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Unintended Consequences of Migration and Labour Vacuum in Agrarian Rural Village in Nepal

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A large number of youths from the rural areas have been migrated to the urban areas and abroad for better opportunities for a few decades. As the volume and pace of youth outmigration increased, it created an agricultural labour vacuum and precipitated unintended consequences on rural agrarian economic production, livelihood, and consumer behaviors of the people in the village. The main objective of the article is to explore and analyze agrarian recession (decline of agricultural and livestock activities) and strategies of livelihood among the villagers whose family members were migrated in and out of the country. Previous studies on migration are mostly limited to the analysis of cost-benefit in the national economy and thus were unable to explore the scope, intensity, and unintended consequences

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of out-migration on rural agriculture and the economy. Based on in-depth interviews, observations and household surveys carried out in a village in western Nepal, this study tries to articulate the agricultural downturn and crisis in the rural village due to labour migration. It focuses on the pattern of use of remittance, changes in land use, and consumer habits. The research compared the number of out-migrants, investment areas of remittance, and changes of livelihood in 1990 and 2020. The relations between migration and rural agrarian production have been found inverse impacts. The migrant households tend to face a not only dearth of agrarian labour during pick seasons but also villagers' inclination to market luxurious goods. Instead of investment of the remittance in agricultural land-livestock and innovation of production system for sustainable development, it is mostly invested in unproductive areas.

[**Keywords :** Agrarian, Migration, Recession, Labour, Remittance]

1. Introduction

Sher Bahadur Thapa (62 years old) was sitting on a stone in the middle of his fallow land at Narethati. His seven goats were grazing on the land. His wife informed him that we were interested to meet him. He called us to the grazing land. This land has been left fallow for more than a decade because of the labour migration of his sons and a serious dearth of labour in the village. His daughters-in-law and grandchildren stayed at Baglung Bazar for their education and profession. He said that foreign labour migration transformed his family structure, food habits, and land-use system. More than half of his arable land area turned into grassland and grazing land. He showed us that the areas of land and family labour produced sufficient maize and millet for the six-membered family before 2000. Gradually, he reduced agricultural and livestock activities because of the lack of labour in the family and village. He and his wife raised only goats because goat keeping was a relatively easy task in comparison to cows and buffalo. Both of them became old and helpless for the labour-intensive work. He said, "Maize and millet were everyday food crops produced in own land replaced by rice of market. Now, we eat bought rice every day". He added that this was not a single story of his family and the end of the story of foreign labour migration and the agrarian decline of the Narethati. He claimed that a similar labour vacuum and decline of agrarian products were realized, in at least, 70 households in the village. We stayed overnight in his house and listened to recession narratives of the crisis of agrarian culture and the unintended consequences of foreign labour migration. He introduced us to neighbors and the

villagers who shared similar stories of labour vacuum and the decline of agrarian productions.

Maisara Nepali (63 years old woman) was weaving a mat out of fiber of maize. She remembered heydays of weaving straw mats told every year. Both sons were in gulf countries and their family members stayed at Baglung Bazar. They bought house-land (Ghaderi) out of their remittance. The paddy field of the village was also sold and added to the house-land. She left half of her Pakho (maize-millet land) barren because of the dearth of agrarian labour in the village. She said that there were no people to go funeral procession and caregivers of sick people in the village. Her husband died last year because he did not get timely hospital care when he was sick. One of her sons did not return to observe the mortuary rituals. She argued that foreign labour migration not only declined agrarian production but also declined family values and traditional cultures. Urban dweller family members did not care much about the food, shelter, and health of elderly members in the village.

Suman Khatri (33 years returnee migrant) argued that there was no prestige and social respect for agrarian work in the village. He claimed that agrarian labour was not only the lowest-paid but also the least preferred and prestigious work in the village. The migrants preferred similar types of work out of village and country because nobody noticed the social dignity of the labour. It is estimated that 30% of migrant labour worked in the most dangerous and least dignified sectors in foreign countries (World Bank, 2016). Similarly, it is estimated that 6 million Nepali migrants around the world shared 28 percent of the labour force of Nepal. Remittances from migrant workers contribute 25.4 percent of GDP and 56 percent of all Nepalese households receive remittances (Bhandari, 2016). The villagers experienced low productivity because of the shortage of labour, due to out-migration, and lowly investment in agriculture. The study indicated that if the remittances are not invested in farming, the migration negatively impacts agricultural production and the remittances of the migrants were the source of income (World Bank, 2016). The same report argued that the national GDP contribution of agriculture was decreasing and the contribution of remittances was increasing (World Bank, 2016). Therefore, agrarian production and migration have gained significant attention in both scholarly and policy arenas.

