

Awareness of Electronic-National Agriculture Market (e-NAM) in Indian Agricultural Marketing during Covid-19

Vartika Srivastava^{1*}, Mithilesh Verma², Sangeeta Gupta³ and Aishwarya Singh⁴

M.Sc Student¹; Senior Scientist/Associate professor², Assistant Professor⁴, M.Sc Student³

Department of ECM, Chandra Shekhar Azad University of Agriculture & Technology, Kanpur- 208002

*Corresponding Author E-mail: vartikavs17.10@gmail.com

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ABSTRACT

The present study entitled "Awareness of electronic-National Agriculture Market (e-NAM) during covid-19" was carried in to four major agricultural states i.e. Uttar Pradesh, Madhya Pradesh, Haryana and Karnataka. Thus selected total member of 150 respondents were selected from different occupations of agriculture. The data was collected from various stakeholders actively engaged in trading through the e-NAM platform. Out of total more than 50 percent respondent reports govt. advertisements as major source of information transmitter for e-NAM and above 85 percent of the respondents were familiar with the APMC facilities. The study concludes that awareness ratio of eNAM process flow to farmers was positive in selected eNAM states in India. The evolution of eNAM in India provides a better platform for farmers for effective online trading. There is a need to provide the proper non-monetary incentive to farmers to work as influential opinion leaders in terms of creation of awareness and monetary incentives brand flagship of e-NAM.

Keywords: Agriculture Marketing, Corona pandemic, e-NAM, e-Mandi, Food supply chain management.

INTRODUCTION

A Pan-India electronic trading portal known as National Agricultural Market (e-NAM). It is a virtual market platform linking the existing physical Mandis, i.e. APMCs electronically, with a theme of "one nation, one market" as an eNAM market. Small Farmer Agribusiness Consortium (SFAC) is the lead agency for implementing e-NAM under the aegis of the Ministry of Agriculture and Farmers' Welfare,

Government of India. Sanjay Chaudhary & Pradeep Suri (2021) in research study identifies the enablers of adoption of e-trading of agricultural produce in India. It also proposes an adoption framework for promoting e-trading of the agricultural produce. The research proposes an e-trading adoption framework for the Indian agricultural supply chain.

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The ‘perceived ease of use’, ‘facilitating conditions’, ‘social influence’ and lower ‘cost’ are identified as significant enablers in his study besides ‘trust’ and ‘perceived usefulness. The e-trading in Indian agricultural has significant economic and workforce value for the country. Dr. Rouhin Deb (2020) in his study reveals that the steps of the government which range from enabling farmers with an option to trade online, setting up of the e-Nam, Jan-Dhan Aadhar Mobile (JAM) Trinity, have not only resulted in better opportunities for farmers to avail government schemes but also helped them to attain competitive prices for their products. Digitisation could be the force behind the bright future for agriculture. However, this is possible only if a conducive environment is built to facilitate these policy frameworks. Around 1.68 crores farmers are registered, and 1.14 lakh crores of trade value has been carried out through e-NAMs. Keeping in view the transparency and competitiveness that e-NAM has brought into the agricultural market, 1,000 more mandis will be integrated with e-NAM. Mishika Nayyar (2020) concluded that pandemic is impacting global as well as domestic food systems, disrupting regional agricultural value chains, and posing risks to household food security. The central and state governments have done much to allay fears in the minds of farmers by quickly announcing exemptions for the agriculture sector – seeds, labourers and farm related activities. The government has initiated a dialogue with the exporters of agri and allied commodities to disseminate knowledge on eNAM and gain a first-hand account of the problems being faced by the

exporters of such commodities and initiate necessary steps by making meaningful interventions for early redressal of their problems. Allowing critical agricultural activity, filling in gaps in agricultural supply chains and ensuring farmer’s ease is imperative for the smooth functioning of the backbone of our economy.

