UNIVERSITY EXTENSION AND LOCAL AGRICULTURAL TRANSFORMATION: FARMERS' EXPERIENCES WITH FAR WESTERN UNIVERSITY'S SCHOOL OF AGRICULTURE, TIKAPUR

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ABSTRACT

University-led agricultural extension is supposed to link academic knowledge with farmers' needs but there is still little data on its efficacy at the field level. This study analyzes how School of Agriculture at Far Western University (FWU–SoA) interacts with the farmers and evaluates the relationship between its extension programs and livelihood outcomes and technology adoption. Primary data were collected from 100 farmers affiliated with cooperatives within Tikapur Municipality. Socio-demographic factors, awareness, involvement, and perceived outcomes of university-led agricultural extension programs were assessed using descriptive statistics and Spearman's rank-order correlations. Most participants were middle aged, had education, and farmed 0.5–1 hectare of land. Results showed poor FWU–SoA awareness (47%) and involvement (27%) due to limited institutional outreach and engagement. Only 12% received regular technical assistance, and 77% did not receive agricultural technologies from the university. Technical assistance had no statistically significant correlations ($p > .05$) with technology adoption, productivity, or income change, demonstrating FWU-SoA's extension programs had no direct impact on agricultural outcomes. However, farmers strongly agreed ($M = 4.22$) that the university should work more with local communities and that it might make Tikapur a regional agricultural hub ($M = 3.84$). Farmers most frequently prioritized training

(36%) and input support (30%), followed by marketing support (23%) and research collaboration (11%) as preferred areas of support from FWU–SoA. According to these findings, the institutional presence of FWU-SoA has not yet resulted in a consistent field impact. As a result, FWU-SoA should enhance farmer-centered, participatory, and ICT-enabled extension through targeted training, frequent follow-up, and technology/input support that is in line with farmers' priorities.

Keywords: *Agricultural transformation, Farmers' perception, Far Western University*

1. INTRODUCTION

University extension is an essential component of contemporary higher education institutions that link academic proficiency with community. In agriculture, it serves as pivotal bridge linking scientific innovation and local agricultural farming practices and facilitating the transfer of research-derived knowledge, technology, and advances to farmers (Maulana & Antriyandarti, 2022). University extension and the notion of university extension, originated from the land-grant university system in the United States, has been adopted worldwide to strengthen agricultural development by linking and integrating teaching, research, and extension in a pluralistic approach (Rivera & Qamar, 2019). In this approach, universities act as both educational hub and reagents for rural development, disseminating human and technical resources with advanced advisory services to bring about change in the local community (Anderson et al., 2020).

Around 27% of Nepal's GDP and 60% of employment is basically tangibly connected to agriculture sector (Ministry of Agriculture and Land Development (MoALD), 2023). However, the productivity levels remain low because of fragmented landholdings, antiquated practices, inadequate irrigation, and weak institutional connections between research and agricultural institutions (Dhital, 2017). Government driven traditional extension approach is weak in delivery due to top-down delivery methods, budget constraints, low technological penetration and insufficient local mobilization. This gap in practice has led to universities progressively becoming alternative and supplementary entities in agricultural extension. Connecting academic research with practical requirements through result-based learning and participatory outreach, can lead to much needed symbiosis within the three elements, leading to greater agricultural transformation within the niche area (Joshi & Rawat, 2024).

Numerous agricultural universities within Nepal now have secured a position as a top leading institution for research and education within the boundaries of our country. The Institute of Agriculture and Animal Science (IAAS) at Tribhuvan University, the

Agriculture and Forestry University (AFU), and the Faculty of Agriculture at Far Western University (FWU) are the major education educational facilities within Nepal, developed in the framework of research, education and extension (Amgain, 2022). These universities execute a threefold mandate: cultivating skilled human resources, executing theoretical readings into applied and empirical research, and providing extension and advisory that improve farmers' technical and management competencies. Nonetheless, their levels of extension engagement differ greatly by proximity. The Far Western region, physically isolated and economically disadvantaged, has historically been neglected by national research and extension systems, hence rendering the work of Far Western University's School of Agriculture in Tikapur especially important.

