

E-NAM : A PARADIGM SHIFT IN AGRI-MARKETING

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ABSTRACT

The aim of this paper is to get insight into agriculture marketing reforms that have evolved post-independence in India especially e-NAM(electronic-National Agriculture Market) and benefits of the implementation of e-NAM in agricultural marketing. The study is qualitative in nature and primarily based on literature reviews on agricultural marketing developments and reforms occurred in India. E-Commerce has changed the scenario of agricultural marketing in India. Various kinds of literature are gathered and reviewed from government published reports, agriculture journals, newspapers and websites of different institutions, and online published articles related to agricultural marketing. This article helps to comprehend the scope of e-commerce in the agriculture sector to solve inherent problems in rural India. There is a wide variation in agricultural growth across different states in India. The works of literature are analysed properly to suggest the current scenario of agriculture marketing for farmers in India through a working model of e-NAM. The benefits of the electronic platform have helped the farmers and traders in a more effective way than conventional agriculture marketing of produce.

Keywords: *Agriculture marketing, e-NAM, E-commerce, Electronic platform, electronic-National Agricultural marketing.*

Introduction:

If you ate today, thank a farmer.

-Anonymous

In this changing world, digitalisation is the reason for the paradigm shift in agri-business. The digital media has revolutionised the core part of marketing. The new age mantra is “Think Locally, Act Globally” (Devine-Wright, 2013; cited in Ishak & Balikisu, 2015) and in developed countries like Japan, US we can see that implementation of the same. In a developing country like India, the same mantra has been applied in every business to focus on more exports. As India is an agrarian country and its economy is mostly dependent on the agriculture sector, therefore this sector has occupied more than fifty per cent of the workforce and still continues to be the main source of farmers

income (Chengappa, 2018). In the transition phase of commercialisation, the farmer has faced many problems and constraints.

Marketing of agriculture produce can be done in many ways but the cost-effective and transparent strategy would be Digital Marketing (DM). The use of digital technologies to market the product is termed as Digital Marketing. The situation of farmers in India after independence was vulnerable. The annual growth rate was 2.7 per cent and later on, in the Nineties, it slowed down to 1.8 per cent (Singh, 2004:37). The farmer is at the end of the ladder in availing trade benefits and nobody cares about his well being. Many reforms have been done to change this situation but invariable development of agriculture sector leads to uneven production and productivity of crops across the regions. The appropriate policy and programme execution by the government have provided the platform and new technology to help Indian farmers to achieve massive production and distribution.

The internet technology has played a vital role in transforming agriculture sector from purchasing seeds to selling harvested crops, provide information of market and weather, decrease in the cost of production and time of getting the returns for their produce (Gupta & Sharma, 2018). Though technology is available farmers are facing unprecedented challenges and inherent problems in agribusiness in rural India (Singh, 2004). The unregulated and unorganised agricultural Mandis have forced farmers to sell their produce to middlemen. The Indian Agricultural market is dominated by middlemen due to lack of infrastructure, proper transportation facilities, absence of warehousing facilities and unpredictable weather (Gupta & Sharma, 2018). In recent years, the Government of India (GOI) has taken many initiatives such as programs and schemes for the upliftment of farmers and to stop the exploitation of farmers by middlemen.

Presently, e-commerce has changed the scenario of agricultural marketing in India. With the advent of technology and ease of adapting it, farmers and consumers have also started adopting online shopping in agribusiness in India. A model act is constituted by Ministry of Agriculture (MoA) to bring marketing reforms in line with current trends. The Agricultural Produce Marketing Committee (APMC) act has been adopted by 24 states and 2 union territories (as per the State-wise status of marketing reforms on GOI website till 2016) to derive advantages of market reforms. After the establishment of the APMC act, it enabled the marketing exposure, the facility of the warehouse, direct purchase centre and development of agricultural markets in the country (Gupta & Sharma, 2018).

This research article explains the scope of e-commerce in the agriculture sector to solve inherent problems in rural India. The paper is organised into 4 sections. First section deals with the overview and introduction of agriculture marketing. The second section explains the post-independence market reforms and current Indian Agriculture Market scenario. The next section discusses e-commerce platform i.e. e-NAM for agriculture marketing. The benefits of e-commerce in agriculture and concluding remarks are made in the last section.

2. Methodology

The study is qualitative in nature and primarily based on literature reviews on agricultural marketing developments and reforms occurred in India. The author has explained the significant role of agriculture marketing reforms in

enhancing farmers socio-economic conditions. Various kinds of literature are gathered and reviewed from Government published reports, agriculture journals, newspapers and websites of different institutions, and online published articles related to agricultural marketing.