MATERIALS AND METHODS

The study is primary data-based and was conducted online during covid-19 from, keeping covid protocols in mind. The respondents were interrogated through telephonic conversations and by Google survey tool using a well-structured questionnaire. The data was collected from various stakeholders (farmers, traders, entrepreneurs, mandi workers) who are actively engaged in trading through the e-NAM platform in APMC Market yards of the states selected for sampling. Four States, i.e. Uttar Pradesh, Madhya Pradesh, Haryana and Karnataka, were selected purposely to represent the north and south part of the country. The study's outcome is based on the responses and information on the eNAM process flow collected from various stakeholders in the selected APMCs. Total 150 samples were selected purposely for studying the awareness of stakeholders who have gone through electronic trade in the selected States to understand the insights of stakeholders on eNAM. Simple statistical tools such as frequency, percentage, mean score were used to analyse the perception of stakeholders of eNAM in each process flow.

RESULT AND DISCUSSION

Table 1: Distribution of respondents according to their source of information about e-NAM

N=150

S. No.	Source	Yes	No	Mean Score	Rank
1.	Newspaper	38 (25.3)	112 (74.7)	1.25	IV
2.	Government Advertisement	76 (50.7)	74 (49.3)	1.51	I
3.	Radio/ Television	68 (45.3)	82 (54.7)	1.45	II
4.	Stakeholders of e-NAM	34 (22.7)	116 (77.3)	1.23	V
5.	Local Mandi	64 (42.7)	86 (57.3)	1.43	III
6.	Conference/ Seminar	20 (13.3)	130 (86.7)	1.13	VI

The data pertaining in the table 1 shows that distribution of respondents as per sources of awareness about e-NAM, 50.7% respondents were informed by government advertisement with mean score 1.51 and ranked first in the study area. 62.7% respondents were informed by radio/television with mean score 1.45 and ranked second in the study area, followed by

42.7% respondents informed by local mandi with mean score 1.43 and ranked third. 25.3% respondents were informed by newspapers with mean score 1.25 and ranked fourth in the study area, 22.7% respondents were informed by Stakeholder of e-NAM with mean score 1.23 and ranked fifth in the study area.

