



Effect of Remittance on Household Welfare in Nepal

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Abstract

Remittance is becoming prominent source of family income in Nepal. This study thus, analyzes effect of remittance on household welfare. We adopted cross-sectional study design to collect data from 777 randomly selected respondents residing in Chautara Sngachwokgadhi (Mountain region), Galkot (Hill) and Mithila (Tarai) municipalities of Nepal. We used a reliable questionnaire tool having 0.8 cronbach alpha, and we visited the respondents from 6th June- 18th October 2022. The study found that the remittance has positive effect on household welfare of the remittance recipient households. They have good access to households, educational, financial and health facilities. Utilization of remittance helped to increase family income, helped to improve family economic situation and livelihood, helped to reduce family poverty and social exclusion, helped to create self-employment/employment and help to upgrade rural economy in the study area. However, remittance has failed to increase agriculture production and distributions (domestic household hazard) and also failed to increase entrepreneurship development in the local levels. Therefore, the empirical findings of the study can be a reference for developing evidence based policy to the concerned state actor and non-state stakeholders for minimizing public moral hazard and domestic household hazards caused by remittance.

Keywords: Remittance, Coronavirus pandemic, utilization of remittance, household welfare

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1. Introduction

Remittances are essentially foreign currency sent by those who are residing overseas. About US\$ 200 BN remittance has been remitted to the home country by about 2 to 3 million remitters annually (WB, 2015, 2016; IoM, 2017). Since 1996, of the total 40 to 46 percent of yearly remittance flows, about 17 to 22 percent was received by Asia, Latin America and Caribbean whereas a little less (15% to 18%) was received by central and Eastern Europe (Straubhaar & Vadean, 2005). More specifically, Latin American countries received more than US\$ 50 BN in 2006 which is multiplied by 25 over the past 25 years (Fajnzylber & Lopez, 2008). In 2019, global remittance was projected to reach US\$ 715 BN, growing 3.7 percent, of which US\$ 549 BN was received by developing countries. World Migration Report (2018) declared that Indian Diaspora was the largest in the world, with over 15.6 million NRIs sending remittances over US\$ 80 BN in 2018. Other top recipients' countries were US\$ 67 BN to China, US\$ 34 BN each to Philippines and Mexico, US\$ 26 BN to Egypt. Accordingly, global remittance has increased 10 percent to US\$ 689 BN, including US\$ 528 BN to the least developing nations (IoM, 2017).

In Nepal, remittance has been becoming one of the major sources of foreign exchange earnings. During the last five years, remittance helped to contribute about two-thirds of gross foreign exchange earnings (NRB, 2022). In fact, the trend of remittances had been grown after the country adopted a liberal policy for outmigration in the 1990s (Sharma et al., 2014). From 2002 to 2021, remittance inflows to Nepal have increased at an average annual rate of 17.2 percent (NRB, 2021). The Nepali government has allowed 172 countries for individual initiative and 110 countries on an institutional basis for foreign employment. In an average, about 1,750 young people leave the country every day (DoFE, 2017). Total of 190,000 Nepali youths (172,000 M & 18,000 F) have gone for foreign employment in FY 2019/20 (MoF, 2021). The share of female migrants stood at around 8.5% in 2018/19 (MoLESS, 2020). The main hub of labor migration for Nepal is Gulf Cooperation Countries (GCC) and Malaysia. In 2017/18, the top five countries (Malaysia, Qatar, UAE, Saudi Arabia and Kuwait) comprised over 92 percent of the migrants (MoLESS, 2020).

However, since couple of years, the entire world has severely been stressed by the outbreak of Coronavirus Pandemic for a couples of years. The WHO was obliged to declare a pandemic in March 2020 as a result of its outbreak's frightening levels of severity, spread, and delay (WHO, 2020). Globally, there are about 703,992,802 confirmed cases and 7,004,636 death cases until 09 March 2024 (Worldometer, 2024a). Nepal also reported 1,003,450 confirmed cases and 12,031 deaths cases until 09 March 2024 (Worldometer, 2024b). Owing to that on ongoing campaign of

different doses of vaccination have been administered until 19 June 2023 (WHO, 2023). Besides, due to the Coronavirus pandemic, remittance inflows to Asia dropped by 2 percent at US\$ 314 BN in 2020 from US\$ 321 BN in 2019. This is a significant decrease comparing to 11.5 percent decrease on initially estimated calculation during the peak level of the Pandemic outbreak in 2020 (Takenaka et al., 2020).

