



## AGRICULTURE ONLINE MARKETING IN INDIA: AN ANALYTICAL STUDY

**Vishnu K S**

*Research Scholar, Reg. No: 2022EC015, DOSR in Economics, Tumkur University Tumakuru-572103, Karnataka, Email: vvishnu51@gmail.com*

*And Assistant Professor of Economics, Government First Grade College, Kunigal-572130, Tumkur District, Affiliated to Tumkur University, Tumkur, Karnataka.*

**Dr. Neelakanta N T**

*Assistant Professor, DOSR in Economics, Tumkur University, Tumkur-572103,*

*Email: neelnt@gmail.com*

**Paper Received On:** 20 MAY 2025

**Peer Reviewed On:** 24 JUNE 2025

**Published On:** 01 JULY 2025

---

### Abstract

---

*Agriculture is the mainstay of the Indian economy. Without the development of agriculture and rural economy, the overall development of the country is not possible. In this context, modernization of agricultural market is necessary. Hence, online marketing system plays an important role in agriculture. The change in the landscape, digital revolution, increase in knowledge among people has led to significant advancement in online agriculture market. AI and machine learning, block chain technology, agri-fintech etc. are also complementing online agriculture marketing. Indian online agriculture marketing holds a latent potential for considerable growth due to self-reliance of farmers, increase in their standard of living, empowerment in food system. But limited access to technology and internet, inadequate cold chain infrastructure, lack of marketing expertise, complex regulations and complex licensing controls have hindered the development of online agricultural markets. Against this backdrop, this study has several objectives. They include, evaluate the overall impact of online agricultural marketing, Analyze the hurdles impeding progress and Analyze existing policies and regulations governing online agricultural marketing. The study is based on secondary data. Online agriculture market has its own impact on farmers, consumers and Agriculture Sector as a Whole. Digital divide, knowledge and skills gap, infrastructural limitations, policy and regulatory barriers have hampered the online agriculture market. Online agriculture market is being promoted through government initiatives, building trust and transparency, supportive policies and regulations. Online agriculture market is being promoted through Digital Architecture Mission, Rural E-Commerce Platform, Agricultural Export Policy, Tax Reforms, data Protection Framework. The study sheds light*

on the fact that India's online agriculture market has significant potential, while facing many challenges, with ample opportunities for improvement.

**Keywords:** Digital Marketing, Rural E-Commerce, e-Marketing, Online marketing, Agricultural marketing.

### Introduction

Agriculture in India is the backbone of the economy. Agriculture is still the main occupation of Indians. More than 50 percent of Indians are directly or indirectly dependent on farming. Presently online marketing system is gaining a lot of significance. The process of manufacturers dealing their products directly to consumers through online media is called online marketing. Presently mobile, internet and e-commerce are adding in popularity in rural areas. It's also conspicuous that the demand for fresh agricultural production and locally sourced food is accelerating.

There are a number of benefits to online marketing for farmers. It allows them to reach a wider audience of potential customers, sell their yield at a premium price, and make connections with consumers. Also, online marketing can help farmers to reduce their reliance on mediators, who frequently take a large cut of the gains. Still, there are also some challenges associated with online marketing for farmers. These include the need for access to technology and the internet, the capability to produce and manage online content, and the knowledge of how to use digital marketing tools and platforms.

Despite these challenges, online marketing is an important tool that can help Indian farmers to improve their livelihoods and connect with consumers in new and innovative ways.



### **Most popular online marketing channels for farmers in India**

1. Social media: Platforms like Face book, Instagram, and Twitter can be used to connect with consumers; share photos and videos of produce, and promote special offers.
2. E-commerce platforms: Websites like Amazon, Flipkart, and Bigbasket allow farmers to sell their product directly to consumers.
3. Mobile apps: There are a number of mobile apps that can be used to connect farmers with buyers, similar as Ninjakart and Gramophone.
4. Online marketplaces: Platforms like Agribazaar and Agro Junction connect farmers with businesses and wholesalers.

