

# FARMER'S AND TRADER'S VIEWS ON TRADITIONAL & NATIONAL AGRICULTURE MARKET (e-NAM): A STUDY OF FRUITS AND VEGETABLES MARKET OF SOLAN (HIMACHAL PRADESH)

<sup>1</sup>Vijay Kumar Sharma, <sup>2</sup>Divesh Sharma, <sup>3</sup>Pawan Kumar Thakur

<sup>1</sup>Assistant Professor, <sup>2,3</sup>Research Scholar, MBA (Rural Development)  
Department of Interdisciplinary Studies  
H. P. University  
Summer Hill, Shimla-171005

**Abstract-** The present study discusses the perceptions of the farmers and traders of fruits and vegetables on national agriculture market, e-NAM, in the Solan market. Solan fruit and vegetable market has over 11,000 registered farmers and 500 registered traders. The study reveals positive outcomes. Farmers appreciate the expanded market reach, reduced intermediary dependence, and increased financial gains that they get from using e-NAM and the traders find e-NAM more convenient, time saving and helps in increasing the profit through diverse supplier access. Despite recognizing e-NAM as the by the farmers and traders both in the future, still 64% of the farmers and 60% of the traders prefer the traditional market due to trust, familiarity, personal relations and the value of face-to-face interactions.

**Index Terms -** e-NAM (National Agriculture Market), Traders, e-national agriculture market, Traditional agriculture market, APMC (Agricultural produce market committee), Livelihood, online platform, digital literacy and *Mandis*.

## 1.1 INTRODUCTION

Online agricultural markets have appeared as an alternative to the existing traditional markets in India in recent years. These online markets offer several advantages over traditional markets such as wider market access, and price transparency and they reduce the middlemen's involvement. Through the e-NAM, farmers can sell their products directly to a larger customer base, resulting in better prices for their products. Additionally, Traders gain access to a wider range of products and can easily compare prices.

With the increase of people using smartphones and getting internet connectivity, farmers can now easily access these platforms to showcase their products and connect with Traders. This trend also aligns with the government's push for digitalization and initiatives like e-NAM (National Agriculture Market) in India.

The E-NAM (National Agriculture Market) initiative is a significant step taken by the Government of India to reform the agricultural marketing system in the country. We well know that traditionally, farmers used to sell their produce in local agricultural markets known as mandis. These mandis are often regulated by state governments and local authorities, and they involve intermediaries like commission agents, who facilitate the sale of crops or products of the farmers.

## 1.2 SOLAN FRUIT AND VEGETABLE MARKET

In 1972, the same year that the Solan district was created, the Solan fruit and vegetable market was established. On the Solan bypass, in Kather, is where you'll find the mandi. In Himachal Pradesh, it is a significant wholesale market for fruits and vegetables. Farmers and Traders have long conducted business at Solan fruit and vegetable market, a traditional agricultural market. The Solan fruit and vegetable market is key to the livelihood of thousands of farmers in the region.

The Solan fruit and vegetable market is relevant to the livelihoods of farmers in several ways.

- I. Market for farmers and Traders: The market is large and well-structured, allowing farmers to sell their products at a reasonable price and reach a wide range of markets where Traders get a diverse range of products.
- II. Create jobs and stimulate the local economy: The market employs thousands of people including farmers, traders and support staff, thus contributing to the local economy.

In addition to the above, Solan fruit and vegetable market also plays an important role in the following:

- Price discovery

One of the most important sources of information about fruit and vegetable prices in the region is the Solan fruit and vegetable market. This data is used by the farmers and Traders to decide on production and pricing.

- Market Intelligence

Solan fruit and vegetable market is a source of market intelligence for farmers and traders. The market brings information on the demand for various fruits and vegetables, the availability of produce, and the prices of other products. With such information in hand, decisions can be made about production and pricing.

In sum, the Solan fruit and vegetable market is a market that must be included in the local agriculture system. For residents, it is a source of fresh produce, labour, and market information. Of course, it is also to sell locally grown fruits and vegetables and to preserve the local agricultural heritage.

On May 8, 2016, Chief Minister Virbhadra Singh launched the web portal of the Solan fruit and vegetable market, making it the online retail vegetable market. From that time the Solan mandi has only seen progress, in the year 2017 on the occasion of 'Civil Service Day' at Vigyan Bhawan Delhi the district Solan was awarded by the honourable Prime Minister of India for 'Best performance in implementing the e-National Agriculture Market (e-NAM).

