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Assessing the Agricultural Service Delivery Functions of Local Governments in Nepal

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Abstract

Agriculture sector is primary source of national economy and family livelihoods in Nepal. This study thus aims to appraise existing agricultural delivery functions of local governments that have affected livelihoods of the Nepalese farmers. In doing so, we purposively selected Faktalnglung rural municipality (Mountain), Maijogmai rural municipality (Hill) and Kamal rural municipality (Tarai) of Mechi Zone as a field of the study. The required information were generated through in-depth interview (n=15) and focus group discussion (n=6) which were then interpreted from the theoretical perspectives of multi-level governance and agriculture modernization. The study found that local governments are functioning agriculture service delivery through devolved power/jurisdictions. The farming activities are becoming commercialized and modernized that helped to improve livelihoods of the farmers residing in Mountain, Hill and Tarai regions. Some skilled and energetic farmers are willing to involve in agro-tourism entrepreneurship development. That is possible due to the financial subsidy support system, vocational skill development training programs and access to local markets. However, an integrated approach that links agriculture with tourism activities including cooperation among the government, community people and private enterprises is essential. Therefore, local governments need to develop and implement bylaws to functionalize agricultural service delivery functions efficiently and effectively. The federation also need to implement land use plan, supportive policies for commercial farming and youth entrepreneurship for promoting agro-tourism activities.

Keywords: *Local government, agriculture, agriculture service delivery, commercial farming, livelihood*

Introduction

Agriculture sector is a lead sector of Nepalese economy. In fiscal year 2022/23, agriculture contributed 24.1% to GDP with increased projected growth rate from 2.24% to 2.73% (MoF, 2023). Agricultural households represent 62% of the total households and provides employment to 67% of the total population (NSO, 2021). The effective agriculture service delivery functions of local governments thus inevitable for enhancing national economy and improving livelihoods of the farmers.

Local government creates functional environment for local development that enrich quality of life of the local people (Shah & Shah, 2006; Faguet, 2002). Local government is also necessary as most of the public needs are specific to the local people and their livelihoods. Local government has been ensured two-way communication between government and community people (Rijal, 2013).Local Self Governance Act (1999) had focused on involving service recipients in planning and budgeting for local development, with the aim of ensuring social justice for smallholders. At present, federal government has devolved 22 power/jurisdictions to the local government which are in/directly related to the agriculture service delivery functions(CAS, 2015).

The Government also has established several key objectives, including the attainment of food and nutrition security, poverty reduction, and the realization of the sustainable development goals (NPC, 2018). The country's agricultural development priorities align closely with these objectives and the broader sustainable development agenda, particularly SDG-1 and SDG-2. These goals emphasize enhancing access to employment opportunities, ensuring sustainable management of natural resources, developing supportive infrastructure, fostering new economic growth avenues, addressing the impacts of climate change, promoting social inclusion, and establishing farmer-responsive governance. Within this framework, the agricultural service delivery functions of local government has emerged as a critical focus in the agriculture development process.

In practice, agriculture service delivery function plays vital instrument for improving livelihood of the majority of the Nepalese farmers. However, this sector has struggled to improve nutritional status and reduce poverty significantly. Studies reveal that agriculture-based economies of developing countries often exhibit low governance scores, which further complicates agricultural development (Kaufmann *et al.,* 2008). The work of Kyle and Resnick (2018) underscores the challenges posed by federal structure for agricultural governance, emphasizing the need for coordinated planning, adequate human capacity, and financial resources. Kyle and Resnick (2016) examine the implications of federal democratic constitution for governing agricultural functions (CAS, 2015). As the country shifts from a unitary system to a federalism with

devolved power/jurisdictions, it is crucial to ensure agricultural modernization and commercialization. These factors are significant for addressing agricultural governance related to poor coordination, limited human capacity, and insufficient financial resources (IFPRI, 2016).

However, in the studied areas, farmers are thoughtfully involving in commercial farming practices and supplying their products in inter/national markets. This trend underscores the necessity to examine the agricultural development processes in these ecological regions, with a particular emphasis on efficient service delivery functions through decentralized agricultural development strategies. More so, there is a research gap in the perceptions of service providers and service receivers on agriculture service delivery functions of the local governments. Therefore, this study aims to appraise effectiveness of devolved agricultural delivery functions that have affected livelihood of the farmers residing in Mountain, Hill and Tarai ecological regions of Eastern Nepal.

