

Leveraging migration for economic and social development: a case study in Nepal

I. Introduction

Over the course of my IAD program of study, I have focused on the household-level development impacts of two global trends: international migration for employment and membership in an agricultural training and marketing cooperative. Both of these trends represent risk-spreading and asset-building strategies at the household level. They have the potential to contribute directly to community-level economic development, which was my focus area in the IAD program. Furthermore, agricultural cooperative membership and international migration for employment have become extremely common phenomena across the globe; the International Labour Organization estimates that in 2013, 150 million people were international migrant workers, and that cooperatives today employ roughly 250 million people worldwide.¹ But understanding of these development strategies' impacts on household and community welfare, particularly when the two are combined, is limited.

For my IAD capstone project I attempted to analyze these impacts by studying the extent to which migration and/or cooperative membership affect the gender dynamics of decision-making, as well as basic cash inflows, in the household. In analyzing these dimensions of development, I surveyed 120 households in three administrative districts (covering two distinct ecological regions) in Nepal. I partnered with the non-governmental organization Heifer Nepal to conduct my surveys. I traveled to Nepal using funds from the

USAID Research and Innovation for Agriculture Fellowship as well as the Henry A. Jastro Research Fellowship, and was in Nepal for a total of three months during two visits.

The ultimate objective of this project was to determine whether initiatives that assist households in strategically using their migration remittances—either investing remittances into their farm businesses or entering them in savings accounts—might accelerate development in Nepal and other countries on similar development trajectories. The parallel objective of this project was to determine whether Heifer-formed cooperatives are having an impact on female empowerment at the household level. In my research, I defined female empowerment as women’s level of participation in decision-making within a household, specifically regarding that household’s farm business activities. As will be discussed below, my survey found that when only one of the two development strategies is employed, migration has a more dramatic impact on cash inflows in the household than does cooperative membership, and neither strategy alone have a significant impact on decision-making dynamics. But households that have combined both migration and cooperative membership experience significant increases in both cash inflows and female-led decision-making; the households that employed both strategies had incomes higher than migrant households and cooperative households, combined. I theorize that this synergistic outcome from employing both development strategies might be due to the absence of the normally decision-making male in the household, combined with an influx of cash from both their farming businesses and their migrant’s remittances. Finally, I suggest that the existing cooperatives I studied might maximize the productive potential of these remittances by helping families with migrants invest their increased cash inflows directly into their farming businesses. This might further promote decision-making autonomy

among women in these farming households, while generating increased income and promoting a “virtuous cycle” for their farming businesses.

II. Country background

Nepal is one of the poorest countries in the world, owing in large part to its landlocked location, sandwiched between China and India; its small size, averaging 550 miles long by 119 miles wide; and its mountainous topography, with Himalayan foothills making up nearly 70 percent of its land.² Political conflict in recent decades has further disrupted national development: the Maoist insurgency and civil war between 1996 and 2006 claimed 17,000 Nepali lives, displaced between 100,000 and 150,000 people, and disrupted the functioning of government and social institutions—particularly in rural areas, where Maoist groups often held more power than government forces.³ After the war, political stability has not fully rebounded; since the Federal Democratic Republic of Nepal was founded in 2008, there have been eight Prime Ministers, impeding the development of public services and infrastructure. Today, the country ranks 157th out of 187 countries in the United Nations Human Development Index.⁴

For a relatively narrow country with an average north-south width of just 119 miles, Nepal is a topographically and climatically diverse country. It contains three distinct regions running laterally across the country: Terai, mid-hill, and mountain. It can be argued that these regions’ boundaries form the major political, economic, demographic, and geographic divisions within Nepal. First, the Terai is Nepal’s major agricultural region, with many large banana and sugarcane plantations, as well as mustard, lentils, maize, rice, and wheat grown on smaller scales. I interviewed 60 farming households in the Terai, 40 of which lived in Morang district, in the southeast corner of the country, and 20 of which lived

in Nawalparasi district, located in the east-west center of the country along the southern border with India. Second, the mid-hill region has much less flat, arable land than the Terai, and farmers here employ a distinct agricultural system of terraced cultivation, as well as a stronger reliance on grazing livestock than on row crops. I interviewed 60 farm households from the mid-hills region: 40 lived in Tanahun, which is entirely in the mid-hills region and close to the geographic center of the country, and 20 lived in Nawalparasi, which straddles the Terai and mid-hills ecoregions. Finally, the mountain region rises into the Himalayas from around 10,000 feet up to Mount Everest, at 29,029 feet. Because of its harsh climate, this region's primary agricultural activity is livestock pasturing, with cattle and goat being the most common livestock, followed by sheep and buffalo.⁵ It is also characterized by notoriously difficult transportation, impeding marketing and infrastructure development in agriculture. Due to these impediments, as well as the fact that only 5 percent of Nepal's emigrant population comes from the mountain region, I did not include this region in my study.