Various researchers had found that rural out-migration is a significant driver of significant changes in land use, rural economy, and socio-economic transformations, with the unintended consequence of farmland (Chen et al., 2014; Xu et al., 2019; Liu et al., 2016; Radel et al., 2019). It is essential to understand these complex interactions and the effects on the design of land-use policies that help rural livelihood to accomplish food security, and sustainable utilization of natural resources (Lambin et al., 2011; Zimmerer, 2010; Jokisch et al., 2019). The observed agrarian change is neither 'agricultural involution' (Geertz, 1963) nor radical transformation (Aase & Chapagain, 2005) to make the village independent. Like the case of many developing countries, Narethati has been facing increasing challenges of the recession of agrarian production caused by a labour vacuum. Sher bahadur remembered that there was cash scarcity in the village thirty years ago. Some vegetables and diary products were occasionally sold in the regional market to obtain cash for necessary commodities like cloth, salt, sugar, tea, and household utensils. He added that most of the villagers besides Dalits, ate their own food, utilized family and village labour, restored soil fertility by adding animal manure, and worked with the tools manufactured by village blacksmith (kami). He argued that there was cash flow from foreign countries and the expansion of roads in the village. The unintended consequences of the migration and expansion of roads caused the agrarian crisis by the replacement of local tools and technology, labour scarcity, and decline of production in the village.

2. Objectives

The general objective of the study is to analyze and tell the stories of the decline of subsistence village life due to the implementation of the neoliberal economic policy of the state. The main objective of the article is to present a declining graph of agrarian production and land use after the increasing trend of foreign labour migration from rural villages. It argues the agrarian recession (land use, production, and a number of livestock) by comparing and analyzing data from 1990 to 2020. It tries to present the impacts of labour migration and remittances in an agrarian recession in a rural village. Multidimensional impacts include not only agricultural crisis but also changes in family values and the socio-cultural life of the agrarian village in Nepal.

3. Methodology

This study has been conducted in Narethanti of Baglung district, in the western mid-hills of Gandaki province of Nepal.[1] The author employs a mixed-method approach in terms of the nature of data and modes of analysis. Out of eight clusters of village Municipality, Narethati was selected by employing a cluster sampling method. For quantitative data, 30 households were selected. Within the households, 40 plus years old (both male and female) informants were selected. The recall or remembered method was employed to generate actual data around 1990. This primary information was collected from fieldwork from December 2020 to April 2021. Informants The informants remembered information Qualitative information was collected by observations, in-depth interviews, case studies, and the life histories of the village people. Life histories and in-depth interviews helped to generate data of the 1990s. Field observations and stories of the villagers regarding migration and the agrarian systems were employed as reliable information. Collected information was presented and analyzed by using simple statistical tools, and thematic and narrative analyses of the stories.

Figure-1 : Geographical view of Narethati

4. Results and Findings

4·1 Migration in Narethati of Baglung

Narethati is a multi-ethnic village where Chhetri, Brahmin, Magar, Damai, Sarki, Kami, Gurung, Thakali, and Muslims have been subsisted. Around the 1990s, agriculture was the main profession for all the households except four households of Gurkha and a nominal number of labour migration in India. To reflect the stories of the Sher Bahadur Thapa and Maisara Nepali at the very beginning of the article, their family members depended on substance agricultural products in the 1990s. Every household in the village utilized the

maximum area of land and labour resources for the maximum extent of production. Below labour-aged children and elderly people were employed in livestock caring. Livestock is an integral part of the agrarian economy. An adequate number of livestock is required for the particular area of arable land. The land and livestock are considered not only the main source of livelihood and wellbeing but also an indicator of socio-economic status and prestige in the village. There were different and historical trajectories of unequal distribution of land in the village. The household survey explored that 8% of the households had wide-ranging surplus land and 2% had no private land. Out of 30 households, 55%, had enough land to feed and support their families. The rest of 35% hardly managed nonetheless to live and eat working own land and exchanging labour in the village. Sher Bahadur remembered 30 years back and argued that a large number of youths entertained during the marriage, birth, and festivals of the village. He claimed that there were hundreds of villagers participation in any death procession. Both of them remembered collective plantation and harvesting crops by singing and dancing in the rich people. Labour exchange was another village tie that bonded different caste ethnic people into a single production system. These rituals practices and production systems built intimate relations and ties of different castes and kinship relations which were essential social production in the agrarian village.