ILO (2020) also has estimated a significant rise in unemployment and underemployment about 13 million (among 7.4 million in high-income countries) in the wake of the virus. Such declination indicated that rate of poverty will slowly grow. The World Bank has also projected that pandemic will solely push 40 to 60 million people into extreme poverty within 2020 (WB, 2020). Moreover, the countries (Haiti, the Kyrgyz Republic, Nepal, South Sudan, and Tonga) which GDP is at least 30 percent is covered by remittance, their economic and social implications are even more damaging, reducing access to food, health, clothing, cash, housing and education (UNNOM, 2019). Following this point, it can be claimed that falling remittances create a noticeable on people lives those who are more depended on remittance. For example, in 11 countries out of 33 African countries, more than a quarter of population in some extent are depend on remittances (Kalantaryan & McMahan 2020). In the case of Nepal, around one-fifth of the total population, about 6 million migrant workers are in foreign countries, on an average 696 migrant workers had left the country per-day for foreign employment in the last five years (NRB, 2021). In absolute amount, Nepal receives approximately US\$ 8 BN USD workers' remittances every fiscal year. Among the top 25 remittance recipient countries, Nepal was the fourth in the world in 2019 in terms of the percent of GDP covered by remittance (WB, 2021).

However, during the pandemic, Government of Nepal estimated total of 407,000 migrant workers who can be anticipated to return home country and at least 127,000 returnees' migrants need immediate repatriation (Mandal, 2020). Besides, it was due to the effect of Coronavirus pandemic, commodity exports from Nepal decreased by 21% compared to 2021 and merchandise exports decreased by US\$ 365 million (Trendeconomy, 2022). In this context, the effects of remittance need to explain empirically in Nepalese context. Yamada et al., (2022) also argue that not many studies have fully proven how remittances affect household welfare. Dhunagana (2014) notes that the majority of remittances to Nepal are used for consumption, which results in a lack of funds for investment. NRB (2019) also found that 23.9 percent of remittance is spent toward household consumption and only 1.1 percent invested in productive activities. Therefore, this study aimed to analyze effect of

remittance on household welfare comparatively in Mountain, Hill and Tarai ecological regions of Nepal.

2. Methods and Materials

This study used cross sectional survey design (Sharma, 2007; Gupta & Gupta, 2015). The required data were collected from 777 remittance recipient households (Table 1) by using easy reference of sample size determination table (Krejcie & Morgan, 1970). The respondents were visited from 6th June- 18th October 2022. During the field survey, reliable self-administered questionnaires have been applied. The cronbach alpha coefficient value found 0.67 (low reliable) for 10 percent sample respondents and 0.88 (highly reliable) for all the respondents (Cohen, Menon & Morission, 2018; Creswell, 2014). The collected data are categorized and presented according to the objectives of the study. The study used ccomposite index (Sava, 2016), computing Likert scales (Chakrabartty, 2014) and multiple regression model (Field, 2009). The findings of the study are interpreted based on empirical literatures (conducted in international and national context) as well as Lee’s push-pull, Todaro’s migration model and remittance as an alternative for rural development theoretical perspectives.

Table 1: Sampling size determination

Municipality	Ward*	Total Migrant	Total HHs	Remittance Recipient HHs (Sample Population)	Sample Number
Chautara Sangachwokgadhi	5	138	1541	135	97
	14	245	659	196	127
	Total	383	2200	331	224
Galkot	6	500	548	259	153
	7	391	432	244	148
	Total	891	1853	503	301
Mithila	6		529	237	144
	8		502	158	108
	Total	561	1031	395	252
Total			5084	1229	777

3. Findings of the Study

3.1. The Study Area

Chautara Sangachowkgadi municipality (7°46' N 85° 42' E) is located in northern part of Bagmati province. The municipality was established on 18 May 2014 by merging Pipaldanda, Chautara, Kubhinde, Sanusiruwari Village Development Committees as Chautara Municipality. Later on 2017 it was expanded again merging Sangachok, Thulo Sirubari, Kadambas, Irkhu, Batase and Syaule Village Development Committees to form Chautara Sangachowkgadi Municipality. The Municipality has 14559 total HHs and 51347 total population with average family members 3.57, gender ration 84.32 and active age population 28736(55.96%). It has total 165.25 km² land area including 100.61 km² farming land and 34.74 km² forest land (CSGMO, 2019). Agriculture and remittance are major sources of households' income. There are total 2445 migrated youth working in more than 33 foreign countries. There are 3 pockets covering 105 hector land under prime minister agriculture modernization program and 39 farmers groups (3684 F & 2195 M) involving in 97 cooperatives including 11 agriculture cooperative, 22 commercial agro farms and 64 microenterprises, 506 business enterprises.

