \beta_2 X_{it} + \beta_3 G_{it} + c_i + d_t + u_{it} \quad (1)$$

$$Indicator_{it} = \beta_1 R_{it} + \beta_2 X_{it} + \beta_3 G_{it} + c_i + d_t + u_{it} \quad (2)$$

where $LScore_{it}$ is the aggregate living standard score of a household i at time t, R_{it} is a remittance source dummy for whether a household receives remittance from domestic (domestic dummy) or international (International dummy) sources and remittance dummy (whether the household receives remittances or not). X_{it} includes a set of household and community characteristics. The household characteristics include household size and its distribution according to the age groups, number of married members, male and female members in the households, and the per capita consumption of the households. Under the household head characteristics sex, age, age squared, education level, job sector, employment status, and migration history has captured. The migration history is a migration dummy whether the household head had ever migrated. Moreover, dummies for the pension income and borrowings, the number of durable goods that household owns, and the dummies for agricultural landholding are also captured. To capture the geographical characteristics of G_{it}, I included rural or urban dummies to the model. To capture community-level characteristics, I use several ward

(baseline political/administrative division) level characteristics such as the supply of electricity, piped drinking water supply system, and the availability of the community forest in the community as control variables. Moreover, the availability of the supply system of cooking fuel such as LPG gas and Kerosene in the local market is also included in the model. Other variables are, c_i the time-invariant factors or the unobserved effect for each household, d_t is a time dummy, and u_{it} is idiosyncratic errors that change across t as well as i. The parameter β is the major findings of my study, captures the gain in household living standards due to receiving remittances. The later model is to find out the impact of remittances on each indicator of the living standards, where, $Indicator_{it}$ denotes whether a household deprived or not for each indicator cooking fuel, improved sanitation, improved drinking water, electricity, flooring and roofing, and the asset ownership.

To determine the household size, the total number of persons living in that household for the last 6 month or born during the surveyed year are considered as a household member. If a household receives remittances from both domestic and international sources, then it considered an international remittance-receiving household. A borrowing dummy is included in the model to control the effect of borrowing transfer. A household has borrowings if they borrow from friends, or relatives, or neighborhoods. A person is 'employed' if s/he worked at least 40 hours during the last seven days for cash or in-kind benefit, 'underemployed' if worked less than 40 hours and looked for an additional job and 'unemployed' if actively searching the job but didn't get. Furthermore, time dummy d_t captures the effect of government policies and programs to elevate the living standard of the households. It also captures the effects of welfare programs of non-state organizations to poor households.

Results

Descriptive Results

Table 1 represents the status of remittance-receiving households of a panel group of 422 households (1266 observations). The domestic remittance-receiving households in the rural area are almost double (18.62%) compared to an urban area (9.38%) and it is three times larger for the international remittance recipients in the rural area. A similar trend can observe through all the rounds of the survey.

Remittance Receiving Household (%)

	1996		2004		2011		Panel	
Remittance	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
No Remittance	77.7	85.9	67.1	87.5	39.1	78.1	61.3	83.9
Domestic	10.9	12.5	16.2	4.7	28.8	10.9	18.6	9.4
International	11.5	1.6	16.8	7.8	32.1	10.9	20.1	6.8

Table (1)

The remittance amount received by households has large differences according its sources (domestic/international). The below table shows the mean and standard deviations of the remittance amount received by each panel households in three rounds and the aggregate in local currency. The average international remittance amount received by households is more than three times higher than the remittance amount received from domestic source.

Remittance Amount received by households according sources (in local currency NPR)

	1996		2004		2011		Aggregate	
	Dom.	Intl.	Dom.	Intl.	Dom.	Intl.	Dom.	Intl.
Mean	14,045	26,242	18,252	28,939	23,324	96,336	20,270	68,350
St.D.	28,939	129,645	31,177	92,325	44,139	130,476	38,624	123,098

Deprived Households (%)

	1996		2004		2011		Panel	
Remittance	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
Cooking Fuel	96.4	17.2	94.1	21.9	90.2	18.8	93.6	19.3
Improved Sanitation	96.7	29.7	85.8	15.6	71.5	18.8	84.6	21.4
Improved D. Water	74.9	10.9	65.4	9.4	20.1	7.8	53.5	9.4
Electricity	88.3	3.1	76.0	1.6	27.9	0.0	64.1	1.6
Flooring & Roofing	88.6	17.2	68.7	7.8	53.6	3.1	70.3	9.4
Asset Ownership	83.8	26.6	72.6	12.5	40.5	6.3	65.6	15.1

Table (2)

Like the national deprivation status, cooking fuel is a highly deprived sector for the panel households too (Table 2). More than 93% of households in the rural sector are deprived of cooking fuel which is less than 20% for the urban sector. The less deprived sectors are electricity and improved drinking water for both rural and urban households. There is a sharp decrease in deprivation on electricity and water over the one and a half decades since 1996. But small improvement is observed in the cooking fuel. The deprivation on asset ownership is decreasing by half in each survey for the urban area but the rate of change is much slower for the rural area. Analyzing both tables

throughout the three different points of time, even though the remittance-receiving households are quite higher in rural areas, the improvement in the quality of life is better in the urban area.

Econometric Result

For each model, I run two sets of regression: first, the effect of remittance according to its sources (that is domestic or foreign dummies as the coefficient of interest). Next, the effect of remittance dummy (whether the household receives remittance or not) as the coefficient of interest.

The fixed effect estimates of remittance source dummies for the model (1) are reported in Table (3.1). Only the coefficient of interest is presented in the table, and the standard errors are robust SE. Table (3.1) represents the effect of remittance according to its source (where it comes from? domestic or international). From both sources, the effect is positive and significant at 1% level.

