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New State Structure and Agriculture Governance: A Case of Service Delivery to Local Farmers in the Eastern Gangetic Plains of Nepal

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Abstract: Under the new constitution adopted in 2015, Nepal embraced the federal structure of government comprising seven provincial and 753 local governments, each with their own legislative, judicial, and executive powers. Nepal's agriculture sector provides livelihoods to about 60% of the population. However, its bottlenecks are rooted in poor implementation of agricultural policies and plans, low levels of investment, uncertain political commitment and weak governance, especially a lack of an effective service delivery mechanism to farmers. This study analyzed the impacts of federalism on the institutional arrangements and governance of the agriculture sector through both review of literature and field-level information gathering, particularly focusing on extension service delivery to farmers in Province 2. The findings highlight the impacts of federalism on agricultural governance mainly in functional overlapping, resource allocation, priority setting, coordination, human resource management, and extension service delivery. The lack of coordination and collaboration between the three tiers of government and the line agencies results in less-effective extension service delivery, especially in providing integrated, specialized technical services to farmers which is the main responsibility of local governments. Lack of poor understanding of governance, institutionalization, and human resources management is found to be one of the most serious problems with the provincial and local governments. The consequences are that despite a huge potential to improve service delivery leading to increased production and a market surplus, the province remains food-deficient and lacks food and nutrition security. The study recommends a strong political commitment, better policy and institutional coordination and coherence, and good governance in all tiers of government by providing demand-driven agricultural services leading to higher cropping intensity and productivity potential for which it is well recognized.

Keywords: agriculture and food security; coordination; extension service delivery; federalism; governance; Nepal; policy priority

1. Introduction

Nepal has adopted a new federal state structure following the promulgation of the Constitution of Nepal in 2015. The constitution has established three levels of government—federal, province, and local. The local governments (LGs), represented by 753 rural and urban municipalities, are supposed to be the government reaching the door steps of the people serving the interests of the grassroots communities [1]. This change from a unitary to a federal system was accomplished after a 10-year-long armed revolution

with the aim of instituting an inclusive and responsive system of governance and promoting effective and efficient service delivery system to the people [2,3]. The local governments (LGs) enjoy relative autonomy, having 22 exclusive and 15 concurrent judicial, administrative, and legislative rights [4]. The Local Governance Operation Act 2017 (LGOA) guides the LGs to run their administrative, judicial, and development functions. The aim of the LGOA was to help LGs to work effectively “to improve the quality of life, reduce social and economic inequalities, and enhance rapport between people and public institutions” [4]. The agriculture sector is under the concurrent responsibility of all three levels of government, except that agricultural extension is now the sole jurisdiction of the local governments. Agricultural research and education are placed under both federal and provincial governments, but agricultural quarantine (crop, food, and livestock) and food safety are the responsibility of the federal government [3,4].

Old institutional structures such as the Regional Directorates of Agriculture in five development regions and District Agriculture Development Offices and Agricultural Service Centers in each district have been dismantled. The central departments of agriculture and animal husbandry and the Ministry of Agriculture Development are trimmed down to smaller structured organizations. In the provinces, a Ministry of Land Management, Agriculture, and Cooperatives (MoLMAC) has been established under which the Directorates of Agriculture, Agriculture Knowledge Centers (AKCs), research laboratories, and commodity farms have been set up. In each urban and rural municipality, an agriculture section has been created which is staffed with a small team of agricultural technicians, often on a temporary basis, to look after agricultural extension and other service delivery to the farmers within the municipality [3]. However, these are intended structures, not always in place and/or functional yet.

2. Experience of Federalism and Good Governance

2.1. General Experience

Many arguments appear on why federalization is better than a unitary governance system [5,6]. Diffusion of power, increased citizen participation, greater efficiency in government function, and a government that is closer to the people to respond to their needs are some arguments given in favor of federalism [5]. However, experience from both developed and developing countries that have adopted federalism provides a mixed picture on most of these counts. For example, the practices of federalism in Africa did not appear to have positive effects [7]. Nevertheless, today at least 25 countries covering roughly 40% of the world’s territories have a federal system of government [6]. Under a federal government system, the citizens and governments work together to implement policies and programs and to support networks and linkages [8]. Federalism is a system in which power is shared by a central government and sub-national units such as states or provinces [8]. The sub-national units are given self-rule through executive, judicial, and legislative powers by the constitution of the country [9,10]. It also encourages cooperation and innovative approaches to policy development [9]. In contrast, some potential disadvantages are that federalism promotes duplication of work, lack of coherence, additional operating costs, and ineffective governance due to lack of capacity and allows inequalities between provinces [10].

2.2. Nepal’s Experience

In Nepal, the newly-introduced constitution provided the basis for federalism. Among many intents and goals, the key objective of this constitution is to embrace the right of the people to autonomy and self-rule and to fulfill people’s aspirations for peace, good governance, development, and prosperity through the federal democratic republican system of governance. Good governance and service delivery to the people is guaranteed by the constitutional provisions (Article b, 4) in which it is pledged to assure equal and easy access of people to services and to make public administration clean, competent, impartial, transparent, accountable and participatory [4]. Nepal’s federal system among others is aimed at integrating development programs, and scaling-up local economic growth [11].