### 1.3 OBJECTIVES OF THE STUDY

- To highlight obstacles encountered by farmers and Traders when using the online platform e-NAM.
- Identify potential benefits of using the e-NAM.
- Identify what farmers and traders prefer, traditional market or e-NAM;

### REVIEW OF LITERATURE

Aggarwal, N., Jain, S., & Narayan, S. (2017)<sup>1</sup> analyses the shift towards an online system in agricultural markets. Initially met with resistance from commission agents and traders due to political barriers, mandi officials had to persuade them into accepting it while some boycotted trading for weeks. It is argued that India needs institutions capable of setting market rules along with incentives as well as infrastructure support needed for modernized trade platforms if there will be any success seen from these reforms.

Bisen, J., & Kumar, R. (2018)<sup>2</sup> focuses on the agricultural marketing reforms in India and the implementation of the e-NAM system. It highlights the challenges faced in implementing e-NAM, including infrastructure limitations, legal hurdles, and low awareness among farmers. The study suggests various solutions to address these challenges, such as amending state APMC Acts, improving infrastructure, hiring skilled manpower, and increasing awareness programs for farmers. The study emphasises the importance of efficient markets for price discovery and fair competition and discusses the role of agricultural marketing in poverty reduction. The research concludes that the e-NAM system has the potential to provide fair prices for farmers and quality products to consumers, but efforts are needed to strengthen the system and overcome the challenges.

Venkatesh, P., Singh, D. R., Sangeetha, V., Balasubramanian, M., & Jha, G. K. (2021)<sup>3</sup> examines the implementation and performance of the electronic National Agriculture Market (e-NAM) platform in India. The study analyses the coverage of e-NAM in agricultural markets, the pattern of trade, the benefits to farmers, and the constraints faced by the platform. The findings suggest that there is room for improvement in quality assaying and unified licenses to promote inter-market trading and achieve better price discovery.

Thakur, P., Mehta, P., & Kumar, K. (2021)<sup>4</sup> this research discusses the current state and changing dynamics of agricultural produce marketing in India. It emphasises the importance of agricultural marketing in driving production, consumption, and economic development. It explores the evolution of agricultural marketing through regulatory measures, such as the establishment of regulated markets and the APMC system. The research highlights the shortcomings of the APMC system and the need for regulatory reforms in agricultural marketing. The study also examines the initiatives implemented by the government to address the challenges faced by the agricultural marketing system.

### RESEARCH METHODOLOGY

<sup>1</sup> Aggarwal, N., Jain, S. & Narayanan, S. (2017) the Long Road to Transformation of Agricultural Markets in India: Lessons from Karnataka. *EconomicandPoliticalWeekly*, 52, 47–55. [www.jstor.org/stable/26698413](http://www.jstor.org/stable/26698413).

<sup>2</sup> Bisen, J. & Kumar, R. (2018) Agricultural marketing reforms and e-national agricultural market (e-NAM) in India: are view. *Agricultural Economics Research Review*, 31(conf), 167–176.

<sup>3</sup> Venkatesh, P., Singh, D.R., Sangeetha, V., Balasubramanian, M. & Jha, G.K. (2021) The changing structure of agricultural marketing in India: a state-level analysis of e-NAM. *Agricultural Economics Research Review*, 34(conf), 97–109.

<sup>4</sup> Thakur, P., Mehta, P. & Kumar, K. (2021) Existing Status and Changing Scenario of Agricultural Produce Marketing in India. *Indian Journal of Extension Education*, 57, 28–38.

A purposive sampling was adopted to select participants for both interviews and surveys. For the quantitative and the qualitative components, the purposeful sampling technique was used. Only 50 Farmers and 25 Traders were interviewed to collect the data. In this research, a sample survey was conducted. A sample of 50 respondents from farmers and 25 respondents from Traders was selected. Semi-structured interviews and surveys were utilized as the primary data collection methods.

#### PART-A: FARMER'S VIEWS ON TRADITIONAL MARKET AND e-NAM

**Table 1: Age group wise distribution of the respondents**

Age group	No.	%age
18-30	5	10%
31-40	9	18%
41-50	13	26%
50-60	16	32%
61 and above	7	14%
<b>Total</b>	<b>50</b>	<b>100%</b>

Source: Primary Survey

The above table-1 shows that 50 respondents participated in the survey out of which most of the participants were from the age group of 50-60 years followed by the group of 41-50 (26%). The data shows that only 10 percent of the respondents were from the age group of 18-30. The above table 1 shows that there were 50 Participants out of which most of the people belong to the age group of 31-40 and 41-50 years.