Agriculture Development Policy in Nepal

Federal Government of Nepal provisioned Local Governance Operating Act (2017) which devolved 22 powers/jurisdictions to the local governments. This act places a strong emphasis on implementing a decentralized service delivery that fosters cooperation, collaboration, and coexistence among federal, provincial, and local levels. It also outlines the duties, roles, and responsibilities of the local municipals concerning devolved powers/jurisdictions emphasis on enhancing agricultural service delivery functions. Powers/jurisdictions numbered 2, 3, 5, 7, 10, 11, 15, 18, and 19 are directly associated with agriculture (LGOA, 2017). The role of cooperative is highlighted in jurisdiction number 2. Under jurisdiction number 3, local governments are permitted to run radio programs to disseminate knowledge and skills related to crop, livestock, and vegetable production. Jurisdictions 5 and 7 outline the proper management of agriculture-related service delivery and the implementation of innovative programs and projects. Additionally, jurisdiction number 10 addresses the management of local markets, as well as the collection and distribution of agricultural products (LGOA, 2017). Power 11 addresses agricultural development along with infrastructure facilities, including local roads, rural roads, agricultural roads, and irrigation. Power 15 focuses on the management of farming and livestock, agricultural production, livestock health, and cooperatives. Power 18 pertains to the management, operation, and oversight of agricultural extension programs. Additionally, power 19 covers the management of drinking water, electricity projects, and alternative energy sources. More specifically, duties and responsibilities related to agricultural development and extension are detailed in Part 3, under roles, duties, and authority of local bodies in Clause 11. Provisions for planning and implementation are specified in Part 6, Clause 24 (LGOA, 2017). Local

government mechanisms are somehow effectively implementing devolved agricultural power/jurisdictions function in Eastern Nepal (Kharel & Pasa, 2021).

Furthermore, Ministry of Agriculture also implemented Agri-business Promotion Policy (2006) which aimed at promoting agro-businesses enterprises in inter/national markets. This vision is pursued through three main objectives: supporting market-oriented and competitive agricultural production, contributing to both domestic and international markets by developing agro-based industries, and aiding poverty alleviation through agricultural commercialization. The policy outlined 44 specific objectives, including establishing growth centers, managing markets in collaboration with special economic zones, creating areas for commercial crop production, and promoting organic and pesticide-free farming. Other objectives focus on developing agro product and export zones, establishing cold and frozen storage facilities, implementing cold chains and chambers by applying modern as well as indigenous knowledge and technology. Likewise, agriculture development strategy (ADS), a 20-year strategic framework, aimed at enhancing agricultural development of the country. It has received financial and technical support primarily from the ADB, with co-financing from IFAD, EU, FAO, SDC, and JICA (MoA, 2014). The strategy focuses on five frameworks: food and nutrition security, poverty reduction, agricultural trade competitiveness, equitable income generation, and assurance of farmers' rights and other four key components: improved governance, increased productivity, profitable commercialization, and enhanced competitiveness (Pasa *et al.,* 2024). The ADS aims to modernize farming activities and increase productivity that requires increased funding, capacity building, and improved infrastructure.

Theoretical Lenses

The study has conceptualized and theorized research issues from multi-level governance and agriculture modernization theoretical lenses. Multi-Level Governance (MLG) is a model that promotes neo-pluralism by involving various networks and political communities in decision-making processes (Ivan & Cugleman, 2009). Initially applied to the European Union, it has since expanded to other governance contexts. MLG is defined as a system of continuous negotiation among nested governments at several territorial tiers and includes the relationships between governance processes and different government levels (Jachtenfuchs, 1995). Bache and Flinders (2004) highlight four key aspects of MLG: (i) increased participation of non-state actors in governance, (ii) overlapping decision-making networks, (iii) a shift in the state's role to coordination, and (iv) challenges in responsibility and accountability. MLG aims to involve all actors through partnerships across various levels (national, regional, local, and civil society). Key to MLG is decision-making based on negotiation and consensus rather than majority

voting. Patrick *et al.* (2005) distinguish two dimensions of MLG: horizontal (involving non-state actors) and vertical (decision-making at different levels of government). MLG involves interdependent decision-making centers across various levels.

Agriculture modernization is essential for agriculture development and economic development of any country. Lewis' dual economy model emphasizes structural transformation, where surplus labor moves from the subsistence agricultural sector to the capitalist sector for agriculture development (Lewis, 1954). Schultz also focused on transforming traditional agriculture into modern production methods, advocating for efficient investment to boost agricultural growth in developing countries (Schultz, 1964). Agricultural growth is crucial for economic development but has stagnated since the 1990s due to inadequate transformation, particularly in Nepal, where agricultural GDP growth is twice as effective in reducing poverty as growth in other sectors (Gauchan, 2008; World Bank, 2008).

Methods and Materials

Study Site

The geography of Nepal ranges from the low Tarai plain in the south, averaging 300 meters above the sea level, to the Himalayas in the north, which exceed 8,000 meters. This varied landscape is categorized into three ecological regions: Mountain, Hill, and Tarai, each exhibiting distinct socio-economic and cultural contexts. This study thus purposively selected Mechi Zone of Eastern Nepal as a field of the study. Mechi zone is popular for tourism and large cardamom. Large cardamom is cultivated on 18,000 hectares across Nepal, with the majority of production concentrated in four eastern districts—Taplejung, Panchthar, Ilam, and Sankhuwasabha—which together contribute to over 80 percent of the national output.

For the ecological representatives, the study selected Faktanglung rural municipality of Taplejung district (Mountain), Maijogmai rural municipality, of Ilam (Hill) and Kamal rural municipality of Jhapa (Tarai) (NAVIN, 2016). From the agriculture modernization view points, large cardamom and maize zones are implementing in Taplejung whereas Kiwi, dairy, and large cardamom zones are implementing in Ilam and paddy super zones, as well as vegetable, maize, areca nut (supadi), rubber, and fish zones are implementing in Jhapa district (PMAMP, 2024).