Table (3.1)
Regression Result for the Effects of Remittance Sources Dummies on the Living Standard Score

Living Standard Score	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
Sources of Remittances							
Ref.: Do Not Receive Remittances							
Domestic Remittance	0.061	0.017	3.69	0.000	0.029	0.093	***
International Remittance	0.065	0.017	3.71	0.000	0.030	0.099	***
Constant	-0.022	0.081	-0.28	0.783	-0.182	0.137	
Mean dependent var		0.370	SD dependent var			0.338	
R-squared		0.600	Number of observations			1266.000	
F-test		32.370	Prob > F			0.000	
Akaike crit. (AIC)		-1770.529	Bayesian crit. (BIC)			-1585.358	

*** $p<0.01$, ** $p<0.05$, * $p<0.1$

It is expected that the living standard score for the domestic remittance-receiving household is 0.061 points higher than the non-recipient household, other things remain constant. Since the living standard score is normalized 0 to 1, therefore if a household

receives domestic remittances, the household is 6.1% less likely to deprive of the living standard. The effect is a bit large (6.5%) for the households who receive international remittances. The value of the effect of remittances sources is very small which might be because the estimation did not capture the full welfare impact of the remittances to the households. Nevertheless, the coefficients are small, the regression model looks well-fitted because the value of R^2 is 0.60.

The estimates for all included variables are reported in Table (3). Most of the variables have expected signs, but only a few variables are significant such as education level, job sector of the household head, and per capita expenditure of the household. The community-level characteristics has also a significant effect on the living standard score of the households. For example, the Supply of electricity and the supply of piped system drinking water have a significant impact on living standards at a 1% level.

Again, estimating the model (1) for the effect of the remittance dummy, the result is tabulated below.

Table (4.1)

Regression Result for the Effect of Remittance Dummy on the Living Standard Score

Living Standard Score	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
Receive Remittances	0.063	0.014	4.58	0.000	0.036	0.090	***
Constant	-0.022	0.081	-0.27	0.790	-0.180	0.137	
Mean dependent var		0.370	SD dependent var			0.338	
R-squared		0.600	Number of observations			1266.000	
F-test		33.080	Prob > F			0.000	
Akaike crit. (AIC)		-1772.469	Bayesian crit. (BIC)			-1592.443	

*** *p<0.01, ** p<0.05, * p<0.1*

Since the remittance dummy coefficient is positive and significant at 1% level. The household receiving remittances is 6.3% more likely not-deprive of living standards

than the non-recipient households. In other words, the remittance recipient household is expected 6.3% less likely to deprive of the living standard. The whole estimated coefficients of the regression model are in Table (4). Most of the coefficients of other included variables have similar signs and values to the results of the remittance source dummy model (Table 4).

Next, the estimation results of the model (2) for the effect of remittances according to the sources (remittance source dummies) on each indicator of the living standard is presented in Table (5.1).

Table (5.1)

Regression Result for the Effects of Remittance Sources Dummies on Indicators of the Living Standard

Living Standard Indicators	Cooking Fuel	Improved Sanitation	Improved Drinking Water	Electricity	Flooring and Roofing	Asset Ownership
Ref.: Do Not Receive Remittance						
Domestic Remittances	-0.014	0.025	0.199***	0.053	0.045	0.058
	(0.021)	(0.038)	(0.044)	(0.034)	(0.031)	(0.038)
International Remittances	0.005	0.023	0.167***	0.059*	0.039	0.097**
	(0.018)	(0.037)	(0.048)	(0.033)	(0.037)	(0.039)
Time	0.033**	0.086***	0.230***	0.148***	0.106***	0.144***
	(0.015)	(0.022)	(0.024)	(0.019)	(0.018)	(0.021)
Cons.	0.005	-0.006	0.053	-0.357**	-0.091	0.261
	(0.124)	(0.171)	(0.219)	(0.168)	(0.176)	(0.188)
Obs.	1266	1266	1266	1266	1266	1266
R-squared	0.087	0.152	0.356	0.526	0.249	0.299

Standard errors are in parenthesis
*** p<0.01, ** p<0.05, * p<0.1

Access to the improved drinking water for the domestic remittance recipient households is better than the international remittance recipient households. The effect is highly significant for both sources of remittance. It is expected that domestic remittance recipient households are 19.9% less likely to deprive of the improved drinking water

compared to the non-recipient households, other things hold constant. The effect is a bit less (16.7%) for the international remittance recipient households. International remittance has a significant impact on access to electricity and asset ownership of the households. There is no other significant result for indicators such as improved sanitation, and the flooring and roofing of the household. Since the value of R^2 is small for cooking fuel and, improved sanitation but, the model is fitted better for the water and electricity. An interesting result observed for cooking fuel. Except for the international remittance recipient households, the impact of domestic remittance on the cooking fuel is negative and insignificant. The international remittance recipient households are 5.9% more likely to have access to the electricity than the non-recipient households. The estimates for all included variables on the model are presented in Table (5). The control variables to capture community-level characteristics have a significant impact on living standards. Moreover, the supply of electricity to the community has a significant effect on most of the indicators, and also the supply of piped drinking water has a highly significant effect on the access to the improved drinking water for the households and is significant at 1% level.

Again, estimating the model (2) for the effect of the remittance dummy, the result is presented in the table below.

Table (6.1)

Regression Result for the effect of Remittance dummy on Indicators of the Living Standard

Living Standard Indicators	Cooking Fuel	Improved Sanitation	Improved Drinking Water	Electricity	Flooring and Roofing	Asset Ownership
Receive Remittance	-0.005	0.024	0.184***	0.056**	0.042	0.076**
	(0.015)	(0.030)	(0.035)	(0.026)	(0.027)	(0.030)
Cons.	0.009	-0.006	0.047	-0.356**	-0.092	0.269
	(0.123)	(0.171)	(0.219)	(0.168)	(0.177)	(0.188)

Obs.	1266	1266	1266	1266	1266	1266
R-squared	0.086	0.152	0.356	0.526	0.249	0.298

Standard errors are in parenthesis
*** p<0.01, ** p<0.05, * p<0.1

Table (6.1) shows that households receiving remittances have a significant effect on improved drinking water at a 1% level, and electricity & asset ownership at 5% level. Other things remain constant Remittance recipient households are expected to less likely to deprive by 18.4%, 5.6%, and 7.6% of improved drinking water, electricity, and asset ownership respectively compared to the non-recipient households. The rest of the coefficients included in the model are reported in Table (6). Although the impact of the remittance is small in magnitude the result is significant at different levels. The rest of the coefficients of variables included in the model have expected signs but only a few coefficients are significant. The values of the coefficients of this model are quite close to the values presented in Table (5).

