



iJRASET

International Journal For Research in
Applied Science and Engineering Technology



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 12 Issue: IV Month of publication: April 2024

DOI: <https://doi.org/10.22214/ijraset.2024.60189>

www.ijraset.com

Call:  08813907089

E-mail ID: ijraset@gmail.com

E-Commerce Platform for Farmers

Anurag Gangane¹, Jayesh Kavitar², Akshay Uparikar³, Himani Kale⁴

Student, Dept. of Computer Science and Engineering, Prof Ram Meghe Institute of Technology and Research, Badnera, Maharashtra, India

Abstract: A husbandry sector is backbone of country's frugality. Utmost of the population of our country is directly involved in this sector. Farmers works hard but when it comes vend their crop products, they face issue due to intermediary persons, dealers and some big selling companies. Similar people get benefit from planter's products. Similar companies and dealers purchase products from growers at low cost in mandi or request, shot and vend it to end stoner or significances in huge requests at veritably high cost. To get relieve of interposers, E-commerce system we've introduced. Through this system growers can have direct communication or can vend their crop products at their own price. E-commerce is easily beginning to have a major impact in the agrarian sector. The way people go about coping Agrarian products is of great concern. Utmost of the time guests have to travel far distances to get agrarian products and getting the right quality isn't assured. The website will guide the growers to pierce new husbandry ways, compare current request rate of different products, the total trade and the earned profit for the vended products. The website builds a platform for growers to insure lesser profitability through end stoner communication. The website will serve as an exclusive and protected platform for conducting agricultural marketing. The relinquishment of e-commerce platforms in the agrarian sector has the implicit to profit smallholder growers by furnishing them with access to new requests, developing their logrolling power, and adding their income.

Keywords: Agriculture, E-commerce, Communication, Profit, Protected.

I. INTRODUCTION

Earlier famers utilized to strife in getting the assets for his or her cultivating wishes such as a free stage and coordinate reference to conclusion customer for the tried and true exchanges. With this framework, as before long as a rancher registers at the stage they'll get the get to all of the offerings from getting resources, to procure their wants to interfacing with the great shoppers.[1]

A. Background And Significance Of The Study

E-trade – Buying and offering of products over the web – has changed the commercial endeavor operations in India. In 2020, the ask length of e-commerce in India ended up surveyed at sixty four billion USD in 2020 and is expected to upward thrust to 2 hundred billion USD with the help of 2027. This speedy-hearth boom in e-trade has the understood to adapt with long- standing shortages interior the Indian agrarian zone, and transfigure Indian cultivation – a zone that accounts for 18.3% of India's GDP (2020) and is the essential supply of benefits for a adulthood of Indian houses. This occasion manages itself at a time while the field is declining in efficiency since of a assortment of challenges which incorporates a obliged constrain of inputs, hamstrung offers demands, and periodic conditions of competition among interposers all through constrain chains. In any case, India's cultivation zone is insufficiently stored to subsidize on the openings given by utilizing e-trade since of challenges opposing smallholder producers in peaceful zones, comparable as moo circumstances of computerized understanding, negative ICT structure, a need of nature with advanced offers, and biased get passage to smartphones and/ or the net. [1]

B. E-Commerce's Transformative Potential

In 2016, 59% of India's manpower is busy in agriculture, 70% of small households depend on it. Its importance, agriculture's donation to India's GDP decreased from 41.3% from 1960 to 18.3% in 2020. E-commerce presents chances to increase India's agriculture sector. [1]

Waste Reduction: About one-third of food produced for living consumption is wasted, with losses during harvesting, post-harvesting, handling, and storage. Agriculture e-commerce can minimize middleman, improve transportation, and storage, reducing time-to-market for product. **Information Imbalance:** new technology can improve farmer's access to price information, ultimately increasing incomes. The effect differ across regions and crops. **Financial Mix:** E-commerce platforms can respect digital transformation for farmers, allowing farmers to access resources with less efforts.

Improved cost and market Productivity: E-commerce enables farm productivity. It also provides access to higher-quality supplies, nurturing increased trade options and decreased prices across markets. [2]

Entering the realm of Agricultural Add on Services; Online shopping platforms offer access, to services empowering farmers with valuable insights on effective training, crop management methods and strategies for pest control. This initiative aims to enhance the quality of crops. Market differences and growth: By enabling farmers to directly connect with buyers using online platforms, agriculture e-commerce can help to change and increase market reach for small farmers outside their local area. This can decrease trust on traditional, limited, market channels and increase market strength. [3]

Developing Manageable Routine: E commerce platforms could propel and encouraged to meliorate rural role by enabling clean products, providing the acceptance of clean farming practices as well as encouraging meet use of resources such as water and fertilizers. This can be donate to biology preservation and semi-permanent direction in agriculture. [4]