On the contrary, respondents said that there were few youths and abled people in the village now. Cases showed that migrated youths did not return to the mortuary ritual of their own parents. Inter-caste ritual reciprocity and the system of labour exchange have been transformed with the decline of agricultural activities. Both observations and survey data informed that household structure and family size have been shrinking because young members have either migrated to foreign countries or left the village, particularly women, for the education of their children. The number of people actually living in the village was dramatically declined. The total population of the 30 households was 168. Of the total population, 72 members were currently living at the village home while the rest 96 were migrated out of their homes for more than 6 months. Of the 96 migrants, 44 were migrated to countries like Japan, Saudi, India, Malaysia, Korea, Dubai, Qatar, Portugal, UK, China, and Australia, and the rest 52 were migrated to urban and semi-urban centers of the country like Chitwan, Pokhara, Kathmandu, Butwal and Baglung.

Both qualitative information and survey data suggest that remittances are not being invested in agriculture and livestock in the village. Though the volume of remittance received from the migrants for the past 30 years i.e., 1990-2020 increased significantly, it has not contributed to agrarian village livelihood. In the last 12 months of 2019-2020, a total amount of 34,620,000 (an average value of 1,154,000, with max-4,500,000 and min-60,000) has been received by the 30 migrant households from their migrant family members. The remittance received has been invested in estate and commercial land, household consumption (food, clothing/meat/drinks), electronic goods, vehicles and jewelry, education, health, and repayment of loans. Similarly, socio-cultural functions, business, saving, capital formation, social support, financing migration, construction, and maintenance of houses are other areas of investment of remittance. Out of total remittance, only 6.2% of the remittance were invested in agriculture and farming as shown below :

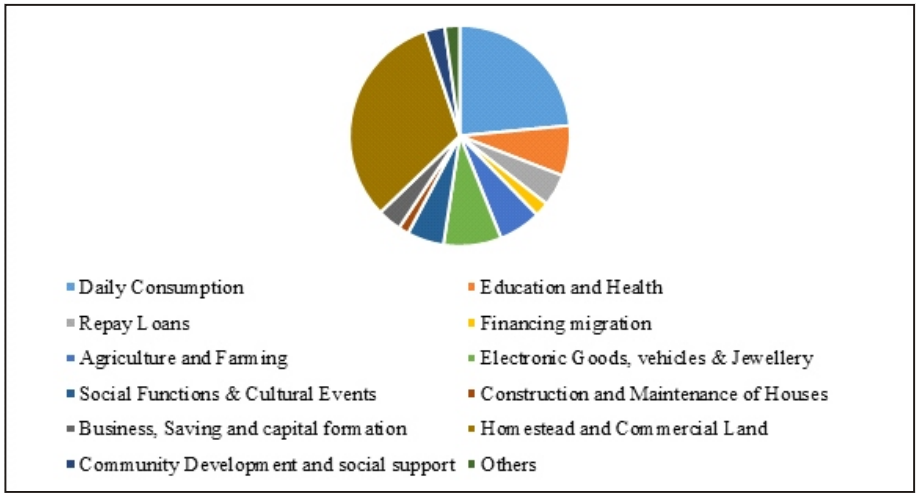

Figure-2 : Investment Field of Remittance

The chart shows that a large amount of remittance is invested in homestead and commercial land (44.91%) and daily consumption (13.5%), followed by socio-cultural events (6.56%), repay loans (6.34%), and school/college fees (6.16%). The high volume of remittance is invested in non-agrarian sectors. It also indicates that the second priority areas of investment are: jewelry (4.64%), loan giving (3.67%), saving in banks (2.85%), business (shops/stock/ transport) (2.35%), TV & mobile (1.91%), construction and improvement of the house (1.9%), electricity, mobile, and internet bill (1.51%), money lending (1.17%), health care (1.06%). Among them,

only a very few amounts are invested in agriculture: hiring labour (0.57%), livestock (0.44%), chemical fertilizer, seeds/irrigation (0.3%), and the least percentage of respondents were obtained amongst agricultural tools (0.15%).