Galkot municipality 28°13'24"N 83°25'29"E is located around mid-region of Baglung district in Gandaki province. The region is surrounded by Baglung municipality (E), Burtibang (W), Myagdi District (N) and Gulmi District (S). It is around 25 km far in the South-Western direction from the headquarter of Baglung district. The municipality has total households 6863 and total population 39277 with average family members 5.76, gender ratio 104.35 and active age population 25631(65.25%). It has total 194.39 km² land area including 122.92 km² forest land and 53.84 km² farming land (GMO, 2020). The majority of population depend upon agriculture and livestock. The municipality has 22 micro enterprises, 837 commercial farms, 77 financial institutions. It is the highest remittance generating region in the country. Out of total 6397 migrants, 2807(43.88%) are working in Japan and large portion of remittance is investing in community level for the implementation of infrastructure development projects.

Mithila municipality (26°52' 15"N 86° 1' 30" E) is located in the northern part of Dhanusha district in Madhesh Province. It is bounded by Sindhuli district (N), Bateshwor rural municipality of Mahottari (W), Kshireswarnath municipality and Bateshwor rural municipality (S), and Ganeshman Charnath and Dhanushadham municipalities (E). The municipality has 7434 total household and 41030 total populations with average family members 5.52 and active age population 23916(58.29%). It has 181.90 km² total land area including 134.96 km² forest

land, 32.51km² farming land and 0.012 pasture grass land (MMO, 2017). There are 55 cooperatives including 24 agriculture cooperatives, 182 farmers group and 2834 members (1898 M+936 F) involving in fish (6.8 hector), vegetables and fruit pockets under Prime Minister Agriculture Modernization Programs.

3.2. Characteristics of Remittance Recipient Households

Of the total 777 respondents, Galkot has the highest number 301(38.70%) of remittance recipient HHs followed by Mithila 252(32.40), and Chautara Sangachwokgadhi 224(28.80%). Male-headed HHs are more prevalent, accounting for 501(64.50%) while there are 276(35.50%) female-headed HHs. The majority 670 (86.20%) of the HHs are belong to Hindu religion followed by Buddhist 79(10.20%), and Christian 14(1.80%). Similarly, the highest 326(42.00%) HHs are Brahmin/Chhetri which is followed by Janjati 286(36.80%) HHs, and Dalit 165(21.20%) HHs.

The education level with the highest 311(40.00%) respondents seem primary level followed by 161(20.70%) secondary or intermediate level, 150(19.30%) lower secondary, and 131(16.90%) illiterate. The data indicate that majority of respondents had completed education up to the primary level and significant proportion of the surveyed population lacked formal education.

The status of irrigated land (\bar{x} 9.21 Ropani; σ 26.90) and rain fed land (\bar{x} 2.36 Ropani; σ 3.27) indicating a moderate average land area for cultivation. The distributions are positively skewed (6.35 for irrigated land and 1.95 for rain fed land) as well. In the case of family food sufficiency, less than 3 months category represents 192(24.70%) of the respondents, indicating that a significant portion of individuals reported having poor food sufficiency. The 3-6 months category accounts 189(24.30%) of the respondents. This suggests that a similar proportion of individuals reported having food sufficiency for a slightly longer period compared to the <3 months. Approximately 172(22.10%) of the respondents reported having food sufficiency for 6-9 months. This indicates a notable proportion of individuals who reported having a relatively longer period of food sufficiency. The 9-12 months category represents 121(15.60%) of the respondents reported having food sufficiency for a substantial period of time. The category of individuals reporting having food sufficiency for more than 12 months accounts for 88(11.30%) or extended time period.

3.3. Sources of family income

Government of Nepal had liberalized the migration system in 1990 (Shivakoti et al., 2021). Since then Nepal's temporary labor migration was relatively become new

phenomenon and increased with a great volume. The study area Sindhupalchok (2381 M + 1346 F) and Dhanusha (14747 M + 77 F) represent highest origin district of total migrant workers throughout the country (DoFE, 2019 as cited in NLMR, 2020). However, the respondents have multiple sources of family income (Table 2).

Table 2: Sources of Family Income

Family income	N	Min	Max	\bar{X}	Σ
Agriculture	777	0	20,000,000	161,943	1,046,771
Micro-enterprises	777	0	300,000	1,943	21,080
General wholesale shop	777	0	700,000	10,437	58,157
Agriculture wages	773	0	600000	12,976	55,965
Nonagricultural wages	777	0	400000	10,586	51,278
Job government	777	0	500000	13,539	75,101
Job private/udhyog	777	0	500000	33,359	100,609
Foreign employment	777	0	20000000	732,693	1,278,644
Pension social security	777	0	1000000	13,859	103,980

Table 2 depicts that foreign employment takes the top spot having the highest average income at Rs. 732,693. This highlights the significant role of foreign employment in generating income for these families. Agriculture (\bar{X} 161,943), private jobs (\bar{X} 33,359) and pension (\bar{X} 13,859) ranks second, third and fourth respectively. This indicates that social security programs also play a supportive role in family income. Government jobs claim the fifth spot with 13,539 average income. General wholesale shop (\bar{X} 10,437), semi-government (\bar{X} 3,680) secures seventh and eighth position. “Others” takes the tenth position, with families earning income from various other sources having an average income of Rs. 3,454. This category includes diverse miscellaneous sources of income. “Micro enterprises” lands twelfth, as families involved in micro-enterprises earn an average income of Rs.

