



Nexus between Migration, Remittance and Households' Expenditure: Evidence from Poor and Low-Income Households in Nepal

Bivab Neupane

PhD Scholar

Lincoln University, Malaysia.

Abstract

This study investigates the linkages between migration, remittance and households' expenditure with reference to low-income and poor households of Nepal. The study used national level representative data of 2018 of Poverty Alleviation Fund (PAF) of Nepal. The study estimated two separate ordinary least square regression model to examine the relationship between remittance, migration and households' expenditure. Estimated results shows that both the remittance and migration are positively and statistically significant in contributing households' expenditure in Nepal. Since, the influence of remittance income in total household's expenditure is low, the study further suggests for targeted programs to enhance the skills and knowledge of migrant workers to increase the volume of income remitted to left behinds.

Key words: *migration, remittance, poverty, ordinary least square, expenditure*

1. Background of the Study

The nexus between Migration and remittance and households' expenditure pattern has been widely discussed in recent years. Globally, and in regional level – in south Asia arena—policy makers and, especially, development economist are exploring and investigating the backward and forward linkages between remittance and migration with the households' expenditure behavior. Many studies has focused on the impact of remittance income in different categories of households' expenditure—such as foods and lodging, other consumer durables. (Castaldo& Reilly,2007), fooding and housing and human capital, legal expenditures (Wang, Hagedorn, & Chi,2019).Another study explored the impact of remittance income into the households human capital and physical capital accumulation (Adams & Cuecuecha,2010).

Similarly, some studies analysed the effect of households migrants remittance by seeing its dynamic impact on the households expenditure decision such as Multi-dimensional and dynamic-- impact on households' consumption expenditure, and shifts in consumption preferences and direct and indirect linkages between migration remittance and household's expenditure (Taylor & Mora,2006).

In national level, few studies has investigated the impact of households' income from remittance and their consumption and non-consumption behavior in Nepal—for example (Dhakal, 2012).

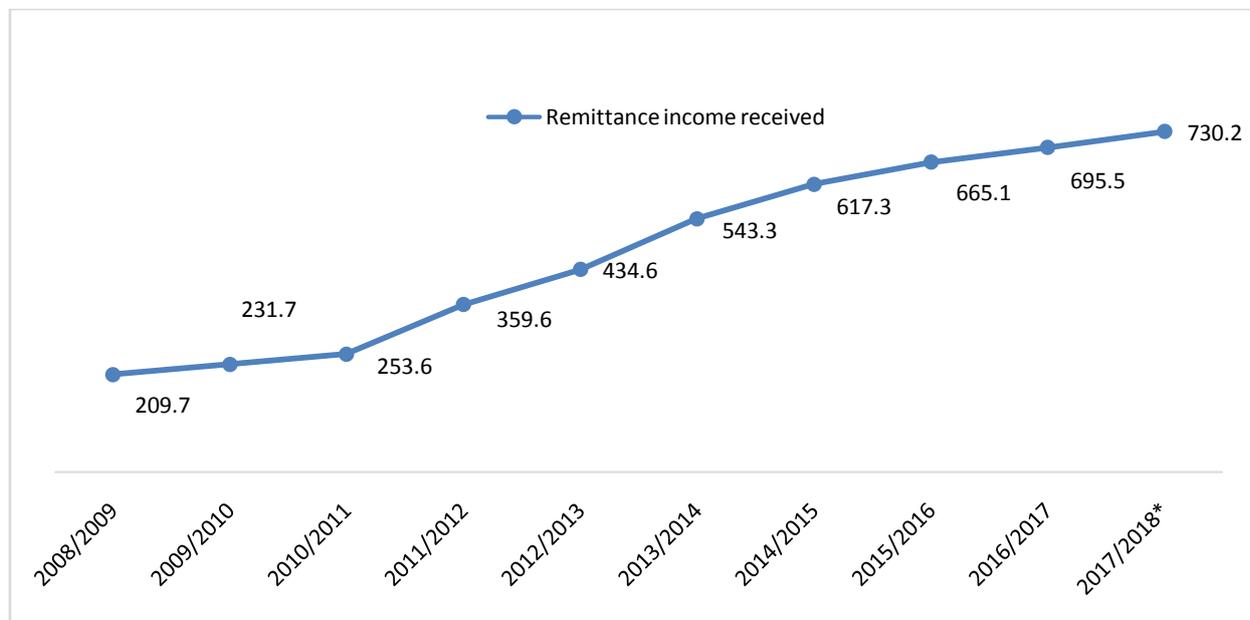
In our context, this study will focus on the linkages between the migration, remittance and households' expenditure—with reference to the poor and low-income households-- in Nepal.