In the context of agriculture development, a study done by the International Food Policy Research Institute (IFPRI) concluded that federalization provided both challenges and opportunities, especially in improving service delivery to the Nepalese farmers [12]. On the possible implications on governance of the agricultural sector the study argued that in Nepal, being a small country, the transition from a unitary to a federal system needed “to be carefully managed to ensure that agricultural and other development services are not compromised” although the transition did offer “opportunity to improve” [11,12]. The authors further argued that with strong history and experience in decentralized planning and local governance, Nepalese farmers are able to articulate their demands for local agricultural development services and that demand-based agriculture services would be their expectation after federalization, for which proper institutional frameworks and processes need to be put in place [4,12]. Good governance in agriculture and food security is paramount to avert food crises [13]. Agriculture and food systems often suffer from inappropriate policy formulation, bad program planning and implementation, poor institutional capacity, and inadequate investment leading to low productivity, production, and food insecurity [13,14].

2.3. Good Governance and Federalism

Governance in agriculture refers to the administrative, institutional, and organizational structures and processes within which agricultural services are embedded [15,16]. Good governance in agricultural policies, programs, and projects results in implementation with greater effectiveness and resource efficiency. Good governance also calls on the principles of public participation, transparency, and accountability in designing policies and their implementation [16]. Good governance involves constructive co-operation between the different sectors, producing outcomes such as efficient use of resources, responsible use of power, and effective and sustainable service provision. It emerges when stakeholders engage and participate with each other in an inclusive, transparent, and accountable manner to accomplish better services free of corruption and abuse, and within the rule of law [17,18]. However, the literature on the impacts of federalization on overall governance of the service sectors such as agriculture and health in Nepal indicates overall deterioration in service delivery due mainly to a lack of proper regulations, quality standards, sound financing, logistics, human resources, and no evidence of “empowering and capacitating local and provincial governments through strengthening leadership and governance mechanisms” [19,20]. In the agriculture sector, it was felt necessary to avoid a disconnect between “accountability and authority for agricultural extension service” at sub-national units. Jaishi et al. [19] argued for “building appropriate local governance structures” to balance the demand and supply for goods and services based on the principle of downward accountability to citizens.

Good governance in agriculture ensures efficient use of resources, just and responsible use of power, and effective, efficient, and sustainable service provision to the people. It calls on the principles of public participation, transparency, and accountability in designing policies and their implementation [16,17]. Agricultural development often suffers from inappropriate policies, poor institutional capacity, bad management, poor program planning, implementation and monitoring, and inadequate investment [21]. Good governance ensures services are provided free of corruption, irregularities, and abuse of power [16–18].

Embracing the principles of good governance in the democratic and federalized government system is essential at all levels, and particularly for municipalities to allow them to provide effective and efficient extension service delivery to farmers. There are many factors which, if institutionalized appropriately, can contribute to good governance and better extension service delivery, in a way that can increase farmers’ food production and incomes and help them attain better livelihoods (Figure 1). It is conceptualized that federalism (i.e., state structure and power sharing arrangements) has a major effect on governance. It is identified as an independent variable, whereas factors such as government policy, coordination, coherence, transparency, accountability, and participation are thought to play a moderating role in influencing the level of good governance (dependent variable).

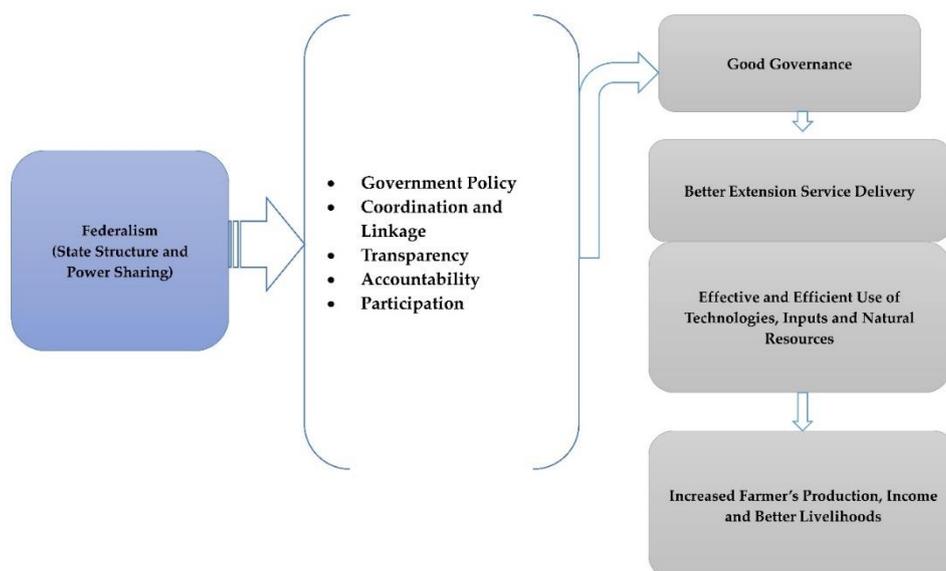


Figure 1. Conceptual framework showing factors affecting good governance and extension service delivery.

When good governance is established and maintained as a day-to-day function in both organizations and human behaviors, it will have a positive effect on extension service delivery. Better extension service delivery contributes to effective and efficient use of resources which eventually bring increased production and income and better farmers' livelihoods. In Nepal, the issue of good governance is mentioned for the first time in the Tenth Five Year Plan (2002–2007). The Poverty Reduction Strategy Paper (PRSP) emphasized good governance to ensure the efficiency of the civil service, reduce corruption and leakage, and accelerate decentralization, as an important vehicle for better delivery of services with more accountability and community participation. Since then the good governance issue has come to the central stage of every plan, policy, and strategic framework for economic development [22].