In all, less than 20 percent of the country's land base is cultivable, but over 70 percent of Nepal's population works in agriculture. Women make up 84 percent of that share. Nepal's agriculture sector is largely non-mechanized, rainfed, and heavily labor-dependent, but this is rapidly changing particularly in the more-industrialized Terai region along the Indian border.⁶

An important element of social context for this project is Nepal's culture of patriarchy. While Nepal's 2015 constitution promoted gender equality in relation to property ownership, representation, and access to resources, there remains a strong culture of patriarchy.⁷ Social and religious norms and customary laws throughout the

country are biased in favor of men: property is customarily passed from father to son, men have exclusive rights to spend household income, and child marriage and polygamy is practiced in many communities.⁸ Women are expected to be a head of household only in the absence or death of their husband.⁹ Finally, the literacy rate for women is half that for men.¹⁰ This cultural patriarchy may be creating inefficiencies in agricultural production and household-level economic development, by not maximizing the potential of women to contribute to cash-generating activities.

By looking at the rate of female-led decision-making in a household, this study could make some initial claims about which factors, if any, aid in increasing female decision-making. By isolating some activities (in this case, migration or cooperative membership) that appear to increase female participation in household decision-making, researchers could advocate that effort and resources be directed toward helping households pursue those activities. This is the theoretical framework within which this project was designed.

III. Migration from Nepal

Within this picture of ongoing challenges to comprehensive agricultural, social, and economic development, as well as political disruption and disorganization, Nepal is undergoing a phenomenon of emigration among its working-age males to healthier economies abroad. Gulf and Southeast Asian countries, particularly Qatar, Malaysia and Saudi Arabia, have offered seemingly limitless employment to low-skilled workers in construction and manufacturing since the 1970s. As of the 2011 census, Nepal's "absent" population was 1.9 million, or 7.3 percent of the population. Migration from Nepal for employment is strongly gendered; 95.1 percent of these absent persons are male, and partial restrictions on women migrating for employment are codified in Nepalese law.¹¹

Furthermore, migration is increasing: the absent share of the population has more than doubled from 3.2 percent in 2001 to 7.3 percent in 2011.

Nepal is now a 'remittance economy': in 2012, it was the third-highest recipient of remittances as a share of GDP in the world, and the highest among least-developed countries.¹² In 2014/15, remittances were valued at 589.5 billion Nepali rupees, which amounts to 27.7 percent of Nepal's entire gross domestic product (GDP). The government's Ministry of Labour and Employment posits that remittances assist in food security, asset creation, livelihood diversification, disaster risk reduction, and employment skills development.¹³ And globally remittances are becoming increasingly recognized for their role in poverty-alleviation: besides protecting against income shocks, researchers have confirmed the positive contribution of remittances to "household welfare, nutrition, food, health and living conditions in migrant sending places and regions."¹⁴

These benefits were frequently (but not universally) confirmed in my interviews; countless women respondents said that they had improved their family's prospects by sending a male family member abroad. For instance, one woman remarked,

"Before, we didn't have our own land; we worked on others' land and it was a difficult time. But since my son left for abroad, we have had a good life. We were able to get our own land, our grandson and granddaughter have been studying in the boarding school, and our son also bought a little land of his own."

Most women simply commented that their lives had been made easier:

"Before my husband went abroad, the condition was miserable. It was hard to survive. But since he went abroad, the conditions are easier."

However, there are pitfalls to emigration for employment, and Nepalis as well as human-rights organizations are becoming increasingly aware of and disturbed by the variety of harassments migrants might suffer while abroad. These include fraud by

recruitment agencies (misrepresentation of availability, quality, and pay of employment); exploitation and abuse from employers; injury or death, on or off the job; and suicide. On a social level, respondents in my survey remarked,

“The children are not being disciplined in the absence of their fathers. If they need to do some kind of community festival or ceremony, then they miss the males because they usually serve leadership roles in these ceremonies. These are the negative impacts of migration.”