The first field, Taplejung district covers 3,646 km^2 area and lies between latitude of 27° 06' to 27° 55' north latitude and of 87°57' to 87°40' east longitude (DDC, 2020a). The district has total 20,590 population with 33.07/km^2population density(NSO, 2021). Taplejung is known for producing large cardamoms, with a total of 2,958 tons

harvested. In the first six months of last year, 3.1 million kg of cardamom valued at Rs 2.51 billion were exported abroad. However, during the same period this year, exports increased to 4.7 million kg, worth Rs 3.81 billion (Prasain, 2024).The field Faktanglung rural municipality covers 1,859 km^2 area. It has 11,791 population with 6.344/km^2 population density (FRM, 2017). It is bordered by Tibet to the north and various local municipalities to the south, east, and west. Approximately 72% of households are engaged in agriculture, followed by 16% in wages, 7% in remittances, and 5% in jobs (FRM, 2081). It is located nearby Kanchanjungha Conservation Area (KCA). In fiscal year 2079/80, about 713 tourists have visited KCA which generated revenue of Rs 1,506,000, a significant increase from Rs. 467,155 in the previous fiscal year 2078/79 (DNPWC, 2080). The agriculture and tourism sectors contributed Rs. 160,000,000 and Rs. 1,000,000, respectively (FRMO, 2081).

The second field, Ilam district covers 1,703 km^2 and lies between 26°42' to 27°8' north latitude and 87°42' to 88°7' east longitude (DDC, 2020b). The district has 279,534 population with 164.1/km^2 population density (NSO, 2021). Ilam, located about 675 kilometers from Kathmandu, is a hilly district with elevations ranging from 610 meters to 3,679 meters above sea level. The district stretches from the Tarai to the upper hill belt and borders Panchthar, Jhapa, Darjeeling (India), Dhankuta, and Morang. Ilam has a sub-tropical climate with cool temperatures, dry winters, and hot, rainy summers. Known for being home to the endangered red panda, it attracts researchers studying rare wildlife (Dulal, 2017; Rai, 2063BS; Dulal, 2022). Ilam has become an emerging tourist destination in eastern Nepal. In the Fiscal Year 2018/19, the region welcomed 134,077 visitors, marking an increase of over 40% compared to the previous year (Chapagain, 2019). Likewise, during the first eight months of the Fiscal Year 2080/81, 85,326 tourists (74,777 domestic and 10,549 international) visited Ilam (What the Nepal, 2024).The field Maijogmai rural municipality covers 135.8 km^2 area. It has 19,131 population with 140.9/km^2 population density (MRM, 2017). It borders Ilam and Deumai municipalities to the north, Jhapa District to the south, and Rong and Mangsebung rural municipalities to the west.

The third field, Jhapa, covers 1,606 km^2 area and lies between 26°20’ to 26°50’ north latitude and 87°39’ to 88°12’ east longitude (DDC, 2020c). The district has total 998,054 population with 621.5/km^2 population density (NSO, 2021). In Jhapa, 81 different varieties of paddy have been cultivated. The district experienced a 0.11% increase in paddy production. This year, rice was grown on 85,500 hectares, yielding 410,400 metric tonnes of paddy. In comparison, last year, paddy was planted on 87,500 hectares, producing 410,375 metric tonnes. The district is equally popular for vegetables and cash crop productions. The field Kamal rural municipality occupies 104.06 km2 area. It

has total 53,894 population with 515.4/km² population density (KRM, 2017). It shares borders with Ilam to the north and various municipalities to the south, east, and west.

Narrative Approach and Data Analysis

This study used qualitative approach (Creswell & Creswell, 2023) and narrative inquiry (Chase, 2011) method for apprising agricultural service delivery functions of local governments. Narrations are all about lived experiences of the participants that concerns not with facts, but with plausibility, related to "to know"' (Dawson, 2007, p. 82) revealing a sense of human agency and subjective perceptions (Wen & Imamizu, 2022). The principal of narrative inquiry lies in its ability to convey life experiences—both individual and collective—in relevant and meaningful ways (Connelly & Clandinin, 1990). This method emphasizes significant life events, fosters holistic perspectives, and holds considerable potential for researchers across various socio-cultural and economic contexts (Webster & Mertova, 2007).Therefore, narrative inquiry was used to capture lived experiences and perceptions of the service receivers (farmers) and service providers both elected representatives, agriculture technicians and administrative staffs. The echoes of their narrations provides holistic understanding on socio-cultural and economic factors that shape agriculture service delivery functions of local governments in the study area.