The objective of this paper is to get insight into agriculture marketing reforms that have evolved post-independence in India and to describe the present scenario of agriculture market transformation through online trading portal i.e. “e-NAM”.

The reviewed works of literature are compiled carefully to draw a picture of agricultural market reforms and development that is implemented to strengthen the spirit of farmers and strategies to eliminate deficiencies present in agricultural marketing with e-platform particularly in the context of e-NAM. The works of literature are analysed properly to suggest the current scenario of agriculture marketing for farmers in India through the working model of e-NAM.

The National Commission on Agriculture has defined agricultural marketing as a “process that starts with a decision to produce saleable farm products that also includes pre and post-harvest operations, assembling, grading, storage, transportation and distribution.”

3. Agriculture marketing Reforms and Present scenario in India

3.1 History of agriculture marketing in India

In India, Agriculture marketing programme was present approximately hundred years ago in the British era. The previous studies explain, the first farm produce in India was raw cotton and bought by the textile mills of Manchester (UK) at reasonable prices. In 1886, first regulated market (“Karanja”) was inaugurated under Hyderabad Residency Order and afterwards in 1887 first law enacted “Berar Cotton and Grain Market Act of 1887” which given authority to British Resident to supervise the regulated markets and to select any place in their district as a market place for buy and sale of agricultural produce. Then in later years, this Act was the base for other models established in other provinces of India. In 1928, the Royal Commission on Agriculture has recommended some important changes in the regulation of marketing and trade practices, and establishment of market yards in regulated markets. Till independence, no major progress has been seen in agriculture marketing. The major reforms came into existence after the independence of India. In India, more than half of the total population is dependent on agriculture but most of them come under marginal and small farmers’ category. These farmers have issues and challenges related to agricultural marketing, storage problem and supply of inputs and services (Gupta & Sharma, 2018). This section concentrate on agriculture marketing reforms and policies occurred during post-independence in India.

It is evident that agriculture always has been acted as a pivotal sector of the Indian economy. After post-independence, agriculture growth and development is considered as the well-being of farmers, employment opportunity, and resource base for other allied industries. The farmers' community had resources for production but the issue was uncertain marketing facilities and infrastructure. To cope up this issue, Government established policies and regulations to

provide a better agricultural marketing system and incentive prices to motivate farmers for more production. In the sixties and seventies most of the States enacted Agricultural Produce Markets Regulation (APMR) Acts and started to operationalise (Mehta, 2006; cited in Minten, Vandeplas & Swinnen, 2012).

3.2 Government intervention in Agri-Market

Time to time, Government has changed several regulations and policies in agriculture marketing system after encountering the various defects like farmers had to face high cost of marketing, getting undue low prices, transportation problem, insufficient marketing yard, etc. The organised agricultural marketing came into picture through “Agricultural Produce Market Committee” (APMC) who framed new policies and enacted with enforcement (Minten, Vandeplas, & Swinnen, 2012). The new improved physical markets attracted and benefited the farmers and traders by providing the right prices and eliminating middlemen (Acharya, 2004).

At the time of independence, Mandis was 268 and after APMC act it went around 6300 Mandis in India in 2007 (Chauhan, 2008); presently the number is increased to more than 6700 (Report of NIAM, 2017). The government has intervened persistently in agriculture policy implication, provision of market infrastructure and regulatory measures of agri-marketing. The advent of the green revolution in the 1970s has shown the friendly policy environment to help farmers grow. The several marketing committees are formed and started serving the interest of the farming community. But in the late 1990's, the scenario has changed and middlemen enter into the picture. The policyholders, bureaucrats and marketing institution started losing their control as they started focusing on the self-sufficiency of food problem.

The era of liberalisation, privatisation and globalisation has emerged to rescue the country from a heavy financial crisis. These things had made the situation worse for farmers and they started seeking help from a middleman for credit requirement. The control of trading went directly to middlemen and they mould the marketing policies to their benefits. Due to this, many problems have emerged and a dire need for reforms in agriculture marketing to save farmers. As per the World Bank Report, the estimated Indian agricultural workers 25.7 per cent would fall by 2050 from 58.2 per cent total workforce in 2001(cited in Economic Times, 2018).