From my interviews, I gathered that migration is seen as a last resort for working-age males without many other employment options.

IV. Heifer Agricultural Cooperatives in Nepal

Another household strategy to build assets and increase cash flow to a family is joining an agricultural cooperative. Researchers have found that agricultural cooperative membership boosts both market participation for farmers and prices for farmers' goods. In many instances, agricultural cooperatives are helping farmers create or connect to value chains, save and re-invest their earnings, and increase their production and on-farm efficiency.¹⁵ Many women I surveyed marveled at the changes that joining the cooperative had brought them:

“Before, I had goats but due to weak marketing I wasn't able to sell goats when they were ready to sell. Now, every Friday, the goats that are ready to sell are collected through the collection center and sold through the cooperative. Before, I also didn't know about managing a business and how to be profitable, so I had to depend on my husband. Now I have become independent and don't need to ask him, and I make income myself.”

Another woman remarked,

“[Since joining] I have learned that I can have animals at home and care for them and have an easier life. Before joining the cooperative, I did not have animals. I used to work at the riverside as a laborer. After being the member of the cooperative, I left being the riverside worker and started keeping animals. Life is easier.”

At the same time, cooperatives' positive impacts on farm-based incomes vary across farm size, location, distance to market, and labor availabilities. Furthermore, there are human, social, and physical constraints to entering agricultural cooperatives, so efforts to establish marketing or training cooperatives must take these constraints into account to avoid exacerbating existing inequalities.¹⁶ In my study, I examined Heifer Nepal's agricultural cooperative work in Morang, Tanahun, and Nawalparasi.

Heifer International established a country program office in Nepal in 1997. Today, Heifer Nepal has worked with 214,888 farming households in 32 of the country's 75 districts, mostly in the Terai and mid-hill regions. Heifer Nepal's work with local NGOs to create agricultural cooperatives is part of Heifer Nepal's Strengthening Livestock Value Chains (SLVC) project, which has run from 2012-2017 with a reported budget of USD13.77 million from Heifer International and USD 9.23 million in leveraged partnership funding. The overall goal of this project is to reduce importation of milk and goat meat, increase family incomes and nutrition, and connect farming families to value chains through cooperatives.¹⁷

Heifer cooperatives differ from many agricultural cooperatives in that they combine elements of marketing, savings and credit, training, and input acquisition in a single cooperative model. In addition, Heifer Nepal provides resources like reading and writing education, and public speaking training, that might not be present in other cooperatives with less emphasis on women's empowerment and the development of human capital.

Each cooperative followed a slightly different model—e.g., focusing on selling different livestock or dairy products, or providing different inputs to farmers—but all

shared similar core goals and management processes. As an example, I describe here the structure and operation of the cooperatives I visited in the district of Morang.

The Morang municipality of Sundarpur is just 24 miles north of the Indian border, in the southeast corner of Nepal. Here, Heifer has partnered with two existing NGOs, Sewa and Sahas, to collect the self-help groups that Heifer started into larger cooperatives. The self-help groups are made up of 20-25 women each; Sewa started their cooperative with seven original groups in 2006, and Sahas started with eight groups in 2012. By the time of my research in 2016-2017, there existed 117 self-help groups and 2,500 members in these cooperatives.

These cooperatives focus on goat meat and cow milk as their major products, with a secondary emphasis on bananas, sugarcane, and other cash crops. They operate central collection points for these products and sell at local markets; their total sales in the fiscal year 2015-2016 were 34,31,200 Nepalese rupees (NRs), or USD 32,033. According to Suresh Regmi, business hub coordinator for Sewa, the cooperative faces difficulties in scale: there is currently not enough production to sell their meat or dairy at larger markets or through contracts, and the cooperative does not have the capacity to navigate the regulations around export markets. Nonetheless, the cooperative is proud of the impact it has already made on its members: by selling directly to the cooperative and avoiding brokers, the farmers get a higher and more dependable price for their products; and by offering a central collection point for their milk and meat, the cooperative saves farmers significant labor, butchering and marketing costs.¹⁸