1,943. This indicates that these small-scale businesses contribute to family income, though to a lesser extent.

3.4. Household Welfare Effect: Summative Analysis

Table 3: Household Welfare

Category	N	Min	Max	\bar{X}	Σ	Skewness	
Increased family income	746	1	5	4.48	0.77	-1.76	0.09
Improved economic situation	746	2	5	4.44	0.56	-.62	0.09
Improved family livelihood	746	2	5	4.41	0.72	-1.22	0.09
Reduced family poverty	729	2	5	4.17	0.82	-.67	0.09
Increased social inclusion	746	2	5	4.11	0.85	-.76	0.09
Creating self-employment	746	2	5	4.12	0.84	-.73	0.09
Creating job opportunities	739	1	5	4.10	0.85	-.79	0.09
Increased local agro production	743	1	5	3.87	0.98	-.63	0.09
Increased non-agro products	745	0	5	3.89	1.01	-.86	0.09
Upgrading rural economy	739	0	5	4.03	0.88	-.96	0.09

Table 3 reflects the household welfare effect of remittances on various economic aspects. The statement, increased family income, improved family economic situation, improved family livelihood, reduced family poverty, creating self-employment increased social inclusion, creating employment opportunities and upgrading rural economy got the highest mean values ranging from 4.48 to 4.03 with 0.56 to 0.88 standard deviation. This means the responses are falls above agree point with consistent data. However, the statements, increased local agriculture production and non-agriculture production got low mean value ranging from 3.87

to 3.89 with 0.98 to 1.01 standard deviation. This means their response falls nearer to agree point with consistent data.

3.5. Multivariate Analysis

Multiple regression model also serve for the dependent variable (index data) through the help of multiple independent variables (nominal/scale) in a certain value (Field, 2009). Owing to that the economic impact index is calculated by creating the composite index (function f from $R^n \rightarrow R$ corresponding to n -number of component variables) (Sava, 2016). The economic impact index (N=717; Min=2.20; Max=5; \bar{x} =4.17) by computing 10 Likert scale variables such as increased family income, improved family economic situation, improved family livelihood, reduced family poverty, increased social inclusion, creating self-employment, creating employment, increased local agriculture production, increased non-agricultural products and upgrading rural economy.

The regression model for the dependent variable economic impact index concerning 31 independent variables (food sufficiency, sources of drinking water, member male 15-64, age of the respondents, rain fed land ownership type, religion, abroad study son, irrigated land ownership type, abroad study daughter, college government daughter, member female >65, rain fed land area, school private son, college private son, gender, irrigated land area, member female, ward or settlements, member male >65, caste ethnicity, member male 0-14, foundation house building, school government son, member female 15-64, level of academic qualification, college government son, college private daughter, school private daughter, subject of qualification, school government daughter and permanent address) is given below:

$$y = b_0 + b_1x_1 + \dots + b_6x_6 + e$$

Where

y is dependent variable

bs are regression coefficients

xs are independent variables

e= error terms

Results of the multiple linear regression as presented in Tables 4 and 5 indicated that there was a collective significant effect between the independent variables suffer from COVID, caste group, age group, subject studied, employment status, family comorbidities, family system, stayed in home quarantine, sex group, family well-being, religious group) with the dependent variable practice index with $F(31, 52) = 16.73, p < 0.05, R^2 = 0.90$

Table 4: Model Summary

	SS	df	Mean Square	F	Sig.	R= 0.94 R2 = 0.89 Adjusted R2 = 0.83 Std. Error of the estimate = 0.16 Durbin-Watson =2.13
Regression	11.98	31	.38	16.73	.00b	
Residual	1.20	52	.02			
Total	13.18	83				

All the predictor variables were not found significant. Among them school government daughter (t= 6.56, p<0.05), permanent address (t=60.7, p<0.05) and ward settlements (t= 4.72, p<0.05) are the significant predictors in the model. The model presented in Table 5 has no issue of multicollinearity as VIF for each of the predictors was less than 9. Moreover, the accepted level of the auto correlation (Durbin-Watson = 1.78) (Table 4) signifies that the economic impact index is 89 percent explained by the above-mentioned predictor variables. The result shows that the economic impact index is largely defined by the variables permanent address, ward settlements, gender, religion, education of the household head, member female 0-14,member male >65, school government daughter, land Khet and food sufficiency (Table 5). That means, the economic impact index of the remittance recipient households with these 10 variables was significantly higher. However, it was surprising to see that college private daughter, college private son, study abroad daughter, member female >65 and college government daughter negatively contributed to the economic impact index.