On the basis of the chart, it can be claimed that 53.33% of the households purchased real estate out of the earnings from migrant workers. Consumption, luxury materials, health, and education are second priority areas of investment. Agrarian innovation and commercialization are the least priority area of investment in the village. Moreover, traditional agricultural practices and arable land areas have been shrinking.

Besides subsidiary occupations[2] agriculture was the main occupation for the households from the Narethanti of Nepal till 1990. To compare agrarian activities and labour migration from 1990 to 2020, it found a dramatic decline in agrarian work and a rapid increment in labour migration. The decline is clearly shown in the following bar figure-3.

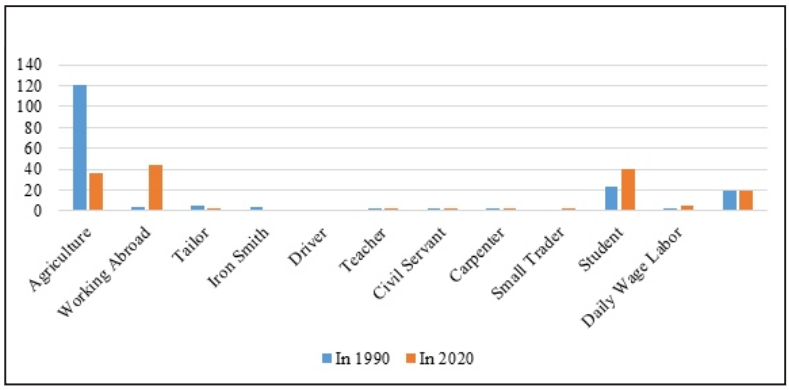

Figure-3 : Occupational status in 1990 and 2020

The negative impacts of migration can be observed in subsidiary occupations like tailor, ironsmith, carpenter, and civil servant. Because of the penetration of the market and the opportunity of foreign labour migration new generation of their family members denied continuing tailoring and iron ore. Small traders and the number of students increased. Though the number of children declined the number of elderly increased in the village.

When compared the number of livestock from 1990 to 2020, their numbers have ben decreased. Buffalo, goat, cow, and ox are considered an integral part of agriculture in the village. They not only produced dairy and meat but also their manure revitalized the

fertility capacity of the land. The livestock number decrease also indicates the decline of agriculture activities and productivity in the village. The number of livestock direct impacts agricultural production. The buffalos and cow/ox are considered the main sources of manure for agricultural production. The number of buffaloes was found to be reduced in 2020 as compared to 1990 as shown in the figure below. Few of them started using chemical fertilizer because of a lack of livestock manure. The quantity of chicken and goats increased because 3 families started commercial poultry farming and two others started commercial goat farming.

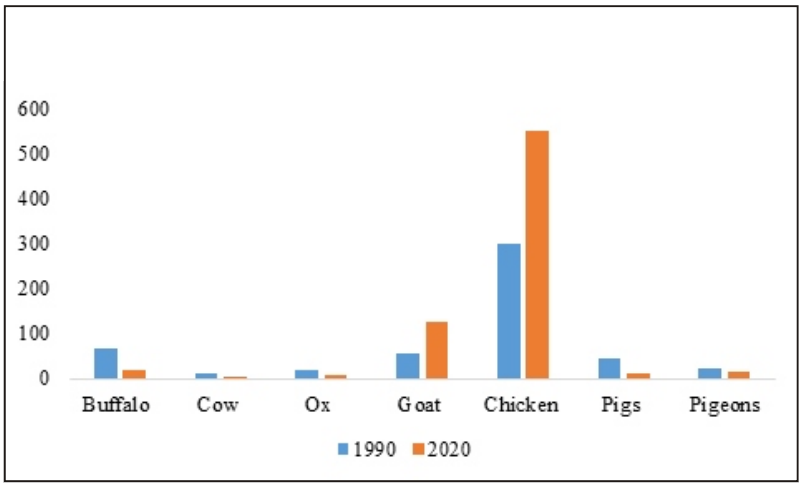

Figure-4 : Changes in Livestock rearing in Narethanti in 1990 and 2020

The production rate of paddy and maize per unit area has decreased because of a lack of manure and care. The overall production of corn, rice, millet, wheat, lentils, soybeans, and mustard has decreased whereas the production of green vegetables, off-seasonal and hybrid vegetables, and hybrid chicken have been increased. The respondents reported that their traditional varieties of rice, maize, and vegetables have been disappeared. The farmers are now cultivating only in a small patch of farmland to consume their own families instead of a surplus-value.

