

## Analysis of Farmers' Perception and Extent of Usage of Social Media in Agriculture

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Social media has become an important communication tool in agriculture, helping farmers access agricultural information, weather updates, market prices, government schemes, and modern farming techniques. Platforms like WhatsApp, YouTube, Facebook, Telegram, and Instagram are widely used by farmers due to increasing smartphone and internet availability in rural areas. Farmers perceive social media as a useful and cost-effective source of agricultural knowledge and interaction with experts. It improves decision-making and awareness of improved farming practices. However, challenges such as poor internet connectivity, low digital literacy, language barriers, and unreliable information limit its use. Younger and educated farmers use social media more effectively than older farmers.

**Keywords:** Social Media, Agriculture, Farmers' Perception, Digital Agriculture, ICT, Agricultural Extension, WhatsApp, YouTube, Farmer Communication, Rural Development

### Introduction

Agriculture plays a vital role in the economy and livelihood of rural communities. Traditional agricultural extension systems often face limitations in reaching all farmers effectively due to shortage of manpower, geographical barriers, and high operational costs. With the advancement of Information and Communication Technology (ICT), social media platforms have become an innovative source of agricultural information dissemination. Farmers now use smartphones and internet-based applications to learn about crop management, pest control, fertilizer application, weather forecasting, and market prices. Social media platforms provide two-way communication that enables farmers to interact directly with agricultural scientists, extension workers, input dealers, and progressive farmers. This has transformed the agricultural communication process and improved farmers' access to timely and relevant information.



Image- Farmers' Perception towards Social Media in Agriculture

### Farmers' Perception towards Social Media in Agriculture

Farmers' perception refers to their understanding, attitude, and opinion regarding the usefulness and effectiveness of social media in farming activities. Most farmers perceive social media as a convenient and fast method of obtaining agricultural information. Platforms

such as WhatsApp and YouTube are highly preferred because they provide visual demonstrations and real-time communication.

Farmers believe that social media helps in:

- Learning improved agricultural technologies
- Identifying crop diseases and pest management practices
- Accessing weather and market information
- Increasing awareness about government schemes and subsidies
- Sharing farming experiences with other farmers

Many farmers consider social media more accessible than traditional extension services because information can be obtained anytime and anywhere. Video-based learning through YouTube is especially useful for illiterate or semi-literate farmers.

However, some farmers express concerns regarding false information, misleading advertisements, and lack of scientific verification of online content. Older farmers may also hesitate to use social media due to low digital literacy and unfamiliarity with smartphones.

### **Extent of Usage of Social Media in Agriculture**

The extent of social media usage among farmers depends on several socio-economic and technological factors. Younger farmers with higher education levels and better income are generally more active users of social media platforms. WhatsApp is the most widely used platform due to its simplicity, followed by YouTube and Facebook.

Farmers commonly use social media for:

1. Crop production information
2. Pest and disease diagnosis
3. Weather forecasting
4. Market price updates
5. Purchase of agricultural inputs
6. Participation in farmer groups and online training programs

Daily usage of social media has increased significantly due to affordable smartphones and internet services. Farmers spend considerable time watching agricultural videos, participating in discussion groups, and communicating with agricultural experts.

### **Factors Influencing Social Media Usage**

Several factors influence the adoption and utilization of social media in agriculture:

- ✓ Educational status
- ✓ Age of farmers
- ✓ Availability of smartphones
- ✓ Internet connectivity
- ✓ Digital literacy
- ✓ Economic condition
- ✓ Awareness about ICT tools

Farmers living in areas with good internet infrastructure tend to use social media more effectively than those in remote regions.

### **Challenges Faced by Farmers**

Despite its advantages, farmers face several challenges while using social media:

- Poor internet connectivity in rural areas
- Lack of digital skills
- Language barriers
- Spread of fake or unverified information
- High data costs in some regions
- Limited trust in online recommendations

These challenges reduce the efficiency and reliability of social media-based agricultural communication.

## Conclusion

Social media has become a powerful tool for agricultural development and rural communication. Farmers generally perceive social media positively because it provides rapid, low-cost, and easily accessible agricultural information. The extent of social media usage is increasing among farmers, particularly among younger and educated individuals. However, effective utilization requires improved digital literacy, reliable internet services, and scientifically verified agricultural content. Government agencies, agricultural universities, and extension organizations should promote digital training programs and create authentic agricultural content in local languages. Proper use of social media can strengthen agricultural extension systems, improve farm productivity, and contribute to sustainable agricultural development.

## References

1. Arora, G., & Feng, H. (2024). Assessing systematic biases in farmers' local weather change perceptions. *Scientific Reports*, *14*(1), 26641. DOI: <https://doi.org/10.1038/s41598-024-76327-8>
2. Li, J., Liu, G., Chen, Y., & Li, R. (2023). Study on the influence mechanism of adoption of smart agriculture technology behavior. *Scientific Reports*, *13*, 8554. DOI: <https://doi.org/10.1038/s41598-023-35091-x>
3. MadhuShekar, B. R., Rani, V. S., Padmaveni, C., Reddy, M. M., & Kumar, B. A. (2023). Analysis of farmer's perception and usage of social media in agriculture. *International Journal of Bio-resource and Stress Management*, *14*(12), 1646–1653. DOI: <https://doi.org/10.23910/1.2023.4972a>
4. Mallick, S., Burman, R. R., Padaria, R. N., Mahra, G. S., Aditya, K., Shekhawat, K., Saini, S., Singh, R., & Mukherjee, S. (2024). Measuring perception on multimedia-based agro-advisory: A scale construction. *The Indian Journal of Agricultural Sciences*, *94*(3), 109–115. DOI: <https://doi.org/10.56093/ijas.v94i3.148669>
5. Mulaudzi, A. I., Olorunfemi, O. D., & Agholor, A. I. (2024). Social media utilization level among South African smallholder farmers: A case study of Mopani District, Limpopo Province. *Cogent Social Sciences*, *10*(1). DOI: <https://doi.org/10.1080/23311886.2024.2356722>
6. Patel, P. K., Vinaya Kumar, H. M., & Patel, J. B. (2023). Determinant factors for social media utilisation behaviour of farmers for sustainable agriculture development. *Journal of Global Communication*, *16*(1), 16–21. DOI: <https://doi.org/10.5958/0976-2442.2023.00004.6>
7. Reshma, K., Vijayaraghavan, R., Srilatha, C., & Supriya, K. (2024). Perception of farmers on social media in fertilizer marketing: A case study in Nalgonda district. *International Journal of Agriculture Extension and Social Development*, *7*(9), 422–425. DOI: <https://doi.org/10.33545/26180723.2024.v7.i9f.1082>
8. Silveira, F., da Silva, S. L. C., Machado, F. M., Barbedo, J. G. A., & Amaral, F. G. (2023). Farmers' perception of the barriers that hinder the implementation of Agriculture 4.0. *Agricultural Systems*, *208*, 103656. DOI: <https://doi.org/10.1016/j.agsy.2023.103656>
9. Takahashi, R., Todo, Y., Kim, Y. R., Kashiwagi, Y., & Tsegaye, D. L. (2024). Using social media for agricultural information dissemination: The role of informant-recipient homogeneity. *Journal of Development Effectiveness*. DOI: <https://doi.org/10.1080/19439342.2024.2425075>
10. Uy, T. C., Limnirankul, B., Kramol, P., Sen, L. T. H., Hung, H. G., Kanjina, S., & Sirisunyaluck, R. (2024). Social media adoption for agricultural development: Insights from smallholders in central Vietnam. *Information Development*. DOI: <https://doi.org/10.1177/02666669241261355>