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FARMERS RESPONSE ON AGRICULTURAL SERVICE DELIVERY IN NEW FEDERAL SYSTEM OF NEPAL

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ABSTRACT: *The objectives of the study were to assess the farmer's satisfaction with agricultural services and the local government's performance in delivery of agricultural services under the new federal system of Nepal. The responses of 300 farming households covering three local levels (100 farming households from each municipality) were collected during 2019 and 2020 to analyse responses. Based on the information obtained, a relative importance index (RII) was developed by using 16 parameters that were considered as performance variables in a Likert-type scale. Results showed that about one tenth of the respondents were highly satisfied; about two fifth were satisfied, and nearly half of the respondents were moderately satisfied with the agricultural services at local level. The RII analysis revealed that local governments are effective in providing agricultural services that are relevant to the farmers resulting in increased access to services along with implementation of agricultural related activities. Other positive changes include the timeliness of service delivery by the local level governments, which have also become more accountable in terms of service delivery. On the other hand, the respondents have felt lower levels of agreement related to the capacity of the local staff, the institutional mechanisms, and participatory planning and financial resource allocation for agricultural services. Thus, from a policy perspective, the findings suggest there is a strong need for strengthening local staff capacities, the formulation of appropriate policies, and the establishment of institutional mechanisms to ensure farmer's participation at the local level planning process, and the prioritization of resource allocation to the agriculture sector to achieve improved agricultural service delivery and greater farmer satisfaction.*

KEYWORDS: Access, capacities, federal, governance, performance, relative importance index

INTRODUCTION

Provision of agricultural services remains one of the major public deliveries in Nepal. These services directly contribute to economic growth, poverty reduction and promoting sustainable livelihoods through direct assistance to farmers and their families (NPC, 2019; Thapa, 2019). Providing effective agriculture services in a timely and effective manner informs, motivates and educates farmers in relation to available technological, managerial and market opportunities (Working Group on Agricultural Extension, 2007). Over the past several decades, the Nepalese government has made

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various efforts to increase government responsiveness to farmer's need and preferences. This was attempted through democratization, decentralization, as well as other institutional initiatives aimed at increasing citizen participation in policy making and implementation (Thapa, 2010; GC et al., 2019; Shrestha, 2019; Subedi et al., 2019; Bishwakarma et al., 2020). However, there are very limited systematic assessment of farmers' responses about the performance of the agricultural service delivery system recently implemented in the federal context of Nepal.

Since 2015, with the federalization of the country, the agricultural services are constitutionally devolved to local governments in Nepal (Constitution of Nepal, 2015). The local governments now have the power and autonomy for designing, implementing, managing and regulating agricultural services locally (LGOA, 2017). With these provisions, over the last four years (Bishwakarma et al., 2020), the local governments (753 municipalities, both urban and rural) have begun to undertake the agricultural service delivery functions which are elaborated in the Local Government Operation Act (LGOA, 2017). The constitutionally provisioned agricultural service delivery at local levels aims to provide relevant services to the farmers locally in effective and efficient ways.

Over the past ten years, several studies have been undertaken regarding farmers' satisfaction with the public agriculture extension services (Ganpat et al., 2014; Elias et al., 2015; Kassem et al., 2021) and their effectiveness (Debnath et al., 2016; Resnick, 2018; Joshi & Narayan, 2019). Findings of these studies indicated mixed results. Unfortunately, there is very limited or no study, at least in the Nepalese context, about farmers' responses to performance of the agricultural service in new federal system, and there is dearth of information and literature.

Scholars argue that it is crucial to collect client's response data to measure public sector performance in order to influence the planning, policy formulation and debate of the future of the government reform process (Osborne & Gaebler 1992; Bouckaert &Van de Walle 2003; Kampen 2007; Shingler et al., 2008). Several research works (Roch & Poister, 2006; Osman et al., 2014; Chatarjee & Suy, 2019) indicated that satisfaction is positively related with perception about the performance. Empirical evidence has also shown that citizens are able to perceive the efforts of service agencies (Gao, 2012). According to Raboka (2006), satisfaction is the fulfillment of certain prior expectations related to any product or service; and satisfaction is how supplied products and services meet or surpass customer expectation (Farris et al., 2010). Satisfaction in terms of agricultural services can be taken as an effective response of a farmer towards the use of agricultural services. Along with the managerial measures, satisfaction is also used as a standard of service performance (Roch & Poister, 2006). Xie, (2008) and Bao et al., (2010), have recognized the use of citizen surveys in assessing performance of local government. Osman et al., (2014) have used the citizen satisfaction survey to assess the effectiveness of local authorities in Perak, Malaysia.