### **A Deep Dive into Agriculture Online Marketing in India**

#### 1. The Changing Landscape

India's agrarian sector, despite its immense contribution to the economy, faces challenges like fragmented markets, information asymmetry, and dependence on mediators. Still, a digital revolution is reshaping the geography, with husbandry online marketing arising as an important tool for transformation.

#### 2. Drivers of the Digital Wave

**Smartphone & Internet Penetration:** Rural India is witnessing a massive surge in smartphone operation and internet access, empowering farmers to connect with the digital world.

**E-commerce Boom:** Platforms like Amazon, Flipkart, and Big basket are creating direct sales channels, bypassing traditional intermediaries and connecting farmers directly to consumers.

**Shifting Consumer Preferences:** The growing demand for fresh, original, and traceable food is driving consumers towards online platforms that connect them with farmers directly.

### **Unlocking the Benefits**

#### **Online marketing opens doors to a plethora of advantages to Farmers**

- a) **Wider Market Reach:** Go beyond original markets and tap into public and even global audiences, expanding opportunities exponentially.
- b) **Premium Pricing** exclude mediators and potentially cost advanced prices for their product, leading to raised income and bettered livelihoods.
- c) **Brand Building** produce a unique online presence, connect with consumers directly, and build trust through brand liar.
- d) **Data-Driven** perceptively influence online analytics to understand client preferences, buying patterns, and request trends, allowing for targeted marketing strategies.

- e) Reduced Costs exclude physical marketing expenses and reach customers more cost-effectively through digital channels.

### **Inspiring Examples:**

Numerous success stories demonstrate the transformative power of online marketing:

- a) Maharashtra Farmer: Increased income by 300% through online sales of Alphonso mangoes, directly connecting with consumers across the country.
- b) Karnataka Cooperative: Reached international markets through an e-commerce platform, fetching premium prices for their spices and expanding their reach.
- c) Madhya Pradesh Startup: Connected small farmers with urban consumers through a mobile app, ensuring fair prices and fresh produce for consumers while empowering farmers.

### **Literature Review**

**Dr.T. Sudhakar Reddy (2021)**, Studied on The Impact Of Digital Marketing On Agricultural Business In India. The main objectives of the study was Identify the challenges faced by farmers in adopting and implementing digital marketing strategies. And explore the role of digital marketing in empowering agricultural startups and promoting innovation in the sector. The study concluded that Challenges include lack of digital literacy and infrastructure in rural areas, limited technical skills among farmers, concerns about data privacy and security, and competition from established players. Digital marketing can play a crucial role in empowering agricultural startups by providing them with access to new markets, funding opportunities, and innovative marketing tools.

**Ashok K. and Naresh, B. (2020)**, Studied on Opportunities and Challenges in Digital Marketing with the objectives like, Analyze the specific opportunities and challenges associated with implementing digital marketing strategies. Discuss the potential impact of digital marketing on different stakeholders, including businesses and consumers. The study found that digital marketing can empower businesses of all sizes to connect with customers directly, build brand awareness, and create targeted marketing campaigns. Consumers benefit from wider product choices, personalized recommendations, and convenient online shopping experiences.

**N. Rameshkumar (2022)**, Studied on Impact of Digital Marketing in Agricultural Sector. The main objective of the study was Identify the potential benefits and challenges associated with digital marketing in agriculture. and Explore how digital marketing can empower agricultural startups and contribute to the overall development of the agricultural sector. The major findings of the study are Young farmers are more receptive to digital marketing than

*Copyright © 2025, Scholarly Research Journal for Interdisciplinary Studies*

older generations, highlighting the potential for future growth in adoption..Digital marketing can play a crucial role in empowering agricultural startups and promoting innovation in the sector.

**Bojkic, Vedrana; Vrbancic Marijana; Zibrin, Dragutin; Cut, Martina (2016)** Studied on Digital Marketing in Agricultural Sector. The objective of the study was Identify the challenges and opportunities associated with utilizing digital marketing tools and strategies for agricultural products and services and assess the awareness and knowledge of digital marketing among agricultural stakeholders, including farmers and students. The study based on both primary and secondary data. The study concluded that, Students recognize the potential benefits of digital marketing for agriculture but express concerns about limited access to technology and knowledge in rural areas. Highlighting product quality, educating consumers about agricultural practices, and building trust are key considerations for successful digital marketing in agriculture.