For generating narrative information, the study applied theoretical sampling method to select 15 articulating participants such as chairman, administrative head, head of judiciary, member of village assembly including local intellectuals (Creswell, 2018). More specifically, five participants were selected from each local level (Faktanglung [P11-P15], Maijogmai [P 6-P10] and Kamal [P1-P5]) located in Mountain, Hill and Tarai regions. Besides, the study also conducted three FGDs from duty bearers or service providers (FGD 5 [Mountain], FGD 3 [Hill] and FGD 1 [Tarai]) and another three FGDs from service receivers or farmers (FGD 6 [Mountain], FGD 4 [Hill] and FGD 2 [Tarai]) as well (Stevens, 1996). The collected narrative information were transcribed and thermalized for generating meaning from information by "watching, asking or examining method (Creswell & Creswell, 2023). The research issues have been interpreted from the perspective of multi-level governance (Ivan & Cugleman 2009; Patrick *et al.,* 2005), agriculture modernization (Schultz, 1964; WB, 2008). and empirical findings. Finally, the study applied four issues of trustworthiness such as credibility, transferability, dependability and conformability (Creswell & Creswell, 2023) for ensuring quality standard.

Data Results

Commercial Farming Practices

Nepal's agricultural farming system is characterized by a diverse range of enterprises, including crops, livestock, and poultry, vegetables, fruits, spices, fisheries and agroforestry. However, in one hand, most of the farmers produced primarily for their own consumption in a subsistence basis. In another hand, average farm size has decreased from 0.68 hectares to 0.55 hectares over the past decade (MoALD, 2023). Major cereal crops include rice, maize, wheat, finger millet, and barley, with maize and millet predominantly cultivated in non-irrigated upland areas, while rice is favored in irrigated regions. Other significant crops include oilseeds, pulses, sugarcane, and potatoes. Various fruits and vegetables are grown in both summer and winter across different ecological zones. The rural population largely consists of smallholder farmers, whose agricultural income is comparatively low by international standards (WB, 2019). In Koshi Province, agriculture sector contributes 33.2% to the GDP, which is higher than the national average of 24.1% and 75.9% people directly engaged surpassing the national average of 66.8% . In fiscal year 2080/81, large cardamom was cultivated on 14,451 hectares, yielding 7,764 metric tons. Besides these facts, the village assembly members (chairperson, ward representatives & female members), administrative staffs, service receivers including intellectuals from three ecological regions also expressed their common theoretical position regarding modernization in agriculture as:

> *Our village is a pocket area for large cardamom. Out of total 457 households in this ward, only 25 percent of households are involved in its production. On average, one household supplies 20 maan (800 Kg) annually. The ward president is a landlord who supplies more than 150 maan (6000 Kg) annually [P11].*

> *Fung Funge Water Fal, Mana Bhara Temple located opposite of Pathi Bhara Temple bear high tourism possibility in this region. That is why the villagers are constructing new road track to reach these tourism destinations [P12]*

> *Jogmai is the first pocket area for large cardamom production in Ilam. Unfortunately, for the past fifteen years, the production has significantly decreased due to various plant diseases and poor irrigation facilities. The village then completely lost its local seeds. After that, the village brought new varieties of seeds from Sikkim. At present, farmers are again producing a moderate amount and supplying it to the local market [P6].*

> *The road accessibility becoming improved in present days. In the past, one had to walk on foot to reach public and private service centers and local hinterlands, which has changed at present. Still, there is no agricultural production collection*

center, and there is no price policy and pro farmers' market systems. We are suffering from mediators while supplying our products either in local market or international market [P8].

Community engagement has increased, with more farmers participating in group activities, which reflects a growing interest in cooperative models and shared resources among farmers. But government support and visionary policies are essential for fostering agricultural development and improving the livelihoods of farmers [FGD3& FGD 6].

There are 52 agriculture technicians in Jhapa. Last year, 16 technicians were appointed through the One Village One Technician Program. In this rural municipality, now there are four agriculture technicians and there are hundred plus farmers' groups. Out of that, 72 farmers' groups have been registered and 47 farmers' groups are not yet formally registered. Along with that, 18 registered female groups are also involved in agro and non-agro based entrepreneurship [P2].

Prime Minister Agriculture Modernization Project has been implemented in this area. We have also established second organic lab of the country. It has been functioning well. This year, the project allocated Rs. 2,200,000 for fish pond maintenance. Last year, local government also provided Rs. 500,000 to agriculture cooperatives and 200,000 for Bagar kheti (sand farming) for watermelon farming [P1].

Agriculture delivery service have given high priority for development and promotion of agro-tourism, commercial cash crops, cooperative farming practice, dairy development, and marketing. As a result, rural municipal is developing agriculture zones, blocks, and pocket areas for implementing agriculture extensions programs in Tarai [FGD 1]

The narratives of the participants highlight a strategic perspectives on agriculture and tourism development. Participants are optimistic about governmental support for organic and cash crop farming. This reflects a growing trend toward sustainability and a recognition of market demands for organic produce, indicating a shift in modern agricultural practices. This reflects a proactive approach by local authorities in supporting farmers. The emphasis on training demonstrates an understanding that improving skills is essential for modernizing agricultural practices and increasing productivity. The focus on tourism suggests an understanding of the interconnectedness of different economic sectors, aiming to diversify income sources for farmers. Participants acknowledge improvements in road infrastructure. Better roads are essential for reducing transportation costs and improving access to markets. Participants from Mountain and Hill regions are

serious for sustaining large cardamom production. About 60,000 families are engaged in large cardamom cultivation. Nepal earned Rs. 6.36 billion from large cardamom exports. Farmers are actively seeking solutions to restore production levels, indicating a proactive mindset toward overcoming agricultural challenges. The farming system becoming commercialized in each ecological regions. However, all the regions are still facing road infrastructure, market access, and sufficient government support related challenges. For the commercialization of farming activities, Mountain and Hill regions emphasize irrigation and adapting agricultural practices and Tarai region highlights commercial farming and agro-tourism development.

