Abstract

This paper analyzes agricultural development in terms of policy and implementation in Nepal. More than two-thirds populations in Nepal reside in the rural area and most of them depend on agriculture. Subsistence form of agriculture is common in Nepal. Rural Area and agriculture are interrelated; like two parts of the same coin. The contribution of agriculture to national Gross Domestic Product is remarkable; however, it is declining over the decades. In fact, the agricultural sector cannot attract young people; the trend of migration from rural to urban is significantly increasing. The poverty is exceedingly marked in rural Nepal. The Government of Nepal emphasizes agriculture development in for poverty alleviation. Order to alleviate poverty, rural development, and national economic growth through the policy level. However, available data and qualitative analysis reveal that the outcome from the agricultural sector is not satisfactory due to several factors. In such situation, more than half of the population has been facing food insufficiency. Because of weak policy and implementation, the agriculture sector is been suffering poor outcome. In that way, the government of Nepal along with concerned authorities should effectively implement agriculture policies in order to reduce poverty and rural development. The agriculture-rural accommodating policies and successful performance are crucial for poverty alleviation and rural development.

Keywords: Agriculture, Livestock, Poverty, Rural

Background

The study examines the scenario of agriculture development in terms of policy and implementation and its challenges in Nepal. This work is based on analysis and literature review as this is a policy review. The study uses secondary data taken from the Central Bureau of Statistics (CBS), Ministry of Agriculture and Livestock Nepal, Central Bank

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of Nepal, World Bank, Asian Development Bank (ADB), Food Agriculture Organization (FAO). Some agriculture specialists and farmers are also interviewed as Key Informants regarding agriculture issues and problems. The literature suggests that the Government of Nepal has been providing a high priority for agriculture development believing that it can contribute to poverty and growth the national economy. However, available data and qualitative analysis spectacle that the agricultural sector has been facing numerous challenges and rural areas have not largely been benefitted from the agriculture; migration from rural to urban is an indicator in this regard.

Agriculture with livestock is the major means of the livelihood for the majority of Nepalese people in rural area. However, agriculture in Nepal represents subsistence in nature; most people have been engaged in agriculture for their livelihood mainly. The agriculture sector is still lacking behind modern technologies and tools. 83 percent of the population depends on agriculture and the same population resides in a rural area (CBS, 2011). In this way, rural and agriculture is interrelated to the large extent. The agricultural sector contributes 28 percent to national GDP as per Nepal Rashtriya Bank (NRB, 2018). Therefore, the development of agriculture and livestock is key for the national economy and, agriculture is the mainstay of the country’s rural and national economy. Agriculture sector represents the main source of food, employment and income for the majority and it is still a dominant sector in Nepal. However, the growth rate of the agricultural sector is found 2.8 percent only, which indicates a low rate. The land ratio in relation with agriculture is supposed to be an important factor for agriculture development. Comparatively, Nepal has the lowest land to labor ratio (0.29), compared to Pakistan (0.81) and Sri Lanka (0.51).

According to the Nepal Living Standards Survey, poverty head count rate in rural Nepal is 27 %, which is higher than urban (15 %) (CBS, 2010). Agricultural growth is considered to be effective in reducing poverty than is industrial growth. Presently people seem to have less interest in the agricultural sector because it is less attractive in terms of getting cash and it resulted in migration flow from rural to urban. Most of the household members of rural Nepal have been in abroad for foreign employment. Remittance has become the major part of the national economy as it shares 25% in GDP (FED, 2011). The CBS data 2011 reveals that 7 percent of the total populations are in overseas employment. Out of 100 overseas migrants in the country, 81 percent was from rural areas. The proportion of
all households that receive remittances is 56 percent; 46.1 percent belongs to the Tarai region and 53.9 percent from hill/mountain region. After returning home, only a few of them have been engaging in agriculture. It seems that national policies cannot attract new generations towards agriculture and that is why the agriculture sector is being deteriorating day by day. The productive-agricultural reform both in policy and implementation level is important for developing countries like Nepal. Agriculture policies are like different instruments in order to make support system, provide guideline and balance production and distribution and ensure the security in terms of food.