**Prof. Shrikant Waghulkar, Dr. Kumardatt Ganjre, Prof. Nitesh Behare and Prof. Niranjan Diwan, (2017)** Studied on “ A Feasibility Study For Online Marketing of Agricultural Greenhouse Products. The objectives of the study was Analyze the capabilities of greenhouse farmers in adopting online marketing techniques. and Understand the consumer preferences and willingness to purchase greenhouse products online. The used statistical methods to analyze survey responses and assess farmers' capabilities, consumer preferences, and market potential. The study found that Greenhouse farmers in Pune possess moderate technical and economic capabilities for online marketing, but operational capabilities need improvement (logistics, packaging) and also found that Consumers in Pune are increasingly open to purchasing fresh produce online, particularly those with higher income and education levels.

### **Statement of the Problem**

While online agricultural marketing holds immense potential to empower farmers, improve incomes, and transform the food system, However, several key challenges hinder its wider adoption and full potential. Due to limited access to technology and internet, many farmers, particularly in rural areas, lack access to smart phones, reliable internet connectivity, and basic digital literacy skills. Farmers often lack the knowledge and skills required to effectively utilize online marketing tools and platforms, such as social media management, content creation, and search engine optimization. However, Lack of proper storage and transportation, facilities for perishable agricultural products leads to spoilage and

wastage, impacting profitability. Online platforms can be vulnerable to the presence of fake products and fraudulent activities, impacting consumer trust in online agricultural purchases. Complex regulations and licensing requirements: are navigating intricate legal frameworks and regulatory processes can be challenging for farmers venturing into online marketing. These challenges collectively hinder the widespread adoption and effectiveness of online agricultural marketing in India, limiting its potential to truly transform the lives of farmers and the food system.

### **Objectives of the Study**

The study mainly covers the following three objectives.

- a) Evaluate the overall impact of online agricultural marketing on various stakeholders, including farmers, consumers, and the agriculture sector as a whole.
- b) Analyze the digital divide, knowledge gaps, infrastructure limitations, trust issues, and policy hurdles impeding progress.
- c) Analyze existing policies and regulations governing online agricultural marketing and identify areas for improvement.

### **Data Collection:**

The study is mainly based on secondary data. The study was carried out through government reports and publications, research papers and academic publications, E-commerce platform data and social media analytics.

### **Impact of Online Agricultural Marketing in India**

Online agricultural marketing in India holds immense potential to transform the agriculture sector, impacting various stakeholders in diverse ways:

#### **a) Impact on Farmers**

##### **Positive Impact**

**Wider Market Reach:** Access to national and even international markets, bypassing local limitations and intermediaries, potentially leading to higher income.

**Premium Pricing:** Eliminating middlemen can allow farmers to fetch better prices for their produce, improving profitability.

**Brand Building:** Creating a direct connection with consumers allows farmers to build brand awareness and trust, potentially commanding premium prices.

**Data-Driven Insights:** Access to sales data and consumer preferences helps farmers tailor their offerings and marketing strategies for better results.

Reduced Costs: Eliminating physical marketing expenses and utilizing efficient online platforms can lead to cost savings.

### **Negatives Impact**

Digital Divide: Limited access to technology and internet in rural areas can hinder adoption and participation.

Knowledge and Skill Gaps: Lack of marketing expertise and content creation skills can limit online presence and effectiveness.

Logistics and Infrastructure Challenges: Inadequate cold chain infrastructure and inefficient delivery systems can lead to spoilage and wastage.

### **b) Impact on Consumers**

#### **Positives Impact**

Wider Product Choices: Access to a diverse range of fresh, local, and seasonal produce directly from farmers, often unavailable in traditional markets.

