Virtual Market for Agricultural Commodities

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Abstract

The Indian government has embarked on liberalizing the agricultural commodity markets, characterized by poor competitiveness, fragmentation, inefficiency, presence of excessive middlemen and frequent price manipulations. The National Agricultural Market (NAM) as an all-India electronic trading portal (eNAM) has been designed to create a common national market for agricultural commodities unifying the existing APMC markets and to overcome the challenges posed by the present agricultural marketing system. This article evaluates whether eNAM can really make a difference to agriculture in general and farmers in particular. Trading in the electronic platform is expected to benefit the farmers as well as buyers, as they can undertake online trading from anywhere in the country in a transparent manner. It would ensure right prices to farmers and benefit the ultimate consumers, giving them the opportunity to get the agricultural commodities at competitive prices. However, in reality, it may not be as simple with farmers in view of the fact that more than 80 per cent of them are marginal and small farmers, who may not be able to participate in the online trading process. As agricultural marketing is a state subject, the extent to which farmers can derive benefit from eNAM depends crucially on the magnitude of reforms in the APMC Act in the states. The states have to speed up reforms in the APMC Act and play a proactive role in providing necessary infrastructure and related services to facilitate online trading to the benefit of farmers and buyers.

The National Agricultural Market (NAM) as an all-India electronic trading portal (eNAM) has been designed to create a common national market for agricultural commodities, unifying the existing Agricultural Produce Market Committee (APMC) *mandis* (markets). The portal is a single-window network providing all APMC related information and services to facilitate farmers, buyers, traders, exporters and processors with a common electronic platform for trading agricultural commodities. This includes

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commodity arrivals & prices, buy & sell offers, provisions to respond to trade offers, among other services.

While the physical flow of commodities continues to take place through *mandis,* an online market (virtual market) reduces transaction costs and information asymmetry. eNAM integrates the existing 585 APMCs, presently conducting agricultural trade in the country. The online trading (i) promotes uniformity, streamlining procedures across the integrated markets, (ii) removes information asymmetry between buyers and sellers and promotes real time price discovery, based on actual demand and supply, (iii) promotes transparency in auction process and access to a nationwide market for the farmers, with prices commensurate with quality of their produce and online payment, (iv) provides facilities for grading and standardization of agricultural produce, and (v) ensures availability of better quality produce at more reasonable prices to the consumer.

eNAM, launched on 14thApril 2016, utilizes the opportunities of technology for agricultural marketing, as it is a techno-infrastructure platform to be promoted through Agri-Tech Infrastructure Fund (ATIF). Farmers can sell their produce directly using electronic auction system. Selling of the produce through online auction beyond the traditional borders of the regional market may give them higher prices. Small Farmers Agribusiness Consortium (SFAC) is supposed to implement it in association with the strategic partner (Nagarjuna Fertilizers & Chemicals Ltd.) in 3 phases covering 250, 200 and 135 *mandis* during 2015-16, 2016-17 and 2017-18, respectively. The central government has allocated ₹ 200 crore for the establishment of eNAM in the budget 2016. Each APMC will get ₹ 30 lakh as a subsidy to establish the necessary infrastructure facilities. eNAM is expected to serve the interest of the agricultural sector in general and the farmers in particular, by generating greater agricultural GDP and higher incomes to farmers.

Objective of eNAM

eNAM is expected to ensure remunerative prices to farmers from the open market and reduce the demand for price support mechanism. This e-marketing platform is expected to help farmers market their produce in a better way, get market related information and facilitate better price discovery through efficient, transparent and competitive marketing platform with access to large number of buyers from within and outside state through transparent auction processes. It would also increase farmers' access to markets through warehouse based sales, obviating the need to transport such produce to the *mandis*. It would facilitate the emergence of integrated value chains in agricultural commodities and help movement of the commodities across the country. However, there are serious concerns over the issues such as: (i) Can eNAM really make a difference to agriculture in general and farmers in particular? (ii) Can it help the

farmers to get adequate *enam* (reward) they deserve from farming and contribute towards doubling their incomes by 2022?