Hence, this study aims to investigate the linkages between remittance migration and households' expenditure by using the secondary source of data from both first and second round of PAF Nepal.

2. Status of remittance in Nepal

Figure 2.1 shows the remittance income received from 2008/2009 to 2017/2018—with 2017/2018 being preliminary estimation. The data shows that in the year 2008/2009 total remittance income received was 209.7 billion while this amount increased to 434.6 billion rupees in the year 2013/13, and in the year 2016/2017 total amount of remittance income received was 695.5 billion rupees. From the data it can be inferred that the amount of remittance received is more than doubled in the year 2016/17 compared to the year 2008/09.

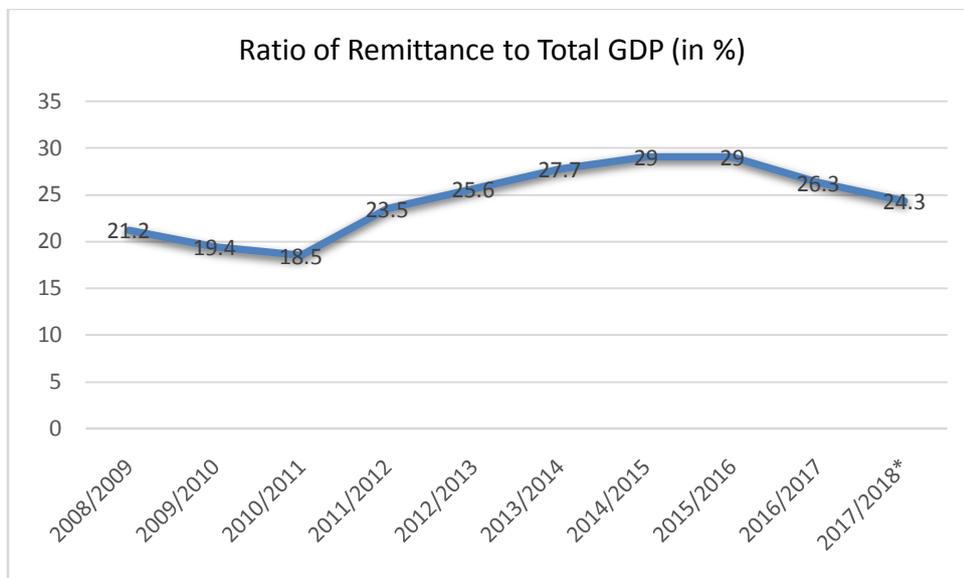
Table 2-1 Remittance income received (in Billions)



Source: DoFE (2016)

Figure 2.2 below illustrates the ratio of remittance to GDP. In the year 2008/09, the remittance GDP ratio was 21.2 percentage while this ratio increased to 25.6 percentage in the year 2012/13 and became highest in the year 2014/15 and 2015/16—both the year maintained equal and highest remittance GDP ratio. However, the ratio declined to 26.3 percentage in the year 2016/17 and estimated to decline to 24.3 percentage in the year 2017/18.

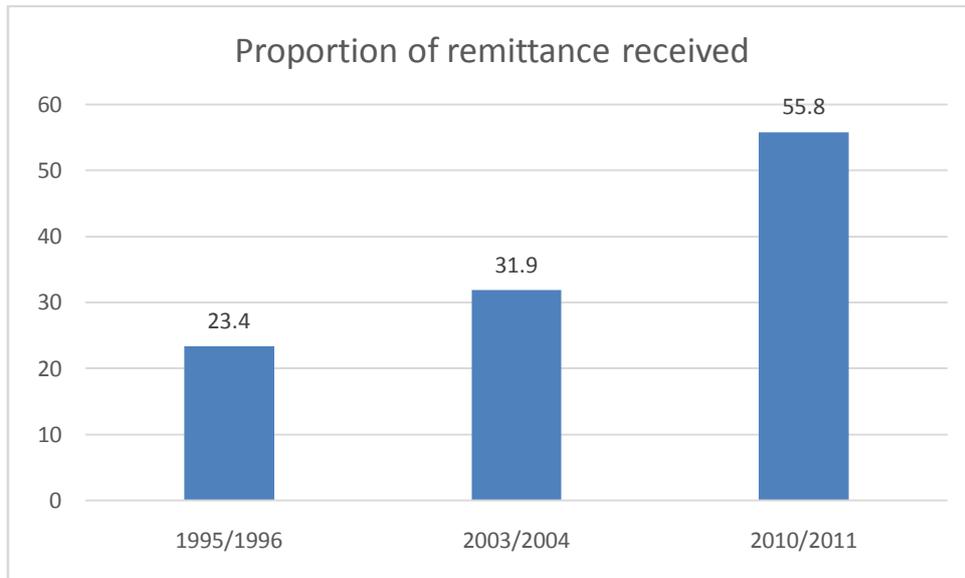
Figure 2.2 Remittance as % of GDP



Source: Source: DoFE (2016)