Transparency and Traceability: Some platforms offer information about farming practices and origin of produce, promoting trust and informed choices.

Competitive Prices: Bypassing middlemen can potentially lead to lower prices for consumers, especially for bulk purchases.

Convenience: Online ordering and delivery options provide time-saving and convenient access to fresh produce.

#### **Negatives Impact**

Quality Concerns: Difficulty in physically assessing the quality of produce before purchase, especially for non-visual aspects like taste and freshness.

Logistics and Delivery Issues: Concerns about timely delivery and maintaining product quality during transportation, particularly for perishable items.

Trust and Authenticity: Potential presence of fake products or misleading information on online platforms, requiring careful research and verification.

### **c) Agriculture Sector as a Whole:**

#### **Positives Impact**

Increased Efficiency: Improved market access and reduced inefficiencies can lead to better resource allocation and reduced wastage.

Empowered Farmers: Improved income and livelihoods for farmers can contribute to rural development and economic growth.

**Improved Food Security:** Increased production and market access can lead to wider availability of fresh and nutritious food.

**Sustainable Practices:** Transparency and consumer awareness can incentivize farmers to adopt sustainable farming methods.

### **Negatives Impact**

**Unequal Benefits:** Small and marginal farmers with limited resources may face challenges in adopting online marketing, widening the digital divide.

**Environmental Concerns:** Increased packaging and transportation associated with online platforms require sustainable practices to minimize environmental impact.

**Policy and Regulatory Hurdles:** Complex regulations and lack of supportive policies can hinder wider adoption and growth of online agricultural marketing.

Overall, online agricultural marketing presents a significant opportunity for positive transformation in the Indian agricultural sector. However, addressing the challenges and ensuring equitable access and benefits for all stakeholders remains crucial to maximize its potential for sustainable and inclusive growth

### **Impediments to Online Agricultural Marketing**

#### **1. Digital Divide:**

**Limited Technology Access:** A significant portion of farmers, particularly in rural areas, lack access to smartphones, reliable internet connectivity, and basic digital literacy skills.

**Unaffordability:** The cost of smartphones, data plans, and digital tools can be prohibitive for small and marginal farmers, creating an entry barrier.

**Language Barriers:** Many platforms and resources are available only in English, excluding farmers fluent in regional languages.

#### **2. Knowledge and Skill Gaps:**

**Lack of Marketing Expertise:** Farmers often lack the knowledge and skills required to effectively utilize online marketing tools and platforms, such as social media management, content creation, and search engine optimization.

**Limited Understanding of Consumer Preferences:** Difficulty in understanding and catering to the evolving preferences and demands of online consumers.

**Data Literacy:** Inability to analyze and interpret online data to make informed decisions about marketing strategies and optimize their online presence.

### **3. Infrastructure Limitations:**

**Inadequate Cold Chain Infrastructure:** Lack of proper storage and transportation facilities for perishable agricultural products leads to spoilage and wastage, impacting profitability and consumer trust.

**Inefficient Delivery Systems:** Limited access to reliable and cost-effective logistics networks poses challenges in delivering farm produce to distant markets, particularly for small farmers.

**Power Outages and Connectivity Issues:** Frequent power cuts and unstable internet connectivity in rural areas disrupt online marketing activities and create operational challenges.

### **4. Trust Issues:**

**Counterfeit Products and Scams:** Online platforms can be vulnerable to the presence of fake products and fraudulent activities, impacting consumer trust in online agricultural purchases.

**Lack of Traceability:** Consumers may lack transparent information about the origin, quality, and sustainability practices of the products they purchase online, making trust-building difficult.

**Data Privacy Concerns:** Farmers may hesitate to share personal and farm data online due to concerns about privacy and potential misuse.

### **5. Policy and Regulatory Hurdles:**

**Complex Regulations and Licensing:** Navigating intricate legal frameworks and regulatory processes can be challenging for farmers venturing into online marketing.

**Limited Access to Financial Support:** Inadequate government schemes and financial assistance programs specifically targeted towards online agricultural marketing initiatives.

