



Migration and Agrarian Change in Eastern Hill Region of Nepal

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Abstract

Migration is a fundamental factor of human mobility and civilization through which people largely shift their ways of living to secure better life. The agrarian mode of social stratification dates back to the human civilization that have also been changing across. Among the various sectors, agriculture is considered to be the backbone of developing economy which has been largely influenced by mobility of the people. By considering this fact, the true value of migration lies on the rapid transformation of existing agrarian pattern of most of the economy. The aim of this paper is to analyze the role of migration in agrarian social change in the eastern hill of Nepal. This research paper is primarily based on the secondary data obtained through reviewing different published as well as digital scholarly sources and other official records to obtain the required information. The study reveals that migration is one of the dominant factors of agrarian social change in hill regions of Nepal. Since, agriculture growth is inevitable for better rural livelihood, the gradual diversification of rural livelihood dominantly influenced the agrarian social structure and the development of rural hill regions.

Keywords: Agrarian change, rural livelihood, occupation, backbone, transformation.

Introduction

Agriculture is the prime occupation and the backbone of most of the developing societies since human civilization. The countries that are in the low profile of international comparison, they are undoubtedly moving on stagnant and backward agrarian system with under or misutilized physical as well as human resources. The country which are backward and underdeveloped are not always facing the scarcity of resources but the techniques or to know how to manage the scarcely available means and resources is accepted as the principal understanding of development science. This fact is truly justified by the green revolution of China and India during the period of 1960s and 70s through massive growth in agro productivity (Pyakuryal and Upreti, 2011, p. 13). The most recent economic studies of the third world show that earlier conclusions about third

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world development were wrong. Earlier studies concluded that the best development plan was to concentrate on industrialization. However, newer studies show that agricultural development is just as important as, or even more important than, that of industrialization.

Agricultural development deserves fundamental importance for the achievement of sustainable development and broad-based economic growth, directly linked to food security and poverty reduction in case of developing nations like Nepal. The poor people of the remote areas are not only far from the access of basic public services but rather, they are facing the lack of basic minimum necessities and are severely suffered by poverty and hunger. Lekhi (2005) argued that agriculture is an important segment of traditional (feudal) economy, the transformation from feudalism to capitalism necessarily implies a transformation of agriculture.

As mentioned by famous economist Gunnar Myrdal, “It is an agricultural sector that the battle for long-term economic development will be won or lost”. Development history of developed countries revealed that the structural transformation of economic system which was predominantly focused on agricultural activities to the modern industrialised and serviced focused complex societies (Todaro & Smith, 2003). In this regard, people tend to migrate from one place to another for the sake of comfortable livelihood and gradually abandoned the contemporary agrarian social system and started adopting new dimension of survival. Prof. Schultz in his theory, “Transformation of Traditional Agriculture” states that there are three main attributes of traditional agriculture. They are:

1. Farming is a way of life based on long established tradition.
2. It is the institutional set up which deals with the ownership of land, legality of tenureship and share of home consumption in agricultural production.
3. Traditional agriculture has some technical properties (Lekhi, 2005).

On the basis of above attributes the farmers on traditional agriculture are compelled to stay as same as in the case of previous generations that is why the transformation of predominant agrarian setup is essential for country’s development.

Sunam & McCarthy (2015) in their article concluded that there exists the mixed outcome of migration in rural agrarian social structure. There are three basic dimensions of migration that has reshaped the status agrarian and social realtion. These domains are: land and agriculture; migration and labour market. As the migration takes place, the land and agricultural relation tend to change in the sence that the returning migrants purchased land not for cultivation but just for speculative motives that keeps land uncultivated and converted into fallow land. Growing trend of external as well as internal migration shift the livelihood of people from agrarian to the urban oriented settlement by which large productive land are left behind barren along with their old aged parents or grand parents. Of course migration may help people to adapt new ways of living, the arable land are under of missutilized by old aged and women and farm productivity often go through deterioration. Consequently, the peri-urban land use pattern has also changed as a result of fragmentation of land for speculative motives instesd of agrarian practices. That affect adversely to the agrarian system. On the other hand, positive arguments for the migration is that migrant people gradually abandone the existing agrarian practice which provides the opportunities to accupy such land by the landless