**Table 2 gender wise distribution of the respondents**

Gender	No.	%age
Male	50	100%
Female	0	0%
Others	0	0%
<b>Total</b>	<b>50</b>	<b>100%</b>

Source: Primary Survey

Table 2 shows that data w.r.t. the distribution of the gender participated in the survey. The data show that 100% of respondents were from the male gender only, who were using the e-NAM system.

**Table 3: Educational qualification wise distribution of the respondents**

Qualification	No.	%age
Below Matric	3	6%
Matriculation	12	24%
12 <sup>th</sup>	6	12%
Diploma holders	15	30%
Graduates	12	24%
Postgraduates	2	4%
<b>Total</b>	<b>50</b>	<b>100%</b>

Source: Primary Survey

Table 3 shows that the maximum respondents i.e. 30% were diploma holders, while matriculate and graduate were equal in the survey. Only 6 percent of the respondents were below the matriculation followed by 4% of the postgraduates.

**Table 4: Farming experience wise distribution of the respondents**

Experiences in year	No.	%age
5-15	4	8%
16-25	10	20%
26-35	19	38%
36-45	10	20%
46 and above	7	14%
<b>Total</b>	<b>50</b>	<b>100%</b>

Source: Primary Survey

The above table 4 shows that the farmers of the age group 26-35 years have the most experience i.e. 38% of farming. While farmers with age groups of 16-25 and 36-45 had the experience of 10 years in their respective farming practices.

**Table 5 Respondent's familiarity with e-NAM**

Familiarity with e-NAM	%age
Yes	100%
No	0%
<b>Total</b>	<b>100%</b>

Source: Primary Survey

Table 5 shows that all the family members of the respondents had the experience and knowledge of the familiarity of e-NAM.

**Table 6: Respondents participated in an e-national agriculture market (e-NAM) wise distribution**

Participated in e-NAM	No.	%age
Yes	50	100%
No	0	0%
<b>Total</b>	<b>50</b>	<b>100%</b>

Source: Primary Survey

The table 6 shows that all the participants have already participated in the online agriculture market (e-NAM) of the district Solan (H.P.)

**Table 7: elements motivating the use of e-NAM**

Elements motivated for e-NAM	No.	%age
Access to wider market	7	14%
Better prices for produce	2	4%
Convenience and time saving	15	30%
Information and technology	5	10%
All of the above	19	38%
Other	2	4%
<b>Total</b>	<b>50</b>	<b>100%</b>

Source: Primary Survey

Table 7 shows that most of the farmers i.e. 19 (38%) were motivated by factors like wider market access, better prices, convenience, I.T., and time savings, while 30% of the farmers were motivated by this convenient method with time-saving. The data further reveals that only 14% of the respondents were motivated toward e-NAM due to the wider access to the market.

**Table 8: Factors contributed to increase the income through the e-NAM**

Themes	Factors that increased your Income	No.	%age
Theme 1	Improved price realization	25	50%
Sub-theme 1.1	Access to better market	15	30%
Sub-theme 1.2	Competitive bidding	10	20%
Theme 2	Increased Market reach	40	80%
Theme 3	Financial security	5	10%
Theme 4	Elimination of intermediaries	35	70%

Source: Primary Survey

Table 8: Fifty percent of the respondents were of the view that the e-NAM led to better prices for their products and they got access to better market prices. By consistently selling their product at favorable prices, they experienced a boost in income. Table 8 also shows that 15 farmers/ respondents got access for a diverse pool of traders, which increased their customer base. Now they have an opportunity to secure more profitable deals, thereby positively impacting their income. In addition to this 10% of the respondents were of the view that e-NAM has reduced income uncertainty. This has enhanced their financial planning and investment decisions. The e-NAM, allowed them to invest in their farms and improve their productivity, leading to increased income over time, where 70% of the respondents were of the view that online platforms like e-NAM connect the farmers directly with Traders, eliminating the need for middlemen. This cuts down on commission costs and allows farmers to receive a greater share of the revenue generated from their products.