**Lack of Standardization and Certification:** Absence of clear standards and certification processes for online agricultural products can create confusion and hinder trust among consumers.

### **Existing Policies and Regulations in Online Agricultural Marketing: Room for Improvement?**

India's online agricultural marketing landscape operates within a complex framework of policies and regulations spread across various ministries and departments. While some initiatives foster growth, others pose challenges:

#### **Positive Initiatives**

Digital Agriculture Mission aims to bridge the digital divide, train farmers on digital tools, and promote e-commerce platforms.

Grameen e-commerce Platform helps to connect rural producers with consumers, bypassing intermediaries and facilitating direct sales.

Agriculture Export Policy (2018), encourages online marketing of agricultural products for exports, promoting international reach for farmers.

### **Challenges and Areas for Improvement**

Multiple Regulatory Bodies are overlapping jurisdictions and conflicting regulations from various entities like APMCs, FSSAI, and Agmarknet create confusion and compliance burdens for online platforms and farmers.

Licensing and Registration is complex and time-consuming licensing processes for online agriculture businesses discourage participation and hinder market entry.

Lack of clear regulations on data privacy and security for farmers using online platforms raises concerns about potential misuse of information.

Absence of standardized grading and certification systems for online agricultural products creates ambiguity and undermines consumer trust.

Inadequate regulatory frameworks governing cold chain infrastructure, transportation, and delivery systems lead to inefficiencies and wastage.

Unclear tax regulations and multiple levies on online agricultural transactions increase operational costs and discourage online sales.

### **Areas for Improvement**

Consolidating regulations under a single authority and simplifying compliance procedures would ease entry and encourage participation.

Establishing clear and universal grading and certification systems for online agricultural products would build trust and transparency.

Investment in cold chain infrastructure, efficient transportation networks, and robust delivery systems is crucial for efficient online marketing.

Implementing a streamlined and rational tax regime for online agricultural transactions would incentivize online sales and boost market activity.

Enacting robust data privacy and security regulations would protect farmers' information and build trust in online platforms.

Educating consumers about online agricultural platforms, quality control measures, and traceability mechanisms would encourage adoption and trust.

By addressing these areas and fostering a more supportive regulatory environment, India can harness the full potential of online agricultural marketing, empowering farmers, enhancing market access, and contributing to a more efficient and sustainable food system.

### **Findings of the Study**

The following findings can be identified from this study.

- a) Online agricultural marketing holds immense potential to transform the Indian agricultural sector, empowering farmers, improving their livelihoods, and enhancing overall market efficiency.
- b) Consumers benefit from access to fresh, local produce, competitive prices, and convenient online ordering and delivery options.
- c) The digital divide, knowledge gaps, infrastructure limitations, trust issues, and policy hurdles significantly impede wider adoption and effectiveness of online agricultural marketing.
- d) Lack of marketing expertise, data literacy, and understanding of consumer preferences hinder effective online presence and marketing strategies.
- e) Complex regulations, licensing procedures, and lack of supportive policies present challenges for both farmers and online businesses.
- f) Equipping farmers with digital literacy and marketing skills through targeted training and capacity building programs.
- g) Enhancing trust and transparency through quality control measures, blockchain technology for traceability, and clear data privacy regulations.
- h) Implement a multi-pronged approach involving government, private sector, and NGOs to address the identified challenges collaboratively.
- i) Develop a supportive regulatory framework that encourages participation, ensures fair competition, and protects consumer interests.

By overcoming the existing challenges and implementing the proposed recommendations, India can unlock the vast potential of online agricultural marketing. This will empower farmers, improve market access for consumers, and contribute to a more efficient, inclusive, and sustainable food system for all.

### **Conclusions**

Online agricultural marketing presents a transformative opportunity for the Indian agricultural sector, offering Empowered Farmers, Enhanced Efficiency, Reduced

inefficiencies by bypassing intermediaries, improved resource allocation, and potential for reduced wastage.