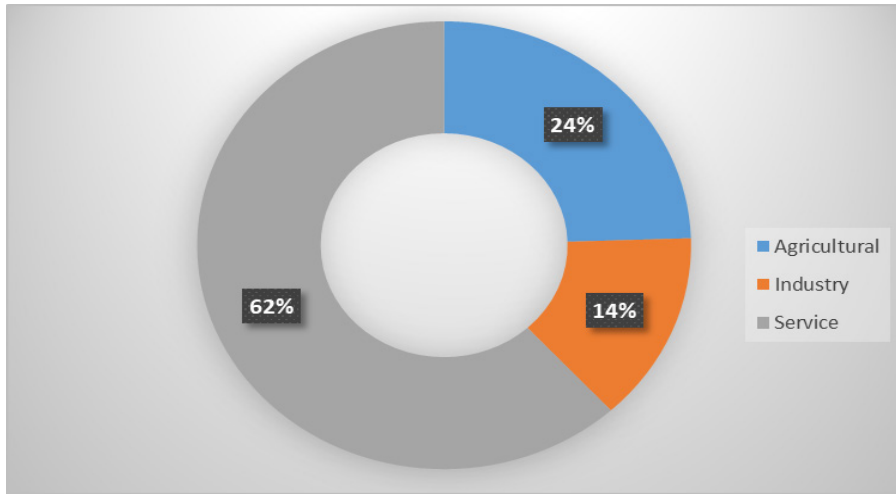
tenants and they cultivate and make it more valuable for their survival. That is how the migration might have mixed impact in agrarian system. Ghimire et al. (2019) draw the conclusion that there is positive correlation between labour migration and land use changes. In one hand, there would be huge shortage of youth work forces and remittances plays major roles over the land use decision at household level. Most of the dry field (*Bari*) are getting changed to barren bushes and forest, due to which there is acute food shortages in most of the remote rural areas.

Nepal is an underdeveloped agricultural country situated between the emerging Asian giant nations namely India and China. On the basis of geographical setting, it can be divided into three regions. They are; Mountain, Hill and Terai. The current population of this country is 29,164,578 having annual growth rate of 0.92 per cent which was 26,494,504 having 1.35 per cent annual growth in 2011 census. Among them 33.83 per cent people are still in rural municipalities having 66.17 per cent in urban municipalities even though the urbanization mainly after federal structure have been duly criticized. According to census 2021, because of the rapid migration from hill and mountain to Terai regions, 53.61 per cent of total population live in Terai region whereas 40.31 per cent and 6.08 per cent in Hill and Mountain regions respectively (National Statistical Office (NSO), 2023). The agricultural history of Nepal dates back earlier to the civilization in various phases of ruling system such as *Mallas, Lichhabi, Kirat, Shah and Ranas*. People are used to adopt agriculture as a basic occupation for survival and till now it is considered as a prime occupation of the majority of the rural masses for last several years.

Qin & Liao (2016) pointed out that there has been positive as well as negative consequences of migration on agriculture production system in the place of origin that contributes for rural restructuring as well. Because of unfavourable economic and environmental condition, migration induce withdrawal from agriculture in some rural regions may actually contribute to improve regional and national agricultural structure. Overall, the study pointed out the complex migration-agriculture interrelationship which is fundamentally depends upon the specific conjunctural configuration of the community, geographical locality and agricultural dependence in China. However, there is close relationship between migration and agriculture.

The basic causes of Nepalese agricultural stagnation is rely of the dominance of absentee landlords. Agricultural backwardness of the country is terrible due to the fact that those who are always passing their life in the farmland have no land. In contrary, those who are always having the plenty of lands have not put their foot in the farmland. That means the real peasant are far from the ownership of land due to which the agricultural productivity is gradually deteriorating day by day which depicts the traditional feudalistic stratification of society on the basis of ownership of land holding. On the same way uncontrolled migration and plotting of productive land nearby the road side for commercial purpose by the brokers further aggravates the problem of shortage and decline in agricultural production. Agricultural dominancy is unavoidable fact of Nepalese economy, although its transformation is not in the desirable pace. The percentage contribution of various sectors in Nepalese economy can be shown by the help of figure below:

Figure 1
Sectorwise GDP contribution of Nepal



Source: Economic Survey, 2022

Devkota (2009) in his article pointed out that for the transformation of entire socio-cultural and economic system in the country, agriculture transformation is necessary condition. Merely by means of agricultural transformation from subsistence to commercialized farming systems, Nepal's development and social change seems to be possible. By means of transforming agriculture toward commercialized farming system, the holistic structural transformation and sustainable livelihood enhancement is possible and appropriate in rural Nepal.