Conclusion

It is concluded in this paper that remittance-receiving households have a positive impact on living standards. A significant effect has been observed in household assets and facilities. Therefore, remittances play a vital role in strengthening the well-being of the remitters family by increasing the better living standard of the people and hence reduce poverty. International remittance-receiving households experience better living standards with access to the electricity and ownership of household assets. Therefore, if a government implements policies providing vocational pieces of training to the unemployed and underemployed people of the rural area and facilities for foreign employment in developed countries, a sharp fall in the deprivation of living standards might experience. In supplement, a small and insignificant effect of remittance to the cooking fuel indicates that an increase in the source of household income is not sufficient to reduce poverty. The government must respond with different policies and programs like those indicators.

In the future, finding the effect of remittance on the human capital formation such as education and health status of the household member might be more interesting. Moreover, I would like to understand how the household's quality of life move on (deprive again or not) after the remittance income stops.

Table (3)

Regression Result for the effects of Remittance Sources Dummies on the Living Standard Score

Living Standard Score	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
Sources of Remittances							
Ref. Do Not Receive Remittances	0.000						
Domestic Remittance	0.061	0.017	3.69	0.000	0.029	0.093	***
International Remittance	0.065	0.017	3.71	0.000	0.030	0.099	***
Household Characteristics							
HH_Size	0.001	0.014	0.05	0.959	-0.027	0.028	
Share of Children 0-3 years	0.002	0.015	0.12	0.903	-0.028	0.032	
Share of Children 4 to 7 years	0.007	0.016	0.44	0.662	-0.025	0.039	
Share of Children 8 to 15 years	-0.006	0.015	-0.43	0.666	-0.036	0.023	
Share of Male 16 to 64 years	-0.008	0.014	-0.53	0.596	-0.036	0.021	
Share of Female 16 to 64 years	0.014	0.014	0.99	0.323	-0.014	0.042	
Share of Old age over 64 years	Omitted						
Share of Married Members	-0.002	0.009	-0.22	0.830	-0.020	0.016	
Household Head Characteristics							
Male	0.029	0.024	1.20	0.233	-0.019	0.076	
Age	0.002	0.003	0.48	0.629	-0.005	0.008	
Age Square	0.000	0.000	-0.18	0.855	0.000	0.000	
Education Level							
Reference: Illiterate	0.000						
Primary	0.022	0.020	1.12	0.263	-0.017	0.062	
Secondary	0.045	0.026	1.74	0.082	-0.006	0.096	*
Higher Education	0.127	0.047	2.68	0.008	0.034	0.220	***
Informal	0.038	0.022	1.70	0.090	-0.006	0.082	*
Employment							
Reference: Unemployed	0.000						
Under Employment	-0.024	0.023	-1.04	0.300	-0.069	0.021	
Fully Employed	-0.026	0.017	-1.47	0.144	-0.060	0.009	
Job Sector							
Reference: Passive	0.000						
Wage Employment in Agri.	0.059	0.033	1.79	0.074	-0.006	0.124	*
Wage Employment in non-Agri.	0.058	0.028	2.05	0.041	0.002	0.114	**
Self-Employment in Agri.	0.006	0.026	0.25	0.802	-0.044	0.057	
Self-Employment in non-Agri.	0.034	0.031	1.11	0.266	-0.026	0.095	
Married	-0.004	0.021	-0.17	0.861	-0.044	0.037	
Migration History	-0.008	0.012	-0.63	0.529	-0.032	0.016	
Agriculture Land Owned							
Ref: No Agriculture Land	0.000						
< 0.5 Hectare	0.023	0.027	0.86	0.391	-0.029	0.075	
0.5-1.0 Hectare	0.023	0.030	0.79	0.431	-0.035	0.082	
1-2 Hectare	0.018	0.033	0.54	0.587	-0.047	0.083	
>2 Hectare	0.055	0.042	1.31	0.192	-0.028	0.137	
Have Borrowings	-0.012	0.013	-0.94	0.350	-0.037	0.013	
Receive Pension	0.012	0.040	0.31	0.755	-0.066	0.091	
Log Per-Capita Expenditure of HH	0.014	0.005	2.71	0.007	0.004	0.024	***
Durable Goods	0.000	0.002	0.04	0.964	-0.003	0.003	
Regional Dummies							
Rural/Urban	Omitted						
Community Level Characteristic							
Supply of Electricity	0.112	0.018	6.11	0.000	0.076	0.148	***

Supply of Piped Drinking Water	0.086	0.030	2.87	0.004	0.027	0.144	***
Community Forest Available	-0.022	0.014	-1.52	0.128	-0.050	0.006	
Cooking Fuel Availability	-0.063	0.043	-1.47	0.143	-0.148	0.022	
Time	0.125	0.010	11.98	0.000	0.104	0.145	***
Constant	-0.022	0.081	-0.28	0.783	-0.182	0.137	

Mean dependent var	0.370	SD dependent var	0.338
R-squared	0.600	Number of obs	1266.000
F-test	32.370	Prob > F	0.000
Akaike crit. (AIC)	-1770.529	Bayesian crit. (BIC)	-1585.358

*** *p<0.01,* ** *p<0.05,* * *p<0.1*

Table (4)

Regression Result for the effects of Remittance Dummy on the Living Standard Score

