

Title

**EVALUATING THE EFFECTIVENESS OF SOCIAL MEDIA MARKETING ON
MARKET ACCESS AND AGRICULTURAL PRODUCTIVITY OF SMALLHOLDER
FARMERS IN AREA 25**

Author

MIRRIAM HAJAP

Co-Author

-



Issued March 2026 Certificate

AR2026625IHX



ABSTRACT

This is a study study that aims to examine the impact of social media marketing on market access and agricultural productivity among smallholder farmers, in Area 25, Lilongwe District, Malawi. Using a quantitative research approach, data were collected to identify the social media platforms used by farmers and to evaluate their influence on access to markets, agricultural inputs, productivity, and income levels. The findings reveal that WhatsApp, Instagram and Facebook are the most widely used platforms due to their affordability, ease of use, and ability to support rapid information sharing. The study shows that social media significantly enhances farmers' access to wider markets, enabling them to connect directly with buyers beyond their local areas. It also reduces reliance on intermediaries, improves price negotiation, and facilitates timely access to agricultural inputs and information. As a result of these benefits, most farmers reported increased productivity and improved income levels. The study further indicates that social media usage is more common among younger and relatively educated farmers, with women rather than men are playing a key role in digital agricultural marketing, highlighting its potential for inclusive development. However, challenges such as limited internet connectivity, low digital literacy, and inadequate digital marketing skills hinder full utilization of these platforms. The study concludes that social media marketing is a vital tool for enhancing agricultural productivity and market access. It aligns with Malawi's Vision 2063, emphasizing digital innovation and agricultural commercialization, and recommends improving internet access, strengthening digital literacy, and integrating social media into extension services.

KEYWORDS: Social media, Agriculture, Productivity, Marketing

INTRODUCTION

This study investigates the effectiveness of social media marketing in enhancing agricultural productivity and market access among smallholder farmers in Lilongwe, Malawi, with a focus on Area 25. It examines how farmers leverage digital platforms to access timely agricultural information, improve farming practices, connect with buyers, and expand market opportunities. Social media has become a powerful communication tool globally, reshaping how individuals, businesses, and communities interact. Its integration into agriculture offers new avenues to address persistent challenges faced by smallholder farmers, including low productivity, limited market access, poor information flow, and inadequate networking with stakeholders.

In Malawi, agriculture is the backbone of the economy, contributing over 30% of GDP and providing employment for more than 80% of the population. Smallholder farmers dominate the sector, cultivating staple crops such as maize, groundnuts, and legumes on small parcels of land. Despite its economic significance, the sector faces challenges in commercialization, productivity, and value addition. Social media presents an opportunity to modernize agricultural practices by facilitating real-time communication, knowledge sharing, and direct marketing, thereby supporting both rural livelihoods and national development strategies.

BACKGROUND OF THE STUDY

Agriculture is crucial for food security, poverty reduction, and economic development, particularly in developing countries where smallholder farmers form the backbone of the sector. However, the sector is often constrained by structural, economic, and technological limitations. Limited access to reliable market information, outdated farming practices, and poor infrastructure hinder productivity

and income generation.

The emergence of mobile technology and social media platforms—such as Facebook, WhatsApp, YouTube, and Twitter—has begun transforming agricultural communication and marketing. These platforms enable farmers to:

- Share real-time knowledge about best practices, pest management, and weather conditions.
- Advertise farm produce to local and international buyers.
- Connect with extension officers, agribusinesses, and agricultural experts.
- Access training materials, online workshops, and peer-to-peer learning networks.

In Africa, social media has been increasingly adopted as a tool for agricultural development. Countries like Kenya, Uganda, and Ethiopia have demonstrated that digital platforms can enhance market transparency, reduce reliance on intermediaries, and improve smallholder farmers' profitability. In Malawi, particularly in Lilongwe, farmers are beginning to harness social media for marketing and knowledge exchange. This trend is fueled by the increasing affordability of smartphones and growing internet connectivity, although challenges such as inconsistent network coverage and low digital literacy persist.