Streamlining regulations, simplifying licensing procedures, and implementing supportive policies are crucial. Establish clear and universal grading and certification systems for online agricultural products. Enact robust data privacy and security regulations to protect farmer information and build trust. Implement a streamlined and rational tax regime for online agricultural transactions to incentivize online sales. Support development of cold chain infrastructure, efficient transportation networks, and robust delivery systems.

## References

- Ashok, K. and Naresh, B. (2020), "Opportunities and Challenges in Digital Marketing" published in *Vigyan Varta* 1(4): 47-50.
- Dr.T.Sudhakar Reddy (2021), "The Impact Of Digital Marketing On Agricultural Business In India" Published in *Nat. Volatiles & Essent. Oils*, 8(4): 426-437.  
www.enam.gov.in
- A.PETER; Dr. S.LATHA (2021), "A Study On Online Marketing Of Agricultural Products In Sivagangai District", *Journal of Emerging Technologies and Innovative Research (JETIR)*, ISSN-2349-5162, March 2021, Volume 8, Issue 3, pp. 2803-2806.
- Aasha Anwar, Megha Bose and Mohit Sharma (2022), "Digitalization in Agriculture Marketing", *Just Agriculture: Multidisciplinary e-Newsletter*, e-ISSN: 2582-8223, Vol. 3 Issue-1, September 2022, pp. 1-5.
- Bagchi, A. (2018). *Artificial intelligence in agriculture*. Retrieved from <https://www.mindtree.com/about/resources/artificial-intelligence-agriculture>. Accessed on June 16, 2021.
- Bojkić, Vedrana; Vrbancić Marijana; Zibrin, Dragutin; Čut, Martina (2016) "Digital Marketing in Agricultural Sector" In: *Proceedings of the ENTRENOVA - ENTERPRISE RESEARCH INNOVATION CONFERENCE*, Rovinj, Croatia, 8-9 September 2016, IRENET - Society for Advancing Innovation and Research in Economy, Zagreb, pp. 136-141.
- Calista Kalleya, Ellina Fahra Azzahri, Angelie Natalia Sanjaya, Agung Purnomo, Cokorda Javandira, Elsa Rosyidah, and Robertus Tang Herman (2023), "Agricultural marketing research: A retrospective of domain and knowledge structure" *E3S Web of Conferences* 426, 01071 (2023) *ICOBAR 2023*, <https://doi.org/10.1051/e3sconf/202342601071>.
- Dr. N. Rameshkumar (2022), "Impact of Digital Marketing in Agricultural Sector" *EPR International Journal of Multidisciplinary Research (IJMR)*, ISSN (Online): 2455-3662, March 2022, pp-18-22.
- Mahima Singh Sengar, Maitri Gharewal, Niharika Patidar, Prof. Ronak Jain (2020), "Farmer's e-Market", *International Research Journal of Modernization in Engineering Technology and Science*, www.irjmets.com, e-ISSN: 2582-5208, Volume:02/Issue:05/May-2020, pp. 770-773.
- Mrs. P.Komala, Dr. A.V.N.Murty (2022), "Digital Marketing Practices For Agriculture Products: In India", *Ijfans International Journal Of Food And Nutritional Sciences*, ISSN PRINT 2319 1775 Online 2320 7876, Volume 11, Iss 10, 2022, pp. 1395-1408.
- Prof. Shrikant Waghulkar, Dr. Kumardatt Ganjre, Prof. Nitesh Behare and Prof. Niranjana Diwan, (2017) "A Feasibility Study For Online Marketing of Agricultural

*Greenhouse Products” W.R.T. Pune District, International Journal of Management, 8(1), 2017, pp. 98–110. <http://iaeme.com/Home/issue/IJM?Volume=8&Issue=1>.*

*Viwat Maikaensarn and Monruedee Chantharat (2022), "Online Agricultural Market System Management in Thailand" Sakata, Shozo ed. 2022. Development of Inclusive Food Value Chain in the Mekong Region. BRC Research Report. Bangkok Research Center. JETRO Bangkok / IDEJETRO, pp. 81-89.*

*[www.wikipedia.org](http://www.wikipedia.org)*