Agrarian Transformation in Rural Society

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Abstract: After the political change in 1951, the first turning point in agrarian transformation of Nepal was kick started. During that period, many policies have been introduced by the government with the concept of agrarian transformation, but the transformation process is not getting speedily due to small unscientific farm size, resource constraints, inadequate infrastructure development, lack of alternative employment opportunities, lack of technical knowledge and business skills among farmers, and inadequate policy supports. A land right is a particular importance in Nepal as they are interlinked with social, economic, political, cultural, psychological, and other factor. For over 50 years governments, politicians and authorities have promised 'Land to the tiller' but a genuine land reform process has not even begun. The aim of this paper was to investigate the drivers of agrarian transformation in rural society and estimate the impact of the government policies and programs on agricultural transformation in Nepal. The results indicated three key drivers of agrarian transformation like spatial, economic, and social. The paper concluded by highlighting some ways to address the agrarian transformation of rural Nepal.

1. Introduction and background

An agrarian society is an agricultural society in which economy is based on agricultural sector. Most of the populations depend on agriculture sector. In an agrarian society cultivating the land is the primary source of wealth. In the stone era living conditions were very hard. Basically, their living conditions dependent on hunting, fishing and collecting edible plants from the nature. They did not know how to produce the things, so that the life was totally wild. They did not have any land rights, no political organizations. Division of labor was depended on age and sex. Men were involved in hunting huge animals and women usually involved in gathering the plant foods. Agrarian society refers to “any form of society, especially so traditional societies, primarily based on agricultural and craft production rather than industrial production” [6]. The mode of production of the agrarian society is distinguishes from the hunter-gatherer society which produces none of its food, and the horticultural society which produces food in small gardens rather than big fields. Agricultural society based on the invention of the plough [6], so that agricultural society means the society, which is predominantly agricultural [22]. Slowly, they formed groups for food supply, society started domestication of plants and animals which was the turning point of development of the agricultural sector. They started to produce production materials and households tools. Some people managed stored surplus product. Agriculture society changed the wild system to a little advanced system. In the process of development, from the agricultural system the society jumped into industrial system. People were depended on human and animal power, different machineries were invented. Human developed technology, they used new technology in industrial area. Trade, profit, international marketing system was established. From the stone era to modern society agricultural system plays the pivotal role for the development of the country.

Nepalese society is rapidly moving towards urbanization, modernization, and commercialization. This has negative implications in agrarian society with the effects on agriculture the backbone of Nepalese economy. Changing population dynamics in rural areas as there is a shortage of farm labor due to male outmigration and increased feminization of agriculture [19]. Though, the agricultural society can slowly transform to the industrial society. When less than half the members of an agrarian society are actively engaged in agriculture, that society has become industrial society and these societies import food, and their cities are centers of trade and manufacturing [3].

2. Objective

The study carried out the following objectives;

1. To assess agrarian transformation in rural society in Nepal.

2. To ensure impact of the government policies and programs on agrarian transformation in Nepal.

3. Study methodology

In this paper, secondary relevant data gathered from different online journals, research articles, different books were reviewed, and managed to the form of this article for better understanding on agrarian transformation in rural society in Nepal. To
realize agrarian structure of Nepalese society conceptual framework has elaborated.

4. An overview of agrarian structure in Nepal

Most agrarian societies have some common characteristics. Its key characteristic is that the economy is generally centered primarily on agriculture however agrarian societies can be involved in other economic activities. The first agrarian societies arose approximately six thousand years ago in Egypt and slightly later in China and India [7]. Agrarian society refers to the society that depends upon agriculture as its primary economic activity. Agrarian social structure encompasses pattern of ownership of land, nature of distribution of land, modes of fulfilling the need for labor force required for agricultural production, type of agricultural technology, type of division of labor, etc.