Despite these advancements, empirical evidence on the impact of social media marketing on smallholder farmers' productivity and income in Malawi remains limited. Understanding how these platforms influence agricultural outcomes is vital for promoting digital innovation and formulating policies that support inclusive agricultural development.

PROBLEM STATEMENT

Smallholder agriculture in Lilongwe faces significant challenges that limit productivity and income generation. Many farmers operate below their potential due to limited access to timely and reliable agricultural information, reliance on traditional marketing systems, and insufficient adoption of modern farming techniques. Production is concentrated on a narrow range of staple crops, particularly maize, which exposes farmers to risks such as price fluctuations, crop failure, and food insecurity.

Traditional marketing methods—such as roadside selling, word-of-mouth networks, and local markets—restrict farmers' ability to access broader markets and secure fair prices. This reliance on informal marketing channels often results in high transaction costs, low bargaining power, and reduced profitability.

Meanwhile, mobile phone ownership and internet access in Malawi are increasing, presenting opportunities to leverage social media as a tool for marketing, knowledge sharing, and networking. However, a gap exists between the potential benefits of social media and its current utilization in agriculture. While some farmers have begun using platforms such as WhatsApp and Facebook for marketing, limited digital skills, lack of awareness, and inconsistent internet connectivity hinder full adoption. This gap necessitates research into whether social media marketing is effectively improving productivity, income, and market access for smallholder farmers in Lilongwe.

RESEARCH OBJECTIVES

Main Objective:

- To assess the effectiveness of social media marketing in improving agricultural productivity and market access among smallholder farmers

in Lilongwe.

Specific Objectives:

- To identify commonly used social media platforms for agricultural marketing among smallholder farmers.
- To evaluate the impact of social media marketing on farm productivity and income.
- To examine how social media platforms influence farmers' access to markets and agricultural inputs.
- To explore demographic factors, such as age, education, and gender, that influence social media adoption among farmers.

RESEARCH QUESTIONS

- What is the impact of social media use on farm productivity and income levels?
- How does social media marketing influence access to agricultural markets and inputs?
- Which social media platforms are most commonly used by farmers in Lilongwe for agricultural marketing?
- How do demographic factors affect the adoption and effectiveness of social media in agriculture?

SIGNIFICANCE OF THE STUDY

The study has several important implications:

- **Academic Contribution:** It fills a gap in existing research by providing empirical evidence on

the effectiveness of social media marketing in Malawi's agricultural sector. Previous studies have largely focused on developed countries, leaving limited localized data for Malawi and similar contexts.

- **Policy and Practice:** The findings offer insights for policymakers, agricultural extension officers, and development organizations on how to leverage social media to improve farmer access to information, inputs, and markets. This can guide the design of training programs, digital literacy initiatives, and infrastructure investments.
- **Farmer Empowerment:** The study highlights successful digital practices and challenges, providing farmers with actionable strategies to maximize the benefits of social media. By identifying barriers to adoption, the research informs interventions to enhance productivity, income, and market participation.
- **Alignment with National Goals:** The study supports Malawi's Vision 2063, which emphasizes agricultural modernization, commercialization, and digital innovation. Understanding the role of social media contributes to the development of a market-oriented and technologically empowered agricultural sector.

LITERATURE REVIEW

This chapter reviews existing literature on the relationship between agriculture and digital communication technologies, with a particular focus on social media. It explores how social media platforms are utilized to enhance agricultural productivity, improve

market access, facilitate timely information sharing, and promote collaboration among farmers. The chapter also examines conceptual definitions, empirical evidence, and theoretical frameworks that guide this study. Emphasis is placed on understanding the mechanisms through which social media can influence farming practices, economic outcomes, and the adoption of innovative agricultural techniques. By synthesizing previous studies, this chapter provides a foundation for understanding how digital platforms contribute to agricultural transformation, particularly in developing-country contexts such as Malawi.