Agriculture Service Delivery in Ecological Regions

Government has been implementing 10 years' (2072-2083) Prime Minister Agriculture Modernization Project. The project has a duration of 10 years, running from FY 2073 to 2082, with an estimated cost of NPR 130 billion. PMAMP aims to generate temporary or seasonal employment for 772,000 individuals and permanent employment for 25,000 people (Devkota, 2021). A total of 753 local levels are carrying out pocket development programs, while 138 district-level offices across 7 provinces are implementing the block development program (PMAMP, 2024). The 16th Development Plan of the Government of Nepal seeks to enhance the competitiveness of the agricultural sector and promote self-reliance through sustainable and commercial agricultural development (NPC, 2024). Within this framework, the commercialization of agriculture has been evaluated by examining trends in the sale of farm products and the increasing demand for improved agricultural services at the local level.

Besides these facts, this section appraises subjective perceptions of the duty bearers as well as service receivers on effective agricultural service delivery functions offered by the local governments belonging to Mountain, Hill and Tarai regions:

> *We have submitted a proposal to the Irrigation Department. We are planning to implement an irrigation project in Ward Number 6. The cost of the proposed project is Rs. 5,000,000. Our municipal produces highest quantity of large cardamom in the district. Farmers are also producing vegetables and herbal products [P15].*

> *We have a huge potential for commercial farming but facing poor irrigation facilities. We have designed small irrigation projects in more potential settlements. We are collaborating with government and non-government agencies to implement our projects. For example, the Agriculture Research Center, a branch of the National Agriculture Research Council, is established in Jaubari village which is providing technical and financial support to the local farmers [P10].*

In this fiscal year, we implemented vegetable and pig farming projects. If the local executive allocates Rs. 4,000,000 for agriculture, we hardly get Rs. 100,000. A few days ago, without any information, a veterinary technician came to our village and distributed one bag of medicines to the farmers. Maybe a huge amount is spent on such meaningless distributive programs [FGD 1].

In this fiscal year, we allocated Rs. 550,000 to implement agriculture-related projects. We distributed modern seeds and tools for performing tunnel vegetable farming. Our ward office has not yet allocated a budget for irrigation projects. We are managing the irrigation system ourselves by purchasing plastic pipes at our own expense. We are rich in terms of water resources but poor in irrigation access. Proper planning, designing, and implementation of projects are needed so that the farmlands can be turned into an agricultural domain [FGD 5].

Irrigation facility is available in Ward Number 2 only, which is managed by the local farmers themselves. The time has come to improve the traditional irrigation system. More than 70 percent of local people are still involved in agriculture. But farming lands are becoming barren due to the lack of irrigation. Farmers are also facing drinking water problems [FGD 4].

The local government allocated Rs. 500,000 for providing modern seeds, pesticides, chemical fertilizers, and food grain storage tanks to the farmers. Before 10-15 years, there were small and few canals for irrigation. With rural electrification facilities, farmers have started to invest in deep boring systems for irrigation. At present, farmers have been producing surplus products, especially rice, wheat, maize, and lentils. Farmers are also producing fresh vegetables like cabbage, cucumber, tomato, and watermelon. Over a hundred farmers are producing and supplying major crops, vegetables, as well as fruits and dairy products in Kerkha Bazaar [FGD2].

These narratives demonstrate status of commercial farming practices of different ecological regions. They show that commercial farming practices have been increased more in Tarai and Hilly regions compared to Mountain region. Kamiljon (2009) also found that districts' geography plays a major role in shaping disparities in accessing the local public services including drinking water. This issue is further highlighted by the service receivers as continued investment in infrastructure and vocational trainings about modern techniques is necessary. In alignment with this vision, agricultural service delivery has become a key priority for local government. The interventions like capacity building and skill development training and other farm-related services have been providing through federal mechanism. Likewise, Support to Rural Livelihoods and Climate Change Adaptation in the Himalayas (Himalica) EU-funded program also

implemented in Taplejung among 300 households from 12 cardamom-producing groups to improve the cardamom value chain. It has established a cooperative for collective marketing and organized exposure visits to India to share climate-resilient practices (ICIMOD, 2017a). Additionally, the project has initiated Kanchenjunga spice garden tourism in partnership with the Trekking Agencies' Association of Nepal (ICIMOD, 2017b).

Ecologically, Faktanglung rural municipality allocated Rs. 5,300,000 for the agriculture sector and Rs. 5,062,000 for animal husbandry. Additionally, Rs. 200,000 has been allocated for skill development training, and an agriculture research center has been established in Ward Number 5 (FRMO, 2081). Maijogmai rural municipality allocated Rs. 4,000,000 for the agriculture sector and Rs. 3,000,000 for animal husbandry (MRMO, 2081). Kamal rural municipality generated Rs. 2,500,000.00 in revenue from business registrations. The agriculture sector is increasingly commercialized, with nine weekly vegetable markets operating regularly. The local government also offers a 50% subsidy for purchasing agricultural technology and provides 75% insurance for animal husbandry (KRM, 2080/81).