The major agricultural issues faced by LGs in the federalized structure in Nepal pertain to ineffective and poor quality of extension services, difficulty in accessing agricultural inputs, lack of market linkages, and low prices of farm products [23–25]. To some extent farmers are empowered in the sense that they can submit their needs and demands to their elected representatives more frequently and strongly. The expectations as argued by the IFPRI report were that their voices would be heard better and more quickly, resulting in greater public and private investment in the agriculture sector, better program prioritization, provision of more intensive technical services at the grass root level, easier access to production inputs and farm loans, and better market access and prices for farm produce [12]. Adhikari [26] found that “poor understanding of federalism, limited practices of democratic norms and values primarily due to the lack of understanding of local governance, and limited commitment of political actors and policy makers to federalism, and may derail the good intentions behind federalism.” This current study therefore argues that due to the poor understanding and weak political commitment of local political leadership to accountability and responsibility, there is a gap between farmers' expectations, provincial and local governments' actions and the capacity to provide better agriculture extension services under the new federal system. This study explores the gap between intent and reality for agricultural extension under the new federal system.

3. Description of Study Methods and Approaches

3.1. Study Objectives and Location

This study, conducted in Province 2, explores the gap between intent and reality of extension in the federal system, and how the situation can be improved. It assesses the situation of agriculture, the food system and extension service delivery from the perspective of local farmers and common citizens after the adoption of the new state structure in the country. The study hypothesis is that under the federalized governance system, the quality and timely service delivery problems in agriculture would be more effectively addressed as the local governments would be within easy reach of farmers and the local population. The objective of this study is to improve the general understanding of the impact of federalization on the governance and institutional arrangements in the agriculture sector especially those that support extension service delivery to the farmer, and communicate this among the policy makers in the provincial and local governments and suggest a way forward.

The current study was conducted in Province 2 of Nepal—a part of the Eastern Gangetic Plain (EGP), and focused on three districts—Dhanusha, Mahottari, and Sarlahi for field level data collection (Figure 2). The province has a total area of 9661 km² and consists of eight Tarai (plain) districts with a total population of 5,404,145 (20.4% of the total population) as of the 2011 census. It is the most densely-populated province in Nepal (559 person km⁻²) compared to the national density of 180 persons per km⁻². The province has a sub-tropical to tropical climate and the most fertile plain area are suitable for growing major cereal, oilseed, and pulse crops and commercial tropical and sub-tropical fruits and vegetables as well as fish farming and animal husbandry. The major cereal crops of the province are rice, wheat, and maize. Although it has high agricultural potential, the province has the lowest human development index (0.4 as against the national average of 0.6) in the country with adult literacy rate of only 41% [27].

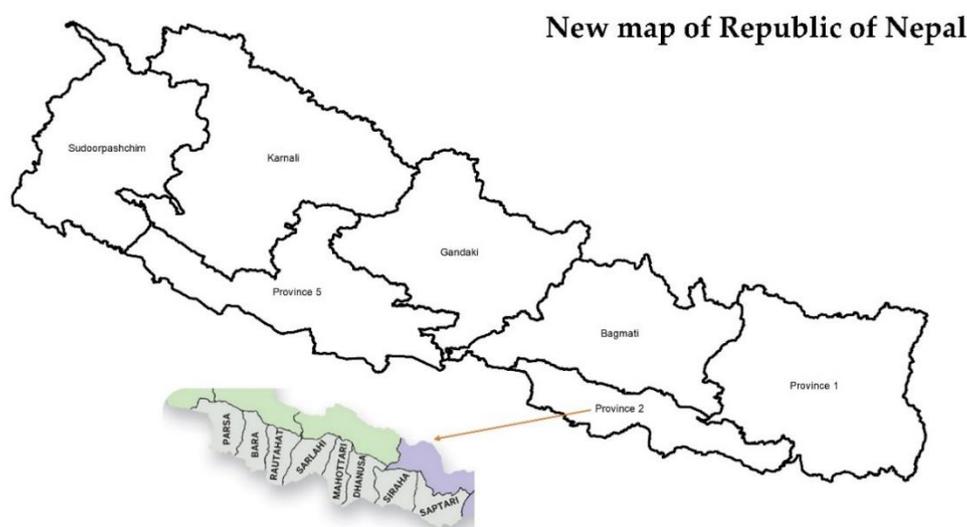


Figure 2. Map of Republic of Nepal showing the seven provinces and districts in Province 2, and the municipalities of Dhanusha, Sarlahi and Mahottari where the study was conducted.

3.2. Study Approach

Both desk review and field-based interactions were employed to collect data and information. Literature related to governance, policy, and extension service delivery as well as information on constitutional, policy, and legal frameworks put in place post federalization were collected through the desk review. Secondary data relating to food and agriculture was reviewed and analyzed to describe the field situation regarding agriculture planning and implementation, especially the situation of agriculture extension service delivery in the province. Focus group discussion (FGD) and key

informant interview (KII) tools were employed to gather data from the three municipalities in March 2019. Altogether, 15 provincial, local, and federal offices were visited and the key informant interviews were conducted with 25 key informants. Members of the Provincial Policy Commission, the State Minister, and officials at the Ministry of Land Management, Agriculture, and Cooperatives, provincial members of parliament, mayors and agriculture officers across the districts were the respondents of KII. Two focus group discussions were held in Dhanusha and Mahottari districts in which 44 stakeholders (25 male and 19 female) comprising of farmers, local traders, teachers, and local leaders participated and shared their views.

4. General Findings

4.1. Importance of Agriculture in Post-Federalized Nepal

Based on the literature-based evidence described above, the federalized state structure in Nepal has an opportunity to focus on effective and efficient service delivery and inclusive economic growth and to respond to the needs of the people, especially grassroots communities in an inclusive and effective manner [28,29]. The agricultural structure under the new constitution is shown in Figure 3.

