e-Platform for National Agricultural Market

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Agricultural markets are characterised by poor competitiveness, fragmentation, inefficiency, presence of excessive middlemen, and frequent price manipulations. The electronic trading portal for national agricultural market is an attempt to use modern technology for transforming the system of agricultural marketing.

Views are personal.

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Since the launch of the economic reforms in 1991, the disparity between growth rates of output in agriculture and non-agriculture sectors has risen sharply. The average annual growth rate for five years in agriculture hovered around a long-term growth trend of 3% whereas growth rate of non-agriculture sector increased steadily from around 6% during the early 1990s to 10% during 2004–05 to 2008–09, and 7.5% during the recent five years. An important reason for this is that the price incentive offered by the agricultural market in the country did not improve, as these markets remained fragmented, inefficient and dominated by low scale and multiple middlemen.

It is observed that after implementation of the Agricultural Produce Marketing (Regulation) Act (APMRA) in various states during 1960s and 1970s, no major reform in the agricultural market has been implemented (Chand 2012). The APMRA brought radical changes and significant improvement in almost all aspects of marketing of farm produce (Acharya 2004). This has been a major driving force behind the achievements of the Green Revolution phase. However, many gains brought by APMRA to improve competitiveness of agricultural markets got diluted over time and market infrastructure did not keep pace with volume of market arrivals. The facilities provided in markets remained not only inadequate, but also deteriorated in many cases. Excessive intermediation worked to the disadvantage of producers and consumers, and favoured only middlemen.

Also, over time, macro environment changed considerably, particularly after 1991. The country liberalised its external trade initially as a part of domestic policy reforms, and then to meet the requirement of the 1995 World Trade Organization (WTO) agreement and to adjust to it. This external liberalisation exposed Indian agriculture to international competition, which necessitated internal liberalisation of agriculture trade to improve domestic competitiveness. The reforms also led to profound changes in trade and commerce in the non-agriculture sector. All these factors put lot of pressure,towards late 1990s, to bring reforms in agriculture markets in the country.

Attempt to Reform Market

In response to the changes in trading environment during 1990s, the union government brought a series of reforms in quick succession, beginning from 2002. These included the Removal of (Licensing Requirements, Stock Limits and Movement Restrictions) on Specified Foodstuffs Order, 2002 and 2003. As per this order, wheat, paddy/rice, coarse-grains, sugar, edible oilseeds and edible oils, pulses, gur, wheat products and hydrogenated vegetable oil or *vanaspati* were removed from the list of Essential Commodities Act (1955) and thereafter, a permit or licence was not required for their trading, storage and movement. Further, the prohibition on futures trading in agricultural commodities was removed in 2003.

These were important reforms but they did not include reforms in agricultural marketing or transactions of farmers' produce. One reason for this was that agricultural marketing is a state subject, that is, it required reform by respective states. However, the central government initiated several measures to bring reforms in the system of agricultural market in states. The first major step in this direction was appointing an Expert Committee on 19 December 2000, by Ministry of Agriculture, Government of India (GoI) to review the present system of agricultural marketing in the country and to recommend measures to make the system more efficient and competitive.

The committee submitted its report on 29 June 2001, suggesting various legislative reforms as well as the reorientation of the policies and programmes for the development and strengthening of agricultural marketing in the country. The committee noted that there were stringent controls on the storage and movement of several agricultural commodities. These restrictions were acting as a disincentive to farmers, trade and industries.

It was suggested that legal reforms can play an important role in making the present marketing system more effective and efficient by removing unnecessary restrictions and by establishing a sound framework to reduce uncertainty of the markets. The State Agricultural Produce Marketing Regulations Act and the Essential Commodities Act were the two important legislations that had to be amended to remove restrictive provisions coming in the way of an efficient and competitive marketing system. Alongside, there was a need to introduce through appropriate legal change, a "negotiable warehousing receipt system" in the country for agricultural commodities to enhance institutional lending to the agricultural marketing sector, and to improve price-risk management (GoI 2002).

To take the recommendations of the expert committee further, the Ministry of Agriculture constituted an inter-ministerial task force on 4 July 2001. The task force submitted its report in May 2002. The recommendations contained in these reports were discussed at the national conference of state ministers organised by the Ministry of Agriculture on 27 September 2002, and later by a standing committee of state ministers constituted for the purpose under the chairmanship of Hukmdev Narayan Yadav, Union Minister of State for Agriculture, on 29 January 2003. The Ministry of Agriculture accordingly set up a committee under the chairmanship of K M Sahni, additional secretary, Department of Agriculture and Cooperation, to formulate a model law on agricultural marketing in consultation with the states. The committee drafted and finalised the model legislation after holding discussions with the state officials (GoI 2003).