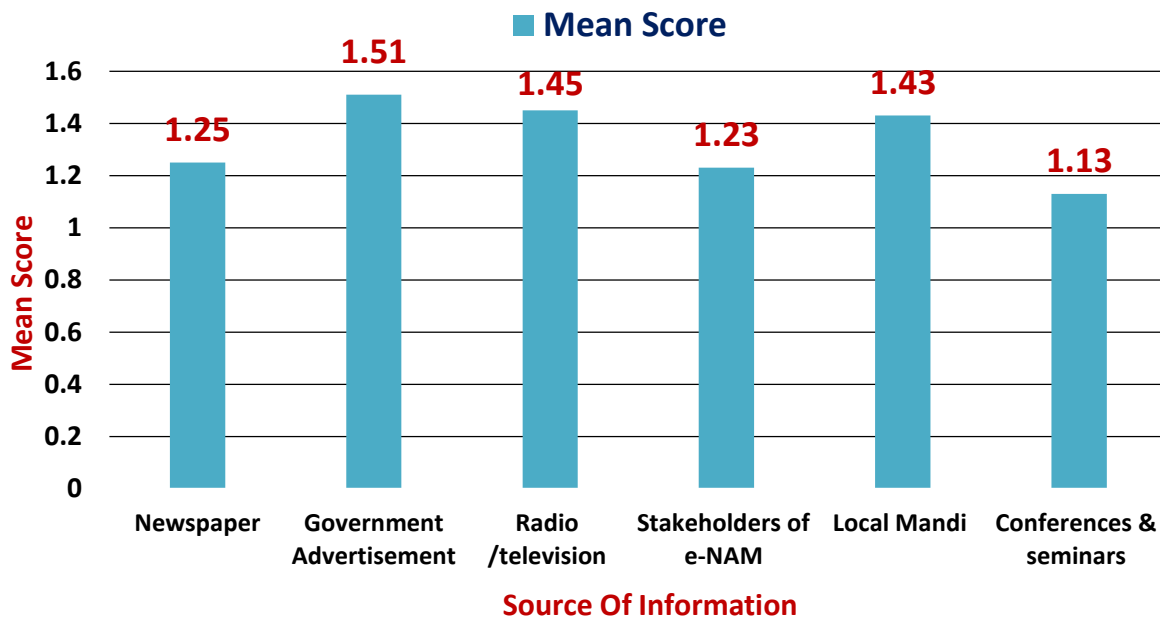


Figure 2.2: Distribution of respondents according to their source of information about e-NAM

Minimum 13.3% respondents were informed by Conference/Seminar with mean score 1.13

and ranked sixth in the study area during COVID 19.

Table 2: Awareness about e-NAM services in APMC
N=150

S. No.	Operations	Yes (%)	No (%)
1.	e-auction	129 (86.0)	21 (14.0)
2.	e-gate entry pass	150 (100.0)	-
3.	Highest bidder will win the bid	130 (86.7)	20 (13.3)
4.	Direct money transfer to farmer account of sale	142 (94.7)	8 (5.3)
5.	Quality check process	129 (86.0)	21 (14.0)

The data pertaining in the table 2 shows that distribution of respondents as per the awareness about APMC Mandi, 100% of respondents knew the e-gate entry pass procedure before booking slots in APMC Mandi. 94.7% of respondents knew that money obtained from the transaction was

directly transferred from consumer to farmer's registered bank account, followed by 86.7% respondents knowing bidding procedure. 86% of respondents were aware of the quality check procedure held at the time of trading to assure Portal quality standards.

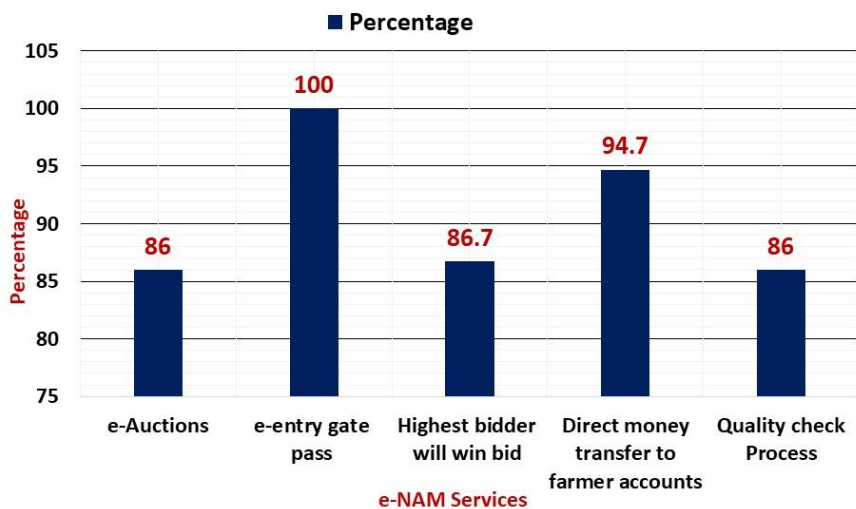


Fig 2.4: Distribution of respondents as per the awareness of e-NAM services in APMC

Table 3: Knowledge of respondents on consumers of farmer’s produce on e-NAM N=150

S. No.	Stakeholders	Yes (%)	No (%)
1.	Wholesaler	5 (3.3)	145 (96.7)
2.	Retailer	15 (10.0)	135 (90.0)
3.	Farmer	-	150 (100.0)
4.	Entrepreneurs	-	150 (100.0)
5.	All of the above	142 (94.7)	8 (5.3)

The data pertaining in the table 3 reveals that distribution of respondents as per the knowledge of consumers of farmer’s products on Portal, 94.7% stakeholders agreed that wholesalers, retailers, farmers and, entrepreneurs buy products of farmers on e-NAM Portal.10% of stakeholders believed that most of the retailers buy the product from

farmers, followed by 3.3% stakeholders were agreed that wholesalers are consumers of a farmer on e-NAM while cent per cent stakeholders disagreed that farmers and entrepreneurs purchase from products on e-NAM Portal only traders were consumers of the products in the study area.