Definitions of Key Terms

Social Media

Social media refers to interactive digital platforms that enable users to create, share, and exchange content within online communities. These platforms support communication through text, images, videos, and other multimedia formats, allowing individuals and organizations to engage in real-time interactions. Social media enables networking, knowledge sharing, and collaborative learning. Its versatility makes it a key tool for promoting information dissemination, building relationships, and fostering community engagement. In agriculture, social media allows farmers to directly reach consumers, share farming techniques, and engage with experts, providing both economic and educational benefits.

Farm Productivity

Farm productivity measures the efficiency of agricultural production, typically expressed as the ratio of outputs (crops, livestock) to inputs (land, labor, capital). It reflects the effectiveness of resource use in generating agricultural goods and is critical for assessing farm performance at both individual and national levels. Productivity improvements often arise from the adoption

of new technologies, better farming practices, and enhanced knowledge access. In the context of this study, farm productivity is closely linked to how farmers leverage digital tools, particularly social media, to optimize production and improve decision-making processes.

Empirical Evidence

Social Media Platforms in Agricultural Marketing

Studies indicate that social media platforms such as Facebook, WhatsApp, YouTube, and Instagram are increasingly used for agricultural marketing. Farmers employ these platforms to promote products, communicate directly with consumers, and exchange technical knowledge. Consistent and authentic content, such as daily updates on farm activities or showcasing quality produce, strengthens relationships between farmers and customers, improving trust and engagement.

However, challenges to adoption persist. Many farmers lack technical skills, have limited time for content creation, and often do not have strategic marketing plans. The literature also shows that social media users in agriculture are predominantly younger, tech-savvy farmers, frequently in the 30–40 age range, reflecting a generational shift toward digital adoption. In Malawi, especially in Lilongwe, smallholder farmers are beginning to utilize social media not only for networking and communication but also as a platform to advertise produce, access training materials, and engage with other stakeholders in the agricultural value chain.

Research from developed countries also highlights widespread social media adoption, particularly Facebook, which has been shown to improve organizational performance when used strategically. Studies in Ethiopia and Uganda further emphasize the importance of targeted

communication and structured networks. Farmers engaged in focused discussions on agricultural topics are more likely to adopt improved farming techniques, demonstrating that social media is not just a marketing tool but also a platform for knowledge dissemination and collaborative learning.

Social Media Marketing, Market Access, and Inputs

Social media marketing can enhance market access and reduce transaction costs for farmers. Online promotion allows farmers to reach a larger audience, increase demand for their products, and improve revenue. Effective social media strategies—such as frequent updates, engaging multimedia content, and promotional incentives—have been shown to boost customer engagement significantly. Creative approaches, including experiential and image-based content, are particularly effective in capturing consumer attention.

Digital inclusion is a key factor in adoption. Variables such as perceived usefulness, ease of use, and suitability of agricultural products influence farmers' willingness to use social media. Youth engagement is particularly notable; access to digital tools provides young farmers with opportunities for learning, networking, and entrepreneurship. Despite these benefits, access to smartphones, reliable internet connectivity, and digital literacy remains a challenge, highlighting the need for policy interventions and support programs.

Impact on Productivity and Income

Empirical studies demonstrate that social media use can substantially improve farm productivity and income. In Pakistan, social media adoption was associated with increased agricultural income through improvements in technical efficiency and land productivity, with greater benefits

observed among educated farmers and those managing larger farms.

Similarly, research in Indonesia found that farmers participating in social media groups exhibited higher efficiency compared to non-participants. Platforms enable knowledge sharing, skill acquisition, and improved decision-making. In China, social media enhances social capital by strengthening professional networks and fostering collaborative practices. Training programs further amplify these benefits, equipping farmers with the skills to leverage digital platforms effectively.

Nonetheless, studies caution that poor marketing strategies and unstructured social media use can limit potential gains. Strategic planning, market analysis, and customer understanding are essential to maximize the impact of social media on agricultural outcomes. When utilized effectively, social media can increase competitiveness, expand market share, and contribute to sustainable economic growth.

Theoretical Framework

Theory of Planned Behavior (TPB)

The TPB explains how individuals' intentions influence behavior, shaped by attitudes, subjective norms, and perceived behavioral control. In agriculture, TPB helps explain farmers' decisions to adopt social media. Positive attitudes, social encouragement, and confidence in digital skills increase the likelihood of adoption.