Living Standard Score	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
Receive Remittances	0.063	0.014	4.58	0.000	0.036	0.090	***
Household Characteristics							
HH_Size	0.001	0.014	0.05	0.958	-0.027	0.028	
Share of Children 0-3 years	0.002	0.015	0.12	0.904	-0.028	0.032	
Share of Children 4 to 7 years	0.007	0.016	0.43	0.666	-0.025	0.039	
Share of Children 8 to 15 years	-0.006	0.015	-0.43	0.665	-0.036	0.023	
Share of Male 16 to 64 years	-0.008	0.014	-0.53	0.596	-0.036	0.021	
Share of Female 16 to 64 years	0.014	0.014	0.99	0.324	-0.014	0.042	
Share of Old age over 64 years	0.000						
Share of Married Members	-0.002	0.009	-0.21	0.835	-0.019	0.016	
Household Head Characteristics							
Male	0.028	0.024	1.19	0.237	-0.019	0.075	
Age	0.001	0.003	0.48	0.633	-0.005	0.008	
Age Square	0.000	0.000	-0.18	0.860	0.000	0.000	
Education Level							
Reference: Illiterate	0.000						
Primary	0.022	0.020	1.12	0.264	-0.017	0.061	
Secondary	0.045	0.026	1.75	0.081	-0.006	0.096	*
Higher Education	0.127	0.047	2.68	0.008	0.034	0.220	***
Informal	0.038	0.022	1.71	0.088	-0.006	0.082	*
Employment							
Reference: Unemployed	0.000						
Under Employment	-0.024	0.023	-1.03	0.301	-0.069	0.021	
Fully Employed	-0.026	0.017	-1.46	0.145	-0.060	0.009	
Job Sector							
Reference: Passive	0.000						
Wage Employment in Agri.	0.059	0.033	1.79	0.074	-0.006	0.124	*
Wage Employment in non-Agri.	0.058	0.028	2.05	0.041	0.002	0.114	**
Self-Employment in Agri.	0.007	0.026	0.26	0.796	-0.044	0.057	
Self-Employment in non-Agri.	0.034	0.031	1.11	0.268	-0.027	0.095	
Married	-0.004	0.021	-0.17	0.863	-0.044	0.037	
Migration History	-0.008	0.012	-0.62	0.533	-0.031	0.016	
Agriculture Land Owned							
Ref: No Agriculture Land	0.000						
< 0.5 Hectare	0.023	0.027	0.85	0.396	-0.030	0.075	
0.5-1.0 Hectare	0.023	0.030	0.78	0.438	-0.036	0.082	
1-2 Hectare	0.018	0.033	0.54	0.589	-0.047	0.084	
>2 Hectare	0.055	0.042	1.29	0.197	-0.028	0.138	
Have Borrowings	-0.012	0.013	-0.94	0.350	-0.037	0.013	
Receive Pension	0.013	0.040	0.32	0.753	-0.066	0.091	
Log Per-Capita Expenditure of HH	0.014	0.005	2.71	0.007	0.004	0.024	***
Durable Goods	0.000	0.002	0.04	0.964	-0.003	0.003	
Regional Dummies							
Rural/Urban	0.000						
Community Level Characteristic							
Supply of Electricity	0.112	0.018	6.11	0.000	0.076	0.148	***
Supply of Piped Drinking Water	0.085	0.030	2.87	0.004	0.027	0.144	***
Community Forest Available	-0.022	0.014	-1.55	0.122	-0.050	0.006	
Cooking Fuel Availability	-0.063	0.043	-1.46	0.144	-0.148	0.022	
Time	0.125	0.010	12.00	0.000	0.104	0.145	***
Constant	-0.022	0.081	-0.27	0.790	-0.180	0.137	

Mean dependent var	0.370	SD dependent var	0.338
R-squared	0.600	Number of obs	1266.000
F-test	33.080	Prob > F	0.000
Akaike crit. (AIC)	-1772.469	Bayesian crit. (BIC)	-1592.443

*** p<0.01, ** p<0.05, * p<0.1

Table (5)
Regression Result for the Effects of Remittance Sources Dummies on Indicators of the Living Standard

Living Standard Indicators	Cooking Fuel	Improved Sanitation	Improved Drinking Water	Electricity	Flooring and Roofing	Asset Ownership
Sources of Remittances						
Ref. Do Not Receive Remittances						
Domestic Remittance	-0.014	0.025	0.199***	0.053	0.045	0.058
	(0.021)	(0.038)	(0.044)	(0.034)	(0.031)	(0.038)
International Remittance	0.005	0.023	0.167***	0.059*	0.039	0.097**
	(0.018)	(0.037)	(0.048)	(0.033)	(0.037)	(0.039)
Household Characteristics						
Household Size	0.006	-0.027	0.006	0.017	0.003	-0.001
	(0.020)	(0.030)	(0.036)	(0.028)	(0.029)	(0.032)
Share of Children 0 to 3 years	-0.006	0.037	0.010	-0.019	-0.007	-0.003
	(0.020)	(0.033)	(0.040)	(0.031)	(0.035)	(0.035)
Share of Children 4 to 7 years	0.017	0.020	0.010	-0.016	0.018	-0.007
	(0.021)	(0.033)	(0.040)	(0.032)	(0.034)	(0.036)
Share of Children 8 to 15 years	-0.012	0.028	0.013	-0.032	-0.015	-0.021
	(0.021)	(0.033)	(0.038)	(0.030)	(0.031)	(0.034)
Share of Male 16 to 64 years	0.002	-0.006	-0.023	-0.032	-0.007	0.022
	(0.019)	(0.033)	(0.035)	(0.028)	(0.029)	(0.033)
Share of Female 16 to 64 years	0.006	0.033	0.050	-0.026	0.020	0.002
	(0.019)	(0.032)	(0.034)	(0.029)	(0.031)	(0.033)
Share of Old age over 64 years	Omitted					
Share of Married Members	-0.014	0.013	-0.025	0.017	-0.028*	0.026
	(0.010)	(0.019)	(0.022)	(0.017)	(0.017)	(0.019)
Household Head Characteristics						
Male	0.029	-0.053	0.128**	0.044	0.010	0.014
	(0.032)	(0.054)	(0.062)	(0.047)	(0.053)	(0.054)
Age	0.004	0.001	-0.004	0.012*	0.006	-0.009
	(0.004)	(0.006)	(0.007)	(0.006)	(0.006)	(0.007)
Education Level						
Reference: Illiterate						
Primary	0.011	0.053	0.022	0.080**	-0.061	0.028
	(0.031)	(0.046)	(0.063)	(0.041)	(0.041)	(0.044)
Secondary	0.054	0.051	0.046	0.057	-0.032	0.095
	(0.037)	(0.062)	(0.063)	(0.047)	(0.054)	(0.060)
Higher Education	0.162***	0.182*	0.149*	0.106	0.019	0.144
	(0.062)	(0.109)	(0.085)	(0.083)	(0.076)	(0.096)
Informal	0.031	0.018	0.091	0.009	0.069	0.011
	(0.032)	(0.046)	(0.068)	(0.050)	(0.050)	(0.056)
Employment						
Reference: Unemployed						
Under Employment	0.001	-0.045	-0.056	-0.064	0.104*	-0.084
	(0.031)	(0.051)	(0.074)	(0.049)	(0.056)	(0.056)
Fully Employed	-0.011	-0.072*	-0.118**	0.006	0.045	-0.004
	(0.024)	(0.038)	(0.053)	(0.037)	(0.043)	(0.037)
Job Sector						
Reference: Passive						
Wage Employment in Agri.	0.000	0.049	0.099	0.111**	-0.058	0.152**
	(0.037)	(0.068)	(0.077)	(0.056)	(0.069)	(0.067)

