



Empowering Farmers of Himachal Pradesh through E-NAM

**Kiran^{a++*}, Disha Gupta^{a#}, Amit Kanawjia^{bt}
and Bhavna Thakur^c**

^a HP State Agricultural Marketing Board, Khalini, Shimla, India.

^b College of Horticulture, BUAT, Banda, India.

^c School of Agriculture and Allied Sciences, DBS Group, Selaqui, Dehradun, India.

Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

E-National Agricultural Market (E-NAM) was launched on 14.04.2016 with a vision to bring transparency, uniformity, to realize optimum price of farmers' produce and to provide a national wide electronic platform for trading of agricultural commodities. It has provided an alternate in form of a national market for marketing of agricultural commodities other than traditional way of marketing. 26 wholesale markets of Himachal Pradesh are linked with E-NAM portal. Initially, two mandis namely APMC Dhalli and APMC Solan were chosen as pilot mandis as on 14th April, 2016, subsequently 5 more mandis by September 2016, 12 mandis by March, 2017 and 7 mandis by June 2022 were integrated in phased manner with e-National Agriculture Market Portal. At present, in addition to 26 existing market yards, 12 more market yards are proposed to be brought in the ambit

⁺⁺Assistant Scientist & OSD Projects;

[#]Project Manager;

[†]Assistant Professor (Horticulture);

^{*}Corresponding author: E-mail: kiranpathania@gmail.com;

of e-NAM. NAM must ensure farmers get paid on time and in full. e NAM should also ensure that the entire ecosystem including assaying and grading works in tandem to ensure that all-India participation works well in order to get our farmers a remunerative price for their produce.

Keywords: E-NAM; farmers welfare; agricultural market.

1. INTRODUCTION

E- National Agriculture Market is pan –India electronic trading portal launched by ministry of Agriculture and farmer's welfare, Govt of India, to facilitate farmers, traders, buyers and exporters with a common platform for trading commodities [1-3]. The Pilot phase of electronic market was launched by PM of India Sh. Narendra Modi on 14th April 2016 with the vision to promote uniformity in agriculture marketing by streamlining of procedures across the integrated markets, to promote free trade across the states, removing information asymmetry between buyers and sellers and promoting real time price discovery based on actual demand and supply [4,5].

The market is helping traders and exporters in procuring quality produce in bulk, at one place and ensure transparent financial transactions. Himachal Pradesh has been actively a participating state under e-NAM since the inception of the scheme w.e.f. 14-4-16 [6-9]. The state, Himachal Pradesh emerged best on all the indicator parameters that have been fixed by the Government of India and Solan Mandi of APMC Solan was adjudged No. 1 amongst the North Eastern and hilly State Category for its best performance on e-NAM and honored with "Prime Minister Award" twice by the Hon'ble Prime Minister on Civil Services day for the year 2017 and 2019 [10-14].

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The Government of India, Ministry of Agriculture provide one time grant of Rs. 75.00 Lakhs for Implementation of core mandatory activities of e-NAM each Mandi to create basic infrastructure like Computer and IT hardware, assaying labs, setting up of weigh bridges, Awareness Campaign, grading machinery, waste management units and Manpower under e-NAM.

The HP State Agricultural Marketing Board facilitated the APMCs and created required infrastructure in all the 26 e- NAM Mandis.

Till now 1,25,127 farmers, 2,096 traders, 1,153 commission agents and 98 FPOs have been registered on e- NAM portal in Himachal Pradesh. Total 203 items are traded on portal in India, in Himachal Pradesh 79 commodities are being traded. 4 commodities i.e. apple, peas, garlic, tomato contribute majority of trade in state.

2. IMPLEMENTATION OF CORE MANDATORY ACTIVITIES OF e-NAM

Since inception of the scheme, Himachal Pradesh has registered almost 100% Traders and commission Agent in e-NAM yards under Fruits and Vegetables category whose Licences are issued by the agriculture department. E-NAM Mandis 26. The Himachal Pradesh E-NAM portal currently has 1,25,127 farmers, 2,096 traders, 1,153 commission agents, and 98 FPOs registered. In all, 203 different things are traded on the internet in India; 79 various commodities are traded in Himachal Pradesh, Apple, peas, garlic, and tomatoes are the four commodities that make up the majority of the state's trade.

2.1 Quality Assaying

Himachal Pradesh mainly deal in about 79 commodities of fruits and vegetables in addition to 11 variety apple and two variety of onion and almost all of these are being traded at e-NAM platform. Assaying is being done in all 26 market yards of the state. All the parameters /lots as prescribed to be tested in the labs. Designated manpower, both in terms of number of lab technicians as well as their skill levels are available with maximum mandis. Sampling process in practice is being standardized. However, some of the existing equipment for QA of all the prescribed parameters needs to be replaced.