Nepal Government Policies Towards Agriculture is based on the Constitution of Nepal (Article 51-e) emphasize agriculture development: protecting and promoting rights and interests of peasants and utilizing the land use policy for increasing production and productivity of agriculture and for commercialization, industrialization, diversification and modernization of agriculture; and Planning for agricultural tools and an access to market with appropriate price for the produce. Since the first five-year plan implemented in 1956, modern agriculture development has been initiated for the country’s economic development. At that time around, 95 percent of the population was involved in agriculture. In the First Five-Year Plan, transportation and communications were given top priority with over 36 percent of the budget allocations and agriculture including irrigation, received second priority with about 20 percent of budget expenditures (NPC, 1975). Then after various efforts are being made in relation to agriculture but industrialization was given the first priority. From 5th plan (1975-1980), Nepal government has been highly emphasized on the agriculture sector to obtain higher economic growth and poverty reduction. Fifth Plan has accorded to it the topmost priority by allocating from 29.8 percent to 30.2 percent of the total estimated outlay in the public sector.

Developed by Agriculture Policy Section, Planning Division, Ministry of Agriculture Development in 2013, there are altogether 20 policies from the agriculture sector. The government of Nepal conducts a periodic census in the agriculture sector. Economists, agriculturists, and environmentalists are consulted to prepare agricultural action plans, agricultural researches, and inputs in policies. The policy level information is obtained from the Ministry of Agriculture and Livestock. This ministry is the umbrella institution of the Government of Nepal for all agricultural and cooperative policies and development.
The Nepal Agricultural Research Council (NARC) is the main agricultural research center and is responsible for the study of improved breeding, productivity, nutritious feeding for fish and livestock.

Ministry of Agriculture and Livestock Development, Agriculture, Nepal has been giving a high priority for agricultural development mentioning as follows on their official website:

*Agriculture is the major sector of Nepalese economy. It provides employment opportunities to 66 percent of the total population and contributes about 36 percent in the GDP. Therefore, the development of the agriculture sector is key to the development of the national economy.* (Ministry of Agriculture and Livestock Department, 2018)

Nepal Agriculture Perspective Plan, APP (1995-2015) was important in the context of agriculture development; main objectives of the APP were to accelerate the growth rate in agriculture through increased factor productivity and it was emphasized on the technology-based green revolution in agriculture ensuring regionally balanced. (NPC and ADB, 1995)

The National Agriculture Policy, 2004 focuses on enabling an environment for agriculture-led rural development. The policy divides farmers into two groups – small and big ones. Those who own less than 4 hectares of land are marked as resource-poor farmers and government have managed assistance-provision for them to boost their productivity. The policy aims at achieving high and sustainable economic growth through commercial agriculture system contributing to food security and poverty reduction.

Further, Ministry of Agricultural Development prepared Agricultural Development Strategy (ADS) 2014, this report is to present the overall strategy for ADS including a 10-year Action Plan and Roadmap and a rationale based on the assessment of the current and past performance of the agricultural sector. The Agriculture Development Strategy (ADS) 2014 has the following vision:

*A self-reliant, sustainable, competitive, and inclusive agricultural sector that drives economic growth and contributes to improved livelihoods and food and nutrition security.* (NPC, 2017)
14th plan of Nepal (2016/17 – 2018/19) is given high priority for entire agricultural and rural development spectrum—agriculture, irrigation and water control, livestock, forestry, environment, agribusiness, credit, and institutions—as well as related rural development topics, including gender issues, roads, power, and the environment.

Nepal government’s policy towards FDI in agriculture is positive as it is mentioned in the Ministry of Foreign Affairs’s official website:

*Nepal has been pursuing a liberal foreign investment policy and been striving to create an investment-friendly environment to attract FDI into the country. Our tax slabs one of the lowest and our position is fairly good in ease of doing business. Profitable areas of investment include hydropower, industrial manufacturing, services, tourism, construction, agriculture, minerals, and energy.* (MOFA, 2018)

**Objectives and Methodology**

The main objective of the study is to analyze the Agricultural policy and Rural development in Nepal. Methodologically the study is based on contents and literature review.

**Discussion/Analysis**

Agriculture Development

Rural sociology is basically characterized by agriculture and peasant farming (Boguslaw, 1972) which represents agrarian values. The social structure of Nepal predominated and based on agrarian in nature. Nepalese agrarian and social structure could not evolve enough to cope with the increasing population in respect with resources. Agriculture in Nepal is being less commercialized because of the low level of technology, infrastructures and poor markets facilities. The agriculture of Nepal depends mainly on monsoon; the government has failed to provide adequate irrigation facilities. According to the World Bank report in 2014, only 28 percent of the total agricultural land is irrigated (World Bank, 2014). Figure-1 shows that 24 percent of the total land is useful for the cultivation purpose. Nepal Terai- southern plane part- is the major agriculture sector (17 % of total land) for the agriculture productions. The major cash crops in Nepal are oilseed, potato, sugarcane, tobacco, and the major cereal crops are
Barley, maize, millet, paddy, and wheat. Figure-3 illustrates that the production of cereals covers half of the total production, followed by vegetables (9%) and fruits & spices (7%) respectively. Similarly, livestock shares 26% of the total production.