Wage Employment in non-Agri.	-0.007	0.079	0.016	0.080*	0.051	0.129**
	(0.037)	(0.067)	(0.067)	(0.047)	(0.060)	(0.059)
Self-Employment in Agri.	-0.047	0.089	-0.075	0.050	-0.052	0.074
	(0.032)	(0.060)	(0.060)	(0.041)	(0.054)	(0.054)
Self-Employment in non-Agri.	0.045	0.105	-0.073	0.059	-0.020	0.090
	(0.046)	(0.072)	(0.072)	(0.054)	(0.063)	(0.059)
Married	0.047*	-0.025	0.029	-0.033	0.039	-0.078
	(0.026)	(0.049)	(0.056)	(0.042)	(0.044)	(0.053)
Migration History	-0.038**	0.023	-0.124***	0.033	0.026	0.033
	(0.018)	(0.025)	(0.029)	(0.023)	(0.022)	(0.027)
Agriculture Land Owned						
Ref: No Agriculture Land						
< 0.5 Hectare	0.004	0.029	0.050	0.031	0.046	-0.022
	(0.034)	(0.055)	(0.058)	(0.048)	(0.050)	(0.058)
0.5-1.0 Hectare	-0.005	0.100*	0.022	0.009	0.014	0.000
	(0.036)	(0.061)	(0.069)	(0.058)	(0.059)	(0.064)
1-2 Hectare	0.001	0.103	-0.033	0.042	0.035	-0.040
	(0.041)	(0.066)	(0.073)	(0.059)	(0.060)	(0.071)
>2 Hectare	-0.047	0.118	0.101	0.074	0.086	-0.004
	(0.052)	(0.089)	(0.086)	(0.077)	(0.071)	(0.086)
Have Borrowings	0.009	-0.025	-0.051	0.014	-0.018	0.001
	(0.019)	(0.026)	(0.034)	(0.025)	(0.027)	(0.028)
Receive Pension	0.004	0.051	0.008	0.050	-0.029	-0.008
	(0.050)	(0.085)	(0.072)	(0.075)	(0.068)	(0.074)
Log Per-Capita Expenditure of HH	0.055***	0.107***	0.037*	0.021*	0.024**	0.085***
	(0.017)	(0.035)	(0.038)	(0.024)	(0.031)	(0.030)
Durable Goods	0.001	-0.000	-0.003	-0.013***	0.010***	0.004
	(0.003)	(0.003)	(0.004)	(0.003)	(0.003)	(0.004)
Regional Dummies						
Rural/Urban	Omitted					
Community Level Characteristic						
Supply of Electricity	-0.026*	0.020	0.113**	0.404***	0.073**	0.088*
	(0.015)	(0.037)	(0.047)	(0.041)	(0.036)	(0.045)
Supply of Piped Drinking Water	0.003	0.031	0.317***	0.021	0.108*	0.034
	(0.014)	(0.053)	(0.087)	(0.052)	(0.059)	(0.052)
Community Forest Available	-0.013	-0.016	-0.057	0.003	-0.043	-0.007
	(0.016)	(0.031)	(0.042)	(0.027)	(0.031)	(0.028)
Cooking Fuel Availability	-0.165*	0.008	-0.064	0.095	-0.071	-0.182*
	(0.097)	(0.112)	(0.106)	(0.076)	(0.062)	(0.106)
Time	0.033**	0.086***	0.230***	0.148***	0.106***	0.144***
	(0.015)	(0.022)	(0.024)	(0.019)	(0.018)	(0.021)
Cons.	0.005	-0.006	0.053	-0.357**	-0.091	0.261
	(0.124)	(0.171)	(0.219)	(0.168)	(0.176)	(0.188)
Obs.	1266	1266	1266	1266	1266	1266
R-squared	0.087	0.152	0.356	0.526	0.249	0.299

Standard errors are in parenthesis
*** p<0.01, ** p<0.05, * p<0.1

Table (6)

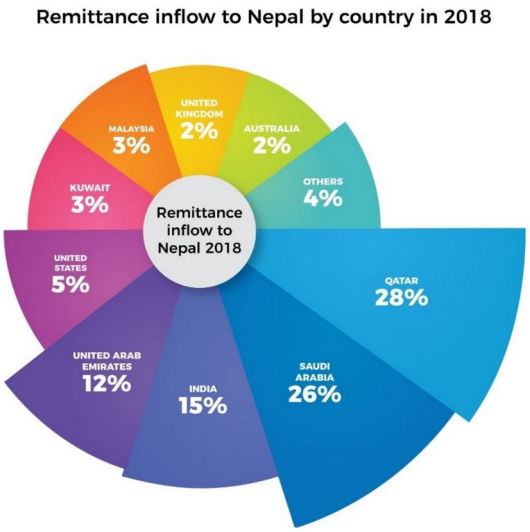
Regression Result for the effects of Remittance dummy on Indicators of the Living Standard