Table 5: Coefficients

Model	B	Unstandardized Coefficients		Standardized Coefficients	t	Sig. Tolerance	Collinearity Statistics	
		Std. Error	Beta				VIF	
1	(Constant)	1.87	.38		4.89	.00		
	Permanent address	.62**	.11	.71	5.36	.00	.10	9.00
	Ward or settlements	.66**	.13	.38	5.03	.00	.32	3.10
	Age of the respondents	-.00	.00	-.17	-2.18	.03	.31	3.18
	Gender	.27**	.05	.29	4.68	.00	.48	2.08
	Caste/ethnicity	-.19**	.05	-.30	-3.93	.00	.31	3.21
	Religion	.17**	.04	.28	4.25	.00	.41	2.38

Model B	Unstandardized Coefficients		Standardized Coefficients	t	Sig. Tolerance	Collinearity Statistics	
	Std. Error	Beta				VIF	
Level of academic qualification	.22**	.03	.65	7.19	.00	.23	4.30
Subject of qualification	-.15**	.03	-.47	-4.34	.00	.15	6.30
Female 0-14 years	.46**	.07	.70	5.79	.00	.13	7.70
Male 0-14	-.12**	.04	-.22	-2.81	.00	.31	3.18
Female 15-64	.10	.05	.19	1.76	.08	.15	6.56
Male 15-64	-.07	.04	-.16	-1.86	.06	.25	3.97
Female above 65	-.27**	.07	-.35	-3.96	.00	.24	4.12
Male above 65	.55**	.08	.46	6.26	.00	.35	2.84
School government daughter	.65**	.11	.74	5.78	.00	.11	8.58
School government son	-.30**	.10	-.33	-2.96	.00	.14	6.81
School private daughter	-.25**	.06	-.38	-3.92	.00	.19	5.11
School private son	.11	.05	.18	2.05	.04	.23	4.26
College government daughter	-.17*	.06	-.21	-2.55	.01	.26	3.82
College government son	-.11	.06	-.15	-1.66	.10	.22	4.39
College private daughter	-.44**	.09	-.43	-4.69	.00	.22	4.39
College private son	-.34**	.12	-.23	-2.83	.00	.26	3.71
Abroad study daughter	-.53*	.21	-.20	-2.51	.01	.29	3.42
Aboard study_son	.10	.19	.02	.51	.61	.67	1.48
Source drinking water	-.11*	.04	-.26	-2.66	.01	.19	5.02
Foundation house building	-.00	.06	-.00	-.01	.99	.22	4.41
Irrigated land area	.14**	.02	.63	6.56	.00	.20	4.95
Irrigated land ownership type	-.64**	.10	-.57	-5.89	.00	.20	4.89
Rain fed land area	.03**	.01	.19	2.69	.00	.37	2.67
Rain fed land ownership type	-.16	.09	-.16	-1.76	.08	.23	4.35
Food sufficient	.18**	.02	.59	6.47	.00	.22	4.35

a. Dependent Variable: Economic impact index

4. Discussions of Findings

The phenomena remittance and development are interfaces to each other. Remittance contributes to development and development contributes to remittance. International labor migration has both positive (Adhiakri, 2021) and negative (Oltmer, 2015) effects in Nepalese development. In the study area, most of the youths from Mountain and Hill regions are involving in foreign employment for their family livelihood and career development. Remittance helped to increase family income in the study area. Srivastava and Chaudhary (2007) explore the positive impact on the per capita income in Nepal and it is becoming effective tool for poverty reduction (Shrestha, 2008). It has increased their expenditure capacity too. According to Raihan et al. (2009) and Bui, Le, and Daly (2015), it can be concluded that remittances have a positive and significant impact on various household expenditures, including food, housing, education, and health. Remittance helped to improve family economic situation and family livelihood. Remittance helped to reduce family poverty and social exclusion. Remittance-receiving households tend to allocate more funds towards consumption, health, and education compared to households that do not receive remittances (Thapa & Acharya, 2017). Remittances had a strong and statistically significant impact on poverty reduction and economic growth in Pakistan (Javid, Arif & Qayyum, 2012). Remittances also generate benefits for the community and social levels. Remittance is not only investing at household level but also investing at social level to implement different infrastructure development projects related to health, education, road and rural energy in Myagdi (Pasa, 2019).