Finally, in addition to serving as business hubs, the cooperatives provide its members with credit services, training on the fundamentals of cooperative operation, and

farm inputs (for purchase) such as fodder seed and improved-breed goat kids. Farmers also receive training on the types of vaccinations goats require, proper pen cleaning and arrangement, fodder varieties and feeding regimens, and kidding and weaning best practices. According to Heifer Nepal's 2014-2015 Annual Report, farmers belonging to these Sundarpur cooperatives sold their goat at the age of 11.91 months and at a weight of 25.4kg; before the initiation of the SLVC project in this area, the average market age of a goat was 17.5 months and the average weight 19.3kg. This demonstrates that, through a possible combination of improved livestock management and access to appropriate markets, farmers are lowering their production costs by selling heavier goats faster.¹⁹

This overview of the specific model of agricultural cooperatives that I studied in Nepal shows that there is high potential for these cooperatives to spur economic and social development at the farming household level. After working with Heifer Nepal, I was interested in examining how this cooperative model might dovetail with the concurrent trend of emigration for employment. A main output of emigration for the households left behind is the receipt of remittances that usually surpass the earnings potential for working-age men in Nepal. If these remittances can be strategically invested in farm businesses that are also reaping the aforementioned benefits from agricultural cooperative membership, it appears that there is opportunity to create synergistic impacts between cooperative membership and emigration on development.

V. Project Details

I collaborated with Heifer Nepal to conduct my surveys with members of their cooperatives in three districts in Nepal. In addition to critical in-country assistance, advice and connection, Heifer Nepal provided me with a master data file from surveys they had

done in July 2016 of their members throughout Nepal. It contained the caste, religion, annual income, and other information on each household. From this data file, I selected 20 member households to interview from each of the three districts. No other factors (incidence of migration, household income, literacy rate, etc.) were regarded during my selection. When visiting each home, my translator and I asked to speak with an available woman from the household. The woman's position in the household was not specified when choosing who to interview, because this would have limited the number of interviews we were able to do with the amount of time we had available. This lack of specificity in choosing interviewees may have contributed to bias in my data collection; for instance, when I asked the women whether they made farm-related decisions for their household, the women who were younger or newer to living in the households (due to marriage) might have been more reluctant to admit any involvement in decision-making than the more established, older women from the same household.

To select interviewees who were not members of Heifer cooperatives, in Tanahun and Nawalparasi we worked with local Heifer cooperative managers to visit households that they knew were non-members. To interview these non-members we visited entirely different communities than the ones in which we found Heifer cooperative members. This was because in communities where Heifer cooperatives had been established, nearly all households were members of the cooperatives, and those who were not may have had characteristics distinguishing them from their neighbors at the time of the cooperative's establishment, such as significantly lower income than those households who had become members. Therefore, to try to reduce bias in data collection, we visited communities where Heifer cooperatives had not been established.

I conducted interviews over two time periods: first in August-September 2016, and second in December-January 2016-2017. The quantitative questions asked—such as household income, livestock assets, and number of years migrant has been away—served to facilitate comparison across respondents, districts, and type of development strategy pursued (i.e., migration versus cooperative membership). The qualitative questions—such as religious affiliation, farming practices, decision-making strategies, and impact of migration within the household—helped me understand the motivations, obstacles, and attitudes of the respondents. Occasionally I asked additional clarifying or related questions. Each interview took around 20 minutes on average, and respondents were interviewed individually.

After conducting the survey, I transcribed the interviews into a spreadsheet, removing the names of the respondents to ensure their anonymity, and used STATA software to analyze correlations between the major explanatory variables (incidence of migration and cooperative membership) and the major response variables (annual income and female decision-making).

The data are organized into one control group and three treatment groups. The control group is those respondents who neither have a migrant worker as part of their household nor belong to a Heifer-formed cooperative (n=30). One treatment group is those respondents who have a migrant as part of their household, but do not belong to a cooperative (n=30). Another treatment is those respondents who belong to a cooperative, but do not have a migrant as part of their household (n=33). The third treatment is those respondents who both belong to a cooperative and have an emigrant as part of their household (n=27). . These groups are visualized in the table below.