The Far Western University's School of Agriculture (FWU–SoA) at Tikapur was founded to amalgamate teaching, research, and extension for the comprehensive advancement of agriculture, livestock, and forestry in Nepal's Far Western Region (Amgain, 2022). Nonetheless, despite this institutional dedication, its on-the-ground involvement and quantifiable influence on farmers' activities are still inadequately comprehended. Nepal's agricultural extension system encounters systemic constraints, such as hierarchical planning, insufficient resources, and inadequate coordination between research institutions and local farmers, which have impeded the adoption of modern technologies and obstructed productivity growth (Dhital, 2017; Kafle et al., 2017; Tamang et al., 2020). In this context, universities are progressively acknowledged as alternative catalysts for agricultural innovation and participatory development by connecting scientific research with actual farming systems (Anderson et al., 2020; Rivera & Qamar, 2019). However, the degree to which university-led extension initiatives yield measurable results in marginalized areas such as Tikapur has not been experimentally investigated.

Prior research indicates that Nepal's agricultural innovation system is characterized by disjointed institutional connections, restricted participatory learning, and inadequate knowledge transfer among academia, government, and local communities (Babu & Sah, 2019; Timsina et. al., 2024). The identified deficiencies prompt questions regarding the efficacy of FWU–SoA's extension initiatives in converting academic research into tangible field-level advantages, including heightened awareness, technology adoption, and income improvement. Rectifying this deficiency is essential for harmonizing the university's extension mandate with national agricultural development objectives and for enhancing its contribution to inclusive rural transformation (MoALD, 2023; Mishra, 2024). This study seeks to evaluate farmers' experiences, views, and involvement in FWU–SoA's extension programs, providing empirical data on the role of university–community partnerships in promoting agricultural innovation and sustainable livelihoods in Nepal's Far Western area.

2. METHODOLOGY

2.1 Research design

Farmers' perception about university extension activities conducted by Far Western University, School of Agriculture has been studied through mixed-method approach in this research. The framework of this research included both quantitative and qualitative parts. The quantitative part measured farmers' levels of participation, their views and how much they adopted the recommended technology. The qualitative part explored deeper insights into farmers' experiences, aspirations and the limitations they faced. A narrative review of the relevant literature was performed to contextualize the empirical results and to guide the interpretation and recommendations.

2.2 Study area

The research was carried out in Tikapur Municipality, situated in Kailali District of Sudurpaschim Province, Nepal. It is situated at 28°31'30" North latitude and 81°07'15" East longitude, encompassing an area of approximately 122.12 square kilometres. The municipality consists of nine administrative wards. Tikapur was intentionally chosen as the study area due to the allocation of the Faculty of Agriculture at Far Western University (FWU) and its existence as a regional hub for agricultural education, research, experimentation and community engagement.