Nepal had exported paddy before 1975 but it is importing food grains beginning in 1980 (Mishra, 1987). Despite a large contribution of the agricultural sector in national GDP, agriculture growth rate seems to be fluctuating. Since the agriculture-growth is lower with respect to the population increment. The amount produced from agriculture is not satisfactory. The data of CBS 2011 reveals that 60 percent of farmers are unable to produce enough agricultural production in order to sustain their livelihood. Many western hill districts of the country have been facing food-deficit. Food and Agriculture Organization (FAO) has been working to ensure the food and nutrition security of farmers and herders (FAO, 2017). To cope with this, poor rural people mostly used to go to India in search of works in the off-farming season.

Furthermore, the average monthly household income in the rural area is lower than urban. The household income of the rural area is 27% only which is obtained from agriculture, wage and rural-micro enterprises. There is variation in total households with access to various facilities; urban represents 95.7 % and rural is 63.0 % only. The agriculture sector in Nepal employs 75 % of the labor force in 2010 (CBS, 2008). The labors in the agriculture sector are paid low as sometimes they receive food grains instead of cash that could not harness their livelihood sufficiently.

The household size in a rural area is 5.08 whereas the household size in an urban area is 4.85 (NRB, 2008). Some 1.3 million households are landless or land-poor; geographically, the landless and land-poor are found all across Nepal. Access to land is considered to be requisite for the food and nutritional security of households. According to CBS 2011, small landholders and marginal farmers predominate Nepalese agriculture with the average holding size of 0.8 ha. Nearly half of all farms have less than 0.5 hectare of land. Likewise, land tenure system also plays a vital role in agriculture production; dual land tenure has been hampering for agriculture development. Many landless households particularly in Terai region –bowl of cultivation- have been cultivating others land for livelihood and in return, they receive half of the production; this system is called Adhiya/Bataiya in the local level. Therefore, the land-secured arrangement is a crucial issue for
Despite the remarkable decline in overall poverty level over decades, poverty in rural Nepal (27%) is still higher than urban Nepal (15 %). According to CBS 2010/11 data, the squared poverty gap index is doubled difference as it is 1.01 in an urban area and 2.00 in a rural area. Ministry of Agriculture Development is receiving approximately 3% of national budget which is not sufficient to promote adequate agricultural growth and ensure food security to the ever-growing population. While Bangladesh and India have allocated around 5-6 % of their total budget in the agriculture sector.

Figure 1: Land-use Patterns in Nepal

(Ministry of Agriculture & Development, 2015)

Figure 2: Agriculture Growth rate in last 12 year
Figure 3: Composition of Agriculture Products

(Chaudhary, Deepak, 2015)

Figure 3: Composition of Agriculture Products

(Coastline of Agriculture Development, 2015)

Challenges
The growth in agriculture has remained stagnant over decades despite a number of plans and policies in national level and international supports. Admittedly, the plans and policies fail to address problems and issues relating to agriculture to the extent. The agriculture sector in Nepal has been facing a number of problems ranging from policy to implementation level.

The tradition agrarian mode of agriculture sector need adopts advanced technologies. Agriculture Development Specialist Arthur Mosher rightly emphasizes various science and technology for the increment of agriculture production. Improved-agricultural technologies include improved seed varieties, fertilizers, and technical support. The price for the agriculture production and market are found to be complex. The coordination between farmers and whole-seller/industrial seems not to be good enough and decisions related to agriculture particularly cost is not fixed timely by concerned authority and farmers could not benefit lavishly. The price-fixing mechanism is not realistic as it ignores the participation of farmers and harvesting time. Normally, the price is fixed after harvesting period and farmers are not paid timely. The security of farmers in terms of their commodity selling is not assured in time. As several of sugar-mills are not paying farmers though they are doing well-producing sugar and selling in the market on cash (My Republica, 2018). The government could not fix the price of paddy timely and farmers could get more benefit. The delay in fixing the price, farmers across the country have apparently been selling paddy at a price that is lower than the base price of last year (The Himalayan Times, 2017).