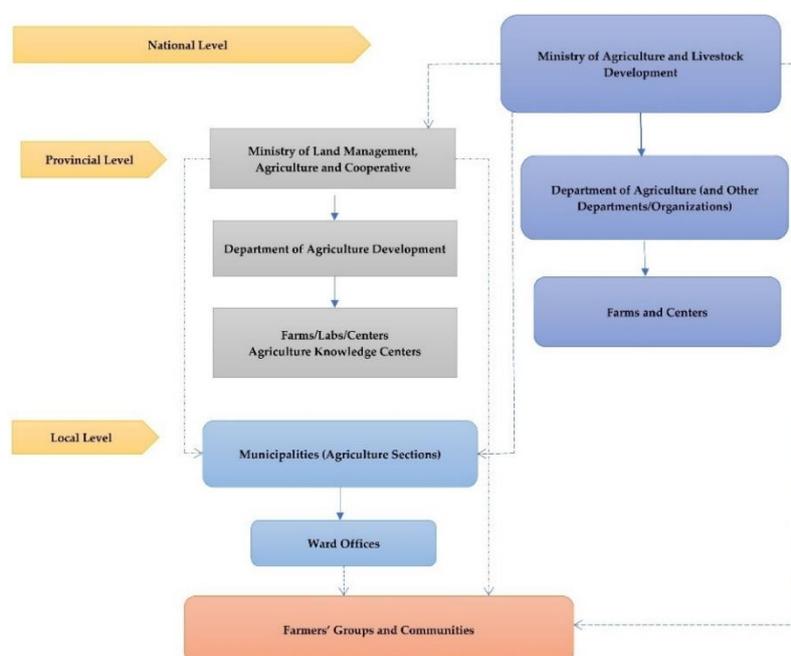


Figure 3. Structure and linkage of three tiers of governments in the agriculture sector in Nepal. The bold arrows show the direct command and dotted lines are coordinating linkages. However, these dotted lines do not yet exist in formal and legal terms across the three tiers of the governments and are the causes for lack of coordination.

Agriculture is one of the key sectors of the Nepalese economy, with 66% of people directly engaged in farming that is largely characterized by small farming and livestock husbandry in an integrated manner [28–30]. According to the World Bank, agriculture is the main source of food, income, and employment for most of the people [31]. Although the contribution of this sector to the national economy has been decreasing over the years, it still contributes about 27% of gross domestic product (GDP) and plays a vital role in people’s livelihoods, food security, and trade and in the overall economic growth of the country. Agricultural GDP (AGDP) growth however has not been smooth and stable, mainly due to over dependence on erratic monsoons, gaps in quality input delivery, and climate variability (Figure 4). The average annual growth of the agriculture sector for the last 20 years was recorded at around 3.2% [29].

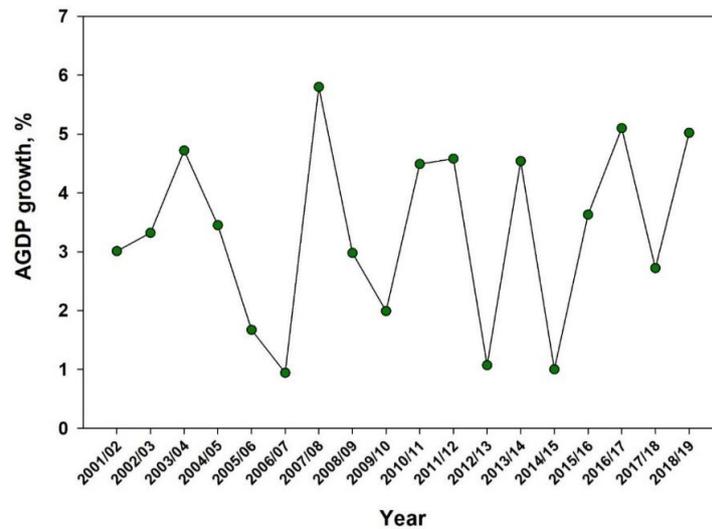


Figure 4. Agricultural gross domestic product (AGDP) growth rate (in %) of Nepal. Source: MoAD [30].

Nepalese agriculture is characterized by semi-subsistence farming, small land holdings, a dependence on monsoon rainfall, and lacks modernization. More than 70% of the cultivated area is covered by three major cereal crops of paddy, maize, and wheat [30]. The data shows scanty commercialization of agriculture. There are several factors, including technological, socio-economic, and governance issues that affect the growth of agriculture and food systems in Nepal [29]. Expectations are that under federalization these bottlenecks would be largely alleviated [32].

4.2. Government Policy and Priority

The agriculture sector was accorded a top priority from the Fifth Five Year Plan (1975–1980) to the early years of the Eighth Five Year Plan (1990–1995) [32]. The annual budget allocation to the Ministry of Agriculture was 7.9% of the national budget in the fiscal year 1993–1994 which gradually started to decline since then and reached a record low of 2.4% in 2008–2009 (Figure 5). The budget allocation to the ministry has slightly improved in later years but has continued to remain at about 3% for the last 20 years. The decline of budgetary resources for agriculture had a major impact on the performance of the long-term Agriculture Perspective Plan (APP) (1995–2015), especially with respect to research and extension services and activities to modernize and commercialize Nepalese agriculture and to achieve the goal of food self-sufficiency.