Out of sampled respondents, 67.74% reported that they experienced a serious hearth of labour in the village. They claimed that the main cause of labour shortage was labour out-migration, particularly third-country migration. Similarly, 25.03% of the respondents reported that they mortgaged arable land either lease or sharecropping. And 16.9% of the respondents turned arable land into grassland or left it barren. Villagers told that about 45 Ropani (22892.4

msq.)[3] previously cultivated land are turned into barren grassland. They claimed that out-migration caused labour shortages in the maintenance of farmland and irrigation. The following figure shows the transformation of the main source of income from 1990 to 2020.

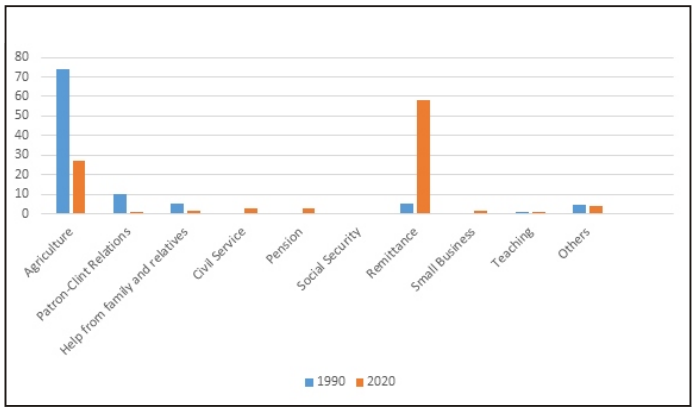

Figure-5 : Main Sources of Income in 1990 and 2020

Among various sources of income, agriculture contributed more than 75% of family income during 1990. The contribution of agriculture declined by 25% of family income in 2020. The remittance income increased from 5% to 60% from 1990 to 2020. Similarly, patron-client relations also significantly declined in 2020. The dramatic increase in remittance and decline of agrarian income show not only economic changes but also other socio-cultural ramifications of village life.

4·2 Effects of Labour Migration on Agrarian Systems

Changes in family structure, the recession of reproduction rate, cultural practices, and agrarian systems are some of the unintended consequences of labour migration. Household structure and family size are important to subsistence agrarian systems. Sher Bahadur shared that the family size of the villagers has been shrinking because young members have left the village. After school education, most of the youth migrated either for higher education in urban centers or foreign labour. Suman Khatri said that married mostly males stayed out of the village and consequently there was a lower reproduction rate in the village. None of the married couples about 45 and below years have more than three children. The downfall of the population growth rate is also matched by the census report 2022 (CBS, 2022). Foreign labour migration has significant effects on the population growth rate.

The access to roads, education, drinking water, and health services has expanded in the village but labour migration has not been stopped. A study noted that migration negatively affected agrarian production in rural areas (Jha, 2010). The study proposed two commonly opposing conditions for migration. They are : (i) the expulsion of labour threatens the household's capacity to react to labour demands, prompting a decrease in cultivation and production (ii) remittances overcome labour deficiencies and give capital inputs to develop agriculture (Jha, 2010). Numerous investigations in Nepal support the former, revealing that migration destabilizes agriculture; loss of labour denies households work, and remittances are seldom invested agrarian system improvement (Black, 1993). But the predominant explorations were that the remittances economy invested in essential family needs, education, family wellbeing, housing, debt repayment, and consumption (Durand & Massey, 1992). The result of the study also matched with the earlier research. In most cases, migration causes a shortage of labour, which is the proximate cause of the overall crisis of the agrarian system. These comprise (i) insufficient attention to agriculture prompting including environmental degradation; (ii) pernicious impacts on the cultural and social organizations that sustain agriculture; (iii) hardship of agricultural innovation or a stagnant agricultural base; and (iv) an overburdening of the individuals who remain (usually women) with labour responsibility of the family (Durand & Massey, 1992).

