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# *Role of Social Media in Transforming Indian Agriculture*

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## **ABSTRACT**

**Social media has undeniably emerged as a powerful tool in the arsenal of the modern farmer, offering a multitude of benefits that extend far beyond the conventional boundaries of agricultural practices. Its role in facilitating knowledge exchange, market access and community support is particularly significant in the context of Indian agriculture, where such resources can dramatically influence productivity and sustainability. As digital literacy and access continue to improve, the potential of social media to transform the agricultural landscape remains vast, promising a future of enhanced efficiency and connectivity for the farming community. When the country's farming is standing at a vulnerable condition due to rapid change of climate, it may be a right moment to inform them about climate resilient farming practices in the fastest way possible- the social media can become the best utility for that.**

## **INTRODUCTION**

In the current era of rapid digital advancements, the pervasive influence of social media is reshaping various sectors, including agriculture, on a global scale. This phenomenon is particularly pronounced in the context of Indian agriculture, where traditional farming practices

are being transformed by the pervasive use of social media platforms. This article aims to delve into the multifaceted impact of social media on Indian agriculture, elucidating its role in empowering the farming community, navigating the associated challenges, and charting a path forward.

Social media platforms have revolutionized communication and connectivity, transcending geographical boundaries to create a virtual network of farmers. In India, where agriculture serves as both a livelihood and a cultural cornerstone for millions, social media has emerged as a powerful tool for empowerment, education, and economic advancement. The transformative potential of social media in agriculture lies in its ability to provide farmers with access to a wealth of information, markets, and communities that were previously inaccessible for a farmer. Platforms such as WhatsApp, Facebook, YouTube, and Twitter have become integral to the agricultural landscape, offering farmers unprecedented opportunities for learning and collaboration. These platforms serve as virtual marketplace network, where farmers can access real-time information on market prices, weather forecasts, and improved agricultural practices. Additionally, social media facilitates peer-to-peer learning and knowledge sharing, enabling farmers to adopt best practices and innovative techniques from progressive and successful farmers.

Despite the numerous benefits, the adoption of social media in agriculture is not without its challenges. Limited internet connectivity, digital illiteracy, and the proliferation of misinformation are some of the obstacles that farmers face in harnessing the full potential of social media. However, with the right interventions and support, social media has the potential to revolutionize Indian agriculture, paving the way for a more sustainable and prosperous future for farmers across the country. More insight has been given in the following sections.

### **THE RISE OF SOCIAL MEDIA AND AGRICULTURE**

A growing number of Indian farmers are embracing social media as a tool to advance their

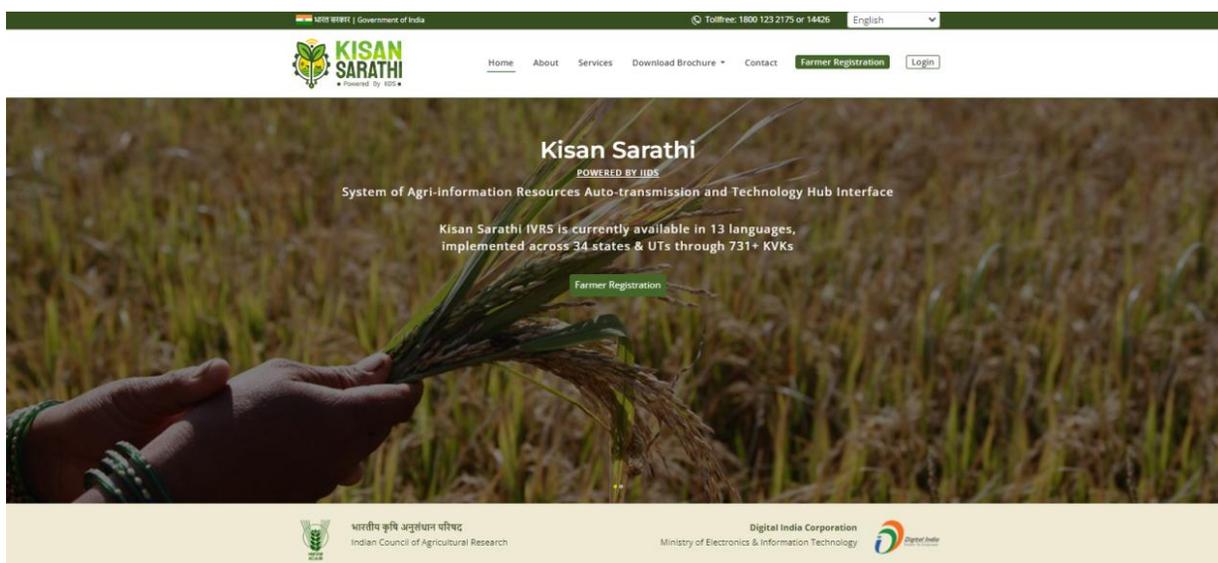


Figure 1. Kisan Sarathi Portal developed by ICAR for the farmers to communicate with experts.