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Though Nepal is in the initial stages of its journey to federalism, there are increasing concerns and questions on fiscal and administrative ambiguity regarding the capacity and effectiveness of the local government in service delivery. The important question is whether the citizens are satisfied or how they are responding to the current performance of service provision at the local level - for example, in the case of agricultural services and delivery. Hence, there is a crucial need to assess farmers' response from the very beginning to shape future policy for improved service delivery. Under this context, this study was conducted. Main objectives of this study were concerned with assessing the farmers' response to the agricultural services provisions in the changed governance structure; they are also related to the institutional set up, specifically relating to the restructuring of the agriculture sector under the new federal system in Nepal. The following were the research questions:

i) How is the overall satisfaction level of the farmers to the agricultural services at local level? And

ii) How is the local governments' performance in agricultural service provisions based on the farmers' response and what are the current performance gaps in relation to agricultural service delivery?

CONCEPTUAL BACKGROUND

An important feature of federalism is the division of state power and authority between the various levels of government (i.e., federal, provincial, and local) (Devkota, 2020). Experts often sum up federalism as combining self-rule with shared rule (Knuepling, 2016). When small sub-national governments with decision-making powers are created throughout a country, citizens can more easily raise concerns with public officials; the closer government authorities are to them, the more they are likely to work with them (Faguet, 2004). Mbate (2017) proposed three potential channels that are supposed to improve service delivery in the decentralized condition: these are political competition, downward accountability and the increases in responsiveness to local needs by better targeting service provisions. In addition, Canare (2020), summarized two primary channels through which decentralization enhances welfare: (a) better delivery of public goods and services due to the information advantage of local governments, and (b) better provision of public goods and services from improvements in governance and accountability. The major assumptions in both the above cases are that the local governments, due to closer proximity to the citizens, has better information about their service needs, and can design public service provisions with better targeting. The political competition at the local level results in the local officials being increasingly accountable to the locally elected representatives, which in turn increases downward accountability and enhances good governance.

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Based on the above conceptual background, the study considered farmers' satisfaction with agricultural services, which is the outcome of the local government performance in service delivery, as presented in Figure 1. Moreover, the performance of local government is assessed using positive statements associated with the agricultural service provisions as per the Local Government Operation Act (LGOA, 2017). The LGOA is one of the major legal frameworks for operating local governments in the federal context of Nepal (see also Bishwakarma et al., 2020 and 2021).

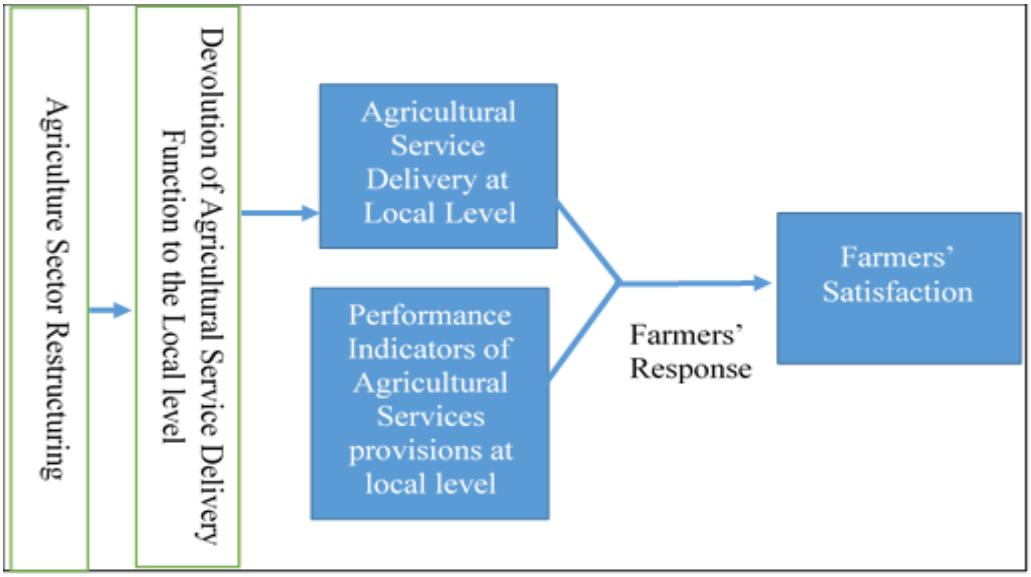

Figure 1. Framework for assessing the response of farmers to agricultural services in the context of agriculture sector restructuring