Unified Theory of Acceptance and Use of Technology (UTAUT)

UTAUT posits that technology adoption is driven by performance expectancy, effort expectancy, social influence, and facilitating conditions. Individual characteristics such as age, gender, and experience also affect adoption, helping to explain variability in farmers' engagement with social media platforms.

Technology Acceptance Model (TAM)

TAM focuses on perceived usefulness and ease of use as primary determinants of technology acceptance. Farmers are more likely to adopt social media if it is perceived to improve productivity and is simple to navigate. TAM provides a practical lens for understanding barriers and enablers of digital adoption in agriculture.

RESEARCH METHODOLOGY

This chapter presents the research methodology adopted for the study, which investigates the effectiveness of social media marketing on agricultural productivity and market access among smallholder farmers in Lilongwe, Malawi. The methodology provides a systematic framework for data collection, analysis, and interpretation, ensuring the study produces reliable and valid findings. It includes the research philosophy, approach, design, and methodology, along with a detailed description of the research setting, target population, sampling techniques, sample size, data collection instruments, pilot testing, data analysis methods, and ethical considerations. By following a structured methodology, the study ensures that conclusions drawn are evidence-based, objective, and applicable to the wider smallholder farming community.

Research Methodology and Design

Research Philosophy

The study adopted a **positivist research philosophy**, which emphasizes objectivity, measurement, and the collection of empirical data. Positivism is particularly appropriate for this research because it focuses on quantifying relationships between social media usage and measurable agricultural outcomes such as productivity, income, and market access.

The positivist approach relies on structured data collection through questionnaires, surveys, and statistical analysis. By employing standardized questions, the study minimizes researcher bias and ensures that responses can be analyzed quantitatively. This allows for the identification of patterns, correlations, and trends in farmers' social media usage and its impact on farm performance. Overall, adopting a positivist philosophy enables the study to produce generalizable and credible findings that can inform policy, practice, and future research in digital agriculture.

Research Approach

The research employed a **deductive approach**, which begins with theoretical frameworks and hypotheses derived from existing literature and tests them using empirical data. The study applied theories related to social media marketing, technology adoption, and agricultural productivity to develop hypotheses regarding the potential benefits of social media for farmers.

Data collected from smallholder farmers were used to test these hypotheses. For example, the study examined whether social media platforms such as WhatsApp and Facebook increase access to agricultural markets, improve farm management practices, and enhance productivity. The deductive approach provides a structured pathway to validate theoretical propositions in a local context, making the findings more robust and actionable.

RESEARCH METHODOLOGY

A **quantitative research methodology** was employed in this study. Quantitative research focuses on numerical data and statistical analysis to evaluate relationships between variables objectively.

This methodology is appropriate because the

study seeks to measure specific outcomes—such as frequency of social media use, types of platforms used, productivity levels, income, and market access—and to establish statistically significant relationships. Quantitative methods allow for clear comparisons, trend identification, and reliable generalizations that can support evidence-based recommendations for enhancing digital agriculture.

Research Design

A **descriptive research design** was used, which is commonly applied in quantitative studies to describe characteristics, behaviors, and relationships among variables.

The descriptive design enabled the study to assess how farmers use social media, which platforms are most popular, and how these tools influence productivity and marketing outcomes. It also facilitated structured data collection, allowing for detailed statistical analysis of patterns and trends. By providing a snapshot of farmers' social media use and its effects, this design supports evidence-based insights into digital adoption in agriculture.

Research Setting

The study was conducted in **Area 25, Lilongwe, Malawi**, a rural and peri-urban farming community. Area 25 was selected because agriculture is the primary livelihood for most residents, and the area has growing access to mobile phones, internet services, and social media platforms.

The presence of farmers' markets, local cooperatives, and community-based agricultural organizations provided an ideal environment to study the use of social media in marketing and knowledge exchange. Limited prior research in this area created a contextual gap that the study aimed to fill, allowing for insights into the practical adoption of digital tools by smallholder

farmers.