agricultural enterprises. Research of Thakur and Chander (2018) revealed that farmers who utilized social media for agricultural guidance experienced enhancements in both crop yields and farming efficiency. This trend highlights a notable shift towards digital inclusion within the Indian agricultural sector, with platforms such as Govt. operated Kisan Sarathi (Fig. 1) and new age start-up AgroStar witnessing increasing popularity, indicative of the sector's digital evolution.

The integration of social media into the Indian agricultural landscape signifies a significant departure from conventional practices, with platforms like WhatsApp, Facebook, YouTube, and Twitter serving as essential resources for farmers seeking to optimize their agricultural techniques and economic outcomes. In a pertinent study Suchiradipta and Saravanan (2016) underscored this growing trend, noted a clear positive relationship between farmers' use of social media and improvements in productivity and operational efficiency. Over recent years, there has been a remarkable increase in the adoption of social media among Indian farmers. These platforms have transcended their traditional roles as social networking sites, transforming into indispensable tools for farmers nationwide. Several studies have corroborated this trend, revealing that farmers who leverage social media for agricultural insights have reported significant enhancements in productivity and operational efficiency.

### **KNOWLEDGE SHARING AND EDUCATION**

The dissemination of agricultural knowledge has been transformed by the accessibility of information facilitated by social media. Platforms such as YouTube offer a vast repository of educational content on farming techniques, pest control, and crop diversity, often presented in local languages too. A notable impact of social media in agriculture is the democratization of knowledge. These platforms provide a wealth of resources on sustainable practices, pest management, crop diversification and empowering farmers with valuable information. Initiatives like Digital Green (Figure 2) exemplify this shift, utilizing video-based tutorials to educate farmers and enhance their productivity on an unprecedented scale.

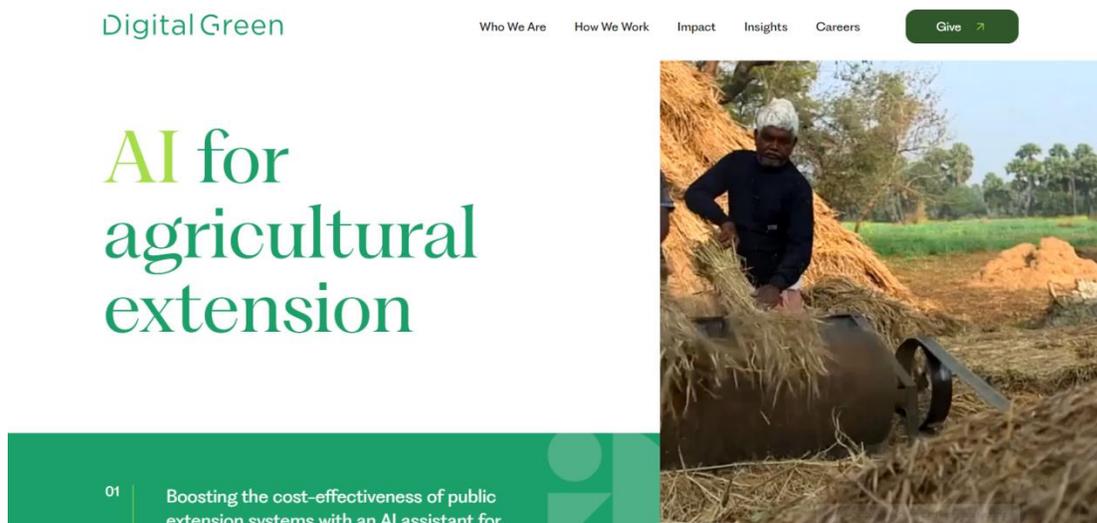


Figure 2. Digital Green is a venture working on cost-effectiveness of public extension system with help of social media and artificial intelligence.

By transcending geographical boundaries, social media enables farmers to share knowledge and access educational content easily. Digital Green's use of YouTube to distribute instructional videos in local languages across India illustrates this transformative potential, democratizing access to agricultural knowledge and promoting sustainable farming practices. Apart from Digital Green, there are numerous digital content creators are uploading their on-field experiences in forms of reels, posts, blogs and tutorial videos. It is the high time to utilize these resources for the benefit of farmers through channelizing them properly. Also, the researchers across different agricultural research institutions may utilize these creators as a feedback mechanism for their devised technologies. These creators may also be useful to bring the real-time burning problems to the agricultural scientists in the shortest time possible. However, till now there is a lack of effort to utilize these resources at large.