3.3 Indian Agricultural Market scenario:

It is evident that to increase food production in India technology has played a vital role regardless of the limited source of output. This amplifying process needs to be embraced with strong infrastructure, warehousing and logistics facility along with efficient marketing network (Saxena et. al., 2017). The present scenario of agricultural marketing in India is going to improve with the help of technology and the internet. There are a few limitations of present agricultural marketing system which has pushed the Indian government to establish a new marketing platform to eradicate the present constraints of the marketing system. The main constraints are explained below:

- (i) *Markets are fragmented within a state:* The markets (Mandis) are established in the states by the APMC Act in different regions to cover the whole state but after all multiple trading license are compulsory and market fees

have to pay at different locations. Apart from this handling charges and market accessibility obstruct in selling off produce.

- (ii) *Infrastructure amenities are not available*: The farmers need a cold storage facility, quality checking labs auction platforms and weighing bridges. These facilities are not available throughout the Mandis. From previous studies, it is evident that farmers are not having these infrastructure amenities for the marketing of their produce.
- (iii) *Market fees and commission agent tax*: Whenever the farmer is coming to sell his produce he has to pay market entry fees, weighing charges and market fees. Market committee and commission agents are authorised for taking taxes from the produce sold. These taxes and fees make the profit very less and the farmer doesn't get any profit margin after his all efforts.
- (iv) *Asymmetric Price of commodities*: The trader generally offers less than the price quoted by the government news media. So farmers didn't have any other option other than selling it.
- (v) *High Intermediation cost*: MoA indicates that in 2004 the share of producers differ for all commodities from "56 to 89 per cent for paddy", "77 to 88 per cent for wheat", "72 to 86 per cent for coarse grains" and "79 to 86 per cent for pulses", "40 to 85 per cent in oilseeds" and "32 to 68 per cent in case of fruits, vegetables and flowers". This has created a need for reform in agricultural marketing channels.
- (vi) *No other options available after post-harvest*: ICAR (2015) reported that the post-harvest losses of various commodities ranging from 4 to 12 per cent and total losses estimated around "Rs 92,651 crores at an average price value of 2014".
- (vii) *The non-existence of Credit facility*: There is a huge need for credit facility for an Indian farmer just after harvesting crops so that they can wait for the right time for the right price of that produce.

3.4 Need of next level of reforms in agri-marketing:

These limitations of agricultural marketing created the need for reforms in this sector. As per Gulati, 2009 in the last five-seven years, there is a wide variation in agricultural growth across different states in India. At one end of the spectrum, there are states like "Gujarat that are showing strong growth of 8-10 per cent per annum in agriculture, while at the other end are states like Uttar Pradesh, West Bengal, etc., that are growing barely at 1-2.5 per cent per annum". The marketing laws are monitored and regulated by the APMC of state Government. The central government has composed the APMC Act in 2003 and rules in 2007 which is shared with states to implement under DACF&W. As per the MoA, influential areas of reforms to pursue in the marketing of agricultural produce are:

- (i) Direct purchase of produce by exporters or retailers or buyers from farmers.
- (ii) The private market yard could be controlled by a non-market committee member.
- (iii) Single license for trade throughout the state.
- (iv) Eligibility for Contract farming to promote employment among small and marginal farmers.