Figure 2.3 exhibits the proportion of households receiving remittance from all sources—the data based on the three different study year of NLSS. In the year 1995/96, the total percentage of households receiving remittance were 23.4 percentage. In addition, in the year 2003/2004—second round of NLSS Survey—it increased to approximately to 32 percentage (i.e. 31.9 %) and the third round of survey, conducted in the year 2010/11 found that the proportion of households receiving remittance increased to 55.8 percent. Moreover, the trend line shows that the proportion of remittance receiving households increased more than two times in between three-study period.

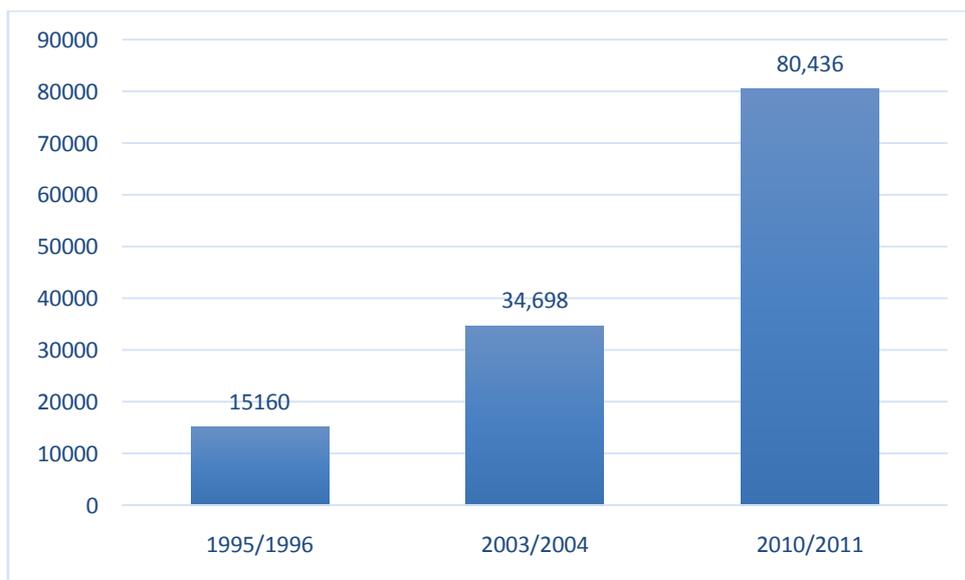
Figure 2-3 Percentage of Households Receiving remittances from all sources



Source: DoFE (2016)

The average volume of remittance received is illustrated in the figure 2.4 below—showing the average size of remittance income received in three different study periods of NLSS. The trend line shows that there is a precipitous rise in the average size of remittance received during the periods—1995/96-2010/11. In the year 1995/96, the average size of remittance income received was 15160 while this amount increased to 34698 in the year 2003/04 and rose sharply to R.s 80436 in 2010/11.

Figure 2-4 Average size of remittance income received



Source: NLSS (2011)

3. Review of Literature

This section provides the review of existing literatures on migration, remittance and households' expenditure behavior in global, regional and national context.

Using propensity-matching score -- as one of estimation technique-- to examine the impact of remittance income from abroad, Randazzo & Piracha (2014) found that migrants has spent their remittance income productively.

The study by (Dhakal, 2012) investigated the linkages between remittance and households' expenditure and saving behavior. They found a positive and significant relationship between remittance income and the households' expenditure. The study shows that compared to household's not receiving remittance, remittance recipient households spend 18 percent more in household's expenditure. The study further used propensity matching score technique to separate out the effects, and make the comparison between the remittance receiving and non-remittance receiving households.

Similar to (Dhakal, 2012), Thapa, Acharya, & Sanjaya (2017) study has also employed the instrumental variable approach and used NLSS national level data set and concluded that in comparisons to the non-remittance receiving households the remittance recipient households make more expenditure on human capital and the basic households consumption.

Adams & Cuecuecha (2010) Used national level representative data set of Guatemala, and employed some remedial measure to correct the endogeneity and selection bias; assessed the impact remittance— both internal and international remittance—on households spending decision in Guatemala. The study further concluded that the remittance income positively contribute to both human and physical capital accumulations.