**Table 9: Challenges faced with e-NAM)**

Challenges faced with e-NAM	No.	%age
Trust issue with buyers	3	6%
Limited internet connectivity	5	10%
Limited digital literacy	10	20%
Limited infrastructure	5	10%
All of the above	27	54%
<b>Total</b>	<b>50</b>	<b>100%</b>

Source: Primary Survey

The above table 9 shows that that most of the participants see all these mentioned options as a challenge for them in using e-NAM. But most of the participants also agree that digital illiteracy is the greatest challenge that they face while using e-NAM as they don't know how to use smartphones and don't know how to use the internet. This creates the greatest challenge for them while using e-NAM.

**Table 10: Preferring the traditional markets over e-NAM**

Preferred market	No.	%age
Traditional market	32	64%
e-NAM market	18	36%
<b>Total</b>	<b>50</b>	<b>100</b>

Source: Primary Survey

The above table 10 shows that most of the participants still prefer the traditional market over the e-national agriculture market e-NAM. 64% of participants say that they would prefer the traditional market and their reasons for that are given below:

**Table 11: Reasons for preferring traditional markets instead of e-NAM market**

Themes	Reasons for preference of traditional market	No.	%age
Theme 1	Trust in familiarity	32	64%
Sub theme 1.1	Personal relationships	23	71%
Sub theme 1.2	Face to face transactions	9	29%
Theme 2	Payment security	17	53%
Theme 3	Technology difficulties	15	46%
	<b>Total Respondents</b>	<b>32</b>	<b>100%</b>

Source: Primary Survey

Table 11 shows that Trust and Familiarity create a comfort zone that is deeply rooted in personal relationships and face-to-face interactions, fostering a preference for the traditional market environment. So because of those reasons farmers prefer the traditional market. Farmers worry about potential payment security issues of the e-NAM system. As it takes a much longer time to complete the transaction process. These concerns act as deterrents, reinforcing the preference for the perceived safety of traditional markets. Farmers face technology problems like they don't have sufficient digital literacy that they need in using the e-NAM so, they tend to prefer to use traditional markets more as they know how this traditional market works and they are familiar with it.

## **PART-B: TRADER'S VIEWS ON TRADITIONAL MARKET AND E-NAM**

During the study, the traders of the e-NAM were also interviewed. For the study randomly 25 traders were interviewed. The opinions of these traders are shown in the following tables:

**Table-1: Age group wise distribution of the respondents.**

Age group	No.	%age
18-30	4	13%
31-40	6	26%
41-50	13	50%
50-60	2	10%
<b>Total</b>	<b>25</b>	<b>100%</b>

Source: Primary Survey

The above table 1 shows that there were only 25 participants, who were working a traders in the e-NAM, out of which most of the people belonged to the age group of 31-40 and 41-50 years. Only six respondents/traders were from the age group of 31-40 years. During the survey, only male participants responded to the questions asked through the online mode.

**Table-2: Educational qualification wise distribution of the respondents**

Qualification	No.	%age
Below Matric	0	0%
Matriculation	2	10%
12 <sup>th</sup>	5	20%
Diploma holders	2	8%
Graduates	13	52%
Postgraduates	3	12%
<b>Total</b>	<b>25</b>	<b>100%</b>

Source: Primary Survey

The above table 2 shows the qualifications of the respondents. There were 13 graduates (52%) in the survey. Only three (12%) respondents had the graduations. Five (20%) of the respondents had their qualified senior secondary education followed by the two matriculate respondents.

**Table-3: Farming experience wise distribution of the respondents**

Experiences in year	No.	%age
5-15	6	24%
16-25	5	20%
26-35	9	36%
36-45	4	16%
46-55	1	4%
56 and above	0	0%
Total	25	100

Source: Primary Survey

The respondents of e-NAM were interviewed and asked about their experiences w.r.t. the farming practices. A maximum of 9 (36%) of the respondents had 26-35 years' experience of in farming. Twenty-four percent of the respondents have experience of farming for 5 to 15 years followed by 5 respondents who have experience of 16 to 25 years. These respondents were also enquired about their familiarity with e-NAM and all the respondents have a good familiarity with this market. They were of the view that they had already purchased agricultural products through an e-national market called e-NAM.

**Table-4: Motivation factors to use e-NAM wise distribution of the respondents**

Factors motivated to purchase	No.	%age
Convenience of ordering	7	28%
Access to product information	3	12%
All of the above	13	52%
Other	2	8%
<b>Total</b>	<b>25</b>	<b>100</b>

Source: Primary Survey

The above table 4 shows that most of the participants i.e. 13 (52%) opted for all of the above options, which motivated them to use the e-NAM platform. The options were a wider variety of products, the convenience of ordering, access to product information, and access to better prices. The 7% of participants feel it's more convenient to make order of their choices easily.