Target Population

The target population consisted of smallholder farmers in Lilongwe, particularly those residing in Area 25. These farmers represent the majority of agricultural producers in the region, mainly engaged in crop and livestock farming.

The study specifically targeted farmers who owned mobile phones and had some level of internet access, including familiarity with social media platforms. To gain additional perspectives, local agribusiness representatives and leaders of farmer cooperatives were also included. This ensured that the study captured both practical and strategic insights into the use of digital tools in agriculture.

Sampling Technique

Purposive sampling, a non-probability sampling method, was employed. This technique allows researchers to intentionally select participants relevant to the research objectives.

Purposive sampling was appropriate because the study focused on farmers who actively use or are aware of social media for agricultural purposes. By selecting participants with experience in digital platforms, the study could gather meaningful and informed insights into the relationship between social media usage, productivity, and market access.

Sample Size

The sample size was determined using **Cochran's formula**, a standard method for calculating sample sizes in studies with large or unknown populations:

$$n = \frac{Z^2 P (1-P)}{E^2} = \frac{Z^2 P (1-P)}{E^2}$$

$$P) \{E^2\} n = E^2 Z^2 P(1-P)$$

Where:

- n = required sample size
- Z = Z-value corresponding to the desired confidence level
- P = estimated population proportion
- E = margin of error

Using a 90% confidence level ($Z=1.645$), $P=0.5$, and a margin of error of 10%, the required sample size was calculated as **68 participants**, which was considered sufficient to provide reliable quantitative insights.

RESEARCH INSTRUMENT

The primary instrument for data collection was a **structured questionnaire**. The questionnaire consisted of closed-ended questions designed to collect measurable data on demographics, social media usage, marketing practices, productivity, and income outcomes.

It included multiple-choice and Likert-scale questions to facilitate statistical analysis. The questionnaire was distributed through Google Forms, allowing participants to access it via mobile devices. This approach ensured efficient data collection, real-time tracking, and minimal data entry errors.

Pilot Study

A pilot study was conducted to test the clarity, reliability, and validity of the research instruments. Eight participants from a neighboring farming community

were involved.

The pilot helped refine ambiguous questions, improve clarity, and ensure that the instrument effectively captured all necessary data. Feedback from pilot participants also identified potential technical issues, which were corrected prior to the main data collection.

Data Analysis

Data collected through Google Forms were cleaned, coded, and analyzed using **SPSS** and **Microsoft Excel**. Descriptive statistics—such as frequencies, percentages, and means—were used to summarize demographic characteristics and social media usage patterns.

Cross-tabulations and correlation analyses were conducted to examine relationships between social media usage, productivity, market access, and income. The use of statistical tools ensured that conclusions were objective, quantifiable, and evidence-based.

Ethical Considerations

The study adhered to strict ethical standards to protect participants' rights. Participants were provided with information about the study's purpose, scope, and potential benefits.

Participation was voluntary, and respondents could withdraw at any time without consequences. Confidentiality and anonymity were maintained, and data were used exclusively for academic purposes. Ethical considerations ensured that the study complied with research integrity standards and protected participants from potential harm.

RESULTS AND DISCUSSION

This chapter presents, analyzes, and

discusses the findings of the study based on data collected from smallholder farmers in Area 25, Lilongwe. The results are interpreted in line with the study's objectives and supported by relevant empirical and theoretical literature. Both descriptive statistics and analytical explanations are used to illustrate how social media marketing influences agricultural productivity, income generation, and access to markets and inputs. The chapter provides a comprehensive understanding of how digital tools are transforming agricultural practices at the smallholder level.

Response Rate

A total of 45 questionnaires were distributed to respondents, and all were successfully completed and returned, resulting in a 100% response rate. This exceptionally high response rate reflects strong engagement, cooperation, and interest from the participants. It also enhances the reliability, credibility, and validity of the study findings.

Furthermore, the full participation suggests that the topic of social media use in agriculture is highly relevant to farmers in the study area. It indicates that farmers are aware of and actively engaging with digital platforms, making the study timely and meaningful in the context of modern agricultural development.

