Challenges in the Use of Social Media for Agricultural Extension Among Rice Famers in Dangcagan, Bukidnon

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ABSTRACT

Social media provides an emerging channel for agricultural extension, but its use among rice farmers may be limited by connectivity, language, information quality, and digital skills. This study examined the challenges encountered by 30 rice farmers in using social media for agricultural extension in Dangcagan, Bukidnon. Data were collected through face-to-face interviews and analyzed using descriptive statistics. Poor internet connectivity was the most common problem, reported by all respondents, followed by lack of agricultural information in the local language (22) and conflicting agricultural advice (13). Other concerns included limited digital skills, difficulty accessing timely updates, and credibility of online information. The findings highlight the need for improved connectivity, localized agricultural content, reliable information, and digital literacy to strengthen social media based agricultural extension.

Keywords: agricultural extension, social media, rice farmers, digital agriculture connectivity, information access, dangcagan

INTRODUCTION

Agricultural extension services provide farmers with technical information, training and advisory support necessary for improving farm production and decision making. Traditionally, extension services have relied heavily on face to face communication between farmers and extension workers. However, the increasing availability of smartphones and digital communication technologies has created additional opportunities for disseminating agricultural information.

Social media platforms can facilitate rapid information sharing, peer to peer learning, communication with agricultural agencies and access to farming related information. The original study conducted in Dangcagan, Bukidnon showed that farmers recognize social media as an important tool for agricultural information dissemination with an overall awareness mean of 3.56. Farmers also agreed that social media improves farm decision making and motivates them to adopt new agricultural practices, both receiving a mean of 3.70.

Despite these positive perceptions, farmers do not necessarily experience social media as a completely effective extension channel. The study found neutral overall rating for the timeliness and relevance of agricultural content with a mean of 3.24. Participation in social media-based extension activities also received a neutral overall mean of 3.24. These findings indicate that the availability of digital information does not automatically translate into effective access to agricultural extension.

The challenges encountered by farmers therefore deserves separate attention. Identifying these barriers is important because agricultural agencies may use the findings to improve digital extension strategies. Previous studies cited in the original manuscript have identified connectivity, digital literacy, and information credibility as important concerns affecting digital agricultural extension. Aker and Mbti (2010) emphasized the problem of conflicting or unreliable information on open access digital platforms.

In Dangcagan, Bukidnon, understanding the specific difficulties encountered by rice farmers can help local agricultural extension providers design more responsive digital communication strategies. Thus, this study

focused specifically on the challenges experienced by rice farmers in using social media for agricultural extension.

Statement of the Problem

This study aimed to determine the challenges encountered by rice farmers in using social media for agricultural extension in Dangcagan, Bukidnon.

Specifically, it sought to answer the following question:

1. What are the major problems encountered by rice farmers in using social media for agricultural extension services in Dangcagan, Bukidnon?

METHODOLOGY

Research Design

The study utilized a descriptive research approach. It focused on describing the problems encountered by rice farmers in using social media as a source and channel of agricultural extension information. The data were derived from the survey conducted among rice farmers in selected barangays of Dangcagan, Bukidnon.

Locale of the Study

The study was conducted in selected barangays of the Municipality of Dangcagan, Bukidnon. The area was selected because of the presence of rice farmers, accessibility by land transportation, and favorable peace and order conditions that supported the conduct of the research.

Respondents and Sampling Procedure

The respondents were rice farmers from selected barangays of Dangcagan, Bukidnon. The list of qualified farmers was obtained from the Municipal Agriculture Office of Dangcagan, Bukidnon and served as the sampling frame.

Complete enumeration was employed, wherein all identified qualified rice farmers were included in the study. A total of **30 rice farmers** participated in the research.

Data Gathering Procedure

Primary data were gathered using a semi-structured questionnaire administered through face-to-face interviews. The questionnaire was prepared in English and translated into Cebuano to facilitate understanding among the respondents.

Participation was voluntary, anonymity was maintained, and respondents were allowed to decline questions. The interviews were conducted at the respondents' homes and lasted approximately 30 minutes.

Data Analysis

The problems encountered by the respondents were summarized using frequency and rank. Multiple responses were allowed because a farmer could experience more than one problem when using social media for agricultural extension.

RESULT AND DISCUSSION

The results presented in Table 1 show the problems encountered by rice farmers in using social media for agricultural extension. The findings indicate that technological connectivity was the most serious challenge followed by language related concerns and conflicting agricultural information.

Table 1. Problems Encountered by Rice Farmers in Using social media for Agricultural Extension

Problems Encountered	Frequency	Rank
Problems with technical aspects of social media, including slow internet or lack of connectivity	30	1
Agricultural extension information available on social media is usually not in the local language	22	2
Conflicting agricultural advice from social media platforms causes confusion	13	3
Difficulty participating in social media-based agricultural extension activities because of lack of necessary skills	11	4
Difficulty finding timely updates of agricultural programs through social media	4	5
Agricultural information from social media sources is not considered credible	3	6
Social media restricts direct interaction with agricultural extension agents	2	7
Difficulty accessing reliable agricultural information on social media	2	8
Social media distracts farmers from practical farming activities	1	9

*Note: Multiple responses were allowed. *

The most common problem was ‘’slow internet or lack of connectivity’’ reported by all 30 respondents. This result indicates that access to social media based agricultural extension is fundamentally affected by the availability and quality of internet services. Even when farmers are willing to use social media, poor connectivity can prevent them from accessing videos, agricultural posts, online training, and communication channels.