Castaldo & Reilly (2007) also employed the national level representative data of Albania, as like Adams & Cuecuecha (2010) national level data set of Guatemala, and investigated the impact of remittance income on the households expenditure behaviur. The study also made the comarision of consumption expenditure behaviour of two households-- between the domestic remittance recipient and international remittance income. The study found that there is no statistical significant difference interms of expenditure patter of internal remittance receiving and non recipient households. it further shows that compared to non remittance receiving households the international remittance receiving households do have statistically singnificant consumption behaviour, however. The foreign remittance recipient households allocates small proportion of their income on fooding, and larger proportion on the households durable goods in comparison to non remittnace receiving households.

In order to explore the correlation between the remittance income and spending on various categories of household expenditure, Wang, Hagedorn, & Chi (2019) used the fixed effects regression model by using the panel data in Kyrgyzstan. The study reveals that households are spending a smaller proportion on accommodations, fooding and housing and a greater proportion on human capital, especially education and legal expenditures.

To check the linkages between remittance and household consumption expenditure in Ghana, Akpa (2018) employed the Autoregressive distributive lag model (ARDL) model, by using the time series data set of 1980-2016, and concluded that remittance income does have a positive contribution in stimulating household expenditure in both the short and long run, although the result exhibits no statistical significance. The study further suggests for making the remittance flow cost efficient.

In an aim to examine the impact of remittance income on the household expenditure decision at the margins, one study, in India, used national level data set between the period of 2007-2008, and shows that remittance receiving households' marginal expenditure on education is 12 percent higher than that of non-receiving households. Similarly, receiving households' marginal spending on non-food expenditure—cloths, lodging and footwear—is 1.5 percent higher than that of non-receipters. The study concluded that the migrants' remittance has a positive human and physical capital accumulation effect (Parida & Mohanty, 2013).

Yameogo (2014) employed the almost ideal demand system (AIDS) technique. The study used the several categories of household expenditure to see the impact of remittance income—along with other control variables—separately. The study further showed that along with the remittance income received, socio-economic, demographic and geographical factors—such as size of the households, age, and sex of the household's head, access to electricity, residing in urban area—influences household expenditure patterns. And, especially, the receiving of remittance contributes to poverty reduction—increased remittance income increases the households' likelihood of coming out of the poverty threshold.

Indicating a non-simple—multi-dimensional and dynamic—impact on household consumption expenditure, Taylor & Mora (2006) suggests that the migration of the households causes shifts in consumption preferences—that alters household utility—of a rational consumer. The study further showed that there is both direct and indirect causal linkages between migration and household spending.

4. Data Source and Methods

The study has used the national level survey data of Poverty Alleviation Fund (PAF). In our knowledge, this study, unlike the existing literatures available in Nepal, has conducted by linking the migration, remittance and household's expenditure behavior among poor and lower income households. The data used for this study confines to poor or ultra-poor households defined in terms of food security status. The ultra-poor are defined as households having food production sufficient for less than three months, medium poor for four to six months, and poor for 6 to 12 months. Households having food production for more than a year has defined as non- poor. Only less than 1 % of households were reported to be non-poor in the data used in this study. About 66 % are from ultra or median poor category while another 33 % are from poor category.

In order to investigate the household's expenditure impact of migration and remittance, study used the two separate Ordinary Least Square (OLS) regression model. Two separate regression model has used to find the impact of migration and remittance separately. Model I shows the linkages between migration dummies (1 if yes and 0 if no) and households' expenditure (log of expenditure). The ordinary least square regression model is given as;

$$Lnexp = \alpha + \beta_1 mig_dum + \beta_2 \ln_{[ro]}landsize + \beta_3 Caste + \beta_4 Belt + \beta_5 Region + \beta_6 hhsz + \beta_7 sex_hh + \beta_8 livestock_tot + \beta_9 child_t + \beta_{10} old_t + \beta_{11} \lninc + \beta_{12} Fq215 + \beta_{13} health_int + \beta_{14} num_room + \beta_{15} health_{int} + \beta_{16} marital_hh + \beta_{17} roof_jasta + \beta_{18} elec + Error\ term$$

-----(1)

Simialrly, model II shows the relationship between remittance income(log of remittance) and households total expenditure(log of expenditure), and can be shown as;

$$Lnexp = \alpha + \beta_1 Lnrem + \beta_2 \ln_{[ro]}landsize + \beta_3 Caste + \beta_4 Belt + \beta_5 Region + \beta_6 hhsz + \beta_7 sex_hh + \beta_8 Age_hh + \beta_9 livestock_tot + \beta_{10} child_t + \beta_{11} old_t + \beta_{12} \lninc + \beta_{13} Fq215 + \beta_{14} inter_lnremsex + \beta_{15} health_int + \beta_{16} num_room + \beta_{17} marital_hh + \beta_{18} roof_jasta + \beta_{19} elec + Error\ term$$