Few scholars argue that migration leads to the development of agriculture by investing remittances in agricultural production (Jaquet, Kohler & Schwilch, 2019). The villagers have reported that few migrant families bought agricultural land. Instead of being improved or cultivated routinely, the lands were utilized for pasture and grassland. Additionally, the agricultural recession continued due to the low rate of wages and gender-specific labour requirements.[4] De Hass (2006) presented that households in Southern Morocco invested more in housing and agriculture following a rise in remittance income.

It was found that some remittance-receiving households were using modern agricultural technologies such as improved varieties of rice and improved transplanting techniques. However, labour migration did not significantly alter household cultivation patterns and remittances were also not used for agricultural improvements in Canar Province of Ecuador (Jokisch, 2001). Similarly, other investi-

gations also explored the labour deficiencies arising from migration led to a decline in agriculture production (Turner et al, 1993, Harden, 1996). Yet Lucas (1987) discovered that in the short run migration decreases subsistence agriculture production, but remittances enable households to improve agricultural productivity and capital accumulation over the long run. Utilizing an ethnographic methodology, Zimmerer (1993) found labour deficiencies due to out-migration, along with the abandonment of traditional soil conservation techniques and increased participation of women in farm work. Researchers showed that out-migration reduces the number of cattle and subsequent extension of shrublands, predictable to the theory of deintensification (Preston et al., 1997). Another research revealed the differential effects of international and internal migration on the change in agricultural land use (Maharjan et al., 2020).

Various studies of Nepal revealed that labour migration is bringing about incessant labour deficiencies in agriculture prompting agricultural land abandonment and low productivity (Paudel et al., 2014; Thapa, 2001). Further, remittance-receiving agricultural households are also not seeing an uptake in agriculture output in Nepal. These discoveries infer that large-scale migration is making a deficiency of agriculture labour, adversely influencing agriculture productivity. A policy geared toward channeling remittances to investments in productiveness-improving agricultural capital and inputs would possibly increase agriculture yield. The negative impact of migration on agriculture yield might not have been compensated through remittances (Rozelle et al., 1999). This is not surprising in Nepal's case due to the fact that nearly 80% of remittance income is utilized for daily consumption and only 2.4% for capital formation. A study revealed that remittance-receiving rural households did not use productivity-enhancing agricultural inputs like chemical fertilizers despite the fact that remittances enhanced their income (Maharjan et al., 2013). If the remittance is highly excessive, the farmers do not spend money on low-productivity subsistence crop farming and livestock, rather preferred the non-farm sector or use remittances for more leisure and consumption goods.

Researchers explore evidence of how out-migration impacts the land management practices and the land-use transition underway in Nepal (KC et al., 2020). It also shows that the

underutilization of farmland is a common and considerable phenomenon taking place in rural landscapes, much more so than the extensively stated abandonment of farmland. Rather, the presence of a huge community-level migration network shows an enormous level of adverse influence on fertilizer use, which proposes that migration brings about a decrease in investment in the crops (Maharjan et al., 2013). A household's decision to opt for migration also has a significant negative impact on crop output. Fertilizer use is also affected by other variables. Despite the fact that remittances have improved household earnings generously, they don't appear to significantly influence fertilizer use. In contrast, community migration networks show an exceptionally significant negative impact on fertilizer use. The outcomes of agrarian production in Narethati and other researchers indicate an increasing feminization of the agricultural sector resulting from a shortage of male labourers.

5. Discussion

The revised and enlarged edition of 'Nepal in Crisis' in 2001 stated that "there is a remarkable lack of investment in agriculture generally and only low levels of production for the market. Indeed, there is even evidence of reduced sales of agricultural products by hill households in the sample" (Blaikie et al. 2001 : 298). On the contrary, some researchers argue remittance economy can act as a catalyst in transforming the subsistence farming sector into a more productive and commercial one by removing some of the constraints it faces (Azam & Gubert, 2002). Both the survey and narrative articulate that remittance has not invested transformation and involution of agriculture in the village. Migration has a negative impact on agrarian production.