Demographic Information

Gender of Respondents

The findings show that female respondents constituted the majority of participants. Out of 45 respondents, 23 were female, 18 were male, and a small proportion preferred not to disclose their gender.

This result highlights the increasing involvement of women in agricultural activities and digital marketing. It suggests

that social media platforms are providing women with opportunities to participate more actively in agribusiness, improve their income, and expand their market networks. The findings also point to the growing importance of gender inclusivity in digital agriculture, as women are leveraging technology to overcome traditional barriers in accessing markets.

Age Group of Respondents

The study revealed that the majority of respondents were young farmers:

- 49% aged 18–24
- 29% aged 25–34
- 16% aged 35–44
- 6% above 45 years

This distribution indicates that younger farmers are more likely to adopt and utilize social media platforms for agricultural purposes. Their familiarity with technology, higher digital literacy, and openness to innovation make them more responsive to digital transformation in agriculture.

However, this finding contrasts slightly with earlier studies suggesting that most agricultural social media users fall within the 30–40 age group. This difference may indicate a shift toward earlier adoption of digital technologies among younger generations in Malawi, reflecting changing trends in technology usage.

Level of Education

The study found that respondents had relatively high levels of education:

- 44% held degree qualifications
- 29% had diplomas
- 18% had postgraduate degrees
- 9% had secondary education only

This suggests that education plays a critical role in enabling farmers to effectively utilize social media platforms. Educated farmers are more likely to understand digital tools, interpret market information, and apply knowledge to improve both production and marketing strategies. It also implies that literacy and education are key drivers of successful digital adoption in agriculture.

Type of Farming Practiced

The findings revealed diversity in farming practices:

- 62% engaged in mixed farming (crop and livestock)
- 22% specialized in crop farming
- 16% focused on livestock farming

This diversity demonstrates that social media is applicable across various agricultural systems. It indicates that digital platforms are versatile tools that can support different types of farming enterprises, whether crop-based, livestock-based, or mixed systems.

Presentation of Research Findings

Social Media Platforms Used for Agricultural Marketing

The study found that WhatsApp and

Facebook are the most widely used platforms:

- 80% used WhatsApp
- 67% used Facebook
- 22% used Instagram
- 11% used YouTube and other platforms

These results highlight the dominance of mobile-based platforms in agricultural marketing. Their popularity is largely due to affordability, ease of use, and the ability to share multimedia content such as images and videos of farm produce.

The findings are consistent with existing literature, which emphasizes that accessible and low-cost digital tools are more likely to be adopted in rural and peri-urban areas. These platforms enable farmers to communicate instantly, advertise products, and exchange information efficiently.

Influence of Social Media on Market Access and Inputs

• Access to Markets

The majority of respondents (73%) agreed that social media helps them reach buyers beyond their local markets. This demonstrates that social media reduces geographical barriers and expands market opportunities.

By connecting directly with customers, farmers are able to bypass intermediaries, increase their customer base, and improve sales performance. This enhances marketing efficiency and contributes to higher demand for agricultural products.

• Access to Inputs

Similarly, 69% of respondents agreed that social media helps them access affordable agricultural inputs such as seeds, fertilizers, and equipment.

Additionally:

- 70% reported reduced dependence on middlemen
- 65% reported improved price negotiation

These findings suggest that social media enhances transparency and empowers farmers with better access to information. Farmers are able to compare prices, identify suppliers, and make informed decisions, leading to cost reduction and improved profitability.

Impact of Social Media on Productivity and Income

- **Farm Productivity**

A significant majority (84%) of respondents reported increased farm productivity after adopting social media, while only a small percentage observed no change or were uncertain.

The improvement in productivity is attributed to:

- Access to timely agricultural information
- Learning improved farming techniques
- Better communication with experts and peers

These findings indicate that social media acts as an important knowledge-sharing platform, enabling farmers to improve their technical efficiency and farming practices.

- **Income Levels**

The study also found a positive impact on

income:

- 62% reported increased income
- 22% reported significant increase
- 11% reported no change
- 5% reported a decrease

This shows that social media contributes to improved financial performance by increasing market reach, reducing transaction costs, and enhancing pricing strategies.