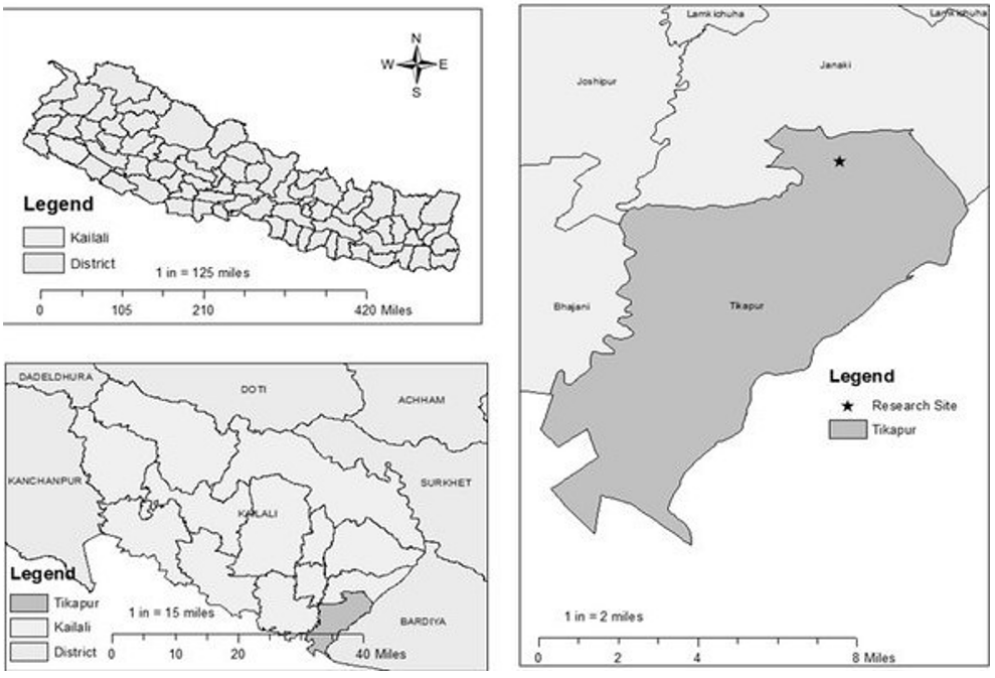

Figure 1: GIS map showing the study area

2.3 Sampling technique and sampling frame

The sampling population consisted of all farmers associated with registered agricultural cooperatives in Tikapur Municipality, Kailali District, representing the primary stakeholders of FWU–SoA's extension programs. The sampling frame was created using the official list of cooperatives from the Agriculture Division of Tikapur Municipality (2023). This list showed that there were 1,836 active farmers.

Using Yamane's (1967) formula for a finite population at a 95% confidence level and a 10% margin of error, we found that at least 96 people had to respond. So, 100 farmers were chosen at random using simple random sampling to make sure they were representative and to account for any non-responses.

2.4 Data collection methods

The study population comprised farmers affiliated with registered agricultural cooperatives in Tikapur Municipality. A list of cooperative members obtained from the Agriculture Division of Tikapur Municipality served as the sampling frame. From this frame, 100 farmers were selected using simple random sampling. Primary data were collected via semi-structured, the semi-structured interview method allowed the researcher to gather detailed information on farmers' perceptions, experiences and participation, while keeping the interviews consistent. Data on farmers' awareness, technology uptake and perceived effects of university extension programs were obtained through a reliable questionnaire encompassing both closed and open-ended questions. Each interview lasted around 30 minutes and was conducted in the vernacular to assure clarity and precise responses.

2.5 Data analysis

The data obtained from the semi-structured interviews were analyzed through quantitative methods. Data were entered and cleaned in Microsoft Excel and for further analysis Statistical Package for the Social Sciences (SPSS) was used. Farmers' engagement, perceptions and acceptance of extension techniques were expressed through calculation of descriptive data, including frequencies, percentages and averages. To explore associations between key extension variables, a Spearman's rank-order correlation test was applied, examining relationships among technical assistance, technology adoption, productivity, and income change.

2.6 Operational Definition and Measurement of Variables

Table 1: Co-ordination schema of variables

Section	Variable Name	Description	Coding / Values	Type
A. Demographic Information	Gender	Sex of respondent	1 = Male, 2 = Female, 3 = Other	Categorical
	Age group	Age of respondent categorized	1 = 20–29, 2 = 30–39, 3 = 40–49, 4 = 50–59, 5 = ≥60	Ordinal
	Education Level	Highest education attained	1 = Illiterate, 2 = Primary, 3 = Secondary, 4 = Higher Secondary, 5 = Bachelor+	Ordinal
	Main Occupation	Primary income source	1 = Agriculture, 2 = Business, 3 = Service, 4 = Others	Categorical
	Farming Experience	Years engaged in farming	Numeric entry	Continuous
	Landholding (ha)	Total cultivated land area (ha)	1 = <0.5, 2 = 0.5–1, 3 = 1–2, 4 = >2	Ordinal
	Annual Household Income	Total annual income (NPR)	1 = <100,000, 2 = 100,000–300,000, 3 = 300,000–500,000, 4 = >500,000	Ordinal
B. Agricultural Practices	Main Crop	Major crop cultivated	1 = Rice, 2 = Wheat, 3 = Maize, 4 = Vegetables, 5 = Fruits, 6 = Others	Categorical
	Adopted New Technology	Adoption of new technology in past 5	1 = Yes, 0 = No	Binary