### **MARKET ACCESS AND MARKETING**

Social media has become a dynamic marketplace for farmers, enabling direct engagement with consumers and retailers, thereby expanding their market reach. This direct access to markets can result in improved pricing, better margins, and a deeper understanding of market demand. Platforms such as Facebook and WhatsApp play a vital role in this context, hosting numerous groups and communities (Balkrishna and Deshmukh, 2017) where farmers can advertise and show the picture of their produce, communicate audio-visually and negotiate sales without the need for intermediaries. By facilitating direct access to markets, social media allows farmers to circumvent traditional supply chains, often leading to more favorable pricing for their products. The emergence of Facebook and WhatsApp as bustling marketplaces underscores the economic empowerment that social media affords to farmers, enabling them to access broader markets and engage directly with consumers.

### **COMMUNITY AND SUPPORT NETWORKS**

Social media platforms have emerged as transformative tools for nurturing a sense of community among farmers, offering virtual forums and groups where they can exchange experiences, insights, and support. This digital connectivity addresses the inherent isolation prevalent in rural agricultural settings, providing a vital source of solidarity and resilience. The online communities not only serve as platforms for sharing practical knowledge but also foster a sense of belonging and mutual understanding among farmers. By facilitating peer-to-peer learning and collective problem-solving, these digital networks enhance the overall knowledge base and adaptability of the agricultural community. Through these platforms, farmers can seek advice, share best practices, and offer support to one another, creating a collaborative environment that transcends geographical boundaries.

### **CHALLENGES IN UTILIZING SOCIAL MEDIA**

The integration of social media into farming practices faces challenges such as digital literacy, limited internet connectivity in rural areas, and concerns regarding misinformation and content authenticity. These obstacles hinder the full utilization of social media in agriculture, underscoring the need for targeted solutions to enhance accessibility and effectiveness. With the term digital literacy it is meant to explain the difficulty of using both electronic device as well as the content development process in a specific social media. For an example, the YouTube is

famous for detailed explainable tutorials whereas the Facebook users prefer short videos with duration less than one minute. The content creators utilize the platform in such a way that their content gets maximum reach. In this case, the farmer needs to understand choice of social media for its purpose. Also, the search engines operate following critical mechanisms. Unless the farmer understands how to find their required content, he/she will have the minimal chance to receive the exact solution to their problem in the web of information i.e. internet.

### **SOLUTIONS AND FUTURE DIRECTIONS**

Enhancing the digital literacy of farmers and implementing initiatives by governmental and non-governmental organizations to improve rural connectivity and provide trustworthy information are essential for maximizing the advantages of social media in agriculture. Additionally, investments in infrastructure to improve internet connectivity in rural areas are crucial for enabling broader access to digital platforms. The potential integration of advanced technologies such as artificial intelligence and block-chain offers further opportunities for improvement in the future.

### **CASE STUDY**

A KVK under the monitoring of ICAR-ATARI Kolkata named Ramkrishna Ashram KVK situated at Nimpith, 24 Pgs (S), West Bengal has taken social media as a tool for communication among large section of farming community. They are posting all kinds of updated in Facebook and X handles. They also circulate the notifications among WhatsApp groups. Through, these notifications, farmers from different remote location of the district can access the information on market opportunity, new schemes, krishi mela or other things. It has significantly improved the livelihood of several farmers.



Figure 3. How Nimpith KVK is leveraging power of social media for communicating farming communities.

## **CONCLUSION**

The advent of social media, which took place nearly two decades ago, has seen its usage skyrocket in recent years due to advancements in digital connectivity and device accessibility. This surge is evident across all sections of the society, including the farmers. As a result, social media has become an influential force driving change in Indian agriculture by modernizing traditional farming practices and empowering farmers on a national scale. It provides access to vital information, markets, and communities that help boosting productivity, efficiency and economic results for farmers. While challenges like digital literacy and internet connectivity persist, it's crucial that governments, NGOs and other stakeholders collaborate to tackle these issues head-on to fully leverage the advantages of social media in agriculture. The future looks bright with the potential integration of advanced technologies such as AI and blockchain set to further amplify the role of social media within Indian agriculture. As this evolution continues unabatedly, we anticipate an even greater impact is going to happen on Indian agriculture leading towards innovation-driven sustainability and prosperity within the sector.

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