The migrant households experienced a labour vacuum in agricultural work during the peak seasons of plantation and harvest. Similarly, the number of domesticated animals have been significantly decreased. Cultivated land areas and domesticated animals have symbiotic relations for the continuation of the agrarian production system. Soil fertility must be recharged by applying domestic animal manure. Domestic manure is highly valued and taken well care of. For the proper distribution of the manure domestic animals were temporarily shifted to different locations of arable land. The agriculture-livestock system works such that the more animals a family owns, the more manure it can accumulate, and more land can

be cultivated. The manure heaps outside the farmhouse are signs of wealth and rank in the village. We have not observed big heaps of dung outside farmhouses in the village. Without manure, villagers do not plant crops because it is west of labour and seed. Rather they left barren land. Observation and surveys show that there was a dramatic decrease meant of domestic animals in the village. Absence of active members in the family, elderly people are compelled to reduce or quit domestic animals though they preferred diary products. It implicitly indicates the downfall of agricultural production. Some of the households quit agricultural production completely. The case of lessening of agricultural land is also found in Himalayan regions too. Pawan Ghimire argues that at least one-third of fields once cultivated are permanently abandoned in Mustang (Ghimire, 2005). He noted that 70% of the farmland was not cultivated in the village of Pisang in 2004 (Ghimire, 2005). Aase and Chapagain (2005) argued that despite the profound transformation in the eastern hill (cardamom and other cash crops), an agricultural recession occurred western hills of Nepal. It indicates the crisis of the centuries-long domestic production system.

6. Conclusions

The present study compared the subsistence agricultural system of a village in 1990 and 2020. The selected adult informants recalled and told stories and actual information of 1990s and 2020s. When compared from 1990 to 2020, the recession of the agrarian system (land used, production, and domestic animals) and the increasing trend of labour migration and volume of remittances are presented in the figures. The main livelihood strategy of 1990 was agrarian production whereas remittance was considered the main strategy in 2020. The agrarian system of the village includes the integration of the agriculture practices, fertility-manure-irrigation management, labour system, animal husbandry, and socio-cultural unity of the village. One of the major unintended consequences of migration, particularly foreign labour migration, was the agrarian crisis in the village. The villagers abandoned one-third of arable land without cultivation. Both quantitative and qualitative data provide strong evidence of labour dearth, reduction of arable land area, decreasing numbers of livestock, and volume of remittance investment in agrarian sectors. The crisis of the centuries-long agrarian system of production has wider ramifications reflected in

short-term and long-term unintended consequences at Narethanti of Baglung district. More specifically, the huge scale labour migration resulted in gender imbalance, a deficiency of male agriculture labour, and the work burden of females.

The total area of arable lands, animal manure, and resource investment including irrigation, innovation, and mechanization have been significantly decreased and the downfall results in the quantity of production and relations of production. The survey data present a dramatic downfall in the number of domestic animals in the village. The ramification of the reduction of domestic animals caused a reduction in manure, dairy product, crop production, and the crisis of sustainability of the village's livelihood. Gender-specific division of agrarian labour and feminization of agrarian production is an interesting area to be further explored. The male-specific division of agrarian labour and ritual roles demanded the presence of male labour in the village.

There are various factors responsible for the situation of labour vacuum in the village. The neo-liberal economic policy of Nepal since 1990 not only opened but also encouraged youth to foreign labour migration. Similarly, the intensification of the Maoist insurgency (1996 to 2006) displaced an enormous number of youths from the villages. Shrinking economic activities and investment threats cultivated migration ecology. The lower income from agriculture was the principal reason for the crisis of the traditional agricultural system. The downfall of the agricultural sector has taken place in a situation where the fundamental structure of the political economy of Nepal remains stagnant. The agricultural crisis indicates crisis in the economy and the state at large. Lack of progressive changes and profound transformations in technology, policies, and investment, the speed of downfall accelerates. The situation of abandonment of arable land, decreasing number of domestic animals, and no investment of remittances in agriculture could be claimed crisis of the agrarian system in the Narethati village.

Footnotes

1. The village is located at 28.24°N 83.46°E. The average temperature of the flatland is 20°C, which is incredibly suitable for agriculture.
2. Tailor, ironsmith, driver, teacher, civil servant, and small traders
3. 1 Ropani = 508.72msq
4. Women should not plough land.

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