Living Standard Indicators	Cooking Fuel	Improved Sanitation	Improved Drinking Water	Electricity	Flooring and Roofing	Asset Ownership
Receive Remittance	-0.005	0.024	0.184***	0.056**	0.042	0.076**
	(0.015)	(0.030)	(0.035)	(0.026)	(0.027)	(0.030)
Household Characteristics						
Household Size	0.006	-0.027	0.006	0.017	0.003	-0.000
	(0.020)	(0.030)	(0.036)	(0.028)	(0.029)	(0.032)
Share of Children 0 to 3 years	-0.006	0.037	0.010	-0.019	-0.007	-0.003
	(0.020)	(0.033)	(0.040)	(0.031)	(0.035)	(0.035)
Share of Children 4 to 7 years	0.017	0.020	0.011	-0.016	0.019	-0.008
	(0.021)	(0.034)	(0.040)	(0.032)	(0.034)	(0.036)
Share of Children 8 to 15 years	-0.012	0.028	0.014	-0.032	-0.015	-0.021
	(0.021)	(0.033)	(0.038)	(0.030)	(0.031)	(0.034)
Share of Male 16 to 64 years	0.002	-0.006	-0.023	-0.032	-0.007	0.021
	(0.019)	(0.033)	(0.035)	(0.028)	(0.029)	(0.033)
Share of Female 16 to 64 years	0.006	0.033	0.050	-0.026	0.020	0.002
	(0.019)	(0.032)	(0.034)	(0.029)	(0.031)	(0.033)
Share of Old age over 64 years						
Share of Married Members	-0.014	0.013	-0.026	0.018	-0.028*	0.027
	(0.010)	(0.019)	(0.022)	(0.017)	(0.017)	(0.019)
Household Head Characteristics						
Male	0.028	-0.053	0.131**	0.044	0.010	0.011
	(0.031)	(0.053)	(0.061)	(0.046)	(0.053)	(0.054)
Age	0.004	0.001	-0.004	0.012*	0.006	-0.010
	(0.004)	(0.006)	(0.007)	(0.006)	(0.006)	(0.007)
Education Level						
Reference: Illiterate						
Primary	0.011	0.053	0.023	0.080*	-0.061	0.027
	(0.031)	(0.046)	(0.063)	(0.041)	(0.041)	(0.044)
Secondary	0.054	0.051	0.045	0.058	-0.033	0.096
	(0.037)	(0.062)	(0.062)	(0.047)	(0.054)	(0.060)
Higher Education	0.161***	0.182*	0.151*	0.105	0.020	0.141
	(0.062)	(0.109)	(0.086)	(0.083)	(0.076)	(0.096)
Informal	0.031	0.018	0.090	0.009	0.069	0.012
	(0.032)	(0.046)	(0.068)	(0.050)	(0.050)	(0.056)
Employment						
Reference: Unemployed						
Under Employment	0.002	-0.045	-0.057	-0.064	0.104*	-0.082
	(0.031)	(0.051)	(0.073)	(0.049)	(0.056)	(0.056)
Fully Employed	-0.010	-0.072*	-0.119**	0.006	0.045	-0.003
	(0.024)	(0.038)	(0.053)	(0.037)	(0.043)	(0.037)
Job Sector						
Reference: Passive						
Wage Employment in Agri.	0.001	0.049	0.099	0.111**	-0.058	0.152**
	(0.037)	(0.068)	(0.077)	(0.056)	(0.069)	(0.067)
Wage Employment in non-Agri.	-0.007	0.079	0.016	0.080*	0.050	0.130**
	(0.037)	(0.067)	(0.067)	(0.047)	(0.060)	(0.059)

Self-Employment in Agri.	-0.046	0.089	-0.077	0.050	-0.052	0.076
	(0.032)	(0.060)	(0.059)	(0.041)	(0.054)	(0.054)
Self-Employment in non-Agri.	0.045	0.106	-0.072	0.059	-0.020	0.089
	(0.046)	(0.072)	(0.072)	(0.054)	(0.063)	(0.060)
Married	0.047*	-0.025	0.029	-0.033	0.039	-0.078
	(0.026)	(0.049)	(0.055)	(0.042)	(0.044)	(0.053)
Migration History	-0.038**	0.023	-0.124***	0.033	0.026	0.034
	(0.018)	(0.025)	(0.028)	(0.023)	(0.022)	(0.027)
Agriculture Land Owned						
Ref: No Agriculture Land						
< 0.5 Hectare	0.003	0.029	0.051	0.031	0.046	-0.024
	(0.034)	(0.055)	(0.058)	(0.048)	(0.050)	(0.058)
0.5-1.0 Hectare	-0.007	0.101*	0.024	0.009	0.015	-0.002
	(0.036)	(0.061)	(0.069)	(0.058)	(0.059)	(0.065)
1-2 Hectare	0.001	0.103	-0.033	0.042	0.036	-0.041
	(0.041)	(0.066)	(0.072)	(0.059)	(0.060)	(0.071)
>2 Hectare	-0.048	0.119	0.103	0.074	0.086	-0.007
	(0.052)	(0.089)	(0.086)	(0.077)	(0.071)	(0.086)
Have Borrowings	0.009	-0.025	-0.051	0.014	-0.018	0.001
	(0.019)	(0.026)	(0.034)	(0.025)	(0.027)	(0.028)
Receive Pension	0.004	0.051	0.007	0.050	-0.030	-0.007
	(0.050)	(0.085)	(0.072)	(0.076)	(0.068)	(0.075)
Log Per-Capita Expenditure of HH	0.055***	0.107***	0.036*	0.021*	0.023**	0.086***
	(0.017)	(0.035)	(0.038)	(0.024)	(0.031)	(0.030)
Durable Goods	0.001	-0.000	-0.003	-0.013***	0.010***	0.004
	(0.003)	(0.003)	(0.004)	(0.003)	(0.003)	(0.004)
Regional Dummies						
Rural/Urban	Omitted					
Community Level Characteristic						
Supply of Electricity	-0.026*	0.020	0.112**	0.404***	0.073**	0.088**
	(0.015)	(0.037)	(0.047)	(0.041)	(0.036)	(0.045)
Supply of Piped Drinking Water	0.002	0.032	0.318***	0.020	0.108*	0.033
	(0.014)	(0.053)	(0.087)	(0.052)	(0.059)	(0.052)
Community Forest Available	-0.014	-0.016	-0.055	0.003	-0.043	-0.009
	(0.015)	(0.031)	(0.041)	(0.027)	(0.031)	(0.028)
Cooking Fuel Availability	-0.164*	0.008	-0.066	0.095	-0.072	-0.180*
	(0.097)	(0.112)	(0.106)	(0.076)	(0.062)	(0.105)
Time	0.034**	0.086***	0.230***	0.148***	0.106***	0.145***
	(0.015)	(0.022)	(0.024)	(0.019)	(0.018)	(0.021)
Cons.	0.009	-0.006	0.047	-0.356**	-0.092	0.269
	(0.123)	(0.171)	(0.219)	(0.168)	(0.177)	(0.188)
Obs.	1266	1266	1266	1266	1266	1266
R-squared	0.086	0.152	0.356	0.526	0.249	0.298

