Farmers' Perception and Use of Social Media for Agricultural Information and Subsidy Schemes in Lele Valley of Godawari Municipality, Lalitpur

Prashant Shrestha[1], Rahul Aryal[2]

1. Independent researcher

2. Research Assistant at Small World, Kathmandu

Abstract

This study examines how farmers in Lele Valley, Godawari Municipality, Lalitpur, Nepal, use social media to access agricultural information and government subsidy programs. Despite increasing digital adoption in rural Nepal, there is limited evidence on how farmers integrate social media with traditional information sources and how socio-demographic factors affect adoption. A quantitative research design employing descriptive and causal-comparative methods was applied, using structured surveys administered to 112 commercial farmers who rely on social media for their farming activities. Findings reveal that traditional sources such as radio (82.1%) and newspapers (70.5%) remain dominant, while digital platforms like YouTube (69.6%) and Facebook (66.1%) are gaining traction. Access to subsidies is uneven, with 62.5% of respondents receiving institutional support and 30% receiving none. Socio-demographic characteristics including gender, location, and farming experience significantly influence income, digital adoption, and participation in support programs. The study concludes that social media can enhance agricultural communication and facilitate subsidy access, but adoption is limited by connectivity issues, digital literacy gaps, and institutional barriers. Policy recommendations include strengthening digital literacy programs, streamlining subsidy procedures, integrating social media into extension services, and supporting farmer-led digital networks for knowledge sharing and equitable access.

1. Introduction

Social media platforms have truly transformed communication across the globe (Asian Development Bank, 2023). They have also altered networking and the spread of information in big ways. When these platforms extend to rural and agricultural areas, they open up new opportunities to update traditional practices (Bite, Deshmukh, & Dresel, 2017; Chhachhar, Qureshi, Khushk, & Ahmed, 2014). Farmers gain improved ways to share knowledge, learn from peers, access markets, and link up with government support schemes. Research supports this idea from sources like Bite, Deshmukh, and Dresel (2017), along with Chhachhar, Qureshi, Khushk, and Ahmed (2014). In agriculture particularly, more farmers rely on platforms such as Facebook, WhatsApp, and YouTube (Al Shaikh, Al Gharagher, & Alshohaib, 2023; Ghimire, 2024). They discuss matters with fellow farmers and experts on those sites. They exchange insights on best practices and obtain current information about markets and subsidies. Studies by Al Shaikh, Al Gharagher, and Alshohaib (2023) and Ghimire (2024) highlight this pattern quite clearly.

Agriculture remains vital for employment and stable income in Nepal (ADB, 2023; NPC, 2024). Media is considered one of the key stakeholders in agricultural development in the country (MoAD, 2016). The use of social media for agricultural discussions is gaining momentum steadily. Even so, usage patterns vary widely across Nepal's diverse terrains and between urban and rural settings (Bhandari, 2023; Paudel, 2023). Areas with reliable connectivity demonstrate strong engagement levels. In remote locations, however, farmers face significant obstacles. Factors such as unreliable internet, limited technical skills, and concerns about misinformation hinder progress (Baniya, 2008; Cochran, 1977). Meanwhile, government agricultural subsidies play a crucial role. They enhance smallholder productivity, ensure food security, and sustain rural livelihoods. These subsidies are now distributed more frequently through digital channels. Still, their reach and transparency remain inconsistent (Bhandari, 2023; Paudel, 2023). *According to the Nepal Living Standards Survey IV 2022/23,* data on agricultural indicators show clear changes in Nepal's agricultural sector from 1995/96 to 2022/23. The share of agricultural households owning land has gradually fallen, from 83.1 percent in 1995/96 to 60.3 percent in 2022/23. Along with this, the average size of agricultural land holdings has also become much smaller, declining from 1.1 hectares to 0.4 hectares over the same period. The proportion of irrigated land has changed only slightly over the years and stood at 49.4 percent in 2022/23 (National Statistics Office, 2024). This dismal picture indicates growing land fragmentation and declining

agricultural viability, posing serious challenges to rural livelihoods and food security in Nepal. Use of social media can support agricultural development by improving farmers' access to information, markets, and extension services.