Remittance helped to create self-employment/employment and upgrading rural economy. However, remittance failed to increase agriculture production and distributions activities in the study area. In fact, this study indicates that the category of “Increased family income” has the highest mean value of 4.48, while the category of “Increased number of non-agricultural products” has the lowest mean value of 3.89. Remittance failed to increase rural entrepreneurship development in the local level. However, the household welfare index is significantly describe by *school government daughter, permanent address and ward settlements*. Dhungel (2014) argues that international remittances are primarily spent on consumption rather than investment in productive sectors. Only a small proportion of migrants utilize remittances directly for productive investments such as agriculture, manufacturing, and trade. Lee’s (1966) push-pull theory argues that high demand of labor in international labor market and lack of employment opportunity in home country becoming pull and push factors for foreign employment. The study also found that the most prevalent reason for international labor migration was the lack of

employment opportunities. Owing to that most of the youths from Mountain and Hill regions are involving in foreign employment for their family livelihood and career development.

According to Todaro (1976), migration is an economic phenomenon which is positively related to higher urban wages. Owing to that the largest segment of the remitters' monthly salary ranging from 30000 to 49000 and smallest segment of remitters' monthly salary range of over Rs. 300,000 which is significantly higher than monthly salary of domestic workers. Japan is the most popular destination to the total remitters of Hill region (Max salary) whereas Qatar and Saudi Arabia are also significant destinations (Average salary) for youths from Mountain and Tarai regions. Pasa and Bishwokarma (2020) also found that remitters from Mulabari Dhading working in Gulf countries are earning Rs. 49,000 per month whereas remitters working in Japan, Korea, and Australia are earning more than Rs. 99,999 monthly. The effect of maximizing family income directly affected the daily life of the remittance recipient households (Dhakal & Maharjan, 2018). Remittance helped to reduce family poverty and social exclusion as well as also helped to maintain social justice, equality and household welfare in the study area.

However, from the alternative rural development perspective, government mechanisms are failed to use natural resources properly (Lekhi, 2008). Agriculture is primary sources of family income of the majority of the rural people but it is becoming second highest average income at Rs. 161,943.37 to the remittance recipient households. Remittance recipient households possessed farm land but only 22.40 percent have both farm land and paddy filed. Less than three months' family food sufficiency was reported by 24.70 percent of respondents. Government is also failed to mobilize human resources in home country. Most of the youths are unskilled and semi-skilled but working in abroad. Most of the youth from Mountain and Hill regions are involving in construction, cleaning and hotel management sector. Remittance failed to increase rural entrepreneurship development in the local level. Because of that daily household consumption expense of the remittance recipient household increased annually.

5. Conclusions

The study comes to the conclusion that remittance is becoming prominent source of family income even in post pandemic period. The positive impact of remittances on family welfare is perceived to be the highest. Remittance helped to increase family income, helped to improve family economic situation and livelihood, helped to reduce family poverty and social exclusion, helped to create self-employment/employment and help to upgrade rural economy in the study area.

The highest family income is associated with foreign employment, while loan repayment is a prominent use of remittances. Hence, transparent governance practices related to remittances and national level investments are considered important for rural development. After the pandemic, very few numbers of remitters started self-employment/employment after returning back to home country. The daily household consumption and cultural celebration expenditures have significantly been increased. And remittance recipient households are also donating significantly to the youth club, medical treatment seeker, school/college and community level (public moral hazard) after Coronavirus pandemic. Accordingly, impact on the increased number of non-agricultural products is relatively lower as remittance has failed to increase agriculture production and distributions (domestic household hazard) and also failed to increase entrepreneurship development in the local levels. Therefore, we (the researchers) would like to raise couple of questions: How effectively government can implement migration as a development stimuli? And how effectively government can apply remittance as an alternative strategy (economic and non-economic) for rural development?

6. Policy Implications

Central and local government need to implement resource management plan for proper utilization of remittance for maximizing welfare of the remittance receiving households. Government need to develop and implement human resource development and management plan in central and local levels. There is a provision to supply skilled workers in international labor market, semi-skilled workers in domestic urban centers and unskilled workers in domestic local hinterlands. Sufficient technical and logistic support must be provided to the skilled workers willing to migrate temporarily in developed countries like; Japan, Australia, New Zealand, South Korea, United Kingdom, Canada and USA. The large portion of remittance is expensing in daily consumptions because of low agriculture production. Hence, central and local government jointly develop and implement agriculture transformation plan for more productivity and expansions of agro-based entrepreneurship development. More so, priority has to be given to high production and productivity. The public moral hazard and domestic household hazard are rampant in remittance recipient household throughout the country. Therefore, central and local government need to implement remittance management program to reduce such hazards significantly in coming years.