The below figure is the analytical framework and explanatory concepts of Nepalese agrarian society, shows the overview of Nepalese agrarian structure
Figure-1: Analytical framework and explanatory concepts of Nepalese agrarian society

Nepalese agrarian social structure

Ownership of land
- Most of the agrarian society do not own a land
- Among the land owning members, there is inequality in terms of ownership of fertile and irrigated land
- The rich landowners own much of the total arable land
- Much of the land owned by the poor land owners is less fertile and lack of irrigation facility

Distribution of land
- The distribution of land is extremely unequal
- Much of the arable land is possessed by few
- A majority of the land owners own small amount of the total arable land. 26 percent of total land owners own more than 61% of total agricultural land

Labor force
- Labor force is fulfilled in three ways: - using the family members, hiring people and adopting labor exchanged
- Due to the tendency to go abroad for foreign employment, is very difficult to fulfill the need for labor force in any of these ways

Agricultural technology
- The technology used in agrarian society is traditional
- Machines are not used for scattering seeds and harvesting crops
- Male cows and buffaloes are used to plough the land and improved seeds are rarely used

Division of labor
- The division of labor is generally based on age and sex. based on skill and knowledge has yet to be developed
- In developed countries division of labor is based on knowledge and skill.

Transitional phase
- The agrarian society is at transitional phase now
- It is gradually moving from the traditional agriculture to the modern commercial farming

Social stratification
- Agrarian society is highly stratified
- There are three classes based on land ownership-the landlords, the peasants and the tenants

Ethnic heterogeneity
- Agrarian structure is characterized by ethnic heterogeneity
- People engaged in agriculture are ethnically heterogeneous

Small amount of agricultural land
- There is not extremely large amount of arable land
- Only 18% of total land is cultivable

Influence socio-cultural norms and values
- Agrarian society is influenced by socio-cultural norms and values
- Division of labor based on caste and sex: Brahman people do not plough the land; females do not plough the land

Decreasing demographic size
- The number of people engaged in agriculture as their primary occupation is decreasing gradually
- In 1991, accounted for 81% of total population; in 2001, it decreased from 81% to 78%
- Estimated to have decreased to 65% from 78%

Sense of Unity
- Exhibit a strong in-group feeling
- Physically, economically and socially homogenous
- Strong ‘we’ feeling’ in the name of village glory
- Any outsider violating the village norms and customs is heavily punished

Source: Own graphic from different sources.
Analytical framework and explanatory concepts of Nepalese agrarian society shows the interlinked among ownership of land, distribution of land, agricultural technology, transitional phase, labor force, division of labor, social stratification, influence of socio-cultural norms and values, ethnic heterogeneity of Nepalese agrarian population, ecological diversity, small amount of agricultural land, and decreasing demographic size of Nepalese agrarian society. The conceptual framework’s major message is the sense of unity in rural society in the name of village glory and good relations among the village people. It may also be said that agrarian society currently is being influenced more and more by the features of industrial society. The continued extension of commercial farming with an eye to profits, along with the introduction of machinery has greatly influenced the agrarian societies. The agrarian society is gradually undergoing transformation under the impact of industrialization. The introduction of commercialization, and mechanization into agriculture means that the urban ways of life more and more influence agrarian culture.

5. Agrarian transformation

The word 'rural transformation' has a broader meaning in itself. Transformation is the process or the event that occurs when something changes from one to another. Likewise, the transformation which is not associated with the urban will be referred to as rural transformation. Rural transformation is associated with agrarian transformation. Transformation involves many contexts like economic, physical, mobilization, cultural, political, administrative, sociological and many other aspects [26], so that the transformation of the agricultural sector is central to the future growth and well-being [4].

We can take an example from India. India has witnessed enormous agrarian transformation. This has occurred due to the policies introduced by the state, which included land reforms, community development programs, Green Revolution and several welfare schemes. As a result of the agrarian transformation, a set of new classes emerged in rural society, while old classes disappeared or got transformed. The agrarian transformation has affected politics in India to a significant extent [25].

The entire world is in a crisis with multiple dimensions i.e. food crisis, an energy crisis, a climate crisis and a financial crisis. To find real solutions we need speculative finance in our food system that is real way out of the food crisis [2]. So many researches have been done about agrarian transformation in the world. Hualou Long and Yansui Liu [10] conducted a research in 2016 about rural restructuring in China. They suggested three dimensions of rural restructuring: spatial, economic, and social restructuring which is shown in the below figure.
Agriculture sector of Nepal has huge potential for development. The share of agriculture sector to GDP is 29.37% [13]. It is obvious that it needs less time, effort and resources to transform the agriculture sector than to develop any other sector. Agricultural transformation is the process by which individual farms shift from highly diversified, subsistence-oriented production towards more specialized production oriented towards the market or other systems of exchange. The process involves a greater reliance on input and output delivery systems and increased integration of agriculture with other sectors of the domestic and international economies.