Breakdown of development strategies pursued by respondents (n=120)

MIGRATION ONLY 30 respondents	MIGRATION AND COOPERATIVE MEMBERSHIP 27 respondents
COOPERATIVE MEMBERSHIP ONLY 33 respondents	NEITHER 30 respondents

The study acknowledges that in addition to the major explanatory variables studied—cooperative membership and emigration—a variety of socioeconomic factors are also at play in each household, some of which might affect the household’s income level and division of decision-making. These factors include the household’s religion, caste, and number of members; the district and geographic region in which they live; the number of years a migrant has been working abroad, if applicable, as well as the monthly remittances they send to the household; and the number of years the household has belonged to the cooperative, if applicable.

These were the factors I was able to partially capture in my brief surveys; there are innumerable other factors at play in the topics I am studying—household decision-making, determination of who migrates abroad, investments into farm or other assets, joining an agricultural cooperative in the first place, etc.—that my survey was unable to capture. For example, my survey did not ask what the male emigrant’s occupation in Nepal had been before moving abroad, so it did not capture the differences in earnings potential of each individual. If the men who were able to migrate abroad were in relatively high-wage occupations before leaving Nepal, while those left behind are stuck in relatively low-wage

positions, then the cash-inflow impact of migration is overstated in this study. As another example, the survey did not capture the family structure within each household (how many generations live in the household, how many are related by marriage versus by blood, etc.). If the households with nuclear families (and thus fewer mouths to feed) are more likely to join an agricultural cooperative than households with three or more generations, then the impact of cooperatives on household poverty alleviation will also be overstated.

VI. Project results

This study finds that the households that implemented *both* development strategies—cooperative membership and emigration—ranked highest in their level of annual cash inflow and the rate of female-led decision-making. These household gained an average of 521,193NRs in cash inflow, which is more than the average gains of the migrant households and the cooperative households, combined. They also demonstrated significantly higher levels of female decision-making, regarding farm business decisions: households that employed both development strategies together were 55 percent more likely to have a woman making farm-related decisions than households that solely pursued migration, and 71 percent more likely than households that solely joined Heifer’s cooperatives to have a woman making farm decisions.

By contrast, the group of households that pursued neither migration nor cooperative membership did in some ways ‘suffer the consequences’ of foregoing these development strategies. These households had the lowest levels of cash inflow—less than half of what migrant and cooperative member households gained, on average. In terms of female-led decision-making, these households ranked second, behind households that

pursued both strategies. The table below summarizes the study’s major descriptive findings.

Treatment group	Mean cash inflows	% Woman-led Decisionmaking
Cooperative ONLY (n=33)	208,932.00	30.3
Migration ONLY (n=30)	311,733.00	33.33
Neither cooperative nor migration (n=30)	191,266.67	33.33
Migrant + Cooperative Member HHs (n=27)	521,193.00	51.86

Households with migrants received an average monthly remittance of 30,191 NRs, or US\$291.78. These remittances contribute an average of 82 percent of total annual household incomes. Clearly, migration is contributing significantly to household cash inflow while the migrant is abroad. The question posed in this study is whether this inflow contributes to long-term household asset building, through investment or savings, or whether it represents merely short-term income generation.

In my interviews, I asked respondents who had a household member working abroad how they predominantly used the remittances that were sent. The most common responses are presented in the table below.

	Household maintenance and expenses	Children’s education	Repay loan(s)	Farm (purchasing livestock, land, etc.)	Savings
Cooperative members	17	13	9	8	4
Cooperative non-members	18	15	3	7	2

These responses might indicate that remittances are generally not enough for many households to cover more than basic household goods and maintenance, since most households spend their remittances on household needs and relatively few are able to save the remittances. Or, these responses might indicate that households who have sent someone abroad are able to substitute growing their own food for buying it at the store (expenses that would fall under household expenses). Finally, it might indicate that due to a lack of alternative uses for their money (investments in appropriate but unavailable farm machinery, or savings accounts with banks, etc.), households see spending remittances on household maintenance as the only reasonable use of their money. This survey was unable to capture the reasons behind the respondents' remittance spending patterns. These responses also indicate that while there is a marginal increase in investing remittances in farm-related purchases like livestock or farmland among the households that belong to cooperatives, this difference is small. This appears to me to be a missed opportunity for the cooperatives and their members: by establishing dedicated savings or credit accounts for families who have large cash inflows from remittances, cooperatives could further leverage the cash inflow that remittances represent for families with emigrants working abroad.