However,Mountain region faces challenges in irrigation and relies heavily on self-managed systems, with ongoing efforts to improve infrastructure and support from research centers. The Hill region struggles with inadequate irrigation facilities, but the implementation of modern technologies and local efforts are helping farmers adapt. In contrast, the Tarai region benefits from better irrigation, more commercial farming, and stronger agricultural support systems, leading to surplus production and marketing.

Effectiveness of Agriculture Service Delivery

The LGOA (2017) clause 11 of Part 3 outlines agricultural development and extensions related roles, duties, and authority of the local government. Additionally, planning and implementation are discussed in clause 24 of Part 6. Local governments have the autonomy to carry out these provisions independently. As outlined in Schedule 8 of the Constitution of Nepal (2015) local governments possess the authority to manage public administrative services including agriculture input development, market mechanism, biodiversity conservation as well as animal health, and cooperatives. Furthermore, the Government of Nepal is committed to agricultural development goals, guided by the 20-year vision of the ADS, which aims to create a self-reliant, sustainable, competitive, and inclusive agricultural sector that drives economic growth and enhances livelihoods and food and nutrition security, ultimately leading to food sovereignty (MoAD, 2014). Several cross-ministerial policies and strategies, such as the Multi-sector Nutritional Plan, Food Security Action Plan, and Zero Hunger initiatives 2025 were prioritized

under food security agenda. The goals and objectives of these policies are integrated into the new administrative framework of government (IFPRI, 2016).

Besides above facts, this section appraises subjective perceptions of the participants residing in Mountain, Hill and Tarai regions as:

> *The government allocated Rs. 39,00,000 for agriculture in the Mountain region in fiscal year 2017-18, providing modern hybrid seeds, vitamins, and tools for tunnel farming. Financial support remains limited, though farmers access loans from the Agriculture Development Bank and cooperatives, with future incentives planned. Large cardamom production began over a century ago in Jogmai, but its yield is declining due to plant diseases. Farmers also cultivate potatoes, amriso, ginger, tea, and seasonal vegetables without incentive provisions [FGD 3].*

> *We have huge potentiality of commercial farming. Moe than 18 cooperatives re investing in cash crops and food grains. Local governments provide seeds and tools but need to offer grants and incentives for exemplary farmers. Farmers are forming committees to receive fertilizers, seeds, and tools from local government, and there is a push for the permanent presence of agricultural technicians in each ward [P7].*

> *Agriculture section offers capacity and skill development trainings related to agricultural development. Recently, they provided soil testing, and crop disease training, with over 600 farmers participating in agricultural tours, leading to plans for agro-tourism [P2].*

> *Ward committees focus on improving road networks, irrigation, and establishing collection centers to address supply issues during the rainy season. Plans include processing centers for large cardamom and vegetable collection to enhance farmer earnings and reduce reliance on intermediaries [FGD5].*

> *Ward committees focus on improving road networking, irrigation, and establishing agriculture collection centers in Jogmai. They plan to enhance road networks to ensure local products can be supplied during the rainy season. Local governments are prioritizing agriculture as a key sector to improve livelihoods, with plans for upgrading agricultural development initiatives. They are focusing on establishing processing centers and reforming intermediaries' dominant marketing channels[FGD3].*

These narratives proves that the farmers participate in skill development trainings and exposure visit programs are becoming skillful. The remark of key informants reveal that Maijogmai is popular destination to the Nepalese farmers and inter/national guests. In

that sense Maijogmai endures high potentiality for agro-tourism development. The duty bearers shared that farmers are producing tea, orange, kiwi, butterfly, Ginger amriso, akbare khursani and potato. Tea farming in Nepal spans 20,237 hectares across 30 districts, with about 160 tea gardens and over 17,000 farmers involved. Most of the tea farmers are belonging to Ilam and Jhapa districts. These responses also signify effective implementation of agricultural service delivery function of local government. The narratives also demonstrate that farmers have been producing different crops including cash crops farming based on ecological regions. However, agricultural extension programs such as construction of agricultural collection centers, food processing centers and marketing development channels have been the commonly focused area of the elected local government. The empirical findings reveal that topography is obstacle for the farm commercialization in Mountain region. Developing all-weather road connectivity are urgent need for facilitating rural and urban market linkages (Kamiljon *et al.,* 2009).

The findings signifies that infrastructure improvement, better irrigation facilities, and government support are key to enhancing agricultural service delivery. However, each region has its own specific challenges and priorities, ranging from improving irrigation and market access in the Mountain region to fostering agro-tourism and cooperative farming in the Hill region, and expanding commercial farming and infrastructure in the Tarai region.