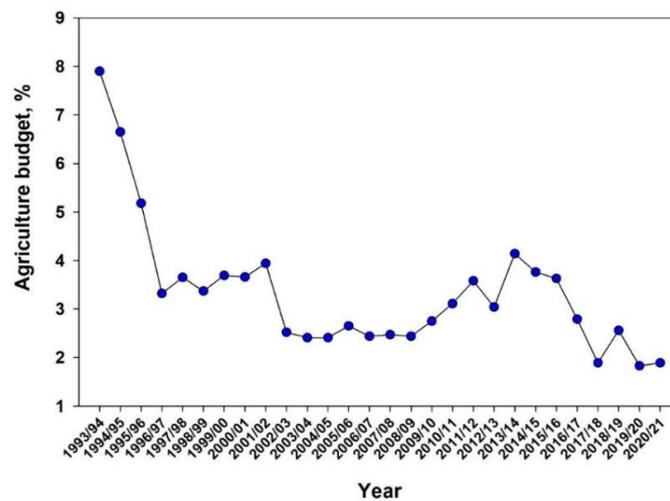


Figure 5. Annual budget allocation (in %) to agriculture in Nepal. Source: Ministry of Agriculture Development (MoAD) [30,32,33] and author’s calculations from the Ministry of Finance, Red Books.

Within the Ministry of Agriculture in Nepal, resource allocation was not balanced between crops, commodities, and programs. The budget allocation was highly tilted to crops and commodities rather than food quality control, farm mechanization including postharvest technology, capacity and human resource development, and resource conservation and agro-biodiversity conservation and management. Agricultural research was the most neglected with its budget nearly four times lower compared to extension programs (crops and livestock) in 2015–2016 [34,35].

After the completion of the APP in 2015, another 20-year-long Agriculture Development Strategy (ADS) came into existence with four pillars of agricultural development—governance, productivity, commercialization, and competitiveness with 72% of the total costs of the ADS being recommended to be invested in these four components [33,34]. This shows ADS's agribusiness focus and less concern for sustainability of agriculture, resource use efficiency, agrobiodiversity management, and livelihood improvement for small and marginal farmers. Following the adoption of the new constitution and resulting federal structure of governance, the relevancy of the ADS declined as it was prepared in the context of the old unitary system of governance, and had no connection to the Sustainable Development Goals (SDGs) that are now a target for the Government of Nepal's policy. There is also a threat to effective implementation due to lack of ownership by civil society, stakeholders, and provincial and local governments [35,36].

The National Agriculture Policy (2004) which is also an umbrella policy for the agriculture sector has been considered an important guideline for agricultural development [32]. This policy tries to strike a balance between various elements such as enhancing productivity, commercialization, and competitiveness on one hand, and conservation and utilization of natural resources including agrobiodiversity and improvement in livelihoods, incomes, and food security of poor and smallholder farmers on the other [32]. The National Agriculture Policy however needs updating and refinement considering the new constitution and SDGs. Some key policies that influence the landscape of agriculture include the Agri-Business Promotion Policy (2006), Agrobiodiversity Policy (2007, 1st amendment, 2014), Land Use Policy (2015), and Agricultural Mechanization Promotion Policy (2014) [35,36].

The Constitution of Nepal 2015 is itself the principal policy document to direct the course of Nepalese agriculture. The focus of the constitution is the right to food sovereignty and rights to food for every citizen of the country. Other provisions in the constitution are scientific land reform, improvement in productivity, diversification, commercialization, modernization, sustainability of resources use and ecological balance, climate and soil adaptation, better access to inputs, and an effective food distribution system [1,4]. The Right to Food and Food Sovereignty Act (2018) was promulgated to implement the basic rights relating to food, food security, and food sovereignty of citizens conferred by the Constitution of Nepal [36]. To address the SDGs and in particular SDG 2, the government adopted the Zero Hunger Challenge (ZHC) initiative as a national agenda and prepared the ZHC National Action Plan (2016–2025). The objective of this action plan is to ensure people's right to food by improving food and nutrition security and food governance to achieve a society free of hunger and malnutrition by the year 2025 [33].

4.3. Extension Service Delivery

Service delivery is known to be a set of institutional arrangements embraced by the government to supply a range of goods, inputs, and services to its people. A responsible government needs to take accountability and should provide service delivery in a timely, effective, and efficient way [36,37]. The access to services is, however, dependent on the kind of services available, relevance of services and timeliness [38], as well as capacity to deliver. Service delivery nevertheless continues to be unsatisfactory, ineffective, and inefficient in providing even essential services in Nepal [37]. Extension is also known as the delivery of technological information inputs and the education of farmers about improved methods of farming. Technological adoption is one of the criteria of a successful extension service delivery. In agriculture, extension services in Nepal were introduced as advisory services to

farmers and dissemination of knowledge and technologies developed by the national agricultural research systems [38].

5. Field Study Findings

5.1. Agriculture and Food Security

Overall, based on the information gathered through FGD (mostly farmers) and confirmed by most of the district based KII (mostly AKC staff) the current study questions the notion of “local governments being at the doorsteps of people”. Our findings indicate that the slogan exists only in theory in Province 2 in the agriculture sector. Traditionally, the Tarai belt where the study area is located was known as the grain basket of the country but the area and particularly Province 2 seems to be losing this identity in recent years. This province accounts for about 21% of rice and 29% of wheat production of the country, but yields are not significantly higher than the national averages. The yield of rice was even lower than the national average of 3154 kg ha⁻¹ in 2015–2016. The province is gradually becoming food deficient due to the low performance of agriculture and increasing population. Despite fertile land area and large irrigation potential, five districts out of eight were food deficient in 2015–2016 (Table 1).