Likewise, farmers could not get fertilizer in time. The fertilizers and agriculture tools are imported from India and other countries. Government policies that influence food prices play a critical role in shaping the incentives for farmers as they decide what to produce, how to produce it, and how much to produce (Block & Lindauer, 2013). Market access and linking between the village and urban center are important in the wake of agriculture development, which is poor. Especially road connectivity is a key factor in raising agricultural production. Many villages are still not connected in hilly and mountain districts. The lack of physical access has adverse impacts on the delivery of agricultural inputs on a regular basis. Nepal faces the shortage of agriculture storage centers that is essential in order to boost the commercialization of agriculture. Another problem is land
fragmentation, which is becoming a problem for the development of agriculture because it is reducing agricultural land. Agricultural land includes arable lands both for permanent crops and for permanent pastures; land defined by the FAO as land under temporary crops, temporary meadows for mowing or for pasture, land under market or kitchen gardens, and land temporarily fallow.

About 70 percent of the population of Nepal depends on the forests for daily fuelwood supply; therefore, the agro-forest concept may be the one option for agriculture development to cope with the problem arising due to climate change. Cold wave in Nepal in 1997/98 had negative impacts on agricultural productivity and showed a reduction in the production of crops by 27.8 in potato (NARC, 1998). Similarly, Nepal has been facing a number of diseases on crops that harming agriculture production and farmers. The research-oriented agriculture policy and program seem to be supportive of sustainability. However, the research program is limited in the paper. Technical assistance provided by the government is insufficient in the agriculture sector.

Nepal government policy is also to introduce foreign direct investment (FDI) in the agricultural sector, although according to the World Bank Nepal Overview Report, FDI still only accounts for 0.6 percent of GDP. Agriculture sector still could not attract private investment despite the governmental prompt policy. Poor farm-market linkage, lack of policy, and political unwillingness may be the reasons behind it. Furthermore, the remittance is not being used properly and largely in the agriculture sector due to the lack of policy and political willingness. Remittance, which has been found in other countries to be contributing to increasing agriculture yield— are not contributing to boosting agriculture yield in Nepal. (Asian Development Bank, 2014)

The implementation of agriculture development is a crucial question in Nepal. The Project for Agriculture Commercialization and Trade (PACT) was initiated by the Ministry of Agricultural Development with the objective of improving the competitiveness of smallholder farmers and the agribusiness sector to find new market opportunities to increase productivity and quality is not effective due to various reasons. Likewise, the public delivery of agriculture-related matters is not effective and even allocated budget for agriculture development could not spend properly and timely. For instance, last year, Debangunj Rural Municipality located at Province 1 of Nepal could not expend allocated
agriculture budgets (approximately 10 thousand dollars) for agriculture development due to political and bureaucratic reasons and it became freeze.

Conclusion

The agriculture friendly economic policy and effective implementation are required for agriculture development. Sustainability must be the central idea in the context of agriculture development. Sustainable economic growth can be achieved through agriculture development avoiding deforestation, and land degradation. A new federal political structure of Nepal, which is assumed to have democratic and people-centric can make effective delivery services of agriculture-related matters to local levels. The local governance is imperative in order to implement agricultural development. Therefore, the government should make local governance effective both in terms of strategy and implementation aspects. The role of good governance in this regard is vital.

The supportive policies and programs such as incentives, opportunities, easy access to needed inputs and safety nets- compensation in case of loss of productions due to diseases or natural calamities and insurance policy credit facility should be initiated; farmers can be encouraged through its implementation. The cash-transfer program as in loan form at a lower interest of rate may be another option in order to enhance and empower to poor farmers. Like the Bolsa Familia as an "anti-poverty scheme" implemented in Brazil in 2004, genuine farmers should be categorized for the receivers of the loan. In Bolsa Familia, those households who spend their children to school and get vaccinated were provided loan through banking genuine farmers who are engaged in the farming sector should be given cash for agriculture development.

Technical supports for agriculture can be included in this scheme. Besides, the insurance in agriculture sector is not effective like health-insurance. However, the Crops and Livestock Insurance Directives 2013 was introduced by the Insurance Board Nepal with the focus on crops (apples, banana, paddy, potatoes, vegetables, among others), livestock and poultry, making it mandatory for all the non-life insurance companies to come up with insurance policies for these products (Agriculture Insurance, 2018). Nevertheless, its implementation part is complex and therefore, it is not implemented
in a realistic way. According to NLSS 2010/11, 86.8% of labor-power is available in rural. The new generation can be encouraged through the insurance in the agriculture sector. These all issues and problems related to agricultural development are important in the wake of agriculture development. Only if the Government of Nepal addresses these issues and problems, rural development can be accelerated by reducing poverty and rural development is possible in a true sense.

References


