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ORIGINAL RESEARCH

Ranking the Factors Influencing e-Trading Usage in Agricultural Marketing

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Abstract *This research article attempts to rank the factors influencing continued e-Trading usage in Indian agriculture marketing. The ranking process is the first of its kind application in agricultural e-trading. A review of published literature has helped in identifying key factors influencing e-trading usage in agricultural marketing. The factors are ranked using the efficient Interpretive Ranking Process (IRP) methodology adopted in the context of agricultural marketing. Sixteen expert members, grouped into three different expert panels, have helped generate ranks and validation besides giving suggestions for improving e-trading usage in the context of the National Agriculture Market project (eNAM) in India. It has been found that the top factors influencing e-trading usage are 'Trust', 'Cost', 'Perceived Ease of Use', and 'Facilitating Conditions', respectively. These factors need to be supported with adequate resources to strengthen eNAM in terms of improved usage among the beneficiaries. It is further revealed that immediate attention is needed on aspects such as transparency, quick information dissemination, adequate quality assurance, uniformity in taxes and market fee, improvement in marketing infrastructure, inter-market trade logistics, conflict resolution, mobility and training. Further, the e-trading system's flexibility needs to be enhanced by incorporating modular design options, configurable new features, open-source innovation, cloud computing, and progressive artificial intelligence application.*

Keywords Agriculture · Digitalization · E-commerce · E-trading · Flexibility · IRP · Marketing · Supply chain

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Introduction

The Indian agricultural supply chain is fragmented and characterized by several non-value-add intermediaries. The information asymmetry in terms of demand and supply patterns is also high. The main reasons for this are the geographic dispersion of the agricultural trade markets and the lack of adequate agricultural marketing infrastructure. These markets have little coordination and bear the negative consequences of trader cartels.

One of the most challenging areas in the procurement/sourcing stage in the agricultural supply chain is when the buyers of crops (trader/agent/agribusinesses) interact with farmers. The digital solutions in the procurement/sourcing stage (Fig. 1) are vital to improving the supply chain. Digitalization helps the buyer in terms of transparency, easy monitoring of operations, and making transactions efficient. The farmer benefits from better access to markets, information, and services that help him adopt the recommended agricultural practices and transparent trading (Global System for Mobile Communications Association [GSMA], 2020).

The e-trading platform is viewed as a game-changer and a valuable instrument to address the supply chain improvement by offering an alternative to the rigid