Since, there have been remarkable political change during the last 70 years, shifting from Rana ruling in 1950 to multiparty democracy in 1990 and even turning to the federal democratic republic in 2006, there is no significant transformation in socio-economic of common people. More specifically, the prevalent political shift does not coincide the agrarian social structure as a result of feudal domination over time. Basically, there are four basic layers to be changed for considerable agrarian change in reality even if there have been so many physical changes in the society. First, the *individual layer* comprising transformation of understanding, attitude and behavior. Second layer is *family* relating to transformation of value, culture, norms and relations. The third are agrarian *community layer* consists transformation of norms, values, tradition and relations. And finally at the fourth, *agrarian society* consisting change in rules and procedures along with norms and tradition (Pyakuryal & Upreti, 2011, pp 9).

The most prominent question for agrarian change

1. How can agricultural output and productivity per capita be substantially increased that will benefit the small farmer and contribute to supply for the urban population?
2. What is the process by which traditional farms are transformed into commercial farms?
3. Why do traditional farmers resist change?
4. Are price incentives sufficient to increase output?

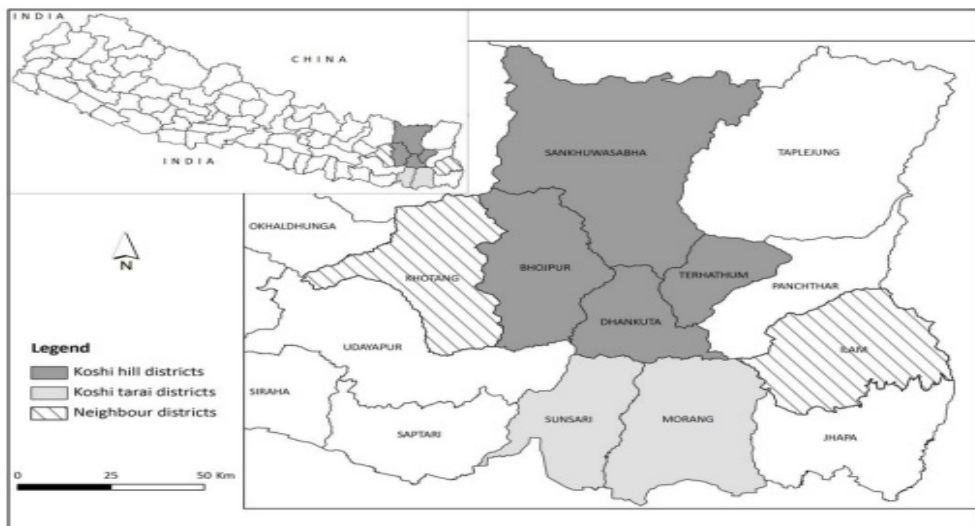
5. How migration of people from one place to another influence agrarian system in hill regions?

So the present study tries to answer the above mentioned questions. Rural development is inevitable for national development for which agriculture is in the core of all development in the Hill region of Koshi province of Nepal. The increasing trend of rural to urban migration, specifically from Hill to Terai is the basic problem of this region. Increased access with Terai and urban region as a result of increased income from remittance and other valuable cash crops production, the people of this region are continuously being migrated to other areas either temporarily or permanently. That is one of the serious challenges for the planners and policy makers in this region. This paper aimed to analyze the growing trend of migration and effect on recent agrarian change at the eastern hill region of Nepal. More specifically, it is intends to find out how the agrarian social change has been taking place in the selected four district of Koshi province of eastern Nepal.