**Table-5: Benefits of using e-NAM as a buyer wise respondent's distribution**

Themes	benefits you perceive in using e-NAM	No.	%age
Theme 1	Smooth process	25	100%
Sub theme 1.1	Timesaving	18	72%
Sub theme 1.2	Convenience	7	28%
Theme 2	Access to diverse suppliers	15	60%
Theme 3	No intermediaries	17	68%

Source: Primary Survey

Theme 1 in the above table 5 shows that with a user-friendly platform, traders can efficiently browse products, place orders, and complete transactions. This convenience and efficiency save time, making the overall buying experience smoother and more convenient, which is a great benefit for traders.

Theme 2 in the above table 5 shows that the traders emphasized the benefit of e-NAM in providing access to a diverse network of suppliers. This includes not only an expanded supplier base but a wider range of product varieties. The increased options empower the traders to explore and connect with a large number of suppliers, enhancing their ability to find specific products.

Theme 3 of the above table 5, describes the no. of the respondents about the direct interaction with farmers through this platform. It has removed the intermediaries that were in the traditional markets. So, it has helped the Traders in reducing the cost that occurs while including the intermediaries.

**Table-6: Challenges of using e-NAM market for purchasing the products**

Themes	concerns or challenges you face when using e-NAM	No.	%age
Theme 1	Quality concerns	16	64%
Theme 2	Technological barriers	7	28%
Theme 3	Lack of personal interaction	21	84%
Sub theme 3.1	Absence of face to face transactions	11	44%
Sub theme 3.2	Building trust online	10	40%

Source: Primary Survey

Theme 1 of table 6 shows that traders using online agriculture markets like e-NAM express their concerns w.r.t. the quality of the products they purchase. They were concerned about the accuracy of product descriptions and potential variations in quality. Additionally, issues related to freshness, proper handling during transportation and adherence to quality standards are common concerns for traders in online agricultural markets.

Theme 2 shows that there is a technological barrier in the market, such as limited access to technology and connectivity issues are a significant concern for Traders. These barriers have led to difficulties in using the online platform. Theme 3 shows that the absence of face-to-face transactions and communication challenges impact the relational aspect of the buying experience. Traders emphasized the importance of personal interaction in traditional markets and the shift to an online platform may be perceived as a loss of this interpersonal element. Building trust online becomes a challenge, as personal connections that contribute to trust are less prevalent in the digital environment.

**Table 7: Still prefers purchasing from traditional markets (Mandis) over e-NAM**

Still prefer purchasing from traditional markets	No.	%age
Yes	15	60%
No	10	40%
<b>Total</b>	<b>25</b>	<b>100%</b>

Source: Primary Survey

The above table shows the preference for purchasing the production from traditional *mandis* / markets over online platforms i.e. e-NAM. The respondents/traders were enquired about their interests and 15 respondents (60%) still prefer to purchase the product through the traditional market only, while 40 percent of the traders prefer the e-NAM market to purchase products from the online portal.

**Table 8: Reasons for preference of traditional market in spite of e-NAM by the traders**

Themes	Reasons for preference of traditional market	No.	%age
Theme 1	Trust in traditional market	15	100%
Sub theme 1.1	Familiarity with local seller	9	60%
Sub theme 1.2	Assurance of quality	6	40%
Theme 2	Preference for personal interaction	8	53%

Source: Primary Survey

Table 8 shows the preference of respondents/traders for purchasing the products from the traditional market and the e-NAM market. The table shows that traders mentioned the trust built through familiarity with local sellers, their established relationship in the traditional markets, and the assurance of quality in traditional markets. This trust is a crucial factor contributing to the preference for traditional markets. The long-standing relationships and the confidence in the reliability of mandi transactions create a sense of security that might be perceived as lacking in online platforms. Table 8 also shows that the preference for face-to-face talk, direct communication with sellers, and the ability to physically inspect the product is a significant factor. Traders value the personal interaction of the

traditional markets, where they can engage directly with sellers and assess the quality of the product first-hand. This personal touch is often considered essential in building trust and making informed purchasing decisions.