2.2 Unified Licence

State is issuing unified licences to traders in order to trade in e-NAM mandis. We have taken

measures to increase the registration of traders in inter mandi trade. Steps have been taken for interstate trade between Himachal Pradesh, UT of Chandigarh, Uttrakhand and Haryana.

2.3 E-payment

Table 1. The summary of trade on e-NAM portal is as under

Year	Farmer registered	Benefitted Farmers	Traders Registered	Participated Traders	e-Payment (in lakhs)	Qty. of Transaction (in qtl.)
2016 -2017	10947	3	1167	2	0.1079	4.04
2017-2018	46527	796	691	186	762.6855	23232.88
2018-2019	57639	2268	56	251	2923.44	82094.19
2019-2020	5228	3423	28	236	6030.9179	130607.71
2020-2021	1443	3464	21	237	4759.9197	104428.87
2021-2022	2250	6921	13	248	8266.39	184147.11
2022-2023	1049	8838	89	230	12015.86	290805.9
2023-2024 (upto 06/07/23)	39	608	30	85	702.63	19277.80

2.4 Awareness Campaign

Since inception of e-NAM more than 200 awareness and training camps have been organised at APMC level and 69 camps at village panchayat / Gramsabha level to educate the farmer about e-NAM and its importance/ benefit to farmers.

2.5 Internet Connectivity

In Himachal Pradesh sixteen e-NAM mandies have High speed Internet connectivity and in rest of three mandies these services are being provided by dongle because of NH work constraints.

2.6 Proposal to add New Mandies under e-NAM

In addition to 26 existing market yards, 12 more market yards are proposed to be brought in the ambit of e-NAM.

List 1. List of e-NAM Mandis

Pilot Markets Linked on 14.04.2016	Market Linked on Sept,2016	Market Linked on March,2017	Market Linked on June,2022	List of proposed 12 Mandi
1.Dhalli(Shimla)	1.Bhatakufar (Shimla)	1.Parala	1.Khadapathar(Shimla)	1.Nerwa(Shimla)
2.Solan(Solan)	2.Parwanoo(Solan)	2.Rohru.(Shimla)	2.Mehandli(Shimla)	2.Nadaun(Hamirpur)
	3.Jassur (Kangra)	3.Bandrol(Kullu)	3.Tapri(Kinnaur)	3.Kullu(Kullu)
	4.Takoli(Mandi)	4.Patlikahal(Kullu)	4.Bajjnath(Kangra)	4.shaat(Kullu)
	5.Bhunter(Kullu)	5.Kangra(Kangra)	5.Dharamshala(Kangra)	5.Chauribihal(Kullu)
		6.Palampur(Kangra)	6.Dhanotu(Mandi)	6.Wakhnaghat(Solan)
		7.PoantaSahib(Sirmaur)	7.Chailchowk(Mandi)	7.Dharpur(Solan)
		8.Hamirpur(Hamirpur)		8.Nagrota
				Bagwan(Kangra)
		9.Mandi(Mandi)		9.Takarla(Una)
		10.Chamba(Chamba)		10.Nahan(Sirmaur)
		11.Una(Una)		11.Rajgarh(Sirmaur)
		12.Santoshgarh(Una)		12.Bilaspur(Bilaspur)