In addition to analyzing the data descriptively, I ran an analysis of variance (ANOVA) test to determine whether the differences in average cash inflows among the four groups are statistically significant. By running a two-way ANOVA test, I was able to evaluate the effect of pursuing each treatment individually, as well as the effect of combining the two treatments, or independent variables (migration and cooperative membership) together. This helped determine whether there are significant synergies to be

gained by pursuing both household-level development strategies. The results of the ANOVA test are shown below.

Two-way ANOVA test of cooperative membership and migration on income
R-squared=.3034

Source	Partial SS	df	MS	F	Prob>F
Model	4.6154	5	6.51E+11	17.03	0.0000
Coop-membership	.4593	1	.4593	4.85	0.0296
Migration	3.7097	3	1.2366	13.07	0.0000
Coop-membership*Migration	.7469	1	.7469	7.89	0.0059
Residual	10.5978	112	.0946		
Total	15.2132	117	.1300		

This ANOVA test shows that when cooperative membership and migration are tested individually for their impact on annual income, each of their p-values are statistically significant (0.0296 and <0.0001 for cooperative membership and migration, respectively). What's more, when the interaction between the two treatments is tested, to determine whether combining the two variables has a larger impact on income than either of the treatments alone do, this result is also highly significant: its p-value is .0059, meaning there is only a .59 percent chance that cooperative membership plus migration do not have quite the effect on income that this study purports them to have.

VII. Results-based Policy Recommendations

As mentioned above, this study was conducted over a relatively brief period of time, using a short survey that did not capture all of the dynamics that impact household-level dynamics. The decision to send a family member abroad is extremely difficult and impactful for a household, and takes into account each household's very individual constraints and opportunities. Therefore it is unreasonable to infer from the data gathered

in this study that communities should unequivocally pursue both migration and cooperative formation for their agricultural, social, and economic development. However, the statistically significant differences in cash inflows and female-led decision-making between households that have pursued one or both of these strategies indicates that researchers and policymakers should examine more closely the possibility of synergies between the strategies.

The Nepalese government will be recovering from the property and human capital losses from the 2015 earthquake for many years. According to most Nepalis I spoke with in my research locations, local government offices are also cash-strapped and have high rates of absenteeism. Therefore I suggest that the cooperatives created by Heifer Nepal, and similar agricultural marketing and training cooperatives, spearhead the effort to help farming households maximize the investment potential of their remittances from migrants abroad.

First, cooperatives could assist in the relatively simple process of sending remittances from abroad back to Nepal. Migrants often face high transaction fees if using money transfer companies or banks to send money to their homes. The International Remittances Network (IRnet), operated by the World Council of Credit Unions, was developed to reduce these fees and give families more options in sending remittances. Families can make a transfer from a credit union to a credit union, from a credit union to a non-credit union (for example, to a retail outlet providing money transfers), or from a non-credit union to a credit union.²⁰ The NGOs that currently operate the cooperatives studied in this project could partner with a local credit union or commercial bank to set up similar

remittance-transfer operations for the many families in their communities with migrants abroad.

Secondly, the cooperatives studied in this project and similar community-based groups could add a new dimension to their cooperative activities: creating savings funds and investment opportunities specifically for households receiving monthly remittances from emigrated family members. This would help families track and manage the cash inflow from remittances, while also ensuring remittances could be effectively used as insurance against future shocks to income. If paired with some advice or guidance on possible ways to invest remittances in households' farming businesses, it could help create a cycle of investment, income and reinvestment into these businesses.

Other regions have recognized the potential development gains that remittances to home communities represent. The African Institute for Remittances (AIR), launched in 2014, aims to “implement concrete strategies and operational instruments to use remittances as development tools for poverty reduction.”²¹ The International Fund for Agricultural Development is also working to promote investment of remittances and migrant savings through “opportunity identification, productive investment models, skill development, and entrepreneurship.”²² If the cooperatives studied in this project could assist their member households in using monthly remittances to hire laborers, purchase land or livestock, or invest in labor-saving technologies, their businesses could eventually support their entire household, reducing the obligation to emigrate. One woman I interviewed asserted that this cycle had already somewhat begun, saying,

“Before, many years ago, males were going abroad to work outside of their hometown. But it has been changed during these years because Heifer has launched this project and taught them about goat farming. The migration has now been decreasing day by day.”