-----(2)

5. Results and Discussions

5.1 Summary Statistics of Variables Used in Regression

The variable log of remittance is significant and indicates that the average log of remittance in remittance receiving households is 11.489 with standard deviation is 1.10. However, the variable land size is not significantly different in case of remittance receiving and non-receiving households. The dummy-- belt --is also significantly different, and in mountain, the average no of non-remittance receiving households is 17.71 percent and 10.37 percent in remittance receiving households. In case of Hill, 44.44 percent of households are non-remittance receiving and 35.1 percent in remittance receiving households. And, if it is Terai, the average number of households in non-remittance receiving category is 37.83 percent and 54.5 percent in remittance receiving households.

The variable roof Jasta (1 if galvanized) is statistically significantly different in terms of remittance receiving and non-receiving households. The average proportion of households with galvanized roof is 59.5 percent in non-remittance recipient households, and 63.2 percent in remittance receiving households.

There is gender wise differences in terms of remittance receiving and non-receiving households. The proportion of male-headed households is 87.5 percent in non-remittance receiving and 64.9 percent in remittance receiving households.

The average amount of health expenditure also significantly differs by types of household—remittance receiving and non-receiving households. The average health expenditure in non-remittance receiving households is 6452.13 rupees while in remittance receiving households, the average amount of health expenditure is 8018.53 rupees, and it is significant at 10 percent level.

The results also shows that there is caste wise statistically significant difference in terms of the households—remittance receiving and non-remittance receiving households. The percentage of households from Brahmins/Chhetri community is 23.2 percent in non-remittance receiving household while this ratio is 18.3 percent in remittance receiving households. Similarly, if the caste is Tarai/Madhese Other Castes, then average number of households is 20 percent in non-receiving households and 25.9 percent in receiving households. Similarly, if the household is non-remittance receiving then the average proportion of households from Dalits community is 9.4 percent and in remittance receiving households it is 7.8 percentage. However, there is no statistically significant difference in case of caste two group--Newar and Janajatis. While in case of Muslim community there is statistically significant difference in term of remittance receiving and non-remittance receiving households.

Demographic variables—such as age of household head and marital status of the households are not statistically and significantly different in terms of two group of households—remittance receiving and non-receiving households. However, the variable, size of household reported to be statistically and

significantly different showing that average size of households in non-recipient household is 5.15 and 6.47 in remittance receiving households.

Ownership of TV and Radio is also significant suggesting that the average number of household owing TV is higher in remittance receiving households in comparison to non-remittance receiving households. Similarly, the nearness to health institutions is also significantly differs by remittance receiving and non-remittance receiving households categories. The percentage of households having access to health institution at VDC is 97.9 percent in remittance recipient households and 96.6 percent in non-remittance receiving households.

The average number of child also varies and shows that the average number of children in remittance receiving households is higher than that of non-receiving households. This is in line with the economic interpretation as increased number of dependents—increased number of children between 0-5—increases the households' expenditures, hence requires higher amount income, or, alternatively, being a remittance recipient households, family may have preference of higher number of children. Therefore, from both sides—there are the chances of having more children in remittance receiving households then non-remittance recipient households. Similarly, the number of old age people above 70 is also statistically significantly different in both type of households'.

There exist region wise difference in terms of households. The average proportion of households from central region is 49.88 percent and 52.9 percent in non-remittance receiving and receiving households. However, the region – if it is Central – is not statistically and significantly different. While there is statistically and significantly difference in case of Mid-western development region.

The variable time (1 if end line) is also found significant. The key variable of interest—migration dummy (1 if yes) is also statistically and significantly different at one percent level. No statistical and significant difference found in case of number of rooms owned by households, nevertheless, compared to non-remittance receiving households, the average number of rooms occupied is higher in case of remittance receiving households.

The variable electricity (1 if have solar electricity) is also significant, and suggest that remittance receiving households have higher proportion of solar electricity users than non-remittance receiving households. No statistically significant t values found in case of number of livestock.