Table 1. District-wise edible food availability and requirement in Province 2 for 2015/16 in Nepal.

| District | Population | Availability * | Per Capita Availability ** | Requirement | Per Capita Requirement | Total Food Balance |
|-----------|------------|----------------|----------------------------|-------------|------------------------|--------------------|
| Saptari | 676,782 | 71,685 | 106 | 122,497 | | −50,812 |
| Siraha | 672,354 | 64,816 | 96 | 121,696 | | −56,880 |
| Dhanusha | 800,249 | 15,2801 | 191 | 144,845 | | 7956 |
| Mahottari | 668,390 | 11,3783 | 170 | 120,979 | | −7196 |
| Sarlahi | 846,863 | 13,6401 | 161 | 153,282 | 181 | −16,881 |
| Rautahat | 770,800 | 91,212 | 118 | 139,519 | | −48,303 |
| Bara | 762,700 | 169,777 | 223 | 138,049 | | 31,728 |
| Parsa | 660,914 | 148,164 | 224 | 119,625 | | 28,539 |
| Total | 5,859,052 | 948,639 | 162 | 1,060,492 | | −111,853 |

* represents edible rice, wheat, maize, millet, and barley; unit: MT. ** per capita availability (and requirement) is in kg and the requirement is the same for all districts and for province. Source: MoAD [30].

In terms of per capita availability of food grains, only three districts (Parsa, Bara, and Dhanusha) met the requirement of 181 kg year⁻¹. This is an indicative situation although food insecurity was not an immediate issue due to easy access to market supply. Food distribution and household food security nevertheless can come up as a serious concern to common people while the province faces the challenges of fulfilling its responsibilities for people’s right to food and the goal of attaining self-sufficiency in food production.

In field interactions, it was found in general that not all farmers were food secure, and Dalit, marginal and small farmers, and disadvantaged groups were more vulnerable to food insecurity. They had small landholdings, low quality land, and lack of irrigation that contributed to the state of insecurity. These farmers could not produce enough food to feed their families. Depending on the study locations, 25–75% of the population were unable to produce enough food for home consumption. Most of the population were not aware of the importance of hygiene and nutrition. Malnutrition particularly in children was common in the study areas.

5.2. Agricultural Extension Service

FGD participants reported that extension service delivery was poor as they had no contact with extension technicians (junior technical assistant (JTA)/junior technician (JT)) in the field, although the government’s policy was to depute one extension worker in each ward of a municipality. The former Agriculture Service Centers (ASCs) were not functional nor were the proposed Community Agriculture Extension Service Centers (CAESCs) operationalized. Despite these problems, limited quantities of improved seeds of crops and grasses and fertilizers were distributed to some farm families in an

ad hoc manner. These inputs were not accessible to all farmers because they had to be collected from the municipalities, and the costs of transportation were higher than the value of distributed inputs. Some farmers communicated that the extension workers were not competent to solve their field problems especially in identifying and controlling insect pests and diseases of crops and livestock, and recommending fertilizer rates and managing soil fertility.

In general, the findings indicated that the farmers' attitude towards government extension service delivery was not positive. This was because people had high expectations of improved services from the local governments following the implementation of federalism. Interestingly, many farmers appreciated the works of some NGOs who were involved in mobilization of farmer groups, imparting training, distributing seeds and fertilizers, and supporting vegetable production, kitchen gardening, goat and poultry farming, and other small activities. It was observed that a select few NGOs were providing better services and in general the interactions with farmers indicated that people perceived NGOs help as charity rather than a regular duty, which is why even small and irregular work was perceived favorably.

Following the adoption of the new constitution, the extension service job has come under the local governments. One of the functions of the local government is to arrange timely supply of seeds, fertilizers, pesticides, and service delivery to the citizens and also ensure their participation in finding people needs [39]. Most farmers in Nepal have no access to quality extension services [40]. It is also felt that the delivery of inputs and services are biased towards big farmers and landowners [41]. The local municipalities neither have functioning ASCs nor trained and expert human resources to provide technical advisory services to the farmers. Expectations are that eventually the ASC will be developed into stakeholder-managed CAESCs. Additionally, the extension service has little functional linkage with research and the private sector [41]. All these constraints pose a real challenge to the local governments in providing effective and efficient extension service delivery to the farmers and agri-business entrepreneurs [42].

5.3. Coordination and Linkage

According to the Local Governance Operation Act 2017, two coordination mechanisms are provisioned to coordinate development including agricultural activities among the agencies under federal, provincial, and local governments. One is the Provincial Coordination Council (PCC) under the chair of the Chief Minister and the other is a District Coordination Committee (DCC)—an elected body. The PCC can meet a minimum of once a year while the DCC can meet once a month. However, the mandate of both the committees are very broad, and it seems unlikely that they are sensitive enough to see agriculture-extension-service-related problems in the face of more immediate and prioritized larger political, administrative, and financial issues such as peace and security, general administration, infrastructure development and revenue generation work, and disaster risk management.

Staff from the AKC, also known as 'Krishi Gyan Kendra' in Nepali, based at a district headquarters covering two districts reported that lack of proper mandate and coordination was the most pressing problem facing the AKC. The local government units (municipalities) do not want to engage with the AKC and collaborate in providing extension services so much so that municipalities do not send participants to the activities organized by the AKC. The linkage between the federal research centers located in the same districts and municipalities was also found lacking. This shows a gross absence of communication and collaboration among the institutions working towards a common goal of agricultural development in the province. Increased program duplication, lack of human resources and lack of clear policy on the roles and responsibilities were also reported to be the key problems across the provincial government, AKCs, and the municipalities.