METHODS

Study Site

The study was conducted in three local government areas; Belaka Municipality of Province 1, and Musikot Municipality and Simta Rural Municipality of Karnali Province (Figure 2). Province 1 and Karnali Province were selected based on their distinct geographic diversity, socioeconomic context and progress achieved to date in operationalizing the agricultural functions and establishing institutional mechanisms for agricultural development. The municipalities were selected purposively to fulfil certain criteria - such as the progress they have made on the establishment of legal/policy instruments, institutional arrangements, preparation of programmes and plans, and progress in agricultural service delivery under the new federal system. Further these three local levels represent diversity in farming conditions, agro-ecology (ranging from terai to hills and mountains), population, and farming systems. Belaka represents the terai/inner terai region, Simta represents the hill/midhill region, and Musikot represents the hill to mountain region.

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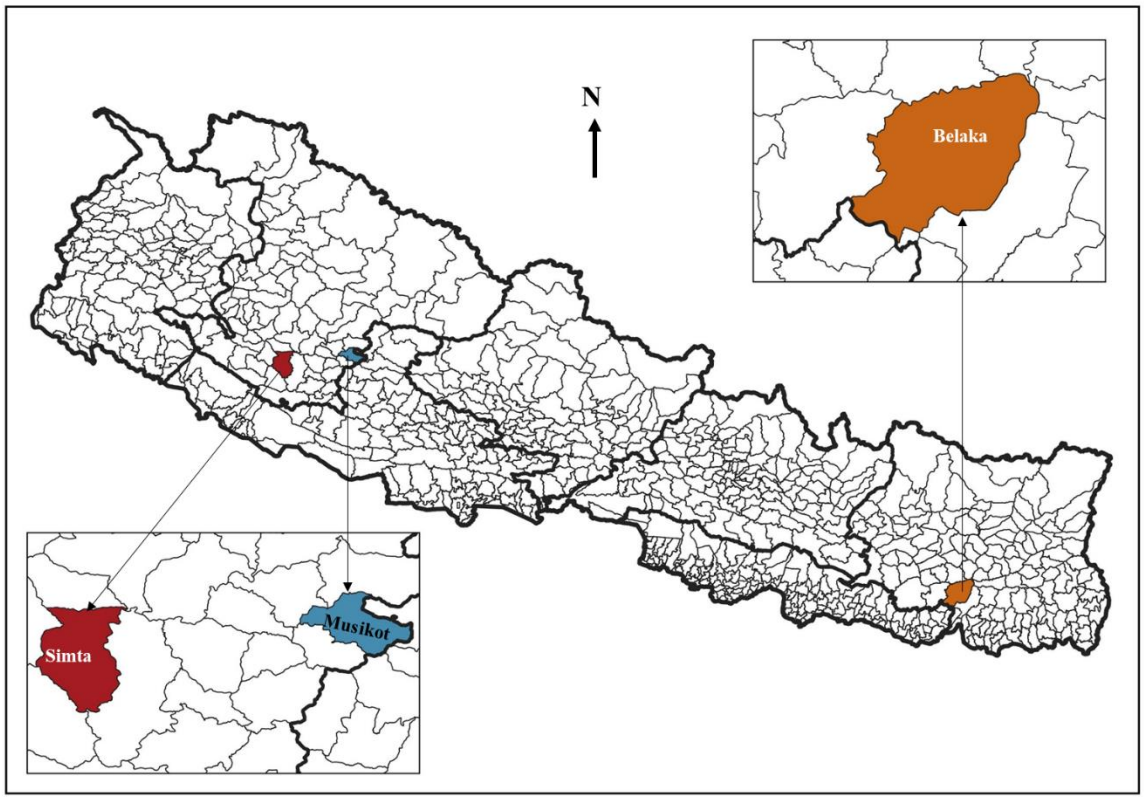