Concurrent Powers Related to Agricultural Service Delivery

This section appraises perceptions of the duty bearers and service receivers on concurrent powers related to agricultural service delivery functions of local governments belonging to Mountain, Hill and Tarai regions. Ward representative express their view about it as:

> *Government allocation of Rs. 39,00,000 for agriculture in FY 2017-18 for distributing modern hybrid seeds and vitamins, as well as tools for tunnel farming. However, financial support for farmers is still lacking. Farmers have been obtaining loans from the Bank and cooperatives, with plans for future subsidies and incentives [P12].*
>
> *Implementation of decentralized power is in its early stages, facing many questions about concurrent powers. Despite uncertainties, agricultural services are being provided, and a new land tax system has been introduced [P7].*
>
> *Five agricultural technicians and one veterinary technician are available in the municipal office. Cooperatives supply seeds and fertilizers, occasionally providing training, though local elites often overshadow target groups. With two technicians*

available, reaching all farmers remains a challenge as interest in agro-based farming. Technicians are mobilized to serve at the ward level, but there is a call for permanent residents to enhance commercial farming[P9].

Most local government powers relate to agriculture, making it a priority sector for improving the lives of those in agriculture-based livelihoods. Effective implementation of agricultural powers can transform farming systems, though challenges remain due to insufficient central government support [P3].

The local government has established an agriculture section to deliver services and provide subsidies and modern inputs, with Rs. 1 crore allocated for agricultural programs this fiscal year. The section is being functionalized, with local governance assuming authority. New laws are being developed for agricultural programs, with farmer involvement in modern practices increasing [P 5].

The Ward Committee is focusing on improving road networks and irrigation facilities, noting that landslides hinder local product supply during the rainy season. Rs. 95,000,000 have been allocated for road projects, emphasizing the need for improved transportation to support farmers [P04].

Four technicians are serving the Rural Municipality, but more resources are needed for comprehensive agricultural support and project reporting. Annual plans for agricultural extension programs are being developed based on expert recommendations, with specific areas identified for projects [FGD1].

A significant budget is allocated for road and irrigation projects each fiscal year, though marketing strategies need further development. Joint efforts with government and I/NGOs are planned to enhance agricultural extension and marketing. Numerous agro roads have been opened this fiscal year, with substantial local road networking established, aiming to connect with national highways [P 13& P14].

The aforementioned accounts suggest that political representatives may be unaware of constitutional provisions, while those who understand them argue that concurrent powers create obstacles due to their shared nature among local, provincial, and central governments. Ward representatives from the Mountain region have been exercising agriculture-related powers like land tax collection, yet service receivers express dissatisfaction with land, forest, and water resource management practices. This indicates a shared eagerness among both duty bearers and service receivers for effective implementation of concurrent powers, alongside satisfaction with agricultural functions that could enhance rural prosperity. Additionally, the narratives highlight that road connectivity is essential for supplying local products. Significant ward-level funding

has been allocated for commercial farming and agricultural road construction, with an increasing fiscal budget for agricultural infrastructure projects across ecological regions. However, according to OECD standards, this budget remains sufficient compared to the 28 percent public expenditures allocated to local governments (Shah & Shah, 2006).This might be reasons all the regions highlights the importance of coordinating agricultural services, and strengthening local governance to enhance agricultural productivity through developed power/jurisdictions. The Mountain region struggling with limited financial support and decentralization, the Hill region focusing on infrastructure and farmer organization, and the Tarai region aiming to improve marketing strategies and extend agricultural services through collaborative efforts.

Challenges for Agriculture Service Delivery Practices

Based on above mentioned narrative analysis, this section developed nine basic challenges of agriculture service delivery functions. First, increased trend of commercial farming practice is evident with growing awareness among farmers about selling local products. However, challenges remain in improving agricultural service delivery to meet this demand. Second, road networking is critical for economic development, yet disparities exist between ecological regions. Tarai region has better access to national highways, while mountainous areas has inadequate road infrastructure, hindering market access. Third, local governments prioritize agricultural service delivery through capacity-building programs. While skills training is beneficial, significant reforms are needed to enhance accessibility of these services among the farmers. Fourth, inefficiencies in administrative functions and inadequate capacity development for staff hinder effective agricultural service delivery. Improved coordination with government and non-government agencies is necessary for better outcomes. Fifth, the average satisfaction level among the service receivers indicates room for improvement. Local government must better engage communities and address their aspirations through targeted incentives and support programs. Sixth, establishing and better functioning agricultural cooperatives is essential for transforming farmers' livelihoods. Cooperatives can facilitate better access to markets and resources, helping farmers by excluding intermediaries. Seventh, availability of farmland and ecological diversity are crucial for agricultural commercialization. However, issues such as land degradation, irrigation challenges, and environmental factors affect productivity in the mountain region. Eights, attraction of youth to foreign employment poses a challenge for agricultural transformation. Local governments should focus on creating opportunities within the agricultural sector to retain youth and support returnees. Ninth, effective governance is vital for agricultural development. The lack of technical expertise, concurrent power/jurisdictions among the governmental tiers, and insufficient accountability measures hinder progress and

productivity. Strong governance frameworks are essential to encourage farmers and ensure commercial agricultural initiatives.

For addressing such challenges, all regions suggested improving infrastructure, capacity building, cooperative development, and youth engagement in agriculture, along with stronger governance frameworks to enhance agricultural service delivery functions.