Necessity of eNAM

Integration of Regional Markets

The agricultural marketing system in India was excessively regulated with various restrictions. The APMC Act, passed in 1963 with the intentions to regulate agricultural commodity markets and to protect the farmers from market shocks and help them to get the justified price for their produce, has, however, yielded inefficiencies in the agricultural markets over the past several years. The Act has prevented development of a competitive marketing system in the country due to the monopoly of regulated markets, providing no assistance to farmers in direct marketing, organizing retailing, supplying raw material to agro-processing industries and adopting innovative marketing system and technologies. By mandating the selling of agricultural commodities through regulated markets, the farmers are prohibited from direct selling of commodities to consumers. The bureaucrats exercise absolute power in the management of APMCs, and market fees are charged for each transaction, raising the transaction costs. The statutory levies and other charges have been a major source of market distortion with cascading effects on commodity prices passing through the supply-chain. These interventions distort price signals in spatially separated markets because of which agricultural prices do not converge efficiently, and regional markets remain segmented. Such interventions insulate regional markets from each other and act as barriers to spatial market integration.

On the other hand, liberalization of agricultural commodity markets, minimizing government interventions, can enhance efficiency in agricultural marketing by strengthening spatial integration of the markets, removing barriers to movement of commodities across markets and allowing price signals and information to be transmitted smoothly and the market forces to determine agricultural prices. An efficient agricultural marketing is considered to be essential for the development of the agriculture sector, since it provides outlets and incentives for production, and contributes greatly to the commercialization of agriculture. Recognizing the importance of liberalized agriculture markets, the Indian government has embarked on liberalizing the agricultural commodity markets as a part of the comprehensive economic reforms involving structural adjustment and liberalization programmes since the early 1990s. It has been argued that liberalization of agricultural commodity markets can lead to allocative efficiency and long term growth in agriculture.

Liberalization of Agricultural Markets

As a step towards liberalization of agricultural markets, the APMC Act was amended, and a Model APMC Act was introduced in 2003 in order to protect the interests of farmers and to

promote private sector's participation in agricultural marketing, removing the monopoly of brokers and barriers in the prevailing marketing system. The Model Act 2003 provides for (i) improved regulation in marketing of agricultural produce, (ii) development of efficient marketing system, (iii) promotion of agricultural processing and export, (iv) establishment and proper administration of markets, and (v) adequate infrastructure for marketing.

Agricultural marketing is administered by the states as per their marketing regulations under which each state is divided into several market areas, each of which is administered by a separate APMC imposing its own marketing regulation. This fragmentation of markets even within the state hinders free flow of agricultural commodities from one market area to another while multiple handling of agricultural produce and multiple levels of *mandi* charges end up escalating the prices for the consumers without commensurate benefit to the farmers. The regulated marketing system suffers from ineffective laws, lack of information flows and quality check, high transaction costs for farmers, lack of options other than broker system, dual role of broker and wholesaler, etc. Due to the deficiencies in the traditional supply-chain, the farm–market linkages have become weak and imperfect (Pachouri, 2012). Agricultural markets are thus characterized by poor competitiveness, fragmentation, inefficiency, presence of excessive middlemen, and frequent price manipulations with no connection between prices paid by consumers and those received by producers (Banerji & Meenakshi, 2004; Chand, 2012, 2016). Thus, the APMC Act, introduced to promote fair trade in agricultural commodities, has become a major impediment to the development of agricultural markets. The move towards a common National Agricultural Market was taken for overcoming the challenges posed by the present agricultural marketing system.