Figure 2. Map showing study sites in Nepal

Data collection and analysis

A household survey was conducted with 300 farming households covering three local levels (100 farming households from each municipality). Sample households were identified and selected randomly from the farmers' lists made available by the Municipal Agriculture and Livestock Development Sections of the respective municipalities. The sample size was determined by using the following formula;

$$n = \frac{N}{1 + N * (e)^2}$$

where, n = sample size, N = population size, e = acceptable sampling error at 10%. The number of farmers receiving services from the Municipal Agriculture and Livestock Development Sections of the three selected Municipalities comprised the population (N) for this study. The core performance indicators in this study correspond to the 16 positively constructed parameters associated with agricultural service provision at the local level. This list included two categories of statements. The first category includes the statements that reflect availability, and nature and responsiveness of agricultural services (such as availability, relevancy and timeliness of the agricultural services,

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information flow, agriculture related activities of the local level, and accountability of the local government). The second category of statements reflect the agricultural service delivery mechanism, policies and resource allocation (e.g. institutional mechanism for service delivery, local capacities, the participatory process in planning and decision making, and allocation of financial resources for agricultural service provision). The respondent farmers were asked to indicate their agreement or disagreement on a five-point scale; strongly agree (5), agree (4), moderately agree (3), neutral (2) and disagree (1) for each statement. Likert type scales have been used to assess farmer's satisfaction of extension services by several studies (Joshi & Narayan, 2019, Elias et al., 2015, Ganpat et al., 2014). The respondent farmers were also asked to indicate their satisfaction to the overall process of agricultural service provisions initiated by local level governments. The farmer's responses ranged from; strongly satisfied (5), satisfied (4), moderately satisfied (3), neutral (2) and dissatisfied (1). Besides these, the following information was collected for each of the respondent farmers: age, sex/gender, caste/ethnicity, education, size of land, annual agricultural and total household income, group membership, migration for foreign employment, and time taken to visit (walking) to reach the Municipal Agriculture and Livestock Development Section.

Data analysis was undertaken using SPSS 16, and results are presented as descriptive frequencies. Major socio-economic variables were analysed using one-way ANOVA. Respondents perception of the importance of the different parameters related to agricultural service provision at local level were analysed by using relative importance index (RII) from the scale data. Five scales were represented: 5 = 1, 4 = 0.8, 3 = 0.6, 2 = 0.4, and 1 = 0.2. RII was computed by using the following equation for analysing the performance of the local level governments; this equation has been used by several scholars for indexing (Subedi et al., 2017; Kattel, 2021).

$$Rii = \sum Sifi / N$$

Where, Rii = relative importance index, $\sum$ = summation, Si = scale value at ith importance, fi = the frequency of importance given by the respondents and N = the total number of respondents.

Reliability and validity of the measurement items

The list of possible relevant variables used for this study was prepared based on a literature review and discussion with experts who are engaged in policy formulation and implementation, and specialists from academia. Cronbach Alpha (α) was used to assess the internal consistency of the scale. The scale appeared to have good internal consistency (α = .93). Pre-testing of the household survey questionnaire was carried out with five farmers from each Municipality (n = 15) prior to finalization. Data were collected by pre-trained individuals; it took approximately 15-20 minutes to complete each questionnaire set. The empirical results were further triangulated with focused

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group discussions and observation of documents and provisions at local levels such as financial allocation, citizen charter, policies and programme according to need.We faced frequent challenges during household data collection due to the Covid-19 Pandemic, and subsequent government-enforced countrywide lockdown imposed for its control. In some places local enumerators were trained virtually and mobilized in collaboration with staff from the Municipalities for data collection, following safety guidelines recommended by WHO and the Government of Nepal. The collected information was verified through telephone conversations and virtual interaction as required.