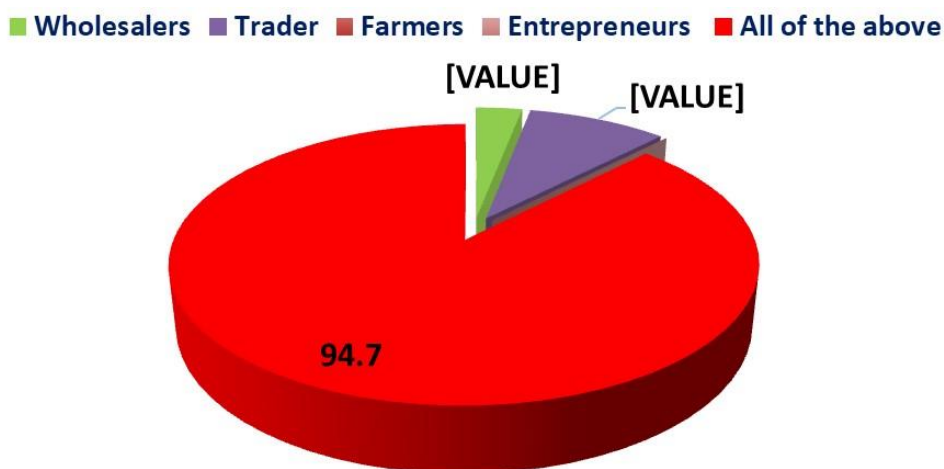


Fig 2.5: Distribution of respondents as per their perception on Consumers of farmer’s produce on e-NAM

Table 2.1: Distribution of respondents according to knowledge concerning with e-NAM
N=150

S. No.	Knowledge	Yes	No	Mean Score	Rank
1.	Knowledge about e-NAM	131 (87.3)	19 (12.7)	1.87	III
2.	Registered with e-NAM	112 (74.7)	38 (25.3)	1.75	IV
3.	Knowledge about APMC Mandi	150 (100.0)	-	2.00	I
4.	Registered with e-NAM app	110 (73.3)	40 (26.7)	1.73	V
5.	Knows about KISAN RATH transportation service	18 (12.0)	132 (88.0)	1.12	VII
6.	Farmer’s SHG considered as FPO	139 (92.7)	11 (7.3)	1.93	II
7.	Multiple registrations in trading	6 (4.0)	144 (96.0)	1.04	VIII
8.	Paid to commission agent for trading with e-NAM	30 (20.0)	120 (80.0)	1.20	VI

The data pertaining in the table 2.1 shows that distribution of respondents as per the knowledge concerning with e-NAM, 100% respondents were having knowledge about APMC Mandi with mean score 2.0 and ranked first in the study area. 92.7% respondents were having knowledge that farmer’s SHG were considered as FPO with mean score 1.93 and ranked second in the study area, followed by 87.3% respondents having knowledge about e-NAM with mean score 1.87 and ranked third. 74.7% respondents were registered with e-NAM with mean score 1.75 and ranked fourth

in the study area, 73.3% respondents were using e-NAM app with mean score 1.73 and ranked fifth in the study area. 20% respondents were paid any commission agent trading in Mandis linked with e-NAM with mean score 1.20 and ranked sixth in the study area. 12% respondents knew about KISAN RATH service initiated by govt. of India with mean score 1.12 and ranked seventh in the study area. Minimum 4% respondents were having problem registering multiple times with mean score 1.04 and ranked eighth in the study area during COVID 19.