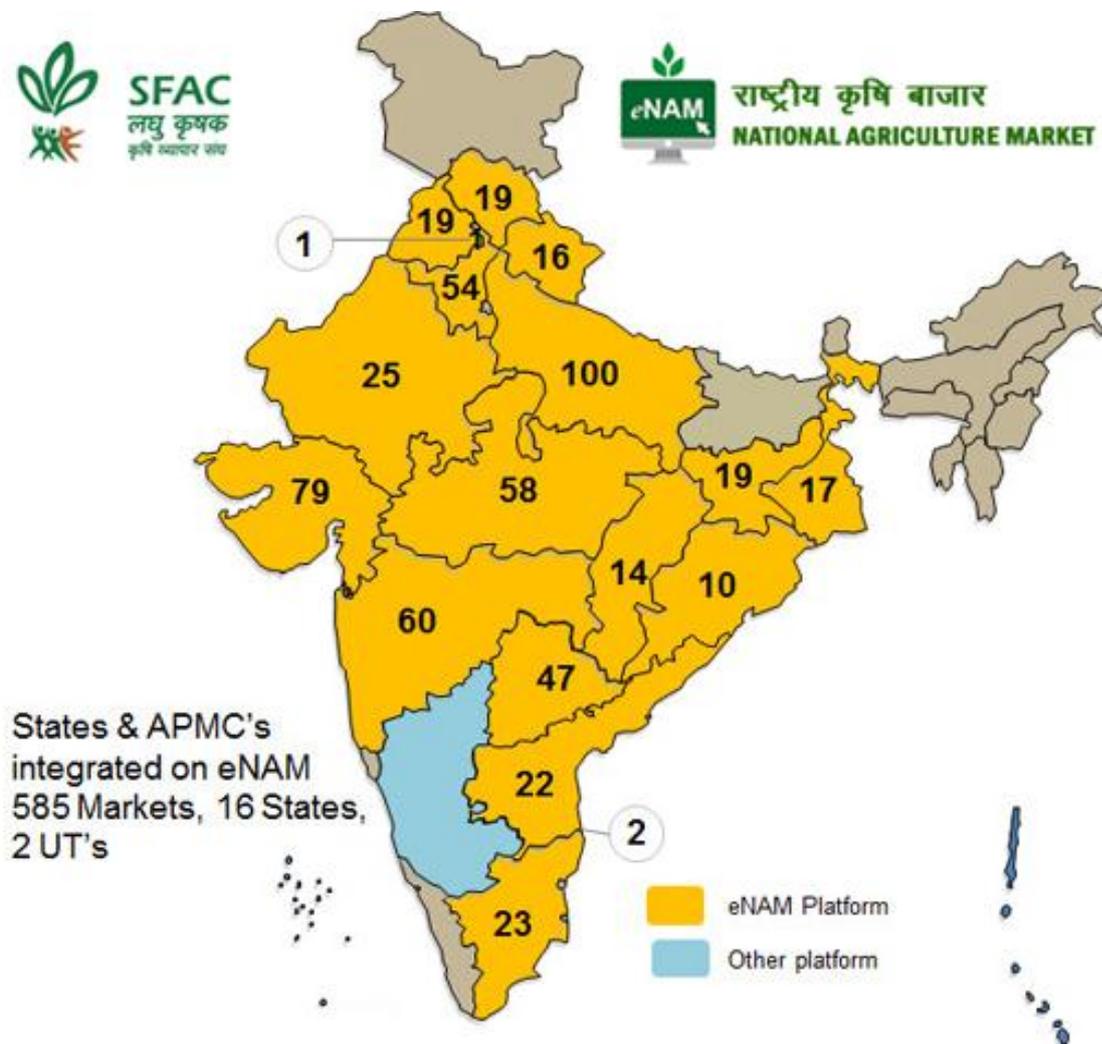
(v) Facility for e-Trading or e-auction with a single fee.

These all areas in the marketing of agriculture have forced the government to come up with a new platform for farmers and traders. As per NSSO Report, the farmers declined at an annual rate of 1.8% to 14.6 crores in 2011-12 from 16.6 crores in 2004-05 and if it will decrease at the same rate (assuming) then in 2021-22 no. of farmers would be below 12 crores (Saxena et. al., 2017).

4. Electronic National Agricultural Market (e-NAM):

The Union Government took initiative to encourage farmers of other states and UTs' of India to market their produce through an electronic platform for agriculture marketing i.e. e-NAM that is the replica of Karnataka Model; ReMS. The motive of e-NAM is to recreate a similar model for trade in agriculture to support farmers and traders.

Under the Digital India flagship programme, Electronic National Agricultural Market (e-NAM) system was introduced in 2016 for farmers and traders to market their crops online across India. The e-NAM system and platform are operationalised and maintained by Small Farmers' Agribusiness Consortium (SFAC) with Strategic Partner viz. M/s Nagarjuna Fertilizer and Chemicals Limited. SFAC is a registered society of the Department of Agriculture, Cooperation & Farmers' Welfare (DAC&FW) under the Ministry of Agriculture and Farmers' Welfare (MoA&FW) (source: <http://www.enam.gov.in>). The e-NAM system was launched on 14th April 2016 with initial acceptance of 21 Mandis across 8 states in 24 commodities on a pilot basis (source: Press Information Bureau, 2016). Presently, 585 Mandis are integrated with e-NAM in 16 states and 2 UT (<http://www.enam.gov.in>).