Agricultural transformation is a necessary part of the broader process of structural transformation, in which an increasing proportion of economic output and employment are generated by sectors other than agriculture. Agriculture transformation is not only concerned with the land labor ratio nor only production factors. It is a function of various factors such as production, psychological, social, governance and political factors. Modernization and commercialization of agriculture by increasing production and productivity through an adequate arrangement of agricultural inputs such as improved seeds, fertilizers, irrigation, agricultural credit, technology, and skilled human resource is a challenging task [13].

Nepal is experiencing unprecedented socioeconomic changes, including massive outmigration of the youth. Nepalese society is rapidly moving towards urbanization, monetization and commercialization, reinforced by economic globalization and market enforcement. This has implications in terms of changing agro-based land use and livelihood. With these effects, agriculture the backbone of Nepalese economy is going through a massive transition, mainly caused by changing population dynamics in rural areas as there is a shortage of farm labor due to male outmigration and increased feminization of agriculture. Land tenure system is one of the important determinants of the land productivity, the primary concern of agrarian reform. Agrarian reforms follow the land reform. Only a successful land reform yields a successful agrarian reform. Land reform, unlike previous discourses, should not be confined to a mere mechanism of land redistribution, but it necessarily includes redistribution or reallocation of rights to establish a more equitable distribution of farmland. Land reform and agrarian reform in our context signify the same process and the same outcomes, as well. Both land reform and agrarian reform aim to...
achieve greater productivity and production, and at the meantime also aim to ensure distributive justice for landless and small farmers, who constitute the majority of the agricultural productive force. These are the political processes targeting to the goals of economic transformation and social justice.

6. Government policies and programs on agricultural transformation in Nepal

Nepal is divided into three physiographic regions: mountains, hills and terai, with elevation ranging from 60 m. in the terai flatland in the south to 8848 m. Himalayas in the north [8]. Climate also varies according to topography. The features of Nepalese agriculture are unique in the sense of its complex nature of farming systems. Under the Ministry of Agriculture Development, there are so many organizations working on agricultural research and development programs. In this section the details of the research and developmental programs and policies from which farmers benefited are given. Efforts have been made to obtain a comprehensive list of programs, missions and policies implemented. In the process it is also likely that a few important schemes may have been missed. Agriculture productivity and the level of technology adoption are very low. However, many organizations have been implementing the government plans and policies. The Nepal Agricultural Research Council (NARC), and the Department of Agricultures’ (DoA) approaches to agrarian reform in Nepal is built on the foundation of sound scientific research, technology development and enhanced use of extension services through which ultimate goal of uplift the rural farmers livelihood. Those implementing body of the Government of Nepal under the Ministry of Agriculture Development as depicted in the figure below.

Figure-3: Government structure of agricultural research and development in Nepal

[Diagram showing the government structure of agricultural research and development in Nepal]
NARC is a prime agricultural research organization in Nepal. It has been conducted an efficient, effective and dynamic agriculture research system since 1991 after its establishment. The main objective is to undertake agricultural research activities for increasing agricultural productivity and production by generating appropriate agricultural technologies suitable to various agro-ecological zones on diversified crops like cereals, grain legumes, oilseeds, cash/industrial crops, horticulture (fruit and vegetable crops), livestock, swine, avian and fishery, and other subject related to agriculture to uplift the economic level and standard of living of the people by research activities on agriculture.

DoA has been working as a government main agency for implementing the government plan and policies in agricultural sector. It has main responsibility for public sector extension services. The departments are headed by Directors-General (DG) and supported by Deputy Directors-General (DDG). At the central level, there are disciplinary program directorates to help the departments in specific subject matters and to advise on matters related to policy, planning, monitoring and evaluation. These directorates supervise and provide technical guidance to agricultural farms and district level extension offices. Private sector linkage and coordination are also facilitated by these programs directorates. In essence, they function as technical hands of the departments. Government of Nepal has introduced many agricultural policies which somehow help for agrarian transformation in Nepal. Ministry of Agriculture Development compiled more than 20 policies from the agriculture sector which are National Agriculture Policy 2004, Agri. Business Promotion Policy 2006, Agri. Biodiversity Policy 2006, National Tea Policy 2000, National Coffee Policy 2003, Dairy Development Policy 2007, National Seeds Policy 1999, National Fertilizer Policy 2001, Irrigation Policy 2003, Poultry Policy 2011, Pasture Policy 2011, Floral Promotion Policy 2006, Agri. Biodiversity Policy 2011, Pasture Policy 2011, Livestock Services (DoLS), Institute of Agriculture and Forestry University (AFU) are functioning under different umbrellas, making coordination and linkage functions difficult to enable the provision of unified extension services to farmers.