C. Challenges To Agriculture Sector In India

The major challenges facing the husbandry domain in India include:

Insufficient Agricultural Infrastructure and Support Facilities: Inadequate basis hinders efficacious rural practices and dispersion channels. [5] Limited Institutional Capacity to Deliver Farmer Specific Services; Institutions fight to allow tailored services to farmers, hindering productiveness and growth. Lack of Awareness Regarding Suitable Agricultural Methods; Farmers may have lacked noeses about modern day and property farming practices. [6] Agricultural Content Development and Degradation: There's a need for ongoing betterment and diffusion of rural noeses and techniques. Ownership Issues of Public and Government Generated Data; Concerns regarding data willpower and approach block efficacious policy making and implementation. [7] Inadequate Use of Public Private Partnerships PPM: Collaborations betwixt acceptant and secret sectors was underutilized, limiting base and resourcefulness allocation. Absence of Common Platforms for Farmers: Lack of centralized platforms hampers data sharing, foodstuff access, and aggregated activity among farmers. [8] Absence of an Agricultural Think Tank: A dedicated base for rural insurance and base is lacking, hindering strategical growing and planning. Insufficient Use of Information and Communication Technology ICT: Underutilization of ICT tools limits approach to information as well as foodstuff opportunities, and efficiency in rural processes. [9] India faces increasing regard for food grains, exacerbated by secondary uses of food crops for biofuels. To destination these challenges, 'India must have elevated its rural practices through. [10]

II. PROPOSED SYSTEM

Platform of structures is Website web page, dinner-layering marketplace chain (marketplace, merch, or clients) become alternatives at country wide scale in which farmer can promote his/ her crop product with unique alternatives. This platform will not only help farmers to find nearest markets but may also show contemporary shares to be had, actual stock information and its present call for a specific product within quick time and much less effort. Thus, the conclusion can be in on the aspect of the maximum profitable marketplace a number of the on-trial of his crop. Here we are supplying a chatting container for farmers to launch communication with stop person or vice versa, e.g.:- for example, if a give up consumer/ character desires to negotiate same factors (e.g. Pricing of product displayed or some different requirements) concerning with farmer. Then he/she will be able to immediately use the chatting gadget provided. The proposed device tackles a critical mission in the agricultural zone: the communique gap between farmers and huge organizations. It gives a downright e trade choline with an integrated chatting device, fostered target communicator interchange and negotiation. Farmers could list merchandise, check orders,' and firmly acquired bills.

Businesses could reach listings,' country orders, and hook up with farmers at once via period chat functionalities. This platform empowers farmers to contribute in a greater product access, live chatting system increases interaction power, and improve transparency between both the parties. The chat record serves as an account of communicating and agreements, selling trust and responsibility. Furthermore, the chatting service increase communication exchange efficiency and bridgework nomenclature limitations. Reduced data imbalance; Direct conversation decreases crossway necessities and specs, minimizing errors and misunderstandings.

III. RESEARCH AND DISCUSS

The graph shows a projected rise in farmer sales through e-commerce platforms in India. Imagine a green line climbing steadily on the right. Years go on the bottom (X-axis) and sales amounts (rupees or chosen unit) go up the side (Y-axis). This growth involves that more farmers are utilizing e-commerce platform to list their products for selling purpose.

Choosing E-commerce in Agriculture in India's Tier 2 and Tier 3 Cities" by eSandhai (<https://esandhai.in/e-commerce-adoption-in-agriculture-in-indias-tier-2-and-tier-3-cities/>)