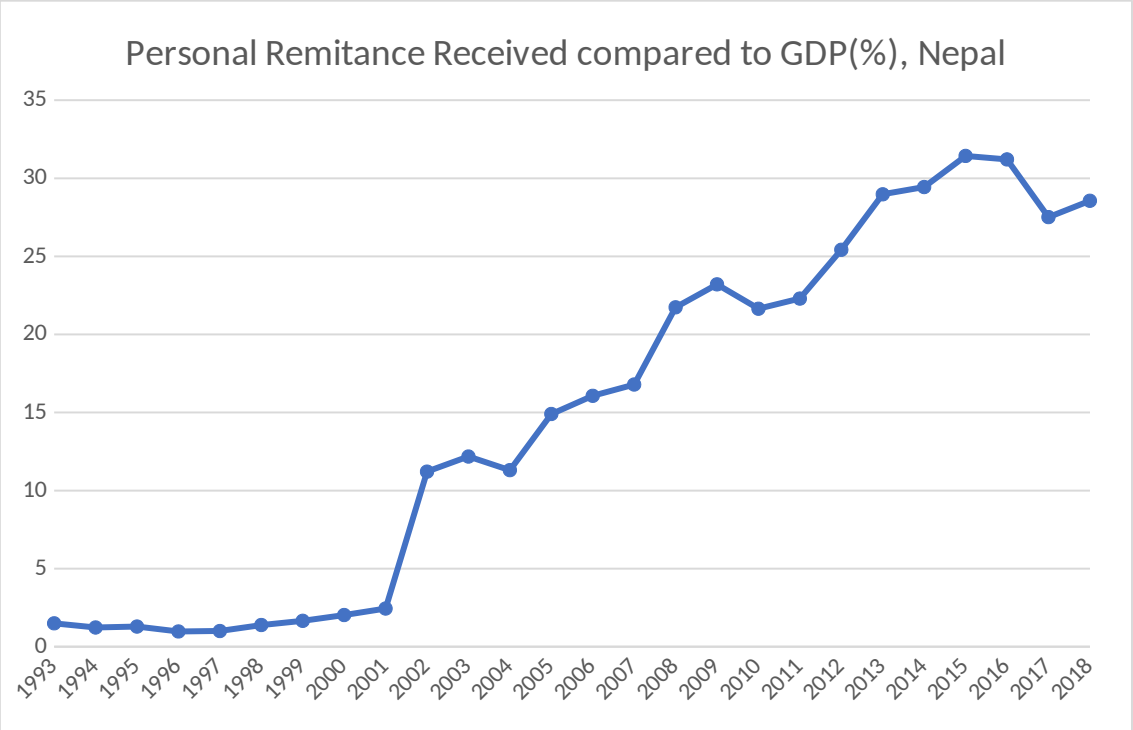
Standard errors are in parenthesis
*** p<0.01, ** p<0.05, * p<0.1