During the last six decades the agrarian transformation activities have been also supported by different international development partners. Several policies were also conducted with different approaches to the donor-assisted projects which have been implemented throughout the country. Some examples of government programs of agrarian transformation in Nepal are service to the disadvantages and women farmers, decrease in migration of youth, training and visit program, block production program (the concept of green revolution technology program), the tuki extension program, integrated rural development project, agriculture credit for small farmers, Agriculture Development Strategy (ADS), Prime Minister Agriculture Modernization Project (PM-AMP), etc. The PM-AMP is a ten year project which was launched in 2016. This is the government intervention program in agriculture sector with aim to consolidate smallholder farmers to boost agro production.

The many structural changes which occurred for agrarian transformation in rural Nepal between 1924 and 1992 are presented in the box below.
Box-1: Structural changes in agrarian system in Nepal

<table>
<thead>
<tr>
<th>Year</th>
<th>Structural changes in agricultural related institutions</th>
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<tbody>
<tr>
<td>1924</td>
<td>The Department of Agriculture was created and two trial and demonstration farms (one each for crops and horticulture) were established in the Kathmandu Valley.</td>
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<tr>
<td>1947</td>
<td>The Parwanipur Agriculture Station, Bara (Terai) was established, focusing on the Terai environment for the production of cereal crops in Nepal.</td>
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<td>1950s</td>
<td>Additional research stations and farms were established (e.g. at Janakpur, Chitwan, Pokhara) and various disciplinary divisions (e.g. agronomy, pathology and soils) were created to test and modify exotic technologies for application in Nepalese conditions.</td>
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<tr>
<td>1966</td>
<td>The existing Department of Agriculture was dissolved and five new departments were created (Agricultural Education and Research, Agricultural Extension, Horticulture, Livestock and Animal Health and Fisheries). The Department of Agricultural Education and Research was made responsible for cereal crop research in Nepal.</td>
</tr>
<tr>
<td>1971</td>
<td>A separate commodity-specific research program on some major crops was initiated by the Department of Agricultural Education and Research.</td>
</tr>
<tr>
<td>1972/73</td>
<td>A ten-year agricultural development plan was formulated; the existing five departments were merged into one Department of Agriculture within the Ministry of Food, Agriculture and Irrigation; and the commodity-specific research programs were expanded to include rice, maize, wheat, citrus and potatoes. Thus, the national rice research program (then called the Rice Improvement Program) was created as the commodity-specific program for rice to test and develop new high-yielding rice technologies in the country.</td>
</tr>
<tr>
<td>1985</td>
<td>The National Agricultural Research and Services Centre (NARSC) was created to strengthen and coordinate research activities of the Department of Agriculture.</td>
</tr>
<tr>
<td>1987</td>
<td>The services component of NARSC was omitted and NARSC became the central secretariat of the Research Coordination Committee (RCC) within the MoAD.</td>
</tr>
<tr>
<td>1990</td>
<td>NARSC became the NARC, an autonomous institution governed by a board, headed by the minister for agriculture.</td>
</tr>
<tr>
<td>1991</td>
<td>The Government of Nepal nominated NARC board members, representing, among others, agricultural research scientists, industrialists and farmers.</td>
</tr>
<tr>
<td>1992</td>
<td>By-laws were drafted (for approval by the NARC board members) to give greater flexibility and freedom to the executive director to achieve more effective research planning and administration.</td>
</tr>
</tbody>
</table>


Modern agriculture development system was established in 1950's in Nepal. Previously autocratic rule executed by the Rana Regime, at that time imported Jersey and Red Sindhi cattle, clover grass, tea, and other plant species from Europe [8]. The democratic government made a direction of improving the well-being of people by starting the first development plan in 1956. During the first planning period cereal crop varieties released plan was forecasted [24]. At the same time Nepal became a member of Food and Agriculture Organization (FAO) under the United-Nation system. After the first five year plan, Nepal's first agriculture conference was organized in 1958 [5], and many agriculture and livestock offices, Agriculture University, different donor funded agricultural related projects were established across the country. Agriculture village development project was launched in 1952. That was one of the biggest project in Nepal, agriculture credit system, and agriculture farm was established in Khumaltar, Lalitpur, in support with United States Agency for International Development (USAID) [24]. Likewise, Agriculture Development Bank was established in 1967, which was another development in agriculture sector. Though, the agrarian transformation in Nepal was kick started after 1950’s. There are so many challenges in agriculture transformation, without transformation of agrarian rural society overall growth cannot be achieved.