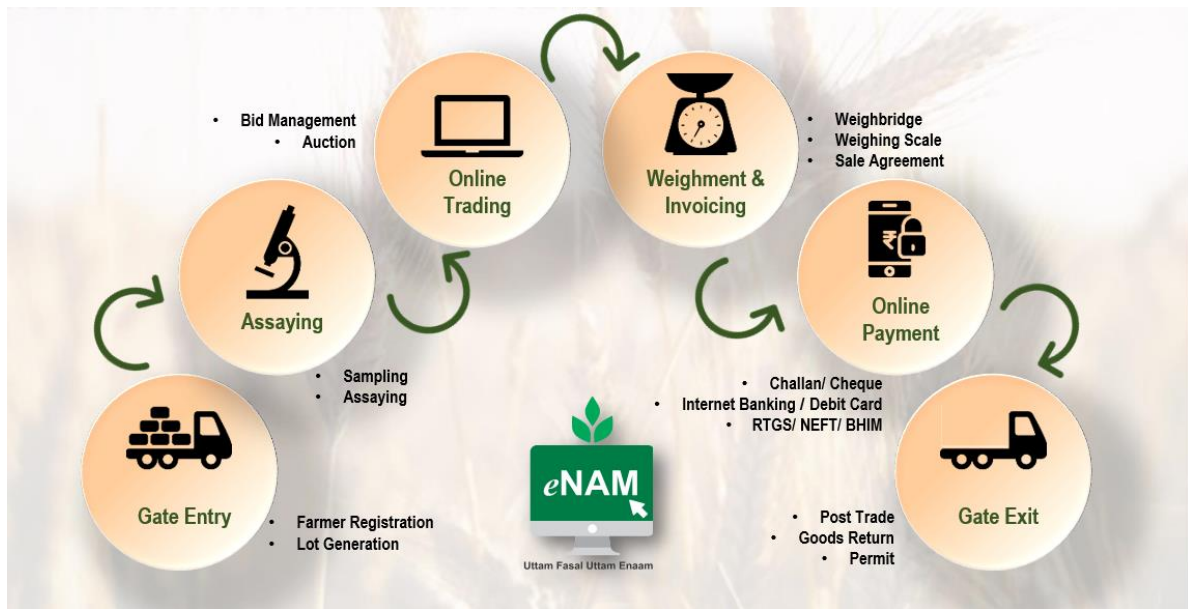


Fig. 1. Flow chart showing e NAM Process Flow

3. SUGGESTION FOR IMPLEMENTATION OF e-NAM

3.1 Registration of Buyers/ Traders/ Farmers

It has been decided that the unregistered buyers/ farmers who visit mandis and reluctant to get themselves registered with e-NAM portal be educated regarding e-NAM scheme for their first and second visit and if buyers/ traders still do not wish to register they may not be allowed to carry out trade within the yards. Mandi Analyst should estimate the number of farmers in the catchment area of the mandi and should undertake targeted farmers' registration drive at village level to cover at least 90% farmers of the catchment area. This should be reviewed by HPSAMB at a monthly basis. Further it is recommended that a dedicated desk should be set up in the mandi premises and registration on gate entry should be avoided. Self-registration using mobile app shall be promoted among the farmers.

3.2 Open Farmer Facilitation Counter

Farmer Facilitation counter should be set up by each e-NAM Mandi to explain and train the farmers on e-NAM mobile app.

3.3 Issue of Tabs to e-NAM Team

The computer system as per e-NAM guidelines have been issued in each mandi but it has been

experienced that it is not feasible to farmers/ traders to stand in queue to auction their product in e-NAM action hall. As per practice the auction take place at different points in auction platform. The strategy has been devised that the e-NAM team will move to auction points and assists the farmers/ traders to bid electronically at their place of auction and for this purpose 2 number tabs will be issued to each e-NAM mandi.

3.4 Real Time Online Bidding

Traders need to be encouraged to participate in Real - Time online bidding using e-NAM application. They may encourage adopting direct payment to the farmers through e-NAM portal. Mandis should put up few LCDs to display live bidding in their market. Real Time bid price information to farmers through SMS in the regional languages.

3.5 To Fix Bidding Times

This issue will be decided as per prevailing condition of Mandis taking into confidence the Secretary concerned.

3.6 Assaying Lab

Rohro, Parala, Bhattkufar and Parwanoo still doesn't have assaying lab. Before April, the four mandis should complete their assaying lab. Rest of 15 mandis should also prepare their assaying lab according to their Commodities.

3.7 Unified Licence

To move from intra-mandi e-auction to inter-mandi e-auction the HP Government has accorded approval to issue unified licence.

3.8 Training and Awareness

All e-NAM mandis shall organise special training and awareness camps for all stakeholders including Farmers. It is necessary to set up at least one camp in the e-NAM mandis every month. Similarly more traders need to be roped in through such camps. Local Processors should also be targeted for inclusion on buying side.

3.9 On Boarding FPOs

In order to enhance the e-NAM ecosystem, FPOs working in the catchment area of the e-NAM mandis shall be identified and on-boarded on e-NAM. All e-NAM staff during lean period of marketing season motivates the FPOs and Farmers to work on e-NAM portal.

3.10 Logistic Support

It is highly recommended to enable the logistic support for facilitating inter-mandi and inter-state trade on e-NAM in order to ensure an active participation from the traders across the state. Mandi should identify major logistic services providers in the vicinity and get their uploads on the e-NAM website through State –coordinator.

4. FINDINGS, SUGGESTIONS AND CONCLUSIONS

If observed carefully, it can be seen that most of the large APMC markets have been integrated with the portal except for Bilaspur in Himachal Pradesh. Without a doubt, it must be admitted that such a system is the need of the hour. It is going to help in better price discovery for farmers and provide facilities for smooth marketing of their produce. Majority of the states have made respective changes in their APMC acts to get markets integrated with e-NAM, but the sad part is that the traders still fail to provide a competitive price to the farmers for their agricultural produce in their state. Considering the low digital illiteracy in rural areas, it will require computer centres with high speed connectivity to be set up, which are easily accessible to farmers. It is not going to be easy for the buyers or traders to assess the quality of food grains sold by producers on the portal itself. Also, inter-state trade may work for

cereals and coarse grains, but not for perishable items. Storage infrastructure for preservation of food grains in the existing system remains a gigantic challenge. e-NAM must also ensure farmers get paid on time and in full. e-NAM should also ensure that the entire ecosystem including assaying and grading works in tandem to ensure that all-India participation works well. This requires significant investment in infrastructure, the upgradation of *mandis* and driving awareness among farmers and traders.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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