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## **Rapporteur's Report on Implications of Corporate Entry into Agricultural Input and Output Markets and Its Impact on Small Producers and Consumers**

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### INTRODUCTION

Due to policies of globalisation and liberalisation in India, the corporate agencies are increasingly setting up systems and mechanisms to interface more directly with the rural and agricultural sector. This includes not only agricultural input companies and agencies setting up shop in rural areas to sell agricultural inputs and provide extension and other services like soil and water testing, but also, processing and marketing agencies procuring farm produce through these arrangements or through contract or contact farming. On the market for agricultural inputs front, many new inputs and new ways of marketing inputs i.e., rural retail bazaars like Haryali Kissan Bazaar (HKB) have been set up during the past few years. On the output side, besides the amendment to the Agricultural Produce Marketing Committee (APMC) Act, there has been emergence of contract and contact farming arrangements wherein corporate buyers directly work with primary producers to ensure timely supply of adequate quantity of quality raw materials. More importantly, the entry of domestic corporates into food retail and the likely permission to Foreign Direct Investment (FDI) in the food retail sector are important and controversial issues which demand empirical data and analysis on their likely impact on producers, traditional vendors, and consumers, besides on other stakeholders like private traders, and middlemen.

Given the small producer dominated nature of Indian agriculture, inclusion of small producers in value chains is an important issue. Small farmers have some advantages for integrating with the supply chains, as they can supply better quality with intensive management attention to each output unit. However, they lack the size to benefit from economies of scale. On the other hand, the threats they face are: standardisation of products in global and national markets, and large volume requirements of modern markets. Further, the lack of access to insurance and credit markets make small producers vulnerable and they reduce their risk by choosing low risk activities or technologies which have low average return (Harper, 2009a).

On the other hand, private agencies stand to gain from small producer linkage when it is not just profits, but also 'people' and 'planet' dimensions of their operations which have become the bottom lines of the companies as part of the 'triple

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bottomline' under corporate social responsibility domain. The private agencies can leverage this smallholder linkage by way of political and social legitimacy and even more efficient operations as small producers are lower cost (due to their family labour intensity and various support provided by state and development agencies) and easier to manage, besides being lower cost than own corporate farms or market based exchanges.

But, typically, small farmers complain of lack of markets for their produce and the processors, exporters or supermarket retailers complain of lack of adequate supplies of quality produce. This marketing paradox is present because many times buyers do not reach out to explore new suppliers and farmers lack understanding of markets and ability to identify new markets and to take advantage of such opportunity with value addition activities like cleaning, grading, sorting, packaging and primary processing (Shepherd, 2007).

In this context, smallholders in India face a number of challenges and research is needed to design supportive policies and institutions in the changing context. There have been only a few studies on this issue so far (Joseph *et al.*, 2008; Singh, 2008; Mangala and Chengappa, 2008; Harper, 2009b; Misra, 2009 and Singh, 2009). It is very heartening that the ISAE chose this theme as one of the themes for discussion during the 69th conference.

The theme received a total of 26 papers, of which only 13 could be accepted for discussion at the conference for various reasons. These 13 papers, including two published in full in the conference issue, are reviewed here in a thematic manner. Of the total of 13 papers, eight papers dealt with issues of vertical co-ordination in agribusiness involving procurement from farmers by processing or retailing firms.

#### CONTRACT FARMING AND SMALL FARMERS

Six papers dealt with contract farming in milk, potato, and poultry. Pratap S. BIRTHAL *et al.* analyse the farm level impacts of contract farming in milk in India with a case study of two districts – Jaipur and Sikar in Rajasthan based on data from 150 contract and 150 independent milk producers in 2005. The paper finds that the average milk yield was slightly higher for contract producers and the unit cost of production of milk was not very different from that for independent or non-contract producers. Contract farming reduced transaction cost involved in the procurement of inputs and disposal of milk which was three times lower in contract situation compared with that for independent production. The output price was higher in open market and that paid by vendors was almost the same as that offered by contracting companies. The net revenue per unit of output excluding family labour cost was higher for contract producers but not statistically different. The authors conclude that contract farming did not appear to make any significant difference in milk yield and cost of production but it improved farm profitability by reducing transaction cost. The probability of participation in contract farming was found to be higher for those with

more experience in dairy farming, educated and larger land holdings. The number of dairy animals was found to negatively affect participation due to economies of scale prevalent for large producers in the open market due to high prices. Therefore, small producers were likely to find vertical coordination more desirable due to higher transaction cost faced by them in open market. The paper recommends intermediate contracts and producers' associations to enable small producers' participation. It also argues for the role of the state in promoting competition in the market and helping small producers form producers' organisations for better bargaining, besides legal protection to the contracting parties.

S.S. Kalamkar reviews the rationale of contract farming from agricultural market risk management perspective discussing the advantages and problems faced by the farmers. He highlights the major constraints like small holdings, opportunistic behaviour of contracting agencies, and minimum support price policy, in the way of progress of contract farming practice in India. He is of the view that given concern about food safety and increasing disposable income in export and domestic market, contract farming has a promising future in India. He recommends legal protection to contract growers, farm gate procurement by agencies and organisations of farmers for better bargaining power besides crop insurance, to make contract farming deliver smallholder development.

The paper by Arun Pandit *et al.* on the benefits of contract farming in the case of Frito Lay (a subsidiary of Pepsico) in West Bengal based on a survey of 139 non-contract and 144 contract farmers across four districts of the state in 2008 found that contract farmers were more experienced, more literate and had higher share of the income from non-farm sources. The contract farmers had lower yields due to varietal differences but obtained higher prices