Materials and Methods

This research paper is based on a descriptive research design. The natures of the data are qualitative as well as quantitative and derived mainly from secondary sources. Secondary data are collected from different journal articles, records of DCCs, agricultural office and other related organization. This study in basically concentrated within the four hill district of Koshi province namely Sankhuwasabha, Terhathum, Dhankuta and Bhojpur which are popularly called as Koshi Hill region mainly after the inception of contemporary Koshi Hill Area Rural Development Project (KHARDEP) in the year 1987. Only descriptive statistics like percentage and average are used for the analysis. The stusy area can be shown in the following figure.

Figure 2: Sketch map of Koshi Hill region of Eastern Nepal



Source: National Planning Commission (NPC, 2013)

Results and Discussion

The production and productivity of agriculture sector is remained backward in developing world of Asia, Africa and Latin America. It is not merely due to the low quality and availability of land resources, rather it is due to the absence of improved technology, skill of the workers, better quality of seeds and institutional arrangement such as financial facilities, cooperatives, market and others. Various studies and literature of development reveals the fact that the achievement in the agricultural advancement in Japan and Mexico is not merely because of the quality land but due to their rapid modernization and commercialization in traditional agricultural system. If not so, it is said that Japan and South Korea were said to be as same as Nepal a developing Country before forty years. But let us compare where they are, and what is our position? Since, agricultural transformation demands massive investment, the government of Nepal allocate less than 3 per cent of its spending in the sector (Acharya & Bhandari, 2011).

Eastern hill region is primarily rura area and one of the recidents of agrarian dominant livelihood of Nepal. According to Khatiwada (2013), mainly after the construction of Koshi Highway in Koshi Hill region during 1980s, the traditional agriculture based closed economy has been changing to open market economy. The production system based on market demand induce people for crop intensification, diversification and commercialization by which the traditional subsistence based agriculture system of this region gradually transformed to the palce of the production of competitive advantages and high value crops. This region is itself full of diversities due to which product variation is found in this region as well. The lower hill areas are mainly dominated by cereal crops whereas higher hill areas are famous for cattle grazing, herbs and tourism. Similarly mid-hill is thought to be appropriate for horticulture and mixed farming system. This is how the agrarian pattern of this region has been gradually changed to intensive cultivation and improved socio-economic condition of people.

An empirical study conducted in the Koshi hill area observed that there have been significant changes in the land use pattern of Koshi hill region particularly in consistant increase in forest land and more intensification in arable land. Further more, the agrarian pattern has changed by replacing traditional cereal crops practice to the more commercial crops like vegetables and other high-value corops like; lagre cardamom, ginger, seeds and fruits. This has been taken place basically due to the different development programs like; community forestry, road construction and introduction of improved agricultural development programs that foster groeth in production, consumption and trading within and outside the communities. The reason behind the declining trend traditional agrarian system is that some patches of agrarian land have been abandoned barren because of the growing trend of local youths migrating outwards either temporarily or permanently for the sake of better life (Pradhan & Sharma, 2017). To visualize the changing land use pattern of. Koshi Hill area, it is better to go through the table 1 below.