DISCUSSION OF FINDINGS

The findings confirm that social media is playing a transformative role in agriculture within Lilongwe.

Firstly, the widespread use of WhatsApp and Facebook demonstrates the importance of mobile-friendly platforms in rural development. These tools provide affordable and efficient means of communication and marketing.

Secondly, social media enhances market access and reduces reliance on intermediaries, leading to improved efficiency and transparency in agricultural value chains.

Thirdly, the study shows that social media contributes to increased productivity and income through improved access to information, better farming practices, and expanded business opportunities.

However, the findings also reveal that factors such as age, education, and digital literacy significantly influence the adoption and effectiveness of social media. Younger and more educated farmers are better positioned to benefit from digital tools, highlighting the need for inclusive capacity-

building initiatives.

CONCLUSIONS AND RECOMMENDATIONS

This chapter provides a summary of the study's major findings, draws conclusions, presents recommendations for practice and policy, and suggests areas for further research. The study assessed the effectiveness of social media marketing in enhancing market access and agricultural productivity among smallholder farmers in Area 25, Lilongwe, Malawi. Using quantitative data, the research analyzed the types of social media platforms employed by farmers, their influence on market access and agricultural inputs, and their impact on productivity and income. The findings offer valuable insights into the role of digital tools in modernizing agriculture and promoting inclusive economic growth.

Summary of Research Findings

Objective 1: Types of social media platforms used for agricultural marketing

The findings revealed that WhatsApp (80%) and Facebook (67%) were the most frequently used platforms among smallholder farmers. These platforms were preferred because they are affordable, easy to use, and support the rapid sharing of images, videos, and market information. Instagram and YouTube were used to a lesser extent, mostly by younger and more digitally active farmers. This indicates that farmers favor platforms that are practical, mobile-friendly, and accessible in rural areas with limited data availability.

Objective 2: Influence of social media on access to markets and inputs

Social media significantly improved farmers' access to both markets and agricultural inputs. About 73% of

respondents reported that social media enables them to connect with buyers beyond local markets, while 69% agreed that it facilitates access to affordable agricultural inputs. Additionally, 70% reported reduced reliance on middlemen, and 65% noted improved price negotiation. These findings illustrate that social media acts as a virtual marketplace, enhancing transparency, efficiency, and profitability.

Objective 3: Impact on productivity and income

The majority of farmers (84%) reported increased productivity since using social media, citing timely access to agricultural advice, new farming techniques, and improved communication with experts. Income levels also improved, with over 80% of respondents reporting increases. The study demonstrates a clear positive relationship between social media usage, farm productivity, and financial performance.

General Observations

Demographic analysis showed that younger farmers (18–34 years) and those with higher education levels were the most active users of social media. Women (60%) also formed a significant proportion of users, suggesting that social media has the potential to enhance gender-inclusive agricultural development.

CONCLUSIONS FROM THE STUDY

The study concludes that social media marketing is a critical tool for enhancing agricultural productivity, market access, and income among smallholder farmers in Lilongwe. Key conclusions include:

- **Digital platforms are essential for agricultural marketing:** WhatsApp and Facebook have

become integral tools for advertising produce, connecting with buyers, and sharing farming knowledge.

- **Market access and input procurement are improved:** Social media enables farmers to bypass intermediaries, reducing costs, improving price negotiation, and enhancing transparency.
- **Productivity and income are positively influenced:** Access to timely information, expert advice, and practical demonstrations through social media contributes to better farming practices and higher revenues.
- **Digital adoption is influenced by demographics:** Younger, educated farmers benefit most, while older farmers or those with limited digital literacy may be excluded.
- **Challenges remain:** Limited internet connectivity, high data costs, insufficient digital literacy, and lack of advanced digital marketing skills hinder full utilization.

Overall, social media marketing aligns with Malawi's Vision 2063 agenda, promoting digital innovation, commercialization of agriculture, and inclusive economic development.