5.4. Program Priority and Performance

The program priorities and work performance of the Province 2 government in terms of budget priority, expenditure trend, human resource availability, issues of subsidy distribution, and implementation of national programs such as the ADS are summarized in Table 2.

Table 2. Program priority and performance in Nepal.

| Program/Issue | Performance |
|--|--|
| 1. Budget Priority and Spending | <p>(a) About 9% of the provincial budget was allocated to the MoLMAC of which 52% was allocated to livestock and fishery sub-sectors alone, leaving other prioritized programs (such as the rice–wheat–maize system, sugarcane, lentil, mango, and vegetables) in low priority. In the MoLMAC budget, there were 315 program headings listed and many were found overlapping and duplicated with those of Directorate of Agriculture Development (DAD), AKCs, and municipality programs.</p> <p>(b) The DAD allocated 82% of its budget for just one program—market shed construction.</p> <p>(c) In the Mithila Municipality, 85% of the allocated budget was allocated to one program heading—irrigation. In the Bhangaha Municipality, the allocated budget to agriculture (9%) was spent at the Mayor’s discretion without having a well-developed plan.</p> <p>(d) The development budget spending of the MoLMAC was just 12.9% during 9 months of the financial year 2018–2019 and the capital expenditure was 4% in the 1st quarter of the same fiscal year. In the DAD, the financial progress as of April 2019 was a meager 0.4% and the capital spending was zero.</p> |
| 2. Human Resource Management | <p>(a) In the Provincial Policy Commission (PPC), 90% of the approved staff positions were unfilled. Similarly, in DAD, 40% of staff positions were vacant. In the Agricultural Mechanization Promotion Center, Naktajhij, 67% of the positions were vacant. Bhangaha Municipality had no staff at all in its agriculture section.</p> <p>(b) In the Agricultural Machinery Testing and Research Center, Nawalpur 85% of the positions were vacant. In the National Oilseed Research Center, Nawalpur 75% of the scientist positions were unfilled whereas in the Tropical Horticulture Center, Nawalpur human resources were down-sized by 50%.</p> |
| 3. Subsidy Distribution | <p>(a) Most of the agricultural budgets are in the forms of subsidies. Subsidies are given from a minimum 50% to 100% of the costs and every year huge quantities of subsidies are distributed across the country, but they are neither targeted nor effective in producing any results. Moreover, many of the subsidies go to well-off farmers, business firms, brokers and traders, and political workers rather than smallholder farmers or the poor and disadvantaged groups for which the subsidy provision was intended.</p> <p>(b) It is reported that subsidy distribution is not transparent and impartial, and a substantial amount of the subsidy budget is feared to be drained out to fake people, political persons, and people handling subsidies. It is alleged that to access subsidies, farmers must pay a fixed percentage of the subsidy amount as a bribe. In construction work, a 10% commission has become a public knowledge.</p> |
| 4. Agriculture Development Strategy (ADS) Implementation | <p>The ADS, which is a long-term post-2015 strategy for agriculture is unknown to the Province 2 Provincial Policy Commission, and MoLMAC has no ownership to implement it. None of the local governments were aware of the ADS and no programs of any kind were formulated to implement the ADS in the municipalities. The fishery super zone implemented in Dhanusha district in the name of the ADS was not found to be effective or free from political meddling. None of the CAESCs that were piloted in Rautahat, Sarlahi, or Sindhuli districts were operational. Last but not the least, many key indicators and targets of the ADS vision (such as food self-sufficiency, food trade, agricultural growth, soil organic matter improvement, and agri-business promotion) are not found moving even in the right direction so far.</p> |

6. Discussions and Recommendations

Based on the above-described findings, the general impact of federalization on the governance and institutional functioning in Province 2 is generally negative especially in the agriculture service delivery to the farmers. The quality of the local government’s agriculture inputs and extension delivery service was especially found poorer than that prevailing under the unitary system, contrary to the expectations of the farmers.

In the focus group discussions, most participants expressed their view that after the implementation of the federal structure no positive changes have been experienced in agriculture. Many farmers reported that timely and adequate supply of farm inputs such as fertilizers, improved seed, farm equipment, and technical advisory services have become even poorer than under the unitary governance system. The federalization process has made municipalities bigger in area than previous local government units and service delivery has become diluted as the planned agriculture service centers (ASCs) are still not operational and locally-hired extension field workers are not in post.

The views expressed by the farmers were largely corroborated by the views expressed by lower-rank provincial and federal staff working especially in the AKCs, and research and demonstration farms and centers. Also, the KII confirmed that the capacity of the agriculture section in the municipalities even after three years of establishment is weak and it is too poorly staffed to provide integrated extension services. The staff are also unable to provide applicable and useable knowledge and expertise drawn from subject matter specialists (SMSs) who are ironically within a few hours' drive from the municipalities covered under this study. The consequences are that for most of the critical services sought out by the farmers, the municipalities are either not able to provide or if provided the services are of poor quality mainly due to lack of coordination with AKC and other related federal and provincial research and demonstration centers. Due to a lack of adequate human resources, provincial and local governments have been unable to plan and implement agriculture development work in their domains, slowing down budget spending or underperforming planned activities. The budget absorptive capacities at both levels were found to be exceptionally low, whereas the budget allocation in the federally-run farms and centers was inadequate to conduct even their regular and day-to-day activities. In practice, what was expected was that local and provincial government would transfer part of their budget to federally-controlled national research centers to access expert services (e.g., training expertise by SMSs) and their specific knowledge and technology developed and disseminated to the farmers in their areas. But lack of communication and coordination among three layers of governments seems to be preventing this. The summary of the change in institutional arrangements and potential impacts on agriculture is shown in Table 3.