Section	Variable Name	Description	Coding / Values	Type
		years		
	Source of Improved Seed	Source of seed if improved seed used	1 = Government, 2 = Private, 3 = University, 4 = Others	Categorical
	Used Soil Testing/Modern Fertilizer	Whether respondent used soil testing or modern fertilizer	1 = Yes, 0 = No	Binary
	Crop Diversification	Whether crop diversification occurred post-FWU interaction	1 = Yes, 0 = No	Binary
C. University Interaction	Know about FWU–SoA	Awareness of the Faculty of Agriculture	1 = Yes, 0 = No	Binary
	Participated in Training/Programs	Participation in university-led events	1 = Yes, 0 = No	Binary
	Received Technical Assistance	Frequency of advice/support from FWU	1 = Frequently, 2 = Sometimes, 3 = Rarely, 4 = Never	Ordinal
	Visited University Farm	Visited demo or research farms	1 = Yes, 0 = No	Binary
	Direct Benefit from FWU–SoA	Whether directly benefited	1 = Yes, 0 = No	Binary
	Willing to Collaborate	Future collaboration interest	1 = Yes, 0 = No	Binary
D. Perception of Impact (Likert Scale)	Q1–Q5	Agreement with 5 perception statements (extension, access, cooperation, benefits, etc.)	1 = Fully Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Fully Agree	Ordinal
E. Socioeconomic & Institutional Linkage	Preferred Area of Support	Area where support is most needed	1 = Input support, 2 = Training, 3 = Marketing, 4 = Research	Categorical
	Main Farming Challenge	Major agricultural constraint	1 = Poor market access, 2 = Lack of irrigation, 3 =	Categorical

3. RESULT AND DISCUSSION

3.1 Socio-demographic characteristics of respondents

Table 2 reveals that 55% of respondents were female and 45% were male. Most farmers were middle-aged or older, with 63% being 40 years of age or older. Educational achievement was predominantly inadequate: 29% were illiterate, 35% possessed secondary education, and merely 5% attained a bachelor's degree or higher. Seventy percent of respondents identified agriculture as their principal occupation. Landholding patterns indicate a predominance of smallholders, with 62% cultivating less than 1 hectare. Household income predominantly fell within the NPR 100,000–300,000 range (48%), whereas 22% earned below NPR 100,000 and 11% exceeded NPR 500,000.

Table 2: Table showing socio-demographic characters of the respondents.

Variable	Category	Percent (%)
Gender	Male	45.0
	Female	55.0
	Other	0.0/
Age Group (years)	20–29	22.0
	30–39	15.0
	40–49	20.0
	50–59	25.0
	≥60	18.0
Education Level	Illiterate	29.0
	Primary	12.0
	Secondary	35.0
	Higher Secondary	19.0
	Bachelor+	5.0
Main Occupation	Agriculture	80.0
	Business	8.0
	Service	8.0
	Others	4.0
Landholding Size (ha)	<0.5	30.0
	0.5–1	32.0
	1–2	26.0

Variable	Category	Percent (%)
	>2	12.0
Annual household income (NPR)	<100,000	22.0
	100,000–300,000	48.0
	300,000–500,000	19.0
	>500,000	11.0

3.2 University extension indicators

The findings indicate that farmers exhibit generally low level of awareness and participation in the programs implemented by Far Western University, School. Only 47% of respondents were familiar with of FWU–SoA and its extension programs, signifying that a considerable segment of the agricultural community remains unaware of the university's existence and initiatives. This represents suboptimal flow of information and outreach strategies between the institution and local agricultural stakeholders. With only 27% of respondents participating and 73% (majority) never engaging in FWU, SoA's programs, the finding suggests that the university's agricultural initiatives remain insufficiently inclusive and lacks adequate outreach, ultimately diminishing their potential influence on agricultural development at the community level. The minimal level of participants is evident towards the possibility of possible issues such as limited accessibility, weak mobilization efforts and misalignment of program activities with farmers' pressing needs.

In terms of technical assistance, 60% of farmers reported having never received support at all, 28% received assistance sporadically and merely 12% indicated receiving consistent technical support. This trend suggests that technical support is accessible to just a limited segment of the agricultural community and that service delivery is sporadic rather than consistent. Farmers' ability to sustain improved agricultural practices and efficiently adopt new technologies is being hindered due to variability in support. Opportunities for field experience and practical learning seem to be constrained as only 15% of respondents had visited the university farm, reflecting limited hands-on interaction with academic experts. The absence of such involvement limits opportunities for farmers to witness the practical application of new technologies or farming techniques which are typically essential for technological adoption and behavioral modification.

Likewise, hardly 23% of participants reported the access to any type of agricultural technology such as enhanced seeds or implements from FWU, SoA. Remaining 77% did not gain any direct advantage from these initiatives demonstrating minimal technology transfer and scarce provision of resources to the community. Overall, these findings

suggest that FWU, SoA's agricultural extension and technology transfer initiatives exhibit limited reach, inconsistent implementation and inadequate integration into farmers' day-to- day agricultural activities.