RESULTS

Socioeconomic variables

Major socioeconomic variables were analysed using one-way ANOVA, and the results are presented in Table 1. The analysis revealed that most of these variables differed significantly between the municipalities. Household size, walking time (minutes) to access the services from the municipality, land holding per household (ha) and household income shared by the agriculture sector (%) are highly significantly different among these three municipalities. The farmers in the terai have higher land holding than hills and mountain farmers. However, irrespective of the differences in land holding per household, the annual income per household from agriculture is similar in all municipalities. In Belaka and Musikot, more than half of the households' annual income was contributed by the agriculture sector (Table 1). In Simta (n=100), less than half of the annual household income derived from the agriculture sector which might be due to the higher seasonal migration to India for employment.

Table 1. Socio-economics variables between Municipality using one-way ANOVA

Variables	Belaka	Simta	Musikot	Overall	F-value	*P*-value
Age (years)	41.57[a]	38.54[b]	40.03[ab]	40.05	2.550*	.080
Household size	5.43 [a]	6.41 [b]	5.79 [a]	5.91	6.979***	.001
Economically active member/ household	3.91 [a]	4.44 [b]	3.95 [a]	4.11	3.016*	.051
Walking time (minutes) to access the services from Municipality	82.17 [a]	67.74 [b]	96.0 [c]	81.95	9.232***	.000
Land holding per household (in hectares)	0.78 [a]	0.48 [b]	0.33 [c]	0.51	23.721***	.000
Annual income from agriculture (NRs.)	109128	79320	120510	102500	1.759	0174
Annual Total household income (NRs.)	231346	245970	245780	241798	0.094	.910
Household income share by agriculture sector (%)	66.31 [a]	47.07 [b]	58.54 [a]	56.74	6.288***	.002

*Note: ***, ** and * indicate significant at 1%, 5% and 10%, respectively.*
(Source: Primary household survey, 2020)

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Farmers' overall satisfaction with agricultural service delivery at local level

Farmers' overall satisfaction with the agricultural services between the municipalities was found statistically highly significant at the 1% level, deriving from the moderate to highly satisfied responses. Analysis of the farmers' responses revealed that less than one-tenth of the respondents were 'highly satisfied'; about two-fifth, satisfied, and about half of them were moderately satisfied with the agricultural service delivery at local level. About one-tenth of them had a neutral response on the statements. Belaka has the highest percent (14%, n=100) of respondent farmers indicating 'highly satisfied' and 'satisfied' followed by Musikot (Table 2). A significant percent of farmers (22%) from Simta have shown their neutral response towards the agricultural services where such neutral response is absent in Belaka.

Table 3: Frequency of respondents' responses to agricultural service delivery at local level

Overall satisfaction level	Belaka (n=100)		Simta (n=100)		Musikot (n=100)		Total (N=300)	
	F	%	F	%	F	%	F	%
Dissatisfied	0	0.0	4	4.0	0	0.0	4	1.3
Neutral	0	0.0	22	22.0	2	2.0	24	8.0
Moderately satisfied	30	30.0	56	56.0	53	53.0	139	46.3
Satisfied	56	56.0	18	18.0	44	44.0	118	39.3
Highly satisfied	14	14.0	0	0.0	1	1.0	15	5.0
Pearson Chi Square value	1.026***							
P- value	.000 with 8 degrees of freedom							

(Source: Primary household survey, 2020)

The findings on farmers' response to agricultural services at the local level (5% highly satisfied, 39% satisfied and 46.3% moderately satisfied) indicated that farmers are highly optimistic and have a high acceptance of the restructuring of the agriculture service delivery i.e. devolution of agricultural services to the local level. However, the results also revealed that satisfaction levels are not uniform across the municipalities. In the three municipalities, farmers from Belaka have shown higher levels of satisfaction to the agricultural services provided. Focused group discussions and field observations revealed that Belaka has formulated several operational level guidelines related to crop and livestock insurance, agriculture learning centre, farmer categorization, public private partnership, production system controls, and guidelines related to subsidy to the farmers. Moreover, Belaka has allocated a higher budget as compared to the two other municipalities for agricultural services, and has mobilized the members of the Municipal Agriculture Development Committee (MADC) for agricultural planning and monitoring activities. In our earlier study, we found that these provisions have helped local government to reach a greater number of farmers, and to provide services more akin to farmers' needs (Bishwakarma et al., 2020). This has shown that vibrant leadership and political commitment (e.g. funding/management of resources, and policy provisions), partnerships and effective functioning of the

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accountability mechanism (such as the MADC) are important contributory factors in achieving higher levels of farmer satisfaction. This finding agrees with Batley (2004), who argued that service provision is very much a political undertaking.