Table 3. Changes in state structure and implications for agricultural governance in Nepal.

| Indicator | Before Federalization | After Federalization | Potential Impacts on Agriculture | Recommendations |
|------------------------|--|---|---|--|
| State Structural Units | National Government, Development Regions (5), Districts (75) VDCs (3915), and Municipalities (191) | Federal Government, Provinces (7) Districts (77), and local bodies (753) | Government (local) at door step. Easy access to services but more political complexity and costlier structures and unclear functions. | Since municipalities lack financial and technical knowhow to create their own cadre of extension officers and the technical staff to run the ASCs, the federal and provincial government should reform policies and budget allocation requiring LGs to avail services from AKCs and national agriculture research centers located within each province |
| Government Tiers | 2—National and local (with LSGA 1999 Provision) | 3—Federal, provincial and local | Weak connection and coordination as all tiers of government are autonomous and independent from each other. | The onus is on LGs (mayors of the municipality) to reach out to province and center to direct their respective offices to work with LGs. |
| Agricultural Functions | Led by separate regional directorates, district offices and service centers | Agriculture is put under the domain of Municipalities who were supposed to set up full-fledged ASC and CAESCs but have not done so. | Due to autonomy, priorities may be changed between the national, local, and provincial governments. Resources may be thinly distributed among various sectors. Agricultural extension may not receive priority. Possibility of overlapping of budget expenditure for the same program across three levels of governments. | Agriculture extension service should be made a co-operative extension service involving all three tiers of government and agriculture universities learning from a similar system prevailing in neighboring India where in the Krishi Vigyan Kendra (KVKs) are run jointly by ICAR and the state agriculture university. |
| Coordination | Strong coordination along the line of command. Provisions for various coordination committees at central, regional, and district levels. | No line of command over province and local levels. Provision for provincial coordination council (PCC) led by the chief minister and district coordination committees in each district. | The PCC has too broad a mandate and is unlikely to meet frequently. Even if PCC is focused, organized, and has political will to better coordinate agricultural institutions, effectiveness may be low due to perception of independency. Coordination may not be effective due to differences in priority and lack of clear role | A separate coordination mechanism should be set up at the district level through the office of the elected District Coordination Committee (DCC) which is as per the provision made in the constitution. |

Table 3. Cont.

| Indicator | Before Federalization | After Federalization | Potential Impacts on Agriculture | Recommendations |
|--|---|---|--|--|
| Human Resource Management (HRM) | Subject matter specialists in each district, farm, and training center. Local frontline extension workers in local service centers. All bonded by one civil service act and regulation | No subject matter specialists (SMSs) in municipalities. No agriculture service centers at the districts; AKC role is simply to act as a clearing house center covering 2 districts. Different Acts and regulations for provincial and local staff | Difficulty in achieving a full HR capacity due to lack of authority to give promotion and capacity building. Terms and conditions may differ between three levels of government agencies; AKCs should hire SMSs whose service the municipalities can avail by covering their costs since the municipalities are not in a position to provide integrated specialized technical services on crops, livestock, and fisheries to the farmers. Implication in effective and quality service delivery. | The AKCs should have subject matter specialists (SMSs) in all major topics in agriculture and livestock disciplines. There should be clear and harmonized policy of the central and provincial government requiring municipalities to avail the services of these SMSs by paying their operational costs. |
| Supervision, Monitoring and Evaluation (SME) | SME clear along the line of command from the Ministry to department, region, district, and agricultural service center levels. | SME ends itself in each of the government body. No line of command along the hierarchy. | Negative effect on the quality of work performance; discontinuation in district-level progress report compilation and reporting; irregularity and corruption likely to increase due to decentralized authority to local- and ward-level officials and in absence of SME; local government agricultural staff may be deprived of regular technical guidance and be demotivated unless AKC is officially connected with them as specialized service centers. | SME should be independent and should be the responsibility of the Provincial Planning Commission (PPC); AKCs should be strengthened with clear mandate, adequate technical staff (SMSs) and budget. There should be clear separation of roles and responsibilities between provincial agriculture directorate and AKCs; AKCs should have autonomy to work with all three levels of government. |

Source: CGED-Nepal [35].

7. Conclusions

Federalism in Nepal is struggling to find its success stories especially in the agriculture sector in Province 2. The decentralization and devolution of power and authorities especially from federal to local governments has not been smooth or without strings attached. The widely-repeated slogans by federalism advocates that the federalization would bring “government at the doorstep of the people” only exists on paper at this stage, as the local governments lack full control over and capacity for managing their administrative and finance staff based on transparency, accountability, and responsibility from sound governance, revenue generation, and satisfactory budget expenditure. Therefore, much more effort is needed to fully institutionalize the federal system as enshrined in the country’s constitution especially in agriculture sector—the mainstay of the economy. There is a clear need for increasing production, productivity, and food system sustainability in Province 2 that can be realized if all three levels of governments worked together as a team. This is possible by improving the local government leadership and institutional arrangements based on the principles of competency and the subsidiary role of institutions working toward meeting the goal of effectiveness, efficiency, and sustainability. In addition, they should all work for one common vision and outcome in agriculture by improving the entire set of activities from planning and implementation to monitoring and evaluation of the agriculture development work. The current study provides a snapshot of the prevailing situation in only one of the seven provinces and three of the 77 districts of Nepal. Hence, these findings may have limited scope for generalization at both provincial and central government level.

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