Functioning of eNAM in Reality

Under the existing state-level APMC laws, farmers can sell their crops after harvesting only in the regulated market yards or *mandis*, restricting them to sell their crops to the traders licensed to operate in the *mandi* under the concerned APMC's jurisdiction. On the other hand, trading in the electronic platform would benefit the farmers, as they can sell their crops to buyers anywhere in the country. Similarly, buyers including large traders, processors and exporters would also be benefited, as they can undertake online trading from anywhere in the country. They do not need to depend on middlemen for trading to take place. Under this condition, the market forces, rather than the monopoly power of traders, would determine the prices of the crops. It would ensure right prices to farmers for their crops, and also benefit the ultimate consumers, giving them the opportunity to get the agricultural commodities at competitive prices.

However, in reality, it may not be as simple with farmers. In view of the fact that the

marginal and small farmers with an average landholding size of less than two hectares constitute more than 80 per cent of farmers, the possibilities for better price discovery through a widened universe of buyers, both local and online, are quite limited for them, as most of them do not take their crops to the *mandis* but sell off to the local traders even before that. Even the farmers who would like to carry their crops to the *mandis*, due to transportation and other costs, distant farmers may not be able to go for bidding online.

Due to resource constraints, the marginal and small farmers are often involved in contract with trader-cum-moneylender, who offers credit/inputs to farmers on condition that they would sell their crops to him at some predetermined price immediately after harvest. Under the linked contract, the farmers do not have any choice for bidding online but to sell their produce to the concerned trader-cum-moneylender. Government interventions in the credit market may not be enough to change this practice. Farmers can benefit from e-trading, if they can find ways for aggregating their produce to volumes large enough to allow them to effectively participate in the online trading process. Farmers' organizations and cooperatives can play an important role by facilitating aggregation bypassing the local traders and even the local *mandis* in the process that is fundamental to the success of any ambitious virtual market experiment like eNAM.

eNAM and Reforms in APMC Act

The extent to which farmers can derive benefit from eNAM depends crucially on the magnitude of reforms in the APMC Act in the states. Karnataka is the forerunner in market reforms and in devising innovative practices to improve the functioning of agricultural markets and bring competitiveness. The unified online agricultural market initiative, under which every farmer who brings produce to the APMC market has a choice to use the common online trading platform or the platform of commission agent for auction of the produce after getting an identification number for the lot, was launched in Karnataka on 22nd February 2014. The unified market platform (UMP) was designed to facilitate transparent, integrated e-trading mechanism and to provide facilities for grading and standardization of agricultural commodities for seamless trading across *mandis*. This marketing model has received overwhelming response from farmers in the state and has shown impressive results in a short period. Looking at the success of the Karnataka model, some states such as Andhra Pradesh, Gujarat, Maharashtra and Telangana have started adopting the model (Chand, 2016). The model can be adopted in other states to take advantage of modern technology to improve agricultural marketing, making it more efficient and competitive. The extent of reforms in the APMC Act was reported to have varied widely across states; while some are most reform-oriented, others are either

intermediate or lagging reformers (Government of India, 2013). In view of this fact, it is imperative for the states to speed up reforms in the APMC Act and play a proactive role in providing necessary infrastructure and related services to facilitate online trading in agricultural commodities to the benefit of the agricultural sector in general and farmers in particular.

References

Banerji, A. & Meenakshi, J. V. (2004). Buyer collusion and efficiency of government intervention in wheat markets in northern India: An asymmetrical structural auction analysis. *American Journal of Agricultural Economics,* 86(1): 236–253.

Chand, R. (2012). Development policies and agricultural markets. *Economic & Political Weekly,* 47(52): 53-63.

Chand, R. (2016). e-platform for national agricultural market, *Economic & Political Weekly,* 51(28): 15-18.

Government of India (2013). State of Indian agriculture 2012-13. Ministry of Agriculture, Department of Agriculture & Cooperation, Directorate of Economics & Statistics, New Delhi.

Pachouri, A. (2012). *Economic inefficiencies in farm-market linkages in agriculture value chain in India: Problems and solutions,* ISAS Working Paper No. 163, Institute of South Asian Studies, National University of Singapore, Singapore.