Simta has appointed a higher number of staff (17), who are mostly Junior Technical Assistant (JTAs) under the provision of One Village One Technician (OVOT) policy, while fewer numbers of staff have been appointed in Belaka (9) and Musikot (8). In spite of the higher number of staff, a higher percent (22%) of farmers from Simta have shown their neutral response to the agricultural services they have received. This has indicated that either there has been a gap in creating wider awareness among the farmers about the agricultural service provisions at local level, or there is poor motivation of the local staff to deliver services effectively. A fewer number of motivated staff with active back up from a committed political leadership and policy provisions is shown to more effective in reaching a greater number of farmers - as in the case of Belaka. Our observation is in line with the findings of Kyle and Resnick (2019), who found that bureaucrats working with fewer but more motivated staff who spend more time in the field are more likely to facilitate citizens' access to agricultural extension rather than a greater number of unmotivated staff.

In addition, different factors such as farmer's age, gender, education, household size, land holding, farm income, contact with extension workers can affect the level of satisfaction with agricultural services. Zawoska (2010) found that older people and women have a higher trust in the agriculture extension agencies. Farmers having a larger farm size are more satisfied with agricultural services as compared to farmers having smaller farm sizes (Ganpat et.al, 2014; Kassem et.al., 2021). Similarly, Kassem et. al., (2021) found that annual income is positively associated with higher satisfaction with the agricultural services.

Farmers' response to the performance of agricultural service delivery at local level

Based on their type, the statements were grouped into two categories: i) responses related to the statements associated with availability, nature and responsiveness of agricultural services, and ii) responses related to the statements associated with the agricultural service delivery mechanism, capacities and resource allocation at local level. In each category, a higher RII indicated a better performance, whereas a lower RII indicated a low performance of local governments in the respective performance parameters. Based on the RII, we attempted to establish an empirical relationship between farmers' responses and the performance of the local government in agricultural service delivery under the federal context of Nepal. The RII analysis revealed mixed results and are discussed in following sections.

Responses to the availability, nature and responsiveness of agricultural services

Analysis of the RII revealed that farmers have generally responded with a moderate level of agreement towards the availability, service provisions and delivery of

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agricultural services at local level (Table 3). The highest level of agreement was for agricultural services provided by the local government as they were more suitable for the local context; this was followed by easily available agricultural services (Table 3). Moreover, the respondents have responded a moderate level of agreement on service provisions such as inclusiveness of the services, accountability of the local government, and information flow related to agricultural services at local level (Table 3).

Table 3. Farmers response to the individual statement associated with availability, nature and responsiveness of agricultural services at local level

Individual statements associated with agricultural service provisions at Local Government (LG)	Scale points (1-Strongly agreed, 0.2-Disagreed)					Total (N)	Weight	RII
	1	0.8	0.6	0.4	0.2			
Agricultural services provided are suitable for local context	9	101	152	31	7	300	194.8	0.65
Agriculture services are easily available	16	73	175	24	12	300	191.4	0.64
Agricultural development activities performed by LG are satisfactory	7	89	161	36	7	300	190.6	0.64
Agricultural services are available in time	9	87	161	24	19	300	188.6	0.63
LG is more accountable to farmers' needs	12	72	167	37	12	300	187	0.62
LG has inclusive agricultural service provision	13	72	160	39	16	300	185.4	0.62
Information flow from LG is satisfactory	10	86	149	36	19	300	186.4	0.62
Agricultural services are market oriented	10	80	137	57	16	300	182.2	0.61
Agricultural staff are responsive to the farmers	7	69	163	43	18	300	180.8	0.60

Note: LG= Local Government; RII= Relative importance index
(Source: Primary household survey, 2020)

Based on the above RII analysis (Table 3), the three municipalities investigated are found to be effective in providing agricultural services that are suitable to the local context, and have made agricultural services easily available to the farmers as required (timeliness). The farmers' positive responses on availability of services are consistent with our earlier finding that municipalities have been able to provide agricultural services to higher percentage of farming households (Belaka, 60%, n=7,827; Musikot, 39%, n=5,541; and Simta 35%, n=5,500) (Bishwakarma et. al., 2020). The household coverage by agricultural services in the municipalities is much higher than that of the centralized service delivery system in the past. Thapa (2010) estimated that the public agricultural extension services used to reach only 15% of the farming households across the country. In a study of Gorkha district of Nepal, Kyle and Resnick (2019) reported 24% of households had received agricultural services. Following restructuring of the

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public agricultural services, significantly more farming households have been reached by all three municipalities. This finding has clearly shown that devolution of agricultural services to the local level can overcome decades long issues of poor coverage.