The study area, Lele Valley, lies within Godawari Municipality in Lalitpur district. It serves as a primary agricultural zone in the area. Farmers there combine vegetable cultivation with livestock rearing and cash crop production (Ghimire, 2024). Modern technological intervention also has been fostering commercial farming activities in this village (Pasa, 2017). Proximity to Kathmandu aids in marketing produce effectively. That said, challenges persist, including fragmented land holdings, water scarcity, and limited access to technology. Initial observations indicate that social media adoption is emerging in the valley. Facebook dominates usage by a wide margin. YouTube and WhatsApp trail right after it (Bhandari, 2023). Implementation of agriculture development strategy also helped to digitalized agriculture extensions services in Nepalese context (Pasa et al., 2024).Perceptions of its usefulness for agricultural information and subsidy access differ among farmers, though. In-depth studies on these views are still scarce (Paudel, 2023; Yin, 2017).Interest in this subject grows both globally and in Nepal (Asian Development Bank, 2023). Knowledge about how farmers in areas like Lele Valley perceive and utilize social media remains fragmented, however. They integrate it into routine farming tasks and subsidy acquisition within their local contexts. An empirical analysis is lacking on connections between awareness levels, preferred platforms, perceived benefits, barriers encountered, and impacts on farming outcomes.

In this research context, the research aims to explore farmers' perceptions and use of social media for accessing agricultural information and subsidy schemes in Lele Valley, while examining socio-demographic, economic, and technological factors that influence adoption and engagement.

2. Research Gaps

Despite growing adoption of social media among farmers in Lele Valley, significant gaps remain in understanding how these platforms are perceived and utilized for agricultural purposes and subsidy schemes. While initial observations suggest that platforms like Facebook, WhatsApp, and YouTube are being used to share knowledge, access market information, and connect with support programs, there is limited evidence on the depth and effectiveness of this usage. Variations in digital literacy, connectivity, and trust in online information create uneven engagement, and little is known about how these factors influence actual farming decisions, subsidy uptake, or

productivity outcomes. Moreover, the interplay between traditional sources of agricultural information and digital tools remains underexplored, leaving questions about how farmers integrate social media into their existing practices (see National Statistics Office, 2023). This gap highlights an opportunity to examine farmers' perceptions, usage patterns, barriers, and potential benefits of social media in a localized context, offering insights that could inform targeted interventions, capacity-building programs, and policy designs that enhance the effectiveness of digital agricultural support in Lele Valley.

3. Objectives and Methodology

The objectives of the study were to examine the socio-demographic and occupational characteristics of farmers ; to assess land ownership, lease arrangements, and economic profiles of farmers and their impact on agricultural productivity and engagement with support programs; to investigate farmers' adoption and use of digital and traditional media for agricultural information and the factors shaping their preferences and to analyze farmers' experiences with agricultural subsidies, including frequency, types, and administrative processes, and identify opportunities for improving subsidy delivery.

This study employs a quantitative research design employing a combination of descriptive and causal-comparative research methods to provide both an overview and analytical insights into farmers' use of social media (see **Masibay & Opeña,** 2024). In descriptive, researchers describe socio-demographic profiles, land holdings, income levels, and information sources. In causal- comparative, researchers compare groups (e.g., by age, gender, ward, or digital skills) to explore how these factors relate to social media use, subsidy access, or agricultural outcomes. Data were collected through structured surveys and semi-structured interviews involving 112 commercial farmers who rely on social media for their agricultural activities in Lele Valley. Located within Godawari Municipality in Lalitpur district, Lele Valley is a key agricultural zone in the region (Godawari Municipality, 2023). Despite growing interest in digital agricultural practices both globally and in Nepal, limited knowledge exists on how farmers in Lele Valley perceive, adopt, and integrate social media into their farming and subsidy-related activities.