The model act called the State Agricultural Produce Marketing (Development and Regulation) Act, 2003, was then shared with all the states for implementation. Some important provisions of the model act are: (i) more than one market can be established by private persons, farmers, cooperatives and consumers in a market area; (ii) there will be no compulsion on the growers to sell their produce through existing markets administered by the Agricultural Produce Market Committee (APMC); (iii) a new chapter on contract farming was added to facilitate and promote smooth progress in contract farming; (iv) provision made for the direct sale of farm produce to contract farming sponsor from farmers' field without the necessity of routing it through notified markets; (v) provision made for imposition of single point levy of market fee on the sale of notified agricultural commodities in any market area and discretion provided to the state governments to fix graded levy of market fee on different types of sales; (vi) registration for market functionaries provided to operate in one or more than one market areas; and (vii) provision made for the purchase of agricultural produce through private yards or directly from agriculturists in one or more than one market area.

National level meetings were organised with the state governments and follow-up letters were sent from union agriculture minister to the state ministers in-charge of agricultural marketing for amending the APMC Act on 16 July 2004 and again on February 2005 and to the chief ministers on 25 May 2005. To incentivise states to amend the APMC Act on the lines of the model act, some investment subsidy on market infrastructure development projects was also provided under central assistance.

As per the recent information, majority of the states reported that they have adopted key area of reforms as suggested in the model act. However, the ground reality has been that except in states like Karnataka, various reforms have been considerably diluted and only partly implemented at the state level. In some cases, new conditions were attached to reforms which defeated the very goal of reforms. The central government order 2002 which liberalised trade in agricultural commodities was put in abeyance by various central government orders during 2006–08. Thus, licensing requirements, stock limits and movement restrictions in respect of purchase, sale, supply, distribution or storage for sale of agricultural commodities, which were removed in 2002, were brought back.

In the meantime, unorganised functionaries like commission agents and traders organised themselves and successfully thwarted attempts to change market rules and practices. The net result has been that persistent efforts for nearly one and a half decades, to reform markets, remained more or less unsuccessful.

Market Models in Karnataka

Among various states of the country, Karnataka has been the forerunner in market reforms and in devising innovative practices to improve agricultural markets and competitiveness. The state was first in implementing Model APMC Act and it has been piloting new practices on its own. In order to take advantage of modern technology to improve agricultural marketing, the state prepared a plan in 2012–13 with the assistance of NCDEX (National Commodity and Derivatives Exchange) Spot Exchange for automation of auction process in *mandis* (primary agricultural markets where producers sell their agricultural produce).

The plan involves creation of transparent, integrated e-trading mechanism coupled with facilities for grading and standardisation to facilitate seamless trading across mandis (APMCs). The approach was to integrate all such APMCs with major consumption market to fetch remunerative prices to farmers. The plan has been implemented through Rashtriya e-Market Services (ReMS) Private Limited Company, which is a joint venture created by the state government and NCDEX Spot Exchange. ReMS offers automated auction and post-auction facilities (weighing, invoicing, market fee collection, accounting), assaying facilities in the markets, facilitation of warehouse-based sale of produce, commodity funding and price dissemination. NCDEX is also implementing a unified market platform, whereby all mandis in the state are being unified for single trading.

The unified online agricultural market initiative was launched in Karnataka on 22 February 2014. A total of 105 markets spread across 27 districts have been brought under the Unified Market Platform (UMP) as of March 2016. Under this initiative, every farmer who brings produce to the APMC market is given an identification number for the lot brought into the mandi. The farmer has a choice to use the common platform or the platform of commission agent for auction of the produce. These lots are then assayed and information about quantity and quality is put on the portal of ReMS.

Buyers or traders who want to buy produce from the farmers are required to get the unified market licence, register themselves with ReMS by paying nominal fee, and are required to keep some security in the bank. Each trader is given a username and password. Any prospective buyer can bid for the produce online from anywhere using her/his username and password. A trader can revise the bid upward any number of times before closure of the bidding time. After closure of auction period, the bids are flashed on television screens put up in the mandis and on the portal of ReMS. Thereafter, the producer/seller is required to give his acceptance for the bid. A seller has the right to reject the bid, in which case a second round of bidding takes place on the same day and in the same way. A bidder is required to keep a pre-bid margin of 5% of value of the lot marked for sale with ReMS before opening of the tender. ReMS charges 0.2% of the value of the transacted produce for providing various online services.

Participation in UMP is not restricted to Karnataka. Traders from other states and bulk institutional buyers such as Cargill, ITC, Reliance, Metro Cash & Carry are also registered with ReMS.

The UMP received overwhelming response from farmers in the state and it shows impressive results in a short period. Auction and sale of farm produce is not restricted to traders within the market. Thus, the possibility of tacit understanding to suppress prices received by farmers or cartelisation has been eliminated. Price discovery is competitive, transparent and efficient. Farmers have also started selling online, enabling farmers to have much higher prices and removing many middlemen.