In an analysis of strength, weakness, opportunities and threat (SWOT), Subedi et. al (2019) also predicted that restructuring of the agricultural service system to the local level would provide wider coverage and easier access to farmers in obtaining agricultural services. Masanyiwa et al., (2019), found increased access to services in Tanzania in a new decentralized system. Moreover, the analysis indicated that farmers perceived increased accountability and improved responsiveness of the local government in relation to agricultural service delivery. These findings are in line with the claims that in a decentralized context both elected and appointed officials become more responsive to the demands of voter-consumers as the distance between them decreases - proximity increases the potency of sanctions (Swanson and Samy, 2003; Faguet, 2004; Speer, 2012; Smith & Ravell, 2016). Similarly, our analysis revealed that agricultural service delivery at local level has improved inclusiveness in service provision. This observation aligns with the finding of Regmi et al. (2010) that decentralization helps to bring politicians and policy-makers closer to clients, to make systems more inclusive, as well as helping to develop more efficient and effective services.

Responses to agricultural service delivery mechanism, participatory process and resources

The respondents' farmers have lower level of agreement to the parameters associated with agricultural capacity, institutions and policies and resource allocation. These parameters have a lower RII, below 0.6 (Table 4). The RII analysis found that the important areas where the local governments are relatively underperforming include; i) capacity of the local staff for agricultural service delivery, ii) partnership with plural actors for agricultural service provision, iii) establishment of institutional mechanisms, iv) a participatory planning process, and v) allocating financial resources for agricultural services.

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Table 4. Respondents' response to the individual statement associated with the agricultural service delivery mechanism, participatory process and resources at local level

Individual statements associated with agricultural service provisions at Local Government (LG)	Scale points (1-Strongly agreed, 0.2-Disagreed)					Total (N)	Weight	RII
	1	0.8	0.6	0.4	0.2			
LG organize periodic public hearings	8	71	134	63	24	300	175.2	0.58
Agricultural staff at local level have enough capacity to provide agricultural services	11	64	139	44	42	300	171.6	0.57
LG has established partnership with other actors for service provision	12	55	138	70	25	300	171.8	0.57
LG has formulated policies, plans and guidelines related to agricultural service provisions	14	45	102	127	12	300	163.2	0.55
LG has established institutional mechanisms for agricultural services	8	52	128	72	40	300	163.2	0.54
LG has promoted participatory planning process	3	73	107	57	60	300	160.4	0.53
LG has allocated enough resources for agricultural services	8	49	98	84	61	300	151.8	0.51

Notes: LG= Local Government; RII= Relative importance index
(Source: Primary household survey, 2020)

The capacity of local staff is one of the major issues in all three municipalities investigated. Most of the staff adjusted at municipalities are Junior Technical Assistant (JTA) level. Moreover, these staff have limited orientation on their roles in the new context (Bishwakarma et.al, 2020). Devkota (2020), explains that lack of adequate and capable staff is one of the major grievances of the provincial and local governments. Paudyal (2021) also argues that lack of capable human resources is one of the major governance issues at local level under the federal context. Moreover, the respondent farmers have also indicated their lower levels of agreement on policies and plans at the local level. Our earlier study found that these municipalities have formulated several policies such as Local Agriculture Act, local level agricultural sector strategy and several guidelines. (Bishwakarma et. al, 2020 & 2021). This indicates that there is a distinct gap in informing the farmers that such policies exist. Moreover, local levels have still to formulate policies to operationalize the concurrent power related to agriculture. Lack of a federal level Agriculture Act and policies is one of the crucial issues in formulating many local agricultural policies related to synchronized power between federal, province and local level. The concurrent power in the agriculture sector is much less discussed among the three spheres of the government to date than for other sectors. Furthermore, the current institutional set up for agricultural services

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at the local level is very slim - only two sections exist, the Agriculture Development Section and the Livestock Development Section. Officials of the local governments argue that federal and provincial government have set up parallel institutional structures rather than strengthening the local level institutions. The farmers' responses about the local capacities and institutional establishment have clearly reflected the current scenario, and the gap in the process of the sectoral restructuring in general, and agricultural service delivery in particular. These observations are in line with Habtom, (2019), who found that institutional, managerial and technical capacities have a great effect on decentralized agricultural service delivery.