The findings indicate that FWU–SoA's extension effort has not yet attained extensive coverage and continuity among cooperative-based farmers in Tikapur. In Nepal, the efficacy of extension services diminishes when programs are sporadic, not centered on farmers, or devoid of follow-up mechanisms- conditions commonly noted in evaluations of extension delivery (Dhital, 2017; Tamang et al., 2020; Timsina et al., 2024). Restricted interaction and little engagement diminish prospects for trust development and adaptive problem-solving, both of which are essential for behavioral modification and enduring adoption. In the case of Tikapur, the low levels of participation and limited farm visits imply a risk of "demonstration without diffusion," where institutional activities exist but do not develop into sustained co-learning cycles that embed innovations within local farming systems (Jaishi et al., 2022).

Table 3: Table showing descriptive statistics of university extension indicators

Variable	Categories	Percent (%)
Knew about FWU–SoA	Yes	47.0
	No	53.0
Participated in FWU Programs	Yes	27.0
	No	73.0
Received Technical Assistance	Often	12.0
	Sometimes	28.0
	None	60.0
Visited University Farm	Yes	15.0
	No	85.0
Received Agricultural Technology (Seeds/Tools)	Yes	23.0
	No	77.0

3.3 Effect of FWU–SoA extension activities on farmers' access to agricultural technologies

The correlations among six variables associated with the FWU, SoA agricultural extension program were analyzed using a Spearman's rank-order correlation. Table 4 indicates that none of the variables are significantly associated as per the statistics (all $p > .05$). The relationships between receiving technical assistance and various factors-adoption of enhanced seeds or technology ($\rho = -.14$, $p = .157$), utilization of soil testing or modern fertilizers ($\rho = .14$, $p = .165$), crop diversification following FWU interaction ($\rho = -.08$, $p = .418$), yield variation over the past three years ($\rho = -.08$, $p = .437$) and income changes attributable to FWU support ($\rho = -.05$, $p = .657$), were all deficient and statistically insignificant. The results reveal that the provision of technical support suggest no meaningful correlation with adoption behaviors, productivity or income variation among the respondents.

Research findings from Nepal and similar settings indicates that advisory services significantly impact adoption when they are regular, contextually relevant, and bolstered by demonstrations, peer learning, and follow-up. When technical help is infrequent or inconsistent, as noted in this context, farmers may struggle to execute and maintain recommended methods, especially given the limitations of smallholder conditions and market/input uncertainties. (Paudel et al., 2018; Thapa et al., 2020). The minimal adoption results contrasted with significant awareness of FWU, SoA among farmers, underscoring the enduring "information-implementation gap" in university extension institutions. Analysts often link this disparity to insufficient human resources, lack of systematic oversight and lack of coherent cooperation among academic, governmental and community stakeholders (Ghimire & Pandey, 2022).

FWU, SoA's programs seem to lack the iterative feedback mechanisms essential for adaptive learning and enduring impact despite of its notable successes in technology distribution and field involvement. The observed statistical insignificance of yield and income variations associated with FWU, SoA support points to a more profound structural problem in the diffusing university-generated knowledge to agricultural communities, a constraint pushed to worsened phase by logistical obstacles, inadequate institutional incentives and restricted mobility of field personnel (Timsina et al., 2024).

Table 4: Spearman's rank-order correlations among FWU–SOA agricultural extension variables

Variable	Received Technical Assistance	Adopted Improved Seeds/Tech (last 3 yrs)	Used Soil Testing or Modern Fertilizer	Crop Diversification after FWU Interaction	Yield Change (last 3 yrs)	Change in Income due to FWU Support
Received Technical Assistance	1.000	−.142	.140	−.082	−.079	−.045
		(.157)	(.165)	(.418)	(.437)	(.657)
Adopted Improved Seeds/Tech (last 3 yrs)	−.142	1.000	−.103	.128	−.089	−.073
	(.157)		(.307)	(.205)	(.380)	(.472)
Used Soil Testing or Modern Fertilizer	.140	−.103	1.000	.050	.009	−.128
	(.165)	(.307)		(.622)	(.927)	(.206)
Crop Diversification after FWU Interaction	−.082	.128	.050	1.000	−.035	.008
	(.418)	(.205)	(.622)		(.728)	(.933)
Yield Change (last 3 yrs)	−.079	−.089	.009	−.035	1.000	.048
	(.437)	(.380)	(.927)	(.728)		(.632)
Change in Income due to FWU Support	−.045	−.073	−.128	.008	.048	1.000
	(.657)	(.472)	(.206)	(.933)	(.632)	

Note: The entries outside parentheses are Spearman's rank-order correlation coefficients (ρ), whereas the values in parentheses denote the corresponding two-tailed p-values. Correlations were considered statistically significant at $p < .05$.