Variables	Non Remittance receiving households (No)		Remittance receiving households(Yes)		t-stat
	Mean	Sd	Mean	Sd	
Log of rem	-	-	11.49	1.10	-4.8e+02***
Land size	2.74	7 0.41	7.51	152.04	1.16
Belt(if mountain =1)	0.18	0.38	0.10	0.31	4.99***
Belt(if Hill =2)	0.444	0.497	0.35	.478	4.66***
Belt(if Terai =3)	0.38	0.49	0.54	.498	-8.38***
Roof_Jasta	.595	.491	.632	0.48	1.86*
Sex of household head(1 if male)	0.87	0.33	0.65	0.48	14.69***
Health expenditure	6452.1 3	14949.05	8018.5 3	24343.75	2.13*
Caste(if Brahamin/Chhetri)	0.23	0.42	0.18	0.387	2.93**
Caste(if Tarai/Madhesi Other Castes)	0.20	0.40	0.26	0.44	3.51***
Caste(if Dalits)	0.094	0.29	.078	0.268	1.39
Caste(if Newar)	.039	0.19	.033	0.18	0.74
Caste(if Janajati)	0.41	0.49	0.39	0.49	1.03
Caste(if Muslim)	.021	0.14	.054	0.23	4.72***
Age	49.14	14.06	49.07	14.14	0.12
Fq205(if rural)	0.98	0.14	0.99	0.11	1.40
Marital_dum (1 if Male)	0.88	0.33	0.89	0.30	1.55
hhsiz	5.15	2.21	6.47	2.63	13.9***
TV	0.66	0.47	0.71	0.45	2.70**
Radio	0.54	0.49	0.59	0.49	2.71**
Health_int	0.97	0.18	.98	0.14	1.95*
Child total	0.48	0.76	0.73	0.89	7.55***
old_total	0.22	0.53	0.16	0.44	2.62**
Region (if eastern)	0.41	0.49	0.35	0.48	3.42***
Region (if Central)	0.49	0.50	0.53	0.49	1.50
Region (if Mid-western)	0.088	0.28	0.125	0.33	3.07**
Time(if end=1 and base=0)	0.46	0.49	0.44	0.49	1.92*
mig_dum(1 if migrated)	0.19	0.39	-	-	60.69***
Number of rooms	2.93	1.64	3.03	1.46	1.56
Electricity (if solar)	0.71	0.46	0.79	4005896	5.26***
Livestock total	7.85	10.31	7.36	7.53	1.24

Model 1:Log of Remittance and Log of Expenditure Model

VARIABLES	(1) lnexprem_model lnexp
ln_rem	0.0760* (0.0440)
hhsiz	0.155*** (0.0350)
livestock_tot	-0.0251*** (0.00804)
age_hh	-0.0146*** (0.00540)
sex_hh	-0.141 (0.278)
child_t	-0.307*** (0.0955)
old_t	-0.547*** (0.140)
lninc	0.298*** (0.0497)
ln_landsize	0.0369 (0.114)
inter_lnremsex	-0.0436 (0.0333)
health_int	0.613 (0.480)
If rural	0.0693** (0.0334)
2.region	1.111*** (0.246)
4.region	1.573*** (0.423)
2.belt	-1.562*** (0.221)
3.belt	-1.801*** (0.396)
marital_hh	-0.0220 (0.0808)
2.caste	0.928*** (0.356)
3.caste	0.0310 (0.264)
5.caste	0.311* (0.162)
6.caste	-0.238 (0.629)
num_room	0.249*** (0.0447)
roof_jasta	0.234 (0.192)
elec	0.00981 (0.165)
Constant	3.870*** (0.804)
Observations	1,657
R-squared	0.190

Standard errors in parentheses

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

Model 1 gives the results of ordinary least square regression model. The model has used log of expenditure-- as dependent, and log of remittance-- as dependent variable. As a control variable, several other socio economic and demographic variable added in the model. The variable of key interest log of remittance is statistically and positively significant in affecting households' expenditure. The result show that one percent increase in remittance income increases households expenditure by 7.6 percentage. Similarly, the demographic variable—such as size of the households is also found statistically significant and positive determining households expenditure. If the size of households increases by one person/unit then the households' expenditure goes up by 15.5 percent, and it is significant at 1 percent level. Although the variable number of livestock is also significant, it negatively affect the households' expenditure. Similarly, the variable age and sex of the households also found negatively significant in influencing the households' expenditure.

The variable income—log of total income— also found positively significant in determining the households' expenditure. If households' income increases by one percent then the households' expenditure rises by 29.8 percent. The variable Size of land – log of land size-- is also positive as households' expenditure increases if the households' ownership of land increase, the variable is not statistically significant, however.

Although we have introduced the interactive term/ multiplicative of variable log or remittance and sex of households head, it is not found significant in determining the households expenditure. Availability of health institutions has also positive relation with the total expenditure; nevertheless, it is not statistically significant.