Discussions of Findings

Improving agricultural service delivery functions and livelihoods of the farmers have become top priority of local governments. Consequently, devolved power/jurisdictions have been upgrading agricultural system in local level. As a result, the demand for agricultural service delivery has rushed, and farmers are becoming more skilled due to capacity development training related to agricultural commercialization and exposure visits. The empirical findings of the studies on governance and agricultural development (Dhital, 2017; Ivanyna & Shah, 2018; Khatiwoda *et al.,* 2017; Shah & Shah, 2006) indicates that the federal government has recognized agriculture as a key sector in the economy. However, farmers are still facing thunders of challenges, including poor irrigation facilities, shortage of agricultural technicians, inadequate support incentives, inconsistent pricing policies, and weak marketing channels. For example, Nepal produces around 26,300 tons of tea annually, which is exported to numerous countries including Australia, France, and India. However, tea exports declined in the first five months of the 2023/24 fiscal year, with 7,181 tons exported, compared to 10,065 tons in the same period the previous year. Farmers report that Indian traders purchase tea at Rs 550 per kg but sell it internationally for up to Rs 3,000 per kg.

According to Shah and Shah (2006), many developing countries continue to experience inadequate and often dysfunctional governance systems characterized by rent-seeking, misallocation of resources, inefficient revenue systems, and weak delivery of public services. Such governance failures negatively impact access to public services for the poor and marginalized groups. In response to these issues, the development assistance community, particularly the World Bank, is consistently working to draw lessons from global practices to better understand effective strategies for enhancing public sector governance. Ivanyna and Shah (2018) used responsive, equitable, responsible, and accountable tools for evaluating advancements in public-sector governance and institutional accountability. Accordingly, the reformed institutional mechanisms and devolved power/jurisdictions also helped to address commercial farming related issues in Nepalese context. However, overlapping concurrent powers among the three tiers of government regarding the management of forest, land, and water resources are causing confusion among the populace. Local governments have not been granted authority over

the utilization of natural resource-related powers. This might create conflict among the three tiers of government. This might be reason that Nepal National Governance Survey (2018) established a framework defining governance as system for the exercise of authority by state authorities in reference to shared values (foundations of governance) through democratic mechanisms (infrastructure of governance), that deliver state's commitments ensuring quality service delivery function (NASC, 2018).

Finally, the goal of transforming agricultural practices at the local level has been significantly linked with developing the skills of the farmers, helping them financially, making long-term sustainable plans for its promotions. These all interventions brings transformation in agriculture development as the agro-tourism pocket centers. In addition, local governments have planned to invest in dairy production and commercialization of cash crops. They have taken the idea of integrated development of agriculture and tourism sectors. In Nepal, the District Administration Plan (1975) had triggered the integration of multi-sectorial district development programs oriented towards poverty reduction, infrastructure development, agricultural growth, and welfare schemes (ARC, 1975). Still now, the multi-sector interventions are relevant to eradicate poverty from the rural regions. Out of these, the fusion of tourism, commercial farming, and dairy production could be one of the strategic focusses in improving the livelihood of the farmers.

Conclusion

The study concludes that devolved agriculture service delivery functions of local governments helped to improve livelihoods of the farmers. Their farming capability and skill also have been enhanced through implementing exposure visits and training programs. The farming system is becoming modernized and commercialized due to the collective efforts of government and non-government authorities. However, local governments still need to improve road connectivity, market access, and sufficient government supports to the farmers. Mountain region focusing on promoting tourism, the Hill on community engagement, and the Tarai on agro-tourism and government support. The Mountain and Hill regions lacks irrigation facilities whereas Tarai benefits from better irrigation, infrastructure and commercial farming. The effectiveness of agriculture service delivery function depend on improved inputs facilities, financial support, training programs and market access strategies. Hence, there is urgent need for proper marketing channels, improved irrigation facilities, accessible training and insufficient resource allocation system. Addressing these challenges through collaborative efforts, innovative practices, and supportive policies is critical for enhancing farmers' livelihoods in the region. Therefore, an integrated approach that links agriculture with other commercial activities is crucial for revitalizing the rural economy and increasing participation in

farming. Fostering collaboration among local governments, community organizations, and private enterprises or multi-level governance might create synergies to functionalize agricultures service delivery more efficiently and effectively.

Policy Implications

Local governments should establish bylaws prior to exercising devolved powers and responsibilities related to agricultural service delivery function. While central government policies have generally supported local governance, it is essential to revise fiscal policies to ensure adequate technical and financial support is allocated to local governments from both provincial and federal levels. Furthermore, stringent policies should be implemented to hold elected representatives and administrative staff accountable for any negligence. The fiscal budget for local governments must be tailored to reflect the geographic and ecological characteristics of the area. The federal government should establish and enforce a comprehensive land use plan that fosters agricultural development nationwide. Local governments need to devise and implement proactive policies that promote commercial farming and effective marketing strategies. Additionally, supportive and collaborative policies should be introduced to assist youth and women engaged in micro-entrepreneurship, especially those interested in investing and returning from migration.

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