3.4 Farmers' perception toward FWU–SoA's role in agricultural development

The frequency distribution and ranking of respondents' perceptions regarding FWU, SoA's contribution to agricultural development is depicted in table 5. A large proportion of respondents strongly endorsed the need for more active institutional engagement with local farmers and communities which received the highest ranking thereby reflecting a pronounced call for greater university-community collaboration in agricultural development. The second highest ranked assertion is that FWU, SoA possesses the potential to convert Tikapur into a regional agricultural hub. This is evident to positive outlook of the respondents about the university's long-term contribution to local development.

However, perceptions regarding direct and immediate advantages from FWU, SoA's activities were relatively subdued. Fourth and fifth ranked statements regarding enhanced agricultural practices, the utility of training and accessibility to contemporary agricultural information respectively, showed moderate level of agreement. This indicates that despite of farmer's acknowledgement regarding the university's potential and strategic importance, they have not yet encountered significant practical effects on their routine farming operations.

These findings indicate an ongoing information-implementation gap: farmers acknowledge the university's potential and desire enhanced engagement, although many have not yet realised concrete advancements in their daily agricultural practices. These deficiencies are frequently associated with inadequate human resources, ineffective monitoring and accountability mechanisms, and insufficient collaboration among academic, governmental, and community stakeholders (Ghimire & Pandey, 2022). This indicates that FWU–SoA's extension initiatives necessitate more robust iterative feedback mechanisms, farmer-led planning, and continuous engagement to achieve lasting results.

Table 5: Farmers' responses on likert-scale statements related to FWU–SoA's

No.	Statement	1 (SD)	2 (D)	3 (N)	4 (A)	5 (SA)	Index Value
1	FWU–SoA should collaborate more actively with local farmers and communities.	3	6	8	32	51	4.22
2	The presence of FWU–SoA has the potential to transform Tikapur into a regional agricultural hub.	7	10	14	30	39	3.84
3	Access to agricultural knowledge and modern technology has become easier due to FWU–SoA's presence.	20	22	23	20	15	2.88
4	The training and support provided by FWU–SoA have been useful in my farming activities.	24	20	26	18	12	2.74
5	The Faculty of Agriculture at FWU has helped improve agricultural practices in the community.	28	24	22	15	11	2.57

Note: Response categories were measured on a 5-point Likert scale: 1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Neutral (N), 4 = Agree (A), 5 = Strongly Agree (SA).

3.5 Farmers' preferred areas of support from FWU–SoA

The areas in which farmers approached assistance from the Faculty of Agriculture at Far Western University (FWU, SoA) were ascertained through a descriptive analysis. Table 5 illustrates that 36% of the respondents selected training suggesting it as the most favored area of help. This clearly indicates farmers' preferences for skill development, access to information and exposure to contemporary agricultural methods to their operations.

Input support (30%) was the second most preferred area revealing farmers' ongoing leverage on tangible resources such as excellent seeds, fertilizers, irrigation tools and equipment to enhance yield. 23% of respondents selected marketing support, referring to a moderate demand for institutional assistance in market linkage, value chain growth and price stabilization strategies. In contrast, research partnership was selected by hardly 11% of farmers as their preferred support area, making it obvious that the majority of respondents regard research as a secondary priority relative to instant, concrete benefits like training and input provision.

These findings primarily highlight farmers' anticipation for practical, need-based and extension-oriented support mechanisms from FWU, SoA, rather than academic or research-based actions. The findings indicates that the university's extension programs should be strengthened by aligning university efforts with farmers' pressing development priorities and regional farming conditions thereby prioritizing competency enhancement initiatives, technology transfer and resource facilitation.