Endnotes

- ¹ International Labour Organization, “Cooperatives;” International Labour Organization, “Labour Migration.” Accessed at www.ilo.org.
- ² Sharma, K.C. 2001. Crop Diversification in Nepal. In *Crop Diversification in the Asia-Pacific Region*, edited by M. Papademetriou and F. Dent. UN Food and Agriculture Organization.
- ³ Basnett, Yurendra. “From politicization of grievances to political violence: an analysis of the Maoist movement in Nepal.” London School of Economics and Political Science Development Studies Institute. Working Paper Series No. 7, March 2009.
- ⁴ Gender Land Rights Database. Updated 2016. UN Food and Agriculture Organization. Accessed at http://www.fao.org/gender-landrights-database/country-profiles/countries-list/general-introduction/en/?country_iso3=NPL; GDP Ranking. Updated 2014. World Bank. Accessed at <http://databank.worldbank.org/data/download/GDP.pdf>
- ⁵ Pariyar, D. Country Pasture/Forage Profiles: Nepal. UN Food and Agriculture Organization, 2005. Accessed at: <http://www.fao.org/ag/agp/agpc/doc/Counprof/PDF%20files/Nepal.pdf>
- ⁶ Karki, Yogendra Kumar. Nepal Portfolio Performance Review 2015. Ministry of Agricultural Development, 2015.
- ⁷ Thapa, note ii.
- ⁸ Gender Land Rights Database, note vii.
- ⁹ Thapa, Sridhar. 2008. Gender differentials in agricultural productivity: evidence from Nepalese household data. Munich Personal RePEc Archive.
- ¹⁰ FAO. 2003. Asia’s women in agriculture, environment and rural production: Nepal Factsheet. Bangkok, FAO Regional Office for Asia and the Pacific.
- ¹¹ Central Bureau of Statistics. 2011. National Census 2011. Kathmandu: Central Bureau of Statistics, National Planning Commission, Government of Nepal.
- ¹² Ibid. note ix.
- ¹³ Ibid. note i.
- ¹⁴ de Haas, Hein. “Remittances, migration and development: policy options and policy illusions.” In K. Hujo and N. Piper (eds), *South–South Migration: Implications for Social Policy and Development*. London and Basingstoke, 2010: Palgrave Macmillan.
- ¹⁵ Fischer, E., and M. Qaim. 2012b. Gender, agricultural commercialization, and collective action in Kenya. *Food Security* 4(3): 441-453; Wollni, M., and M. Zeller. 2007. Do farmers benefit from participating in specialty markets and cooperatives? The case of coffee marketing in Costa Rica. *Agricultural Economics* 37(2): 243–248.
- ¹⁶ Ellen Verhofstadt and Miet Maertens, “Can Agricultural Cooperatives Reduce Poverty? Heterogeneous Impact of Cooperative Membership on Farmers’ Welfare in Rwanda.” *Bioeconomics Working Paper Series* (2014), Department of Earth and Environmental Sciences, KULeuven, Belgium; Francesconi, G.N., and N. Heerinck. 2010. Ethiopian agricultural cooperatives in an era of global commodity exchange: Does organization form matter? *Journal of African Economies* 20(1): 153-177; Ito, J., Z. Bao, and Q. Su. 2012. Distributional effects of agricultural cooperatives in China: Exclusion of smallholders and potential gains on participation. *Food Policy* 37(6): 700-709.
- ¹⁷ SLVC Factsheet, http://www.heifernepal.org/sites/default/files/factsheet/SLVC%20factsheet_25%20January%202016.pdf
- ¹⁸ Interview with Suresh Regmi, business hub coordinator at Sewa cooperative. August 14, 2016.
- ¹⁹ Heifer Nepal annual report, 2014-2015: <http://www.heifernepal.org/sites/default/files/AR15.pdf>
- ²⁰ “Cooperatives offer migrant workers options for better lives.” International Labour Organization Issue Brief, accessed at http://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/---coop/documents/publication/wcms_221743.pdf.
- ²¹ Kinfe, Hailu. “Diaspora/migrant remittances and the African Institute for Remittances.” Potsdam Spring Dialog 2016, Potsdam, Germany. Accessed at http://www.sef-bonn.org/fileadmin/Die_SEF/Veranstaltungen/PFG/2016_pfg_bune_en.pdf.