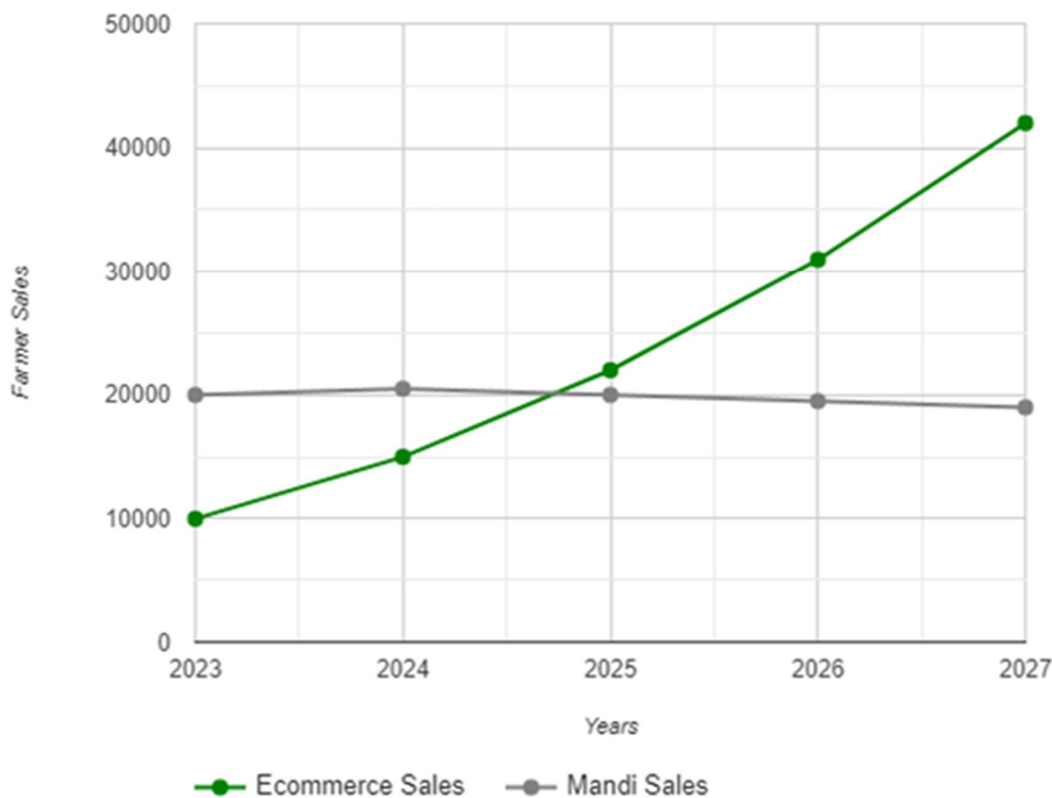


Fig. 1. E-commerce Growth for Farmers in India

Accessing the Power of E Commerce for Smallholders Farmers by Precision Development <https://precisiondev.org/> highlights the effectiveness of e commerce to transmute Indian husbandry by providing meliorate foodstuff approach and reducing cartel on middlemen. INDIAN E COMMERCE SCENARIO AN OVERVIEW by Research Gate provides an overview of the Indian e commerce landscape as well as including a dent one NAM, an authority's gap for on line, rural foodstuff connectivity.

IV. CONCLUSION

The presented e-commerce platform with built-in chat feature represents an important step towards enabling farmers and modifying the agricultural sector. By removing middleman and providing direct communication between farmers and buyers, the platform increases market access, bargain power, and transparency. By using PHP and MySQL, the project showcases a flexible, efficient and secure solution to meet the problems faced by farmers. Through smooth communication and efficient deal conclusions, the platform aims to create a fairer marketplace for agricultural products. This action increases the power of technology to drive global growth and manageable development in the agricultural sector.

This study proposes an e-commerce selling strategy for rural products that has the suggested to increases the living of rural farmers by calming their reach to new requests, perfecting their twisting power, and increasing their income. The presented e-commerce platforms can help as a useful tool for connecting farmers with buyers and increase the effectiveness of the rural value chain.

REFERENCES

- [1] Team PxD, Accessing the Power of E-Commerce for Smallholder Farmers, October 20, 2021.
- [2] Ranu Gupta, Pawan Kumar Sharma, Scope of E-Commerce in Agri-Business in India: An Overview, Jan 2018.
- [3] Yaping Huo and Huiping Mu, Research on the Development of E-commerce Model of Agricultural Products, 2017.
- [4] Michael Pitt, Matthew Tucker, Mike Riley, Jennifer Longden, towards sustainable construction: promotion and best practices, 17 April 2009
- [5] Tall, Arame, Jay, A., Hansen, James, Scaling Up Climate Services for Farmers in Africa and South Asia: Workshop Report, 2013.
- [6] O. D. Adetimehin, Utilization of Agricultural Information and Knowledge for Improved Production by Rice Farmers in Ondo State, Nigeria, 2018.



- [7] J.L. KING AND P.W. HEISEY, Public Provision of Knowledge for Policy Research: The Agricultural Biotechnology Intellectual Property Database.
- [8] Rishikesh Singh, Hema Singh & A. S. Raghubanshi. Challenges and opportunities for agricultural sustainability in changing climate scenarios: a perspective on Indian agriculture, 29 August 2019.
- [9] E-Commerce in agri-food sector: a systematic literature review" by Yiwu Zeng, Fu Jia, Lia Wan and HongdongGuo in the International Food and Agriculture Management Review on 26 February 2017.
- [10] Peter Namisko and Moses Aballo "Current status of agriculture and Global Trends" in International Journal of Science and Research Volume 2 Issue 7, 2013.
- [11] Yang, Q.B. Feng and P. Song. 2008. Research on agricultural e-commerce public exchange platform system.



10.22214/IJRASET



45.98



IMPACT FACTOR:
7.129



IMPACT FACTOR:
7.429



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089  (24*7 Support on Whatsapp)