## CONCLUSION

The purpose of the study was to determine how the e-NAM has affected the farmers and Traders in the Solan fruit and vegetable market. Like how many farmers and Traders are registered with e-NAM in the Solan fruit and vegetable market. The study reveals that more than 11000 Farmers and 500 traders are registered with e-NAM in the Solan fruit and vegetable market and the products that are traded online on the Solan e-NAM platform are tomato, apple, garlic, capsicum, and green beans. The study reveals the benefits that farmers and traders are receiving while using online agriculture markets (e-NAM). The farmers feel that e-NAM has expanded their market and now they have access to a wider market. e-NAM has also reduced their dependence on intermediaries now they are directly connected with the buyer and because of all these factors they are getting financial gains also their income has increased. The traders on the other hand feel that e-NAM is a more convenient method to purchase the product as it saves them a lot more time. e-NAM provides them access to diverse suppliers and e-NAM reduces the dependence on intermediaries and as a result, their profit has also increased.

As the farmers and traders are enjoying the benefits of the online agriculture market e-NAM they are also facing some challenges and there are some concerns that they have. The challenges that farmers face are:

Limited digital literacy: 20% of the respondents feel that they don't know how to work on the internet and don't know how to use smartphones. In the e-NAM, all the work is done online. Limited internet connectivity: 10% of respondents say that they don't have better internet access which creates a hindrance when doing some work on the internet. Limited infrastructure: 10% of respondents say they don't have smartphones and internet access which you need for the online agriculture market e-NAM. Trust issue with Traders: 6% of respondents feel that they don't fully trust the online system and there is a trust issue with Traders in the online system.

It was also found that 54% of respondents feel all of these things mentioned are the challenges for them while using the e-national agriculture market (e-NAM). The quality concern is there, traders express concerns about the quality of the products they purchase. They may worry about the accuracy of product descriptions and potential variations in quality. Technological barriers such as limited access to technology and connectivity issues pose significant hurdles for traders on e-NAM, but the main challenge that traders think they have is a lack of personal interaction. The absence of face-to-face transactions and communication challenges impact the relational aspect of the buying experience. Traders emphasized the importance of personal interaction in traditional markets.

In the study, it was also found that the farmers and traders both agree about the online agriculture market e-NAM as a way forward for the agriculture market but right now they will still prefer the traditional market over the online agriculture market (e-NAM). During the study, it was found that 64 % of respondents from farmers and 60% of respondents/traders say that they will still prefer the traditional market over the e-national agriculture market (e-NAM). The reason for that is that farmers feel much more security in the traditional market, and they are familiar with the traditional market, they know the people who have been buying products from them for over the years and have made a personal relationship and they trust this familiar person more and they don't have to face any technology difficulties in the traditional market.

The reason Traders prefer the traditional market is that they also trust the traditional agriculture market more than the e-national agriculture market (e-NAM) as they are familiar with the local sellers, and they have an assurance of quality in the traditional agriculture market. They prefer face-to-face talk, and direct communication with sellers, and the ability to physically inspect products emerged as a significant factors.

The study further reveals that the e-national agriculture market (e-NAM) has reduced the cost that occurs in the traditional market as you don't have to pay commissions to commission agents in the online agriculture market and the other benefits like access to a wider market, a more convenient process and saves more time. With these benefits, there are also some challenges like limited digital literacy, technology difficulties while using e-NAM, and quality concerns for traders. While the e-NAM staff mentioned that they are addressing these challenges by doing awareness camps and helping in the registration process, providing technological help, and doing training programs for its users and there are so many benefits of using e-NAM, people still prefer the traditional agriculture market.

## REFERENCES:

1. Aggarwal, N., Jain, S. & Narayanan, S. (2017) the Long Road to Transformation of Agricultural Markets in India: Lessons from Karnataka. *EconomicandPoliticalWeekly*, 52, 47–55. [www.jstor.org/stable/26698413](http://www.jstor.org/stable/26698413).
2. Bisen, J. & Kumar, R. (2018) Agricultural marketing reforms and e-national agricultural market (e-NAM) in India: are views. *Agricultural Economics Research Review*, 31(conf), 167–176.
3. Venkatesh, P., Singh, D.R., Sangeetha, V., Balasubramanian, M. & Jha, G.K. (2021). The changing structure of agricultural marketing in India: a state-level analysis of e-NAM. *Agricultural Economics Research Review*, 34(conf), 97–109.



4. Thakur, P., Mehta, P. & Kumar, K. (2021) Existing status and changing scenario of agricultural produce marketing in India. *Indian Journal of Extension Education*, 57, 28–38.