Participatory processes in designing and implementing agricultural development activities are an important aspect that local governments are still to address. The current planning and budgeting approach is much too top down i.e. federal budget first, then provincial, and then local. According to Devkota (2020), local governments have complained that the federal and provincial governments are sending various programme and projects to the local level, without coordination and cooperation. The week institutional governance structure and capacity of the staff at local level is also hindering the promotion of a sound participatory process. However, with the progressive evolution of transferring roles and responsibilities, the institutionalization of a proper accountability mechanism such as the MADC, improved information flow and policy provisions, the local governments are expected to foster the participatory process.

In this analysis, out of 16 performance indicators, allocation of enough financial resources in the agricultural services was the least agreed by the respondents. This shows that local governments are struggling to prioritize and allocate enough resources to the agriculture sector. The Inter-Governmental Fiscal Management Act (GoN, 2017) has provisioned crucial aspects for the fiscal federalism such as revenue rights and its distribution, grant provision, foreign aid and internal loan, public expenditure management and fiscal discipline. Based on the provisions of this Act, local governments are receiving four kinds of grants - fiscal equalization grant, conditional grant, complimentary grant, and special grants from federal and provincial governments. However, due to the limited revenue bases, and their weak revenue generation and administration capacity, local governments are highly depended on fiscal transfer by federal and provincial government (Shrestha, 2019). The great majority of these grants are used by local governments for physical infrastructure and other sectors. Moreover, due to the centralized tendency on holding on to sectoral budgets, the local governments are receiving limited annual budgets and are mostly conditional. For example, the local governments have received only about 15% of the total agriculture sector budget of the federal government in fiscal year 2020/21 and 202/22 (MoF, 2020 & 2021). This indicates that resource prioritization in the agriculture sector is still a very pertinent issue to be addressed.

The farmers' responses clearly revealed that certain conditions are required to achieve improved service delivery and generate greater citizen satisfaction. Some of such

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preconditions at the local level are a strong local administrative capacity, increased citizen's participation in the decision making process, institutional and policy design that promotes wider participation, and effective implementation of local programmes and fiscal management. Such preconditions are also argued by several scholars to promote improved service delivery at local level (Mbate, 2017; Habton, 2019; Dick-Sagoe, 2020).

Research Implication

This research attempted to establish the empirical relationship between the farmers' response and the performance of the agriculture service delivery under new federal system in Nepal. Methodologically, this study has enriched the process of assessing the performance of the public services using the client response (farmer's response in this study). This study has reflected the realistic scenario of the current agricultural services at local level in Nepal. Moreover, the findings documented in this study further augment the political debate on formulating policies and programme to address the issues relating farmer's satisfaction and improving the performance of the agricultural service delivery in new federal system.

CONCLUSION

Farmers were emphatically positive in their responses on the agricultural services under the new federal system in Nepal. Higher level of farmers' satisfaction with agricultural services have been achieved in terms of increasing the access of farmers, and delivery of context specific services according to the farmers' requirements. Local governments have been found more effective for localized agricultural services and delivery that are rather heterogeneous, especially in terms of diverse need, priorities and capacities of the farmers under the federal context. However, developing local level capacities for both human and physical facilities, and establishing appropriate institutional mechanism to facilitate participatory planning and decision-making process, and to allot sufficient financial resources seems crucial to improve the performance of local government in agricultural service delivery, and achieve higher farmer satisfaction. The Government agencies, policymakers and implementers should employ an assessment of farmers' responses, such as those employed in this study, on a continuous basis in order to properly understand and identify the performance gap, and to apply reform measures to gain the trust and higher satisfaction levels from farmers to the public provision of agricultural services at the local level.

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