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References

- Adhikari, S. H. (2021). Remittances and development in Nepal: A disaggregated analysis. *Journal of Management and Development Studies*, 30(1), 37-50. <https://doi.org/10.3126/jmds.v30i1.36350>
- Bui, T. T. N., Le, T.T. N. & Daly, K. J. (2015). Microlevel Impacts of Remittances on Household Behavior: Viet Nam Case Study. *Emerging Markets Review* 25 (December): 176–90. <https://doi.org/10.1016/j.ememar.2015.10.001>
- Chakrabartty, S. N. (2014). Scoring and analysis of likert scale: Few approaches. *Journal of Knowledge Management & Information Technology*, 1(2),
- Chautara Sangachwokgadhi Municipality Office (2019). *Municipality profile of Chautara Sangachwokgadhi 2076*.
- Cohen, L., Manion, L. & Morrison, K. (2018). *Research method in education* (8th ed. Taylor & Francis Group.
- Creswell, J. W. (2014). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (5th ed.). Pearson Education Inc.
- Department of Foreign Employment [DoFE]. (2017). *Migration and remittance in Nepal*. Government of Nepal.
- Dhakai, N. H. & Maharjan, A. (2018). *Approaches to the productive use of remittances in Nepal*. ICIMOD Working Paper 2018/1. ICIMOD.
- Dhungana, B. R. (2014). Remittance and Nepalese economy. *Journal of SMC*, 5:1-15
- Dhungel, K. R. (2014). *Does remittance in Nepal cause gross domestic product? An empirical evidence using vector error correction model*. *International Journal of Econometrics and Financial Management*, 2(5), 168-174
- Fajnzylber, P. & J. Humberto Lopez, J. H. (Eds.) (2008). *Remittances and development: Lesson learn from Latin America*. <https://www.oecd.org/dev/americas/42716118.pdf>

- Field, A. (2009). *Discovering statistics using SPSS* (3rd ed.). Sage Publication Private Limited.
- Galkot Municipality Office (2020). *Municipality profile of Galkot, 2077*.
- Gupta, C. B. & Gupta, V. (2015). *An introduction to statistical methods* (23rd ed.). Vikas Publishing House.
- International Labor Organization [ILO]. (2020a). *Impact of covid-19 on Nepali migrant workers: Protecting Nepali migrant workers during the health and economic crisis*. ILO Country Office Nepal.
- International Labor Organization [ILO]. (2020b). National labor force survey estimated that around 587,646 Nepali migrants are in India.
- International Organization for Migration [IOM]. (2017). *World migration report, 2018*. https://www.iom.int/sites/g/files/tmzbd1486/files/country/docs/china/r5_world_migration_report_2018_en.pdf
- Javid, M., Arif, U. & Qayyum, A. (2012). Impact of remittances on economic growth and poverty. *Academic Research International*, 2(1), 433-447.
- Kalantaryan, S. & McMahan, S. (2020). Covid-19 and Remittances in Africa, EUR 30262 EN, Publications Office of the European Union, Luxembourg. doi:10.2760/86710, JRC121055.
- Krejcie, R. V. & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, (30), 607-610.
- Lee, E. (1966). A Theory of Migration. *Demography*, 3(1), 47-57. <http://www.jstor.org/stable/2060063>
- Lekhi, R. K. (2008). *The economics of development and planning* (11th ed.). Kalayani Book Publication.
- Mandal, C. K. (2020). *Without work and salary, Nepali migrants protest in Covid-hit UAE*. The Kathmandu Post. <https://kathmandupost.com/national/2020/05/18/without-work-and-salary-nepali-migrants-protest-in-covid-hit-uae>
- Ministry of Finance [MoF]. (2021). *Economic Survey 2020/21*. Government of Nepal.
- Ministry of Finance [MoF]. (2022). *Economic survey 2021/22*. Government of Nepal.