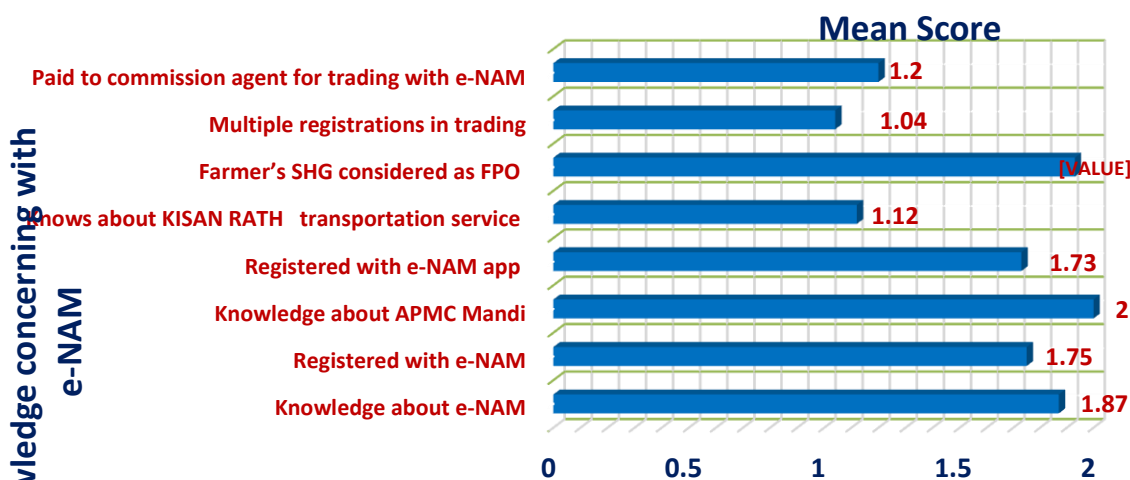


Fig 2.1: Distribution of respondents according to knowledge concerning with e-NAM

Table 2.3: Distribution of respondents according to awareness and preference of various payment methods while trading

N=150

S. No.	Payment Methods	Yes	No	Mean Score	Rank
1.	Cash payment	62 (41.3)	88 (58.7)	1.41	II
2.	Debit card/ credit card	28 (18.7)	122 (81.3)	1.19	IV
3.	Net banking	22 (14.7)	128 (85.3)	1.15	V
4.	BHIM UPI	22 (14.7)	128 (85.3)	1.15	V
5.	Bank to Bank	75 (50.0)	75 (50.0)	1.50	I
6.	Mobile wallet	38 (25.3)	112 (74.7)	1.25	III

The data pertaining in the table 2.3 shows the awareness and preferences of various payment methods while trading in markets 50% respondents knew about bank-to-bank transfer with mean score 1.50 and ranked first in the study area. 41.3% respondents knew about cash payment option with mean score 1.41 and ranked second in the study area, followed by

25.3% respondents knew about mobile wallet with mean score 1.25 and ranked third. 18.7% respondents knew about debit card/credit card transfer with mean score 1.19 and ranked fourth in the study area, 14.7% respondents knew about both net banking and BHIM UPI with mean score 1.15 and ranked fifth in the study area.