This distribution suggests that farmers prioritize practical, immediate, and livelihood- related assistance-skills, technology, and production resources-over long-term research collaborations. Comparable evidence from smallholder settings suggests that farmers favour extension programs that yield tangible economic advantages and mitigate production risks over those primarily focused on research partnership (Amgain et al., 2023).

Table 6: Table showing farmers preferred area of support from FWU- SoA

Preferred Area of Support	Frequency	Percent
Input Support	30	30.0
Training	36	36.0
Marketing	23	23.0
Research	11	11.0
Total	100	100.0

3.6 Inclusion, institutional constraints, and pathways for strengthening FWU-SoA extension

The extension environment also influences the effectiveness of FWU–SoA, in addition to service delivery deficiencies. Fragmented institutional directives, dependence on short term project financing, and inadequate integration of research, education, and community service demonstrate fundamental deficiencies in Nepal's extension system (Bista, 2018; Sigdel et al., 2022). These structural constraints may lead to what Bhandari (2024) terms "extension inertia," wherein institutions produce knowledge yet maintain a social detachment from agricultural communities. To address this, FWU–SoA may need to transition from service delivery to participatory design-incorporating student learning, faculty research, and iterative community trials through ongoing partnerships rather than isolated events.

Equity and inclusion are important for sustained impact of extension programs. Research indicates that intentionally incorporating women and youth as learners and decision-makers enhances household-level knowledge transfer and elevates the probability of adopting improved practices (Shahi, 2022; Joshi & Rawat, 2024). FWU–SoA could enhance participation via gender-sensitive and youth-oriented platforms, including Women Farmer Field Schools and Youth Agri-Innovation Clubs.

Global evidence indicates that university-led extension models are more efficacious when they integrate field engagement, peer learning, and digital technologies (Bonny & Mathew, 2010; Oloruntoba & Adegbite, 2006). Considering the geographic limitations of the Far Western region, hybrid methods that combine demonstrations with ICT-enabled advisories may offer a scalable solution for regular communication and feedback mechanisms (Cai et al., 2021; Dai et al., 2024). This necessitates enhanced digital infrastructure, faculty capability for ICT implementation, and contextually pertinent multilingual content, as highlighted in research on Nepal's digital divide in extension (Mishra, 2024).

The lack of substantial correlations in this study should be regarded as indicative of limited and nascent field penetration, rather than a conclusive failure of the university's function. Farmers' optimistic outlook and robust demand for collaboration suggest a promising foundation. The establishment of a dedicated extension unit, accompanied by regular monitoring and an independent outreach budget, could enhance institutional accountability and sustainability, aligning activities with national priorities such as Nepal's Smart Agriculture Policy (MoALD, 2023). Integrating farmer field data with student research and participatory monitoring may facilitate the transformation of FWU–SoA into a "living laboratory" for farmer-centric innovation and adaptive learning.

Enhancing FWU–SoA's structural capacity, facilitating inclusive participation, and incorporating digital follow-up systems can facilitate a transition from sporadic

outreach to enduring partnership-an indispensable avenue for significant agricultural transformation in Tikapur and Nepal's Far Western region (Davis et al., 2021; Joshi & Rawat, 2024; Mishra, 2024)

4. CONCLUSION

The study discovered that the School of Agriculture (FWU–SoA) at Far Western University in Tikapur has little influence and restricted reach among nearby farmers. Of those surveyed, just 47% were aware of FWU-SoA's extension programs, 27% had taken part in any of its events, and only 12% regularly received technical support. There is no statistically significant link ($p > .05$) between technical aid and farmers' adoption of improved technologies, productivity, or income change, according to Spearman's rank-order correlation analysis. These findings suggest that agricultural performance has not yet improved in a measurable way as a result of university-led extension initiatives.

The Likert index scores also revealed mean scores (M = average score) neutral replies (M=3.0) regarding the value of training, technological availability, and practice improvement, but significant agreement (M = 4.22) regarding the necessity of more active collaboration and recognition of FWU–SoA's regional potential (M = 3.84). This validates a considerable disparity between field-level impact and institutional visibility. To convert awareness into acceptance and quantifiable productivity improvements, FWU-SoA needs to improve its localized training processes, ongoing technical assistance, and participatory outreach, according to the empirical findings. Regular farmer engagement and practical, need-based support-rather than intermittent or symbolic interventions-will determine how effective the university's extension is.

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