The findings is consistent with Aker and Mbiti (2010), who identified connectivity as an important constraint to use of mobile and digital technologies. In the context of agricultural extension, connectivity problems may limit farmers ability to receive information at the time when need it.

The second most frequently reported problems were the “language barrier” identified by 22 respondents. This finding is particularly important in designing localized agricultural extension content. Although farmers may have access to online information, information that is not presented in a language they easily understand may reduce its practical usefulness.

The third major concern was “conflicting agricultural advice” reported by 13 respondents. Social media provides access to information from various sources but not all information may be consistent or technically appropriate. Farmers may encounter different recommendations regarding production practices, pest management, fertilizer application or other farming concerns. This can create uncertainty and make it difficult for farmers to determine which information should be followed.

The fourth problem was the “lack of skills needed to participate in social media based agricultural extension activities” it was reported by 11 respondents. This suggests that access to digital technology does not necessarily mean that farmers posseses the skills required to maximize its agricultural applications. Salemink, Striker and Bosworth (2017) emphasized that digital literacy gaps can restrict participation in online services.

There are four respondents reported difficulty finding “timely updates on agricultural programs”. This suggest that although agricultural agencies may use social media, farmers may still experience difficulty in locating relevant announcements and program information.

Three respondents indicated that they “did not consider agricultural information from social media to be credible”. This concern is important because farmers depend on the accuracy of agricultural information when making production decisions. Information that lacks a clear source or verification may reduce farmer’s confidence in digital extension.

Two respondents reported that social media “restricts direct interaction with agricultural extension agents” while another two respondents experienced difficulty in accessing reliable agricultural information. These findings suggest that social media should not necessarily replace personal interaction with extension workers. Instead, it

may function as a complementary communication channel that extends the reach of conventional extension services.

Only one respondent identified “social media distraction from practical farming activities” as a problem. Compared with connectivity, language, and information quality, this was the least reported concern.

Overall, the results demonstrates that the major barriers to digital agricultural extension among the respondents were largely related to “access, comprehension, information quality and digital skills”. These findings are important because the original study showed that farmers already recognize social media as an important source of agricultural information. However, their neutral rating regarding the timeliness and relevance of content indicates that access alone is not enough and insufficient.

The results on social media platform use further support this observation. Farmers strongly agreed with using Facebook to connect with other farmers and agricultural agencies and with watching YouTube videos to learn modern farming practices, while Messenger or group chats were also used for farming discussions. This indicates that digital platforms already have a foundation for agricultural extension in the community.

However, the study also found low participation in online agricultural webinars or training sessions, which obtained a mean of 2.40. This suggests that social media may currently be more useful for information sharing and communication than for formal online extension activities.

CONCLUSION

Based on the findings, rice farmers in Dangcagan, Bukidnon experience several challenges in using social media for agricultural extension.

The most significant challenge is **poor internet connectivity**, reported by all 30 respondents. This demonstrates that infrastructure remains a fundamental requirement for effective digital agricultural extension. The second major concern is the **lack of agricultural information in the farmers’ local language**, reported by 22 respondents. The third major challenge is **conflicting agricultural advice**, which was reported by 13 respondents.

Other challenges include inadequate digital skills, difficulty locating timely agricultural program updates, concerns regarding information credibility, limited interaction with extension workers, difficulty accessing reliable information, and possible distraction caused by social media.

The findings suggest that social media has potential as a complementary agricultural extension channel, but its effectiveness depends on addressing the barriers experienced by farmers. Digital extension strategies should therefore consider not only the availability of online platforms but also internet accessibility, language, information quality, digital literacy, and continued interaction with agricultural extension workers.

RECOMMENDATIONS

Based on the findings, the following recommendations are proposed:

1. Improve digital connectivity. Local government units and concerned agencies should coordinate with relevant telecommunications and development stakeholders to improve internet accessibility in farming communities and remote areas.

2. Develop localized agricultural content. Agricultural extension information should be provided in locally understood languages to improve comprehension and practical application.

3. Strengthen official social media channels. The Municipal Agriculture Office and other agricultural agencies should maintain verified Facebook pages and YouTube channels where farmers can obtain reliable and updated agricultural information.

4. Establish information verification mechanisms. Agricultural agencies should clearly identify official sources and provide evidence based recommendations to minimize confusion caused by conflicting agricultural advice and ideas.

5. Conduct digital literacy training. Farmers should be trained on how to search for, evaluate, verify, and use agricultural information obtained through social media platforms.

6. Maintain a hybrid extension system. Social media should complement rather than completely replace face-to-face extension. Digital communication can bridge the gaps between technician visits while personal field visits can address complex farming problems.

7. Use social media for direct extension communication. Since farmers already communicate with extension workers through social media, agricultural technicians can use messaging platforms and online groups to provide timely advisories and respond to farmers' concerns as soon as possible.

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