Tabel 1

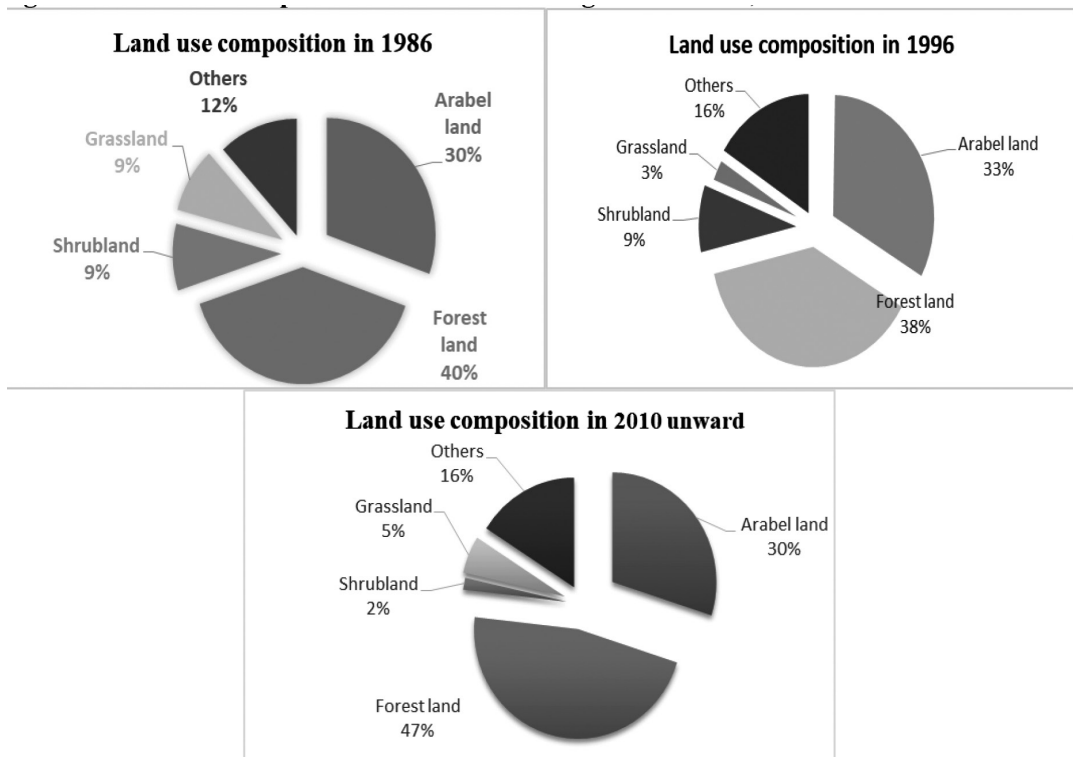
Landuse pattern of Koshi Hills (Sankhuwasabha, Terhathum, Dhankuta & Bhojpur)

| Land use catogeries | 1986 | | 1996 | | 2010 onward | |
|---------------------|-----------|---------|-----------|---------|-------------|---------|
| | Area (Ha) | Percent | Area (Ha) | Percent | Area (Ha) | Percent |
| Arabel land | 199,404 | 30.4 | 219,688 | 33.5 | 196,400 | 29.9 |
| Forest land | 259,366 | 39.5 | 254,918 | 37.5 | 307,154 | 46.8 |
| Shrubland | 60,541 | 9.2 | 61,946 | 9.4 | 11,544 | 1.8 |
| Grassland | 59,254 | 9.0 | 20,718 | 3.2 | 36,216 | 5.5 |
| Others | 77,551 | 11.8 | 107,846 | 16.4 | 104,802 | 16.0 |

Source: Pradhan & Sharma (2017)

Table 1 clearly shoes that distribution of arable land is in declining trend after 2010 whereas forest coverage which is caused by the growing migrations over the years. That means with the growing attraction toward migration and abandonment of land which gradually converted into forest land because of the absence of cultivation. This is the true picture of developing societies where majority youth are seeking job other than agriculture in reality. The comparative status of landuse pattern of this region in graphically shown below:

Figure 3 Land use composition of different catogeries in 1986, 1996 and 2010 onward



The given figure 3 clearly demonstrate the land use composition change during different time. There is no significant change in arable land even if there is fluctuation during each period. On the other hand the forest land has remarkably increased mainly after 2010 onward which means unused land are gradually changing into forest which were previously cultivated for agriculture. However, the research area is not so affected from the environmental view point because of growth in forest areas along with grass land even there is declining shrubland after 2010.

Status of household with absentee population

It is viewed that absentee population or members in the family truly represents the growing mobility of the people in the region which directly influence the socio-economic change from the agrarian social structure to the more intensified ways of living. Even the absentee member represents temporary migration, this ultimately figure out the declining public attraction toward traditional agrarian system. While analyzing the current census statistics of proposed study areas, each of the district are consist with 35 to 40 percent household having at least one or two absentee member either within or outside the country. The basic reason behing doing this is because of growing attraction for comfortable job outside the house by abandoning predominant occupation of agriculture even if the figure of cultivable land does reveal that position.