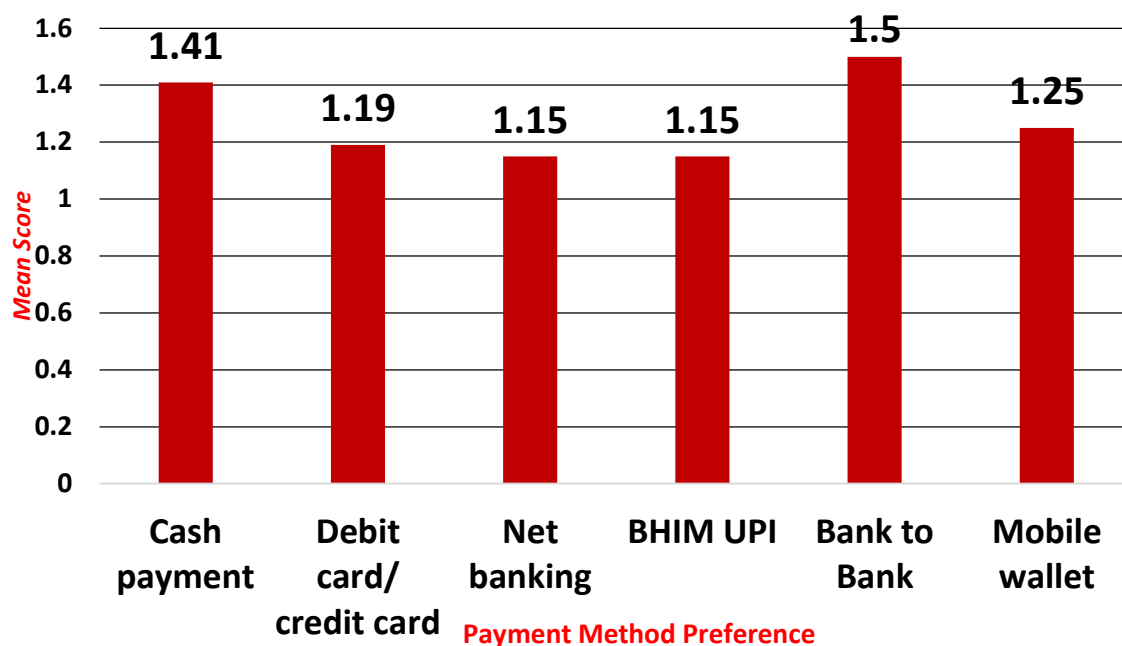


Fig 2.3: Distribution of respondents according to awareness and preference of various payment methods while trading

CONCLUSION & ACKNOWLEDGMENT

The e-NAM Portal helps provide a single-window service in all aspects like commodity arrivals & prices, buy & sell trade offers, provision to respond to trade offers etc. The awareness ratio of eNAM process flow to farmers was positive in selected eNAM states in India. The evolution of the development of eNAM in India provides a better platform for farmers for effective online trading. Regarding the awareness of stakeholders about e-NAM more than 50% of respondents reported government advertisements and 45.3% respondents have reported that television/radio are prime source of information as per the data given in Distribution of respondents according to their source of information about e-NAM i.e. Table 1. In our analysis on various services

of APMC, we found that cent per cent respondents were aware of e-gate passes, from where to obtain and more than 85% of respondents reported that they were aware of e-auction procedure, direct bank to bank transfer and, quality check facilities as per the data given in figure 2. Most of the stakeholders have realized that APMC services in terms of better marketing facilities. Besides awareness, overall more than 90% respondents know their consumers well as shown in Knowledge of respondents on consumers of farmer's produce on e-NAM i.e. table. However, it has been found that awareness rate of e-NAM is pretty good and have implemented eNAM at a greater level. About 50% like to choose Cash payment methods while trading in Agri-Mandis. Overall majority of people are aware

of e-NAM process flow and are using facilities provided by portal. It brings new technology adoption in agricultural marketing sector for betterment in future and is a welcoming sign for new model of marketing.

Recommendation

- 1) Farmer is one of the essential stakeholders in the eNAM platform; there is a need to provide the proper non-monetary incentive to farmers to work as influential opinion leaders in terms of creation of awareness and monetary incentives brand flagship of e-NAM.
- 2) State agriculture Universities plays a significant role in the dissemination of emerging agricultural technology to fields. There is a need to conduct proper awareness programs and training from time to time to increase the rate of adoption among stakeholders. Krishi-Mela, seminars, conferences can help a lot in the improvement of the process flow of information.

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