Adopting Karnataka Model

The success of UMP in Karnataka got countrywide attention and some states like Andhra Pradesh, Telangana, Maharashtra and Gujarat have already started adopting the Karnataka model. Impressed by the success of UMP in Karnataka, the union government took initiative to encourage other states to adopt e-trading platform for agricultural commodities.

The Cabinet Committee on Economic Affairs approved the central sector scheme for promotion on the national agriculture market through Agritech Infrastructure Fund with a budget allocation of ₹200 crore on 1 July 2015. The scheme entails setting up of a common e-platform in 585 selected wholesale regulated markets across the country. The central government will provide the software free of cost to the states along with ₹30 lakh per mandi for setting up the hardware and related equipment/infrastructure. It envisages to expand Karnataka's UMP model at the national level in a bid to cover the entire country.

To give real push to this move, Prime Minister Narendra Modi has launched the electronic trading platform for National Agriculture Market (e-NAM) on 14 April 2016. In its first phase, the initiative will cover 21 mandis from eight states, namely, Gujarat, Telangana, Rajasthan, Madhya Pradesh, Uttar Pradesh, Haryana, Jharkhand and Himachal Pradesh. Further, 25 crops, including wheat, maize, pulses, oilseeds, potatoes, onions and spices have been included for trading on the platform. It is proposed that 585 markets across the country will be brought on the platform by March 2018.

It is pertinent to mention that for integration with the e-platform, the states/union territories will need to undertake three reforms, namely: (i) a single licence to be valid across the state, (ii) single point levy of market fee, and (iii) provision for electronic auction as a mode for price discovery.

Anticipated Benefits

Despite a lot of persuasion by the central governments for several years, most of the states either did not adopt the model APMC Act or adopted it in a much diluted form. Further, the model APMC did not have provision to create a national market or even state level common market. The NAM initiative with electronic trading platform, linking major national markets, will take India's agricultural marketing system to a higher level besides addressing some of the issues that were to be addressed by the model APMC Act. It will operate in the same way as ReMS is operating in Karnataka.

It seems this initiative will prove to be a game changer for India's farmers and agriculture sector, if it is implemented in true spirit. It can offer large direct and indirect benefits to the sector and the economy. The direct benefits include: (i) improvement in competitiveness and efficiency in agricultural markets, (ii) elimination of traders' cartels and price manipulations by local trading groups, and (iii) lower price spread between producers and consumers as well as surplus and deficit states. Producers will get better price realisation, while consumers can expect benefit from the lower price spread.

Better price realisation for farmers will serve as an important incentive for raising productivity and production, and in turn lead to higher growth of output. In many states, farm harvest prices prevail below the minimum support price (MSP) in the harvest period and shoot up subsequently. e-NAM will help check such market imperfections. Some states like Punjab and Haryana desperately need diversification in crop pattern away from paddy–wheat rotation. However, this has not been happening due to unattractive market for alternative crops. e-NAM is expected to promote market- driven diversification and reduce dependence of farmers in these states on MSP and public procurement. Any state that chooses to remain outside e-NAM under pressure from vested interests of market middlemen or due to consideration of loss to revenue from mandi taxes, will be depriving its farming community of benefit of competitive market.

The success of e-NAM in improving competitiveness and integrating pan-India markets will require assaying facilities created in various markets to ascertain quality traits as quality variations are quite large in agricultural commodities. Also, each mandi will require forwarding agents to handle the produce for buyers from outside the mandi.

Concluding Remarks

Though e-NAM will improve competitiveness in market through larger participation of buyers and more transparent system of bidding, it should not be considered a panacea for all deficiencies in agricultural markets. e-NAM necessitates some reforms proposed in model APMC Act whereas it will not address some vital issues having bearing on conduct and performance of market.

The four important areas for reforms, which are not part of e-NAM, are as follows: (i) direct sale by farmers to buyers, processors, or, contract marketing without bringing produce to mandi; (ii) establishment of private markets with treatment at par with APMC. Even under e-NAM, market committee will continue to hold its monopoly power in terms of offering a platform for sale/purchase; (iii) removal of legal barriers to entry of organised and modern capital and investments into agricultural marketing. This will require tweaking Essential Commodities Act to draw distinction between genuine service providers and black marketers/hoarders; and (iv) rationalisation of market fee, commission charges, cess and taxes and development charges. State after state has been raising taxes and development charges to mobilise more revenue from mandis, particularly in the cases where central agencies are procuring the produce.

The full benefit from linking agricultural markets in the country and putting them on electronic platform will come when a single trading licence is valid across the country and when a farmer gets the option to sell her/his produce in any market throughout the country.

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