Table 2

Current status of absentee population migrated outside

| District | Total Household | Absentee household (within the country) | | Absentee household (outside the country) | |
|-----------------------|-----------------|---|------------|--|------------|
| | | Household/ % of total HH | Population | Household/% of total HH | Population |
| Koshi Province | 1191556 | 153603/ (12.89) | 347361 | 269892(22.65) | 343034 |
| Sankhuwasabha | 39173 | 8418/(21.49) | 19139 | 6369/(16.26) | 7904 |
| Bhojpur | 38631 | 8997/(23.29) | 23871 | 7216/(18.68) | 9109 |
| Dhankuta | 37648 | 7764/(20.62) | 18942 | 7979/(21.2) | 9592 |
| Terhathum | 21857 | 3855/(17.64) | 9015 | 4680/(21.41) | 5772 |

Source: (NSO, 2023)

Table 2, demonstrate the total number of household currently exist in latest census 2021, living entirely in Koshi province, along with districtwise household distribution of 4 selected district. In general, each of the four district as well as Koshi prinvnc have nearly 35 to 40 per cent or more leaving their household either from within the country or abroad. Still a huge number of population from this region are migrating outside for the sake of better survival of their own and for entire family.

Situation of agrarian social change in Hill region of Nepal

Koshi Hill region is constituted by joining four (4) different hill districts of Koshi province in eastern Nepal. It is said to be the Koshi region because each of these districts are connected with the same *Arun* River that is famous and the largest one of Saptakoshi river of Nepal. Now each of the districts are connected by road network which is considered as basic infrastructure of development. On the same way basic agrarian change usually takes place along with the infrastructures like road networks by which the available goods, services, and agricultural technology become widespread.

The agricultural commercialization and transformation can really play a prominent role for the development of this region. Although the administrative restructure of federal Nepal converted different Village Development Committee (VDC) in to single municipality, this region is largely constituted by rural areas. Now a day, rural areas of each of these districts are trying to be more commercialized and accessed with various new technology, production methodology and even in the cultivation of highly commercialized crops and occupation in comparison to last few couple of years. That might be the result of federal structure and legal authorities granted to the local bodies, active involvement of various local as well as outsiders NGOs and in the same way sufficient availability of conditional and non-conditional grants provided by the government through local bodies. Khatiwada (2013) argues that a lot of changes have been taking place with the introduction of new crops for market and it is the result of individual efforts, knowledge of agricultural inputs and use of technology. Now a day along with the commercial crops, livestock have become very important income sources because of its geographical conditions and distinctive ecological characteristics.

The youth people of this region in these days are undoubtedly prefer to foreign employment as a convenient opportunities, along with this noticeable attraction of rural people has been going on the highly commercialized as well as alternative ways of agriculture rather than that of traditional. Some of the major modified and commercialized sectors are as follows:

1. Small and cottage industries: - *Dhaka Kapada*, *Allo* Production, *Bhojpure Khukuri*, Production of copper and Kans (Bronz), *Churpi* Production, Tea Production etc.
2. Valuable medicinal products: - *Alaichee*, *Rudrakshe*, *Chiraito*, *Haledo* etc.
3. Commercialized crops: - Production of potato, tomato, different vegetables, ginger, garlic, onion, various fruits like; mango, pear, orange, Avocado, Lichee etc.
4. Some other sectors of occupation:- Animal Husbandry, bee keeping, poultry farming, hotel and restaurant, tourism related activities etc.

By the help of above mentioned occupation and products, the living standard of this region has been increasing everyday. The household structure and purchasing power of people has also been changing rapidly due to which people are well accessed with health, education, communication and other public services. So there is no doubt, the real meaning of rural development does not prefer to search the livelihood by leaving the rural settlement and existing occupation but rather by living within the settlement with having proper and desirable improvement and transformation of existing occupation i.e. agriculture.

The field study reveals that the agricultural transformation practice is more rapid in Dhankuta and Terhathum in comparison of Bhojpur and Sankhuwasabha. Vegetable farming and cash crops (which are perishable in nature) production are relatively more common in Dhankuta and Terhathum because of quick market access due to all season road networks but as a result of seasonality of the road networks in Bhojpur and Sankhuwasabha, the commercial cash crops with non-perishable nature such as aagwah beans, *alaichee*, *rudrakshe*, *allo*, *chiraito* and some other product of cottage industries are more common product for the market.