7. Challenges of agrarian transformation in Nepal

Agrarian reform is a redistribution of agriculture land of the country. Land reform is concerned with rights of land, which is a major political agenda of political parties to influence small farmer and landless
population. Mainly three elements like resource, technology, and organization can make significance difference to the capacities of the farmers for meeting their needs and wants, so that rural transformation can be positively impacted to the farmers and it has to be empowered and provide a greater role in the economy and politics of the nation. Land reform policies vary from country to country which are depended upon the countries’ political, economic, and social background [21]. Land Reform Act, 1964 was the first land reform act in Nepal, which has been amended several times. The major objective of this act is redistribution of the surplus land to land-poor or landless farmers. This act somehow abolished “Zamindari System” and imposed ceiling of the land ownership. This land reform policy achieved nearly 31000 ha surplus land by imposing ceiling on land holding [1]). Based on the agricultural statistics on 2014, a total cultivated land in agriculture was 30,91,000 ha in Nepal [12]. Elites in the Nepalese society have very strong links with land holding. Former king Gyanendra owned over 7740 Ropani (384 ha) of land alone [9]. Disparities in farm size also generate a vast socio-economic difference.

Agrarian transformation is an outcome of various factors such as production factors, psychological and social factors, governance and political factors and contextual factors, which is shown in the below figure. These factors also influence all sub-systems of the entire society [16]. State, law, rules and regulations, strategies, labor, capital, technologies are crucially importance in agrarian changing process. The implementation of an agrarian transformation is usually the responsibility of the government, ministry, department or respective authority. The figure shows that all components of agrarian transformation are equally importance for agrarian change. Besides this globalization and other external factors heavily influence in the agrarian transformation process.

Figure-4: Conceptual framework and major components of agrarian transformation

Contextual Factors (External, Political)

Production Factors (Land, Labor, Market, Capital, Technology)

Agrarian Transformation

Psychological / Social Factors

Governance Factors (Laws, Regulations, People’s Participation, etc.)

Most of the rural societies are integrated communities in which various components like agricultural, non-agricultural, economic, social, political, religious and secular are closely interrelated and cannot easily be separated. The same integration of components also applies to such measures as agrarian reforms that aim at changing the situation. Similarly, the performance of the agricultural sector and the complexity of the land tenure situation influence other sector of the economy and should, therefore, not be observed in
Government policies should be directed towards integrated farming system for the landless and marginalized peasants by providing subsidies on land lease, interest investment with meaningful resources. Policies and programs should encourage the use of fertile land in farming and discourage keeping fertile land barren. Agrarian transformation is not as complex as it said, comprehensive agrarian reform is important for sustainable agriculture development. Allocation of more budget, more peasant-friendly programs and effective delivery services are needed for the transformation of agrarian society. The government should work to make agriculture a respectable and profitable profession.

Agrarian transformation can reduce inequalities in income, wealth and living standards and at strengthening independent and self-reliant farmers. The economic objectives of such reforms are to increase agricultural production, improve capital formation and increase demand for farm inputs and services that stimulate development in the industrial sector.

References


8. Summary and conclusion

Agriculture in Nepal is characterized by low productivity which is mainly due to predominance of traditional farming practices, heavy reliance on weather conditions and poor infrastructure development. Agriculture has been one of the pillars of the development despite the fact, decades of investment is only few progress in Nepalese agriculture. Weak policy formulation, implementation, monitoring, and evaluation system together with inconsistency in agriculture is an important issue which has created frustration among agrarian society. However, the government has been developing many policies, rules and regulations with the concept of agrarian transformation, but the transformation process is not getting momentum due to small unscientific farm size, resource constraints, inadequate infrastructure development, lack of alternative employment opportunities, lack of technical knowledge and business skills among farmers and inadequate policy supports. In this regard, the major ways to transform Nepalese agrarian society as an industrial society; need to achieve much higher productivity, competitiveness, inclusiveness, and sustainability which is also a road map of ADS. Lack of prioritization of agriculture, which gets only 2 to 3% of the annual budget on average, is not sufficient for the industrialization and commercialization of agriculture and to support the farmers.