Demographic Variable—such as total family member also found statistically and positively significant in affecting households' expenditures. Households' burden of expenditure increases by 6.93 percent if one additional family member comes in household. The regional dummies are also significant indicating that, compared to eastern development region, the household's expenditures rise by 110 and 157 percent if it is central and mid-western development region. The geographical dummy—belt are also statistically in determining the household's expenditure pattern. The relative expenditure fall by 156 percent and 181 percent if it is Hill and Terai belt as compared to the mountain belt.

Similarly, caste dummies shows that if it is caste TaraiMadheshi then the households' expenditure increases by 92.8 percent as compared to the caste group Brahmin/ Chhetris Caste. Similarly, relative expenditure goes up by 31.1 percent if it is Janajati.

The result further shows that the socio economic variable—numbers of room owned by the households is also statistically and positively significant. Indicating that the households' expenditure increases by 24.9 percent if the household owns one additional number of room. Nevertheless, the type of roof also positively affect the households expenditure, it is not statistically significant. Similarly, the variable electricity also not found statistically significantly influencing the households' expenditure level.

Model 2: Ordinary Regression Model on Migration Dummy and Log of Expenditure Model

VARIABLES	(1)
	lnexpmig_model2 lnexp
mig_dum	0.563*** (0.151)
hhsiz	0.130*** (0.0355)
livestock_tot	-0.0257*** (0.00801)
age_hh	-0.0150*** (0.00533)
sex_hh	-0.567*** (0.203)
child_t	-0.269*** (0.0957)
old_t	-0.540*** (0.140)
lninc	0.305*** (0.0495)
ln_landsize	0.0247 (0.114)
health_int	0.570 (0.478)
Fq215	0.0744** (0.0333)
2.region	1.110*** (0.245)
4.region	1.582*** (0.422)
2.belt	-1.594*** (0.220)
3.belt	-1.780*** (0.394)
marital_hh	0.0237 (0.0795)
2.caste	0.963*** (0.355)
3.caste	0.0572 (0.263)
5.caste	0.344**

	(0.162)
6.caste	-0.142
	(0.627)
num_room	0.240***
	(0.0446)
roof_jasta	0.229
	(0.191)
elec	-0.0289
	(0.164)
Constant	4.253***
	(0.790)
Observations	1,657
R-squared	0.195

Standard errors in parentheses

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

The model 2 provides the results of ordinary least square regression model. The dependent variable of the model is households expenditure—log of expenditure, and the major variable of interest or independent variable is migration dummy—0 if not migrated and 1 if migrated. Interestingly, migration dummy is statistically and positively significant in affecting the households' expenditure. Showing that if the households is migrant then the households' expenditure increases by 56.3 percent compared to the non-migrant households. Similarly, the demographic variable – size of the households also positively significant in determining the household's expenditure. In addition, result shows that the households' expenditure rise by 13 percent if households size increases by one person. However, the size of livestock is not positively significant in affecting the households' expenditure.

variable age of household head, sex of the households and total number of child between 0-5 and total number of old age people above 70 years are also significant but are not positively influencing the households expenditure pattern. The results further shows that the one percent rise in income increases the households expenditure by 30.5 percent. While the variable the size of land not found to be statistically and significantly affecting the household expenditure decision.

The variable number of family member is also statistically significant in determining the household's expenditure showing that the household's expenditure increases by 7.44 percent if additional family member exist in the households.

Similar to model 1, the geographical variable—regional dummies also found statistically significant in determining the household's expenditure. Compared to the eastern development region, the households expenditure rise by 111 percent and 158.2 percent if it is central and mid-western development region. Likewise, the belt dummies are also statistically significant as relative expenditure rises if the households is in Hill and Terai region—as compared to the mountain belt.

Similarly, caste group 2 and 5 are significant. Compared to Brahmin/Chhetri the households expenditure increases by 96.3 percentage if it is caste group 2. While the relative household's expenditure increases by 34.4 percent. If a household is caste group 5.

Variable number of room is also statistically significant indicating that household' expenditure increases by 24 percent if family owns one additional room.

6. Conclusion and Recommendations

Migration, remittance and households expenditure decision has received widespread attention in recent decade. Increasing number of literatures are available in investigating and examining the nexus between migrants, their remittance and households' expenditure pattern. This study has examined the relationship between the migration and remittance and its impact into the households expenditure behavior with reference to poor and low-income households. The study used the ordinary least square regression model to see the impact of migration and remittance into households' total expenditure. Two separate model—one for remittance and households expenditure and another for migration dummies and expenditure are estimated. The results from model I (remittance and expenditure model) shows that the key variable of interest—log of remittance statistically significant in stimulating households expenditure. Result further shows that one percent increase in remittance income increases the households' expenditure by 7.6 percentage. The control variables such as demographic variable—sex of the household head and age are statistically significant.