Recent Agrarian change Practice in Nepal

The study area is one of the representative hill region of Nepal. It represents the overall scenario of rural hill region and agricultural practice of this country. So the efforts and policies made for the national agricultural reform directly affects to the ***agricultural transformation and rural development*** of this region. Some of the recent efforts made by the government and other responsible authorities that are undertaken mainly after the second people's movements of 2006 are shown in the following points:

- a. Various organizational frameworks are created such as; Ministry of Agriculture, Department of Agriculture, Regional and District level offices of Agriculture have established;
- b. Different research institute for agricultural transformation such as NARC, Pakhribas Agricultural research Centre, Central food Lab, Crop Research Khumaltar etc. are established.
- c. National Agricultural Policy-2061BS and National Agricultural Business Policy-2062BS have been formulated;
- d. Agricultural Perspective Plan come in to exist as a 20 years plan to achieve a six fold increase in growth of agricultural income per capita both via (a) increase output growth and (b) decreased population growth.
- e. A handsome amount of budget has started to allocate in periodic plan, such as 15.11% in 11th Three year interim plan, 12.79% in 12th three year plan in agricultural sector.
- f. Provision to pocket zone for particular agricultural product at a region has started.
- g. Local bodies are competitively including agricultural policies as their priority area to different ward as well as municipal level, etc (NPC, 20011).

Problems of Agricultural change in Hill region

This region in recent days are accessed with national road networks and electricity, however it is thought to be insufficient for the rapid growth and development. Including others, both of these infrastructure are even seasonal in nature. So, people of this region are facing problems for agricultural transformation and rural development. Some of the major problems in agriculture are traditional technologies, seasonal type of cultivation, insufficient infrastructures like road, irrigation and marketing, declining land holding, growing outmigration, low access to modern tools and techniques of cultivation and lack of appropriate research and development are the remarkable and that has to be settled. Additionally, many studies conducted for the

region revealed that Koshi hill region is one of the good from diversified productive point view. However, people intend to migrate from that region is mainly due to the lack of slopy tarrain and poor infrastructural development that compelled people going outside the region. One of the fundamental tools and policy measure to bring agrarian change is considered as land reform which has multidimensional connection determining power relations in society (Chhetri, 2011).

Prospects of agrarian change in Rural Hills of Nepal

A study conducted by the team of experts in the initiation of National Planning Commission of Nepal identified that people mainly after the eradition of malaria and expansion of frmlands along with growing employment opportunities in terai region, threr has been massive migration from this hill region to terai. Study futher identified four remarkable long term change in the region which are; new opportunities within a region, opportunities outside the region, better quality of life at individual level and better quality of life at household level. However, the larger context of social change in the Koshi Hill region has taken place due to following three reasons. The first is changing role of local institution and government system. Secondly, new local level planning process for development is another one which materialized the change in the region and thirdly, it is the structural change in society that demand new ways of life in hill regions.

These points specify that Hill areas of eastern Nepal have large potentialities for agrarian social change by which overall development in general and rural development in particular is possible (NPC, 2013). It is clearly pointed out that international migration definitely have greater family inclme and increased consumption level as a result of remittance sent by migrant workers, it has negative impact impact on crop production and neglect subsistence crop farming due to easy access with alternative income sources for livelihood requirements. Migration concentrating male youth not only reduces labour force for farming and growing feminization of farm sector, but also reduced the investment in crop inputs and declined attraction in the sector (Maharjan et al., 2013).

Conclusion

Despite having enough growth potential, the agrarian social structure of this region have been transformed basically due to growing trend of temporary as well as permanent migration. Even social transformation is inevitable with growing access of technology and innovation, the agrarian social structure of this region has not shown desirable impact in Koshi Hill region in the country. However, the agro-social structure has remarkably changed from traditional, subsistence based, cereal crop dominant ghly dependent economy to modern, and intensive commercialized cash crops dominant economy. Majority youth are intend to migrate outside the region for the sake of better inclme, education and living standard even if there has been remarkable change in access to the outside market through road and communication networks. Although migration would have positive outcome in securing livelihoods of poor households, the short run positivity and negative impact on crop production in the long run is highly considered by policy makers. To put into

nutshell, agrarian social change in hill region of Nepal is said to be desirable only when there is greater attention of local as well as national authorities for the sustainable improvement of social and economic infrastructure in the region such as, health, education, security of life and property along with proper management of physical facilities like road, irrigation, electricity, market and better working opportunities so that growing youth migration for different purpose can be reduced .

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