Map of e-NAM implemented states and UTs' with Number of existing Mandis (till Mar'2019)

Source: <https://enam.gov.in>

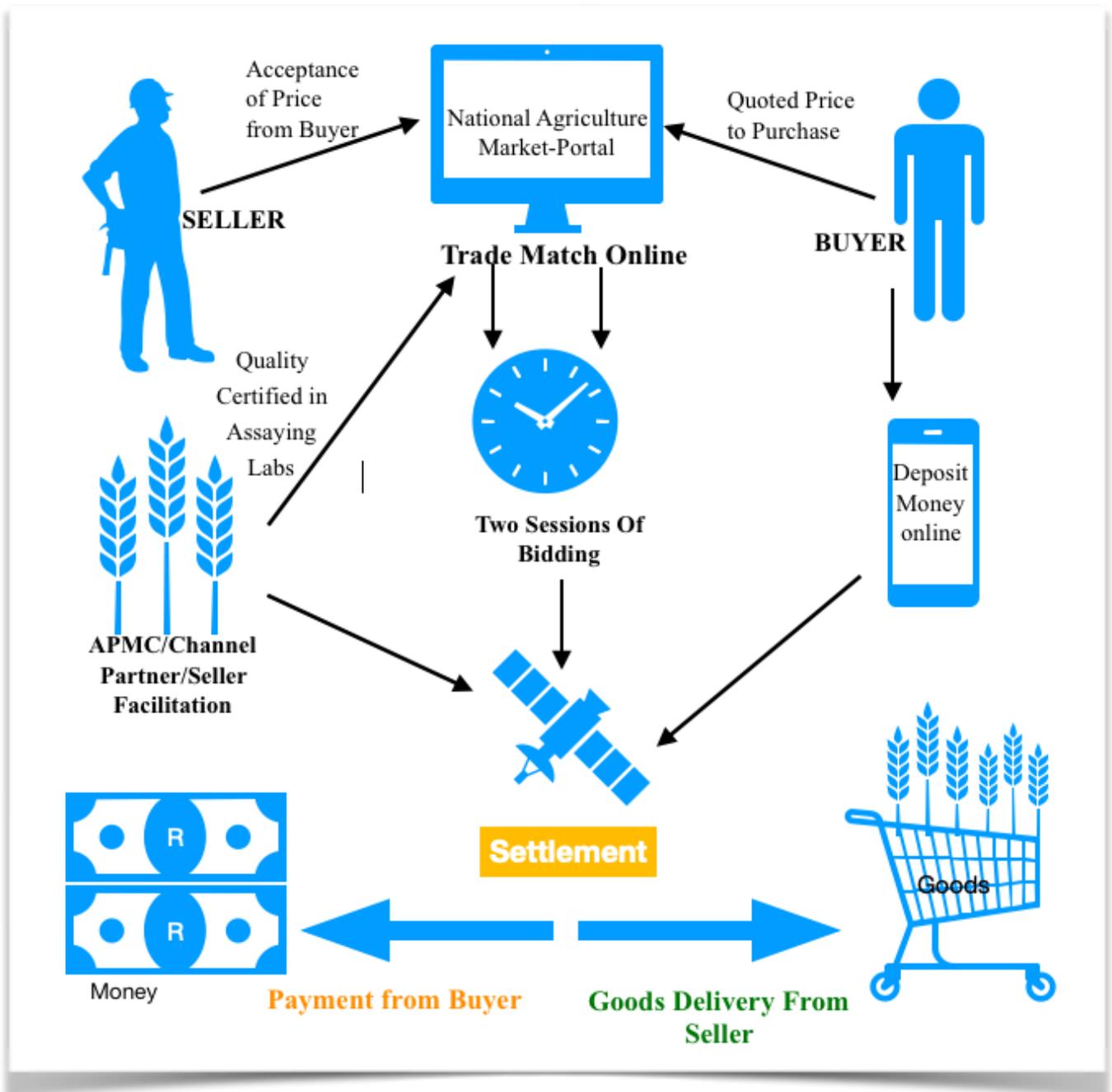
The MoA & FW proposed broad objectives for the Electronic National Agricultural Market (e-NAM) as follows:

- (i) "Transparent sale transactions and price discovery",
- (ii) "Liberal licensing of traders/buyers and commission agents by state authorities",
- (iii) "Harmonisation of quality standards of agricultural produce and provision for assaying",
- (iv) "Single point levy of market fees",
- (v) "Provision of scientific techniques such as soil testing laboratories."

The e-NAM platform which can be accessed online by different stakeholders would help in networking all physical APMC Mandis. This platform has increased choices to sell the agricultural produce by farmers, lower intermediation costs, reduce market fragmentation and lower price for the final consumer. There are three main stakeholders in e-

NAM system-Farmers, Traders, and Buyers/exporters. The working model of Mandis, training manuals, guidelines for using e-NAM application and registration and operational guidelines for different stakeholders are given online. To understand the e-NAM process or working model, the author has administered at one of the APMC mandis where an e-NAM model is functioning.