Figure: 1



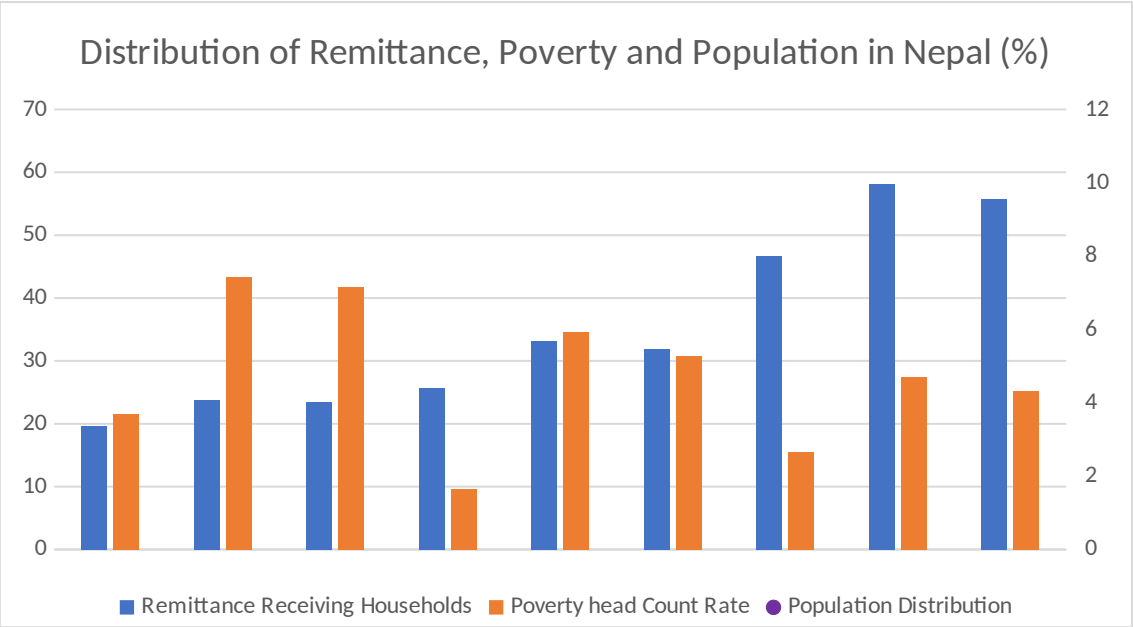
Source: Nepal Rastra Bank

Figure: 2



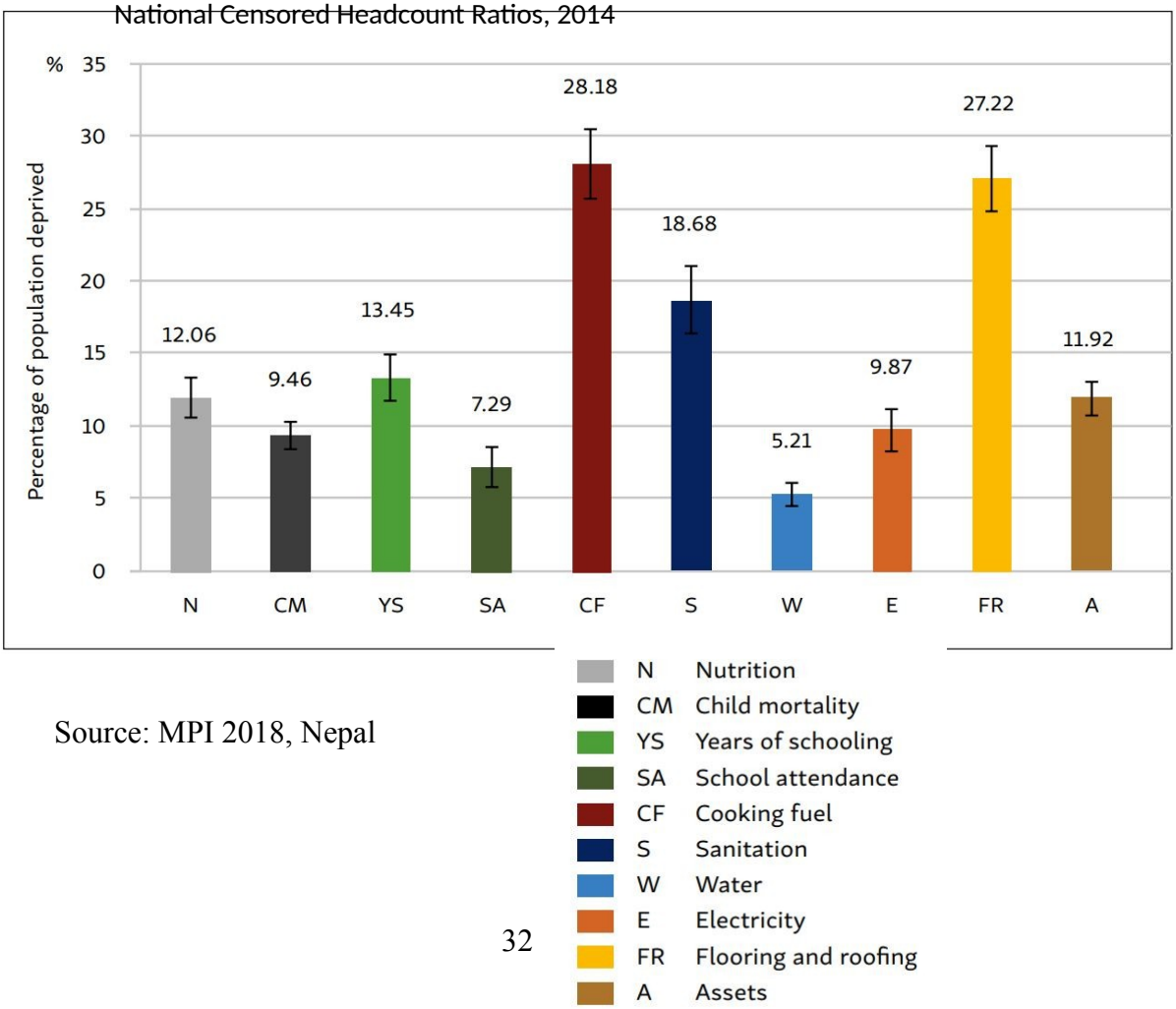
Source: The World Bank

Figure: 3



Source: Central Bureau of Statistics, Nepal, NLSS I, II, III

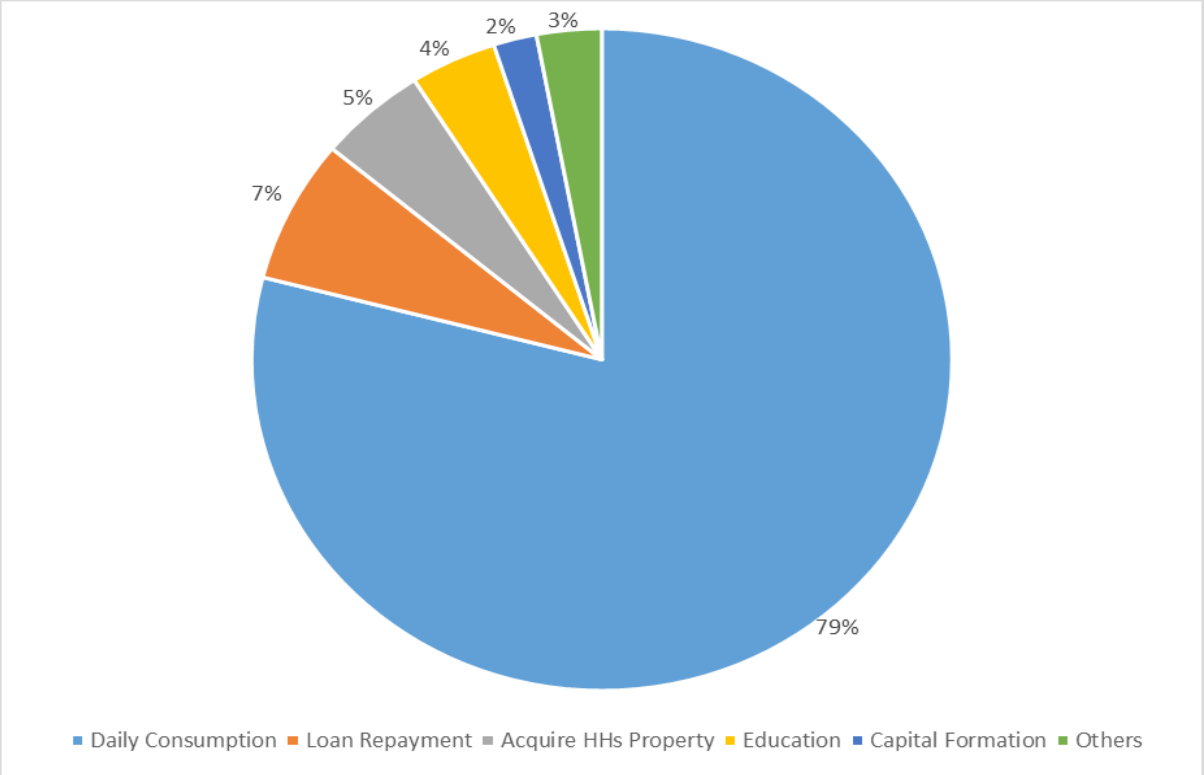
Figure: 4 **The Composition of MPI by Indicator in Nepal**



Source: MPI 2018, Nepal

Figure 5.

The Primary Use of remittance (%)



Source: NLSS III, 2010/11 Report, Volume 2

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