The control variables such as demographic variable—sex of the household head, no of children and age are statistically significant. The geographical variable—region and belt also have statistically significant impact on households expenditure decision. Indicating that geographical variation has also significant impact in households spending pattern. Economic variable such as income of the households is also positive and significant, and this is in line with the economic justification suggested by income and consumption theories. As expected, the size of land is not statistically significant, however. The economic reasoning behind this is that the poor households have very low ownership of lands but have high-level marginal propensity of consumption.

The study also introduced a multiplicative variable—an interaction between remittance and sex of the household head, however, the variable does not exhibits any statistical significance.

The model II showed the relationship between migration dummy and households' expenditure pattern—including other control variables: socio-economic, demographic and geographical factors. The variable migration dummy is statistically and positively significant in determining the households' expenditure.

The remittance income has positive contribution in households' expenditure. However, the regression coefficient is relatively low as compared to the coefficient of migration dummies. The economic reasoning behind this could be that the poor and ultra-poor households earn low remittance income from abroad as they perform low and unskilled jobs abroad with corresponding low wages, whereas cost of migration and remittance is higher. Similarly, these households have very poor access to finance, and consequently, borrow finance from informal financial institutions at very exorbitant cost. Compared to their income remitted from abroad, their total expenditure at home is high (costs which includes all households' expenditure including repayment of borrowing). And, intuitively, the proportion of remittance income and households spending is very low hence the changes in remittance income do influence only small proportion of their total household's expenditure.

While, unlike the remittance income, the migration dummies are highly and statistically significant in affecting households expenditure. This could be due to expectations of the households-- and left behind. Households with migrant abroad do have positive expectation about their financial safety and security, and are more likely to be optimistic about the future income, hence their likelihood of higher consumption and spending goes up and that ultimately increases total household expenditure.

This study further suggests that considering low remittance income attributed to low skills and knowledge of migrants' abroad, there is the increasing need of enhancing the skills and knowledge of poor and low income migrants; thereby increasing the quality and volume of income remitted from abroad. For this, the concerned stakeholders—especially state mechanism should prioritize skill and knowledge enhancement programs targeting foreign employment workers/migrants.

References

- Adams, R. H., & Cuecuecha, A. (2010). remittance, households expenditure and investment in Guatemala. doi:doi:10.1016/j.worlddev.2010.03.003
- Akpa, E. O. (2018). Private Remittances Received and Household Consumption in Ghana (1980-2016): An ARDL Analysis with Structural Breaks. *MPRA Paper No. 87103*. Retrieved from Online at <https://mpra.ub.uni-muenchen.de/87103/>
- Castaldo, a., & Reilly, b. (2007). Do Migrant Remittances Affect the Consumption Patterns of Albanian Households? *South-Eastern Europe Journal of Economics 1 (2007) 25-54*.
- CBS. ,(2011). *Nepal Living Standard Survey 2010/11 (Vol. 2)*. Kathmandu: Central Bureau of Statistics.
- DoFE. (2016). *Labour Migration for Employment, A Status Report for Nepal: 2016/17*. Kathmandu: Department of Foreign Employment.
- Dhakal, S. (2012). International Remittances, Household Expenditures And Saving: Evidence From Nepal.
- Parida, J. K., & Mohanty, S. K. (2013). Role of Remittances on Households' Expenditure Pattern in India. *MPRA Paper No. 62395*. Retrieved from <https://mpra.ub.uni-muenchen.de/62395/>
- Randazzo, T., & Piracha, M. (2014). Remittances and Household Expenditure Behaviour in Senegal. *IZA Discussion Paper No. 8106* .
- Taylor, J. E., & Mora, J. (2006). Does Migration Reshape Expenditures in Rural Households? Evidence from Mexico. *World Bank Policy Research Working Paper 3842*.

Thapa, S., Acharya, & Sanjaya. (2017). Remittances and Household Expenditure in Nepal: Evidence from Cross-Section Data. doi:doi:10.3390/economies5020016

Wang, D., Hagedorn, A., & Chi, G. (2019). Remittances and household spending strategies: evidence from the Life in Kyrgyzstan Study, 2011–2013. *Journal of Ethnic and Migration Studies*. doi: <https://doi.org/10.1080/1369183X.2019.1683442>

Yameogo, N. D. (2014). Analysis of Household Expenditures and the Impact of Remittances using a Latent Class Model: the Case of Burkina Faso. *African Development Bank, Tunis, Tunisia., Working Paper No. 200.*