Figure 1: A working model of e-NAM



Source: Author compilation (<http://sfacindia.com>)

4.1 Process of e-NAM :

The e-NAM centre opens in the early morning with two online sessions. First, it starts from 8 am to 12 pm and another from 1 pm to 5 pm. The farmers who entered into the gate with their products would carry the Lot receipt (Entry receipt). The receipt includes the details of the farmer, contact number, CA name, commodity name, trader company name, no. of bags of commodity, and approximate quantity of a commodity. After this, the sample of a commodity goes for quality check and grading will be assigned with assaying parameter. This commodity will be e-auctioned online through e-NAM portal and buyers can bid the commodity and quantity available on the e-platform. The result of the e-auction will be declared after the session end and winners get the mail for the confirmation. After the confirmation, a farmer will get the money within 24hrs of time of transaction. The farmer has the option to demand more of their produce if he is not satisfied with the e-auctioned value. The farmer will get the money into his/her account and with prescribed details like who is the buyer, the total amount paid by other party and quantity bought. This makes the transaction transparent and smooth.

The vision of implementing the e-NAM system is to provide higher returns to traders and farmers, reduce in transaction cost to buyers/exporters, encourage value chain model and logistics of commodities, uniform market prices and motivate for warehousing. This e-NAM portal provides a one-stop solution for all APMC related information and services that include details of all tradable commodities, buy & sell trade offers, update of current commodity prices, provision to respond to trade offers and e-tenders.

5. Benefits of implementing e-NAM scheme:

After the implementation of e-NAM in the first phase, the response was outstanding and number of Mandis joined are more than expected. Presently a total of 585 Mandis are enrolled into e-NAM till March 2019 and in the next phase, another 415 Mandis are expected to join the platform. There are many advantages of using this platform that can be encashed by farmers and traders in the marketing of produce. The benefits of the implementation of e-NAM in agricultural marketing are listed below:

- i. *Transparent and Cashless Transaction:* The farmers and traders can sell their commodities online and get money through online banking. Online it can be seen the amount credited and who is the buyer.
- ii. *Real Time Price of commodity:* This facility would be grateful for farmers and traders when they are unknown about the prices of the commodity. At the time of selling the commodity, they can check the current price of that commodity and sell at par prices.
- iii. *No middleman Interference:* The main aim of the e-NAM scheme is to transfer the direct benefit to the farmers and traders for the crop sold. The government got successful in doing the same and they have eliminated the middlemen interference.

- iv. *Guarantee of payment*: Earlier it was not possible to get the payment at the same time of selling and farmers have to wait for the weeks and months for their own money. In this scheme farmers and traders are confident of getting money in stipulated time.
- v. *Certified Quality check, logistic and warehousing Facility*: The certification of the commodity was not possible for all traders and farmers, only who has a good relationship with the manager they can only get the certificates. The logistics and warehousing were also the same and small farmers and traders have to wait for their turn or else they have to sell without this facility.
- vi. *Ease of Access to the market*: Reaching to market has become easier and most of them are selling their produce to Mandis directly. This facility has helped them to sell their produce on the same day.
- vii. *Strong and effective supply chain*: The supply chain has become stronger and efficient for all the commodities. The process of arrival of commodities, procurement of products and logistics are maintained very well.
- viii. *Elimination of Transaction cost*: Earlier farmers have to pay transaction cost and market fees for entering each time to individual mandi but e-NAM has eliminated that market fee and transaction cost for each time.

Conclusion

More than half of the population is dependent on agriculture and most of the farmers i.e. approximately 75% are small and marginal farmers. The researcher focuses on shifting of conventional agricultural marketing to e-platform marketing in India. To gain competitive advantage farmers and traders prerequisite to use internet technologies. The need of the hour is to bring better price realisation and motivate the farmers for higher growth of output to raise production. The systematic and organised reforms of agri-market have established an electronic-National Agricultural Market to support the farmers in a more effective way to retaliate the market demand. The transparent payment, elimination of middlemen, one license, guarantee of payment in the stipulated time, provision for e-trading, facility of assaying labs, end of transaction cost, freedom of selling to anywhere in India, etc., have made the paradigm shift in agricultural marketing. After the implementation of e-NAM, disruption of the market resulted in a safeguard of farmers and traders economic growth. The government support towards well being of farmers needs to be applauded and precursor to future reforms in the agricultural marketing system.

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