- Ministry of Labor, Employment and Social Security [MoLESS]. (2020). Nepal labor migration report 2020. Government of Nepal.
- Mithila Municipality Office (2017). *Municipality profile of Mithila 2074*.
- Nepal Rastra Bank [NRB] (2022). *Annual report 2020/21*. Economic Research Department Publication Division.
- Nepal Rastra Bank [NRB]. (2019). *Current macroeconomic and financial situation of Nepal* (Based on Six Months' Data of 2018/19). Research Department.
- Nepal Rastra Bank [NRB]. (2019). *Saving and investment pattern of remittance recipient households*.
- Nepal Rastra Bank [NRB]. (2021). *Annual report fiscal year 2014/15*. Economic Research Department, Publication Division, Kathmandu, Nepal
- Oltmer, J. (2015). *The future of global relation: Connection between migration and development*, (Discussion paper). Institute for migration research and cross cultural studies, University of Osnabruck.
- Pasa, R. B. & Bishwokarma, J. B. (2020). Microeconomic analysis of remittance in Mulabari village of Galchhi, Nepal. *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*, 25(3), 20-26. <https://doi:10.9790/0837-2503042026>
- Pasa, R. B. (2019). Use of remittance in Bima village of Malika rural municipality of Myagdi, Nepal. *International Journal of Current Advanced Research*, 8(9), 2319-6505. <http://dx.doi.org/10.24327/ijcar.2019>
- Raihan, S., Khondker, B. H., Sugiyarto, G. & Jha, S. (2009). *Remittances and household Welfare: A case study of Bangladesh*. Asian Development Bank. <https://www.adb.org/publications/remittances-and-household-welfare-case-study-bangladesh>
- Sava, A. M. (2016). Weighting method for developing composite indices: Application for measuring sectoral specialization. *Journal of Applied Quantitative Methods*, 2(3), 77-84.
- Sharma, K., Banstola, A. & Parajuli, R. R. (2021) Assessment of COVID-19 Pandemic in Nepal: A Lockdown Scenario Analysis. *Front. Public Health* 9:599280, 1-12. doi: 10.3389/fpubh.2021.599280
- Sharma, P. (2007). *A handbook of social science research methodology* (3rd ed.). Kriti Prakashan.

- Shrestha, B. P. (2008). Contribution of foreign employment and remittances to the Nepalese economy. *Economic Review*, 20, 1-15.
- Srivastava, N. L. & Chaudhary, S. K. (2007). Role of remittance in the economic development of Nepal. *The Journal of Nepalese Business Studies*, 4(1), 28-37.
- Straubhaar, T. & Vadean, F. P. (2005). International migrant remittances and their role in development. In Organization for Economic Co-operation and Development (OECD). (2005), *Migration, remittances and development* (13-37). Hamburg Institute of International Economics.
- Takenaka, A. K., Kim, A. & Gaspar, R. (2021). *Despite the Pandemic, Remittances Have Kept Flowing Home to Asia's Families*. 8 February. <https://blogs.adb.org/blog/despite-pandemicremittances-have-kept-flowing-home-asia-s-families>
- Thapa, S. & Acharya, S. (2017). Remittances and Household Expenditure in Nepal: Evidence from Cross-Section Data. *Economies* 2017, 5(2), 16. <https://doi.org/10.3390/economies5020016>
- Todaro, M. P. (1976). *Rural migration in developing countries: a review of theory, evidence, methodology, and research priorities*. ILO
- Trendeconomy (2022). Annual International Trade Statistics by Country. <https://trendeconomy.com/data/h2/Nepal/TOTAL>
- United Nations Network on Migration [UNNM]. (2019). *The impact of COVID-19 on family remittances: a lifeline cut for migrant families*.
- WB (2023). *Remittances remain resilient but likely to slow*. <https://www.knomad.org/publication/migration-and-development-brief-38>
- World Bank [WB]. (2015). *Remittance prices worldwide 12, January 2015*.
- World Bank [WB]. (2016). *Migration and remittances, fact book 2016*. <http://www.worldbank.org/en/research/brief/migration-and-remittances>
- World Bank [WB]. (2020). *Blog open data, Impact of covid19 on global poverty*.
- World Bank [WB]. (2020). *Covid-19 impact on Nepal's economy hits hardest informal sector*. World Bank Group.
- World Bank [WB]. (2021). *World development indicators*.

- World health Organization [WHO] (2020). *Rational use of personal protective equipment for coronavirus disease (COVID-19): interim guidance reference number: WHO/2019-nCoV/IPC PPE_use/2020.2*
- World Health Organization [WHO]. (2023). *WHO Coronavirus (COVID-19) Dashboard*. <https://covid19.who.int>
- Worldometer (2024a). Covid-19 Coronavirus pandemic. <https://www.worldometers.info/coronavirus/>
- Worldometer (2024b). Coronavirus cases in Nepal. <https://www.worldometers.info/coronavirus/country/nepal/>
- Yamada, E., Shimizutani, S. & Murakami, A. E. (2022). Remittances, Household Welfare, and the COVID-19 Pandemic in Tajikistan. *Asian Development Review*, 39(2), 147–174. <https://doi.org/10.1142/S0116110522500159>