RECOMMENDATIONS

Based on the study's findings, the following recommendations are proposed to maximize the benefits of social media in agriculture:

- **Strengthen digital literacy among farmers**

Government agencies, NGOs, and extension services should organize community-based digital literacy programs. Training should focus on platform navigation, content creation, and online communication skills. Practical workshops could include using WhatsApp groups to share market prices, creating short instructional videos, and posting images of produce for marketing purposes.

- **Improve access to affordable internet services**

Collaboration between the government and telecommunications providers is needed to expand network coverage and reduce data costs, particularly in rural and peri-urban areas. Providing subsidized data packages for agricultural content could encourage greater adoption.

- **Integrate social media into agricultural extension services**

Extension officers should utilize social media to disseminate timely agricultural tips, weather alerts, pest and disease warnings, and market information. This could be done through dedicated WhatsApp groups or Facebook pages for local farming communities.

- **Promote farmer-led online marketing initiatives**

Farmers should form cooperative social media marketing groups to jointly advertise products, negotiate better prices, and access wider markets. Such groups could include digital platforms for bulk ordering, sharing delivery logistics, and creating brand identity for local produce.

- **Provide training on digital marketing and branding**

Farmers should be trained on simple

branding, content creation, photographing produce, packaging, and customer engagement online. This can enhance visibility, attract buyers, and improve profitability.

- **Support gender-inclusive digital programs**

Given the high participation of women, programs should also empower men to engage with digital agriculture. Gender-sensitive training could help balance participation, ensuring both men and women benefit equally from digital marketing opportunities.

AREAS FOR FURTHER RESEARCH

Future studies can build on this research by exploring:

- **Comparative studies between rural and urban farmers**

This would highlight differences in digital adoption, productivity outcomes, and marketing strategies.

- **Impact of specific social media features**

Research could examine how WhatsApp groups, Facebook Marketplace, or instructional videos specifically influence productivity and learning.

- **Role of digital financial services in agriculture**

Future studies could investigate integration of mobile money, online payments, and e-commerce solutions in improving market access and income.

- **Barriers to full adoption**

Qualitative studies could explore literacy gaps, gender dynamics, cultural perceptions,

and technical challenges that limit effective use of social media.

- **Long-term sustainability**

Investigations could assess whether continued social media use leads to long-term improvements in farming practices, environmental management, and economic stability.

REFERENCES

1. **Abate, G. T., Bernard, T., & Makhija, S.** (2023). Digital tools and agricultural market transformation in Africa. *Food Policy*, 116, Article 102439. <https://doi.org/10.1016/j.foodpol.2023.102439>
2. **Ajzen, I.** (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
3. **Davis, F. D.** (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340. <https://doi.org/10.2307/249008>
4. **Hamza, A., et al.** (2025). Assessing the impact of social media on farmers' income: Evidence from Punjab, Pakistan. *Frontiers in Sustainable Food Systems*, 9, Article 1555584. <https://doi.org/10.3389/fsufs.2025.1555584>
5. **Ofolsha, M. D., et al.** (2022). The effect of social networks on smallholder farmers' decision to join farmer-base seed producer cooperatives: The case of Hararghe, Oromia, Ethiopia. *Sustainability*, 14(10), Article 5838. <https://doi.org/10.3390/su14105838>

6. **Sadono, E. D.** (2024). Improving agri-food sector productivity in Indonesia: The role of ICT utilization in the form of social media, e-commerce, and farm management. [EconStor Working Paper].
7. **Tolessa, D., Stellmacher, T., & D'Haese, M.** (2020). The role of entrepreneurship training in improving agribusiness performance through the use of social media in Ethiopia. *Journal of Agribusiness in Developing and Emerging Economies*, 10(5), 466–484.
<https://doi.org/10.1108/JADEE-05-2019-0071>
8. **Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D.** (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425–478.
<https://doi.org/10.2307/30036540>
9. **Xie, G., et al.** (2021). An assessment of social media usage patterns and social capital in the agricultural system of China. *International Journal of Environmental Research and Public Health*, 18(21), Article 11388.
<https://doi.org/10.3390/ijerph182111388>