4. Results

4.1 Socio-Demographic Disparities

The results are presented under headings: Socio-Demographic Disparities; Agriculture Production Related Information; Digital Transition in Agricultural Communication; Grant and Subsidy Related Information & Suggestions for Improving Subsidy Procedures.This section presents the socio-demographic and occupational profile of the surveyed farmers. The profile outlines the composition of the study sample across several key variables that provide essential context for the analysis. Characteristics such as geographical distribution, age, educational background, type of settlement, farming experience, and labor structure are detailed. These variables are fundamental for understanding the context in which social media is accessed and utilized for agricultural information and subsidy schemes, as they may influence adoption patterns, platform preferences, and perceived benefits.

Table 1. Socio-Demographic and Occupational Profile of Respondents

Category	Response	Frequency	Percent
Ward Location	Ward number 5	61	54.50
	Ward number 6	51	45.50
Age Group	23 to 39 years	39	34.80
	40 to 59 years	60	53.60
	60 to 77 years	13	11.60
Educational Attainment	Illiterate	11	9.80
	Literate	32	28.60
	Basic Education	32	28.60
	Higher Education	37	33.00
Settlement Location	Rural area	61	54.50
	Urban	17	15.20
	Semi-urban	34	30.40
Farming Experience	1 to 3 years	33	29.50
	4 to 9 years	31	27.70
	10 to 29 years	37	33.00
	30 to 70 years	11	9.80

Category	Response	Frequency	Percent
Male Employees	0	10	8.90
	1 to 3	98	87.50
	4 to 5	4	3.60
Female Employees	0	12	10.70
	1 to 3	80	71.50
	4 to 5	9	8.10
	6 to 12	11	9.90
Total		112	100.00

Table 1 lays out demographic and employment details for people in this study. Most of them, about 54.5 percent, lived in rural spots. Then 30.4 percent were in semi-urban places. Just 15.2 percent came from urban areas. Farming backgrounds differed quite a bit. Around 33 percent had 10 to 29 years under their belt. About 29.5 percent had only 1 to 3 years. Then 27.7 percent fell into 4 to 9 years. And 9.8 percent had a long haul of 30 to 70 years. For male workers, most, at 87.5 percent, stuck to the 1 to 3 range. Then 8.9 percent had none at all. And 3.6 percent had 4 to 5. Female workers mostly, 71.5 percent, were in that 1 to 3 range too. About 10.7 percent had none. Then 8.1 percent had 4 to 5. And 9.9 percent reached 6 to 12. The whole group totaled 112 people.

Looking at the numbers, male labor in the 1 to 5 range came with a low average of 1.44 plus or minus 0.92. The spread skewed right and peaked sharply. That means most farms hired just a few male workers. Table 1 covers the key demographic information from the study. It shows 54.5 percent of respondents from Ward number 5. And 45.5 percent from Ward number 6. On ages, most, 53.6 percent, hit 40 to 59 years old. Then 34.8 percent were in 23 to 39. And 11.6 percent reached 60 to 77. For schooling, 33 percent had higher levels. About 28.6 were literate (informal only). Another 28.6 percent had basic-level education. While 9.8 percent could not read at all. The group leaned toward middle-aged adults. The study's people detail fit middle-aged persons with a mean age of 44.96. Literacy stayed moderate at 33 percent with higher education. And 64.3 percent lived in nuclear family setups. These findings help explain adoption habits. Older farmers preferred traditional media channels. Younger ones actively engaged with YouTube and Facebook.

4.2 Agriculture Production related Information

This section gives a basic look at land ownership among the people we surveyed. It covers their total land holdings along with any lease arrangements they have. We break down the agricultural land into various size categories. That shows what the most common farm sizes are in this group. The information also looks at how often leased land comes up compared to full ownership. All this provides some useful views on land tenure systems and the ways farming gets done around here. The patterns point out differences in how farmers get access to land and handle it in the study area. Now we turn to the spread of financial amounts for those surveyed people. We sort the figures into clear groups to make sense of them. It turns up a mix of economic levels in the population. We also note that quite a few responses stayed unspecified. This kind of breakdown gives good clues about economic patterns and how open people are with their finances in the group. It covers both the reported numbers and whatever did not get mentioned. Sorting things this way helps spot the main economic ranges. It also flags areas where financial details got left out by participants.

Table 2. Land Holdings and Economic Profile of Respondents

Category	Sub-category / Range	Frequency	Percent
Total Land Holding (Ropani)	1 to 3	39	34.80
	4 to 9	58	51.80
	10 to 30	15	13.40
Leasehold Land (Ropani)	1-3	19	17.00
	4-14	19	17.00
	15-30	4	3.60
	No Leasehold	70	62.50
Market Value of Production (NPR)	12,000 to 199,000	23	20.50
	200,000 to 499,000	29	25.90
	500,000 to 700,000	10	8.90
	750,000 to 4,000,000	18	16.10
	Not Stated	32	28.60
Annual Family Income (NPR)	40,000 to 99,000	16	14.30
	100,000 to 499,000	47	42.10
	500,000 to 999,000	32	28.60
	1,000,000 to 3,500,000	17	15.20
Total		112	100.00

Table 2 shows data about land ownership for 112 people who responded. Most of them, around 51.8 percent, owned between 4 and 9 units of land. Then 34.8 percent had smaller amounts, just 1 to 3 units. Only 13.4 percent controlled bigger areas, from 10 to 30 units. When it comes to land, they leased, a big chunk, 62.5 percent, did not lease anything at all. Equal shares, 17 percent each, took on small leases of 1 to 3 units or mid-sized ones from 4 to 14 units. Just a tiny bit, 3.6 percent, went for larger leased areas of 15 to 30 units. Overall, the results point to mostly small and medium land owners who do not depend much on leasing. That means a lot of farmers work their own land instead of renting or borrowing from others. It presents how income spread among those same 112 respondents, and there is quite a bit of difference in what they earned. The biggest group, 25.9 percent, made between 200,000 and 499,000. Right behind them, 20.5 percent were in the 120,000 to 199,000 range. Fewer, at 16.1 percent, reported higher amounts from 750,000 to 4,000,000. Only 8.9 percent fell into 500,000 to 700,000. Interestingly, 28.6 percent chose not to share their income at all. The numbers suggest most people are in middle income levels. There are smaller groups at the higher end, and quite a few who skipped reporting. This might show some gaps in income, or maybe participants hesitate to talk about money, or perhaps they have off-the-books earnings.

It covers main traits of the people surveyed, with a focus on where they live, their farming history, and who makes up the workforce. It points out how respondents are spread across various community types. It also goes into their different amounts of experience in farming. Plus, the info includes the setup of jobs, like how many men and women work in each household. All this gives a full picture of the social and work background for those in the study. It also looks at how income is distributed and where it comes from in the households surveyed. It includes grouped earnings along with some basic stats to describe them. The results show real differences in money matters across social levels. There are varied ways to earn, from main jobs to side work, own businesses, and even jobs abroad. The data makes clear big gaps in income, uneven spreads, and different chances to make money depending on the activity. These details offer a solid look at how the community is divided economically. They also cover strategies for making a living and how much buying power people have. In short, it shows usual income setups along with some standout examples from the group studied. It gives the yearly family income breakdown for 112 households that were surveyed. It mostly shows middle-income situations. The top group, 42.1 percent, is in the 100,000 to 499,000 categories. Close to a third, 28.6 percent, comes next in 500,000 to 999,000. Those with lower incomes, from 40,000 to 99,000, make up 14.3 percent. Higher

earners, between 1,000,000 and 3,500,000, are 15.2 percent. You can see most are centered in the middle ranges, with 70.9 percent together in those two main groups. The setup has even shared at the low and high ends too. That points to some layers in the economy among these people. A large number of households continue to rely on moderate levels of income. Still, there is coverage across the board, which suggests a mix of earnings in what seems like a mainly middle-class set.

4.3 Digital Transition in Agricultural Communication

This section covers the spread of information sources that respondents drew on. It sorts out different communication channels based on how popular they were. The community taps into a wide mix of media platforms. Some are traditional outlets. Others involve digital technologies. The data points out clear patterns in how people seek information. Preferences shift depending on the communication method involved. These results show the ways respondents get knowledge and pass it along. They use multiple channels for that. All of it mirrors the groups' media consumption patterns. It also highlights the sources they trust most. In the end the distribution sheds light on key communication trends among those surveyed.

Table 3. Sources for Receiving Agriculture related Information

Category	Frequency	Percent
Government offices	81	72.30
Radio	92	82.10
TV	67	59.80
Newspaper	79	70.50
Social media	59	52.70
Website	72	64.30
Tole_free_no	1	.90
Mobile_application	1	.90
Leading_worker	35	31.30
Friends_neighbors	82	73.2
Agrovet	12	10.70
Total	112	100.00

Table 3 illustrates the frequency and percentage breakdown for information sources among 112 respondents. Traditional media along with personal networks stand out as the leading ways people get their info. Radio is the most used source, with 82.1 percent of farmers relying on it. Friends and neighbors follow right behind with 73.2 percent. Government offices hit 72.3 percent too. Print media holds its ground pretty well. Newspapers reach 70.5 percent of the respondents. Television covers 59.8 percent of the group. Digital options have some traction but not overwhelming. Websites draw in 64.3 percent. Social media gets to 52.7 percent of them. Mobile apps and toll-free numbers barely register at 0.9 percent apiece. Agricultural experts seem overlooked in a big way. Just 10.7 percent check with agro-vets. Meanwhile, 31.3 percent go to leading workers for advice. The numbers point to a clear lean toward tried-and-true sources rather than fresh tech. Personal connections and old-school broadcasting keep playing a central role in sharing information. The data also captures a shift in how people seek out information. Traditional outlets like radio at 82.1 percent and newspapers at 70.5 percent remain dominant. At the same time, social media picks up steam with YouTube at 69.6 percent and Facebook at 66.1 percent. That fits with Schultz (1964) ideas on agricultural change. The theory emphasizes how tech spreads as the path to modernization.

4.4 Suggestions for Improving Subsidy Procedures

This section looks at a couple of main things in agricultural support setups. It covers how often farmers get subsidies and what kinds they receive. It highlights the important factors that shape farmers' satisfaction with the supportive programs. Things like making processes simpler, direct payments, and providing materials all play a role.

Table 4. Subsidy Receipt and Perceived Suggestions for Improvement

Category	Response / Suggestion	Frequency	Percent
Frequency of Subsidy	Once	51	45.50
	Twice	19	17.00
	2 to 5 times	3	2.70
	More than 5 times	6	5.40
Type of Subsidy Received	Agriculture	9	8.00
	Animal	5	4.50
	Fish	6	5.40
	Infrastructure	17	15.20
	Irrigation	40	35.70
	Tools	72	64.30

Category	Response / Suggestion	Frequency	Percent
Administrative Experience	Excellent	4	3.60*
	Good	25	22.30*
	All right	28	25.00*
	Bad	9	8.00*
	Too bad	13	11.60*
Suggested Improvements	Make the process easier	46	41.10
	Provide direct cash payments	49	43.80
	Base subsidies on production	45	40.20
	Distribute physical materials	48	42.90
	Other suggestions	56	50.00
Total		112	

When it comes to subsidies, most people who got them only received help one time. Table 4 indicates 45.5 percent of such beneficiaries. The numbers drop off for those who got support more than once. Irrigation came next at 35.7 percent. Infrastructure was lower, around 15.2 percent. Subsidies for agriculture, animals, and fish were not that common. They ranged from 4.5 to 8 percent. Overall, these results point to some uneven ways subsidies get handed out.

5. Discussions of Findings

The socio-demographic profile of farmers in Lele Valley reveals a predominantly middle-aged population, with 53.6% aged between 40 and 59 years, and 34.8% between 23 and 39 years. Rural residents constitute the majority (54.5%), followed by semi-urban (30.4%) and urban areas (15.2%). Educational attainment is varied, with 33% having higher education, 28.6% with basic education, 28.6% literate without formal schooling, and 9.8% illiterate. Farming experience is equally diverse, ranging from 1 to 70 years, with a concentration (33%) in the 10-29-year range. Labor distribution shows limited male participation, with an average of 1.44 male workers per farm, while female labor is slightly higher and more variable (mean 2.29), indicating that women contribute substantially to farm operations. Family structures are mostly nuclear (64.3%), affecting decision-making dynamics and resource allocation. These socio-demographic characteristics influence farmers' access to agricultural information and subsidy schemes, as younger, literate farmers are more likely to engage with digital tools, while older or less educated farmers rely on traditional media and interpersonal networks. The patterns align with Schultz's (1964) theory of agricultural change, which highlights the

role of education and knowledge dissemination in adoption of new practices, and Actor-Network Theory (Callon, 1986), which emphasizes how interactions between human actors (farmers, officials) and non-human actors (media platforms, e-portals) shape engagement.

Analysis of land ownership and economic profiles shows that most farmers own small-to medium-sized holdings. Specifically, 51.8% possess 4-9 Ropani of land, 34.8% have 1-3 Ropani, and only 13.4% manage 10-30 Ropani. Leasehold farming is relatively uncommon, with 62.5% not leasing any land, indicating a reliance on owned land for production. Economic profiles further highlight that family incomes are largely concentrated in middle-income brackets, with 42.1% earning NPR 100,000-499,000 and 28.6% earning NPR 500,000-999,000. High-income households (NPR 1,000,000-3,500,000) are a minority (15.2%), while 28.6% of respondents did not disclose income. These land and income characteristics directly impact agricultural productivity, adoption of new farming technologies, and engagement with subsidy programs, as limited resources constrain both investment in production and capacity to leverage support schemes. The findings suggest that policies and extension services must account for these economic disparities to ensure equitable access to agricultural support and productivity improvements (Kaselema & Mtima, 2025).

The communication landscape in Lele Valley is characterized by a combination of traditional and digital media. Traditional sources such as radio (82.1%), newspapers (70.5%), television (59.8%), and interpersonal networks (73.2%) dominate information acquisition. Digital platforms, including websites (64.3%), social media (52.7%), YouTube (69.6%), and Facebook (66.1%), are increasingly utilized, particularly by younger and more educated farmers.The satisfactory and fair level of good governance practices in Godawari municipality also helped to offer digital platform skills related trainings programs (Pasa et al., 2023).Despite this growth, digital platforms serve primarily as channels for information dissemination rather than direct transaction or subsidy management. Barriers to effective digital engagement include high internet costs, uneven connectivity, variable digital literacy, and trust concerns regarding online information, consistent with socio-technical constraints described by Actor-Network Theory (Callon, 1986). The gradual adoption of social media aligns with the Technology Acceptance Model (Davis, 1989), as farmers perceive these tools as useful for accessing agricultural information, market updates, and guidance on subsidy programs. Hybrid practices-combining old and new channels-are emerging, reflecting a transitional phase in agricultural communication where digital tools complement rather than replace traditional methods.

Subsidy distribution among farmers reveals limited frequency and uneven satisfaction with administrative processes. The majority (45.5%) received support only once, while 17% received it twice, and only a small fraction (5.4%) accessed more than five subsidies. Tool-based subsidies are the most common (64.3%), followed by irrigation (35.7%), infrastructure (15.2%), and minor shares for agriculture, animal, and fish support. Administrative experiences are mixed, with only 3.6% rating services as excellent, 22.3% as good, 25% as adequate, and 19.6% as poor or very poor. Farmers expressed preferences for more accessible support mechanisms, including simplified procedures (41.1%), direct cash payments (43.8%), production-based allocations (40.2%), and distribution of materials (42.9%). The high proportion of "other" suggestions (50%) highlights unmet needs or alternative approaches not captured in formal programs. Local institutions (62.5%) and NGOs (58.9%) outperform provincial and national programs, reflecting the strengths of decentralized, participatory extension systems but also pointing to gaps in bureaucratic efficiency. Social media currently plays an informational rather than transactional role in subsidy engagement, indicating the potential for integrating digital tools into subsidy management to enhance accessibility and responsiveness, which complements the findings of Ye et al. (2025). Regression analysis supports links between digital adoption, subsidy uptake, and socio-demographic variables, emphasizing the need for targeted interventions.

Overall, the findings illustrate a nuanced interplay between socio-demographic factors, land and economic characteristics, communication practices, and subsidy engagement among farmers in Lele Valley. Socio-demographic disparities and income levels shape adoption of both traditional and digital agricultural information channels. While digital platforms are gaining traction, traditional media and personal networks remain central, highlighting the importance of hybrid approaches in information dissemination. Subsidy delivery is constrained by bureaucratic inefficiencies, one-time allocations, and varied administrative experiences, though local institutions and NGOs perform relatively better. Farmers express clear preferences for simplified, direct, and production-linked support, which can inform policy refinements. Integrating digital tools with participatory extension strategies offers significant opportunities to improve access to agricultural information and support programs, thereby enhancing productivity, equity, and efficiency in the local farming system. These insights support the four research objectives, providing evidence-based recommendations for policy and practice in Nepal's agricultural sector.

6. Conclusions and Policy Implications

This study shows that farmers in Lele Valley are gradually adopting digital tools and social media alongside traditional channels to access agricultural information and subsidies, with adoption influenced by socio-demographic factors, land ownership, and income levels. While tools like YouTube, Facebook, and WhatsApp are increasingly used, connectivity, digital literacy, and bureaucratic hurdles limit full utilization, and local institutions and NGOs play a more effective role than higher-level programs in delivering support. Overall, the study demonstrates that while digital tools are becoming increasingly important for accessing agricultural information and support, socio-technical and bureaucratic barriers limit their full potential. Integration of digital platforms with local participatory structures can enhance equity, efficiency, and productivity in agricultural practices.The study is, however, limited by its focus on 112 commercial farmers in Lele Valley, which may affect the generalizability of the findings to other regions in Nepal. Self-reported data on income, production, and subsidy experiences may also include inaccuracies due to recall bias or reluctance to disclose financial information. Additionally, the study emphasizes social media and digital platforms but gives less attention to other emerging ICT tools and technologies in agriculture.

Future research could examine regional differences in digital adoption and subsidy utilization across multiple districts, explore the role of gender, caste, and socio-economic status in access and engagement, and investigate emerging technologies such as mobile applications, e-marketplaces, and precision agriculture for their potential impact on productivity and policy outcomes.In terms of policy implications, it is crucial to implement targeted digital literacy and training programs for farmers, provide affordable and accessible internet services in rural areas, and streamline subsidy procedures to ensure transparency, efficiency, and fairness. Strengthening the capacity of local institutions, cooperatives, and NGOs to guide farmers and facilitate support programs, alongside developing digital advisory services in local languages, can further enhance access to agricultural knowledge, improve subsidy delivery, and support sustainable farm productivity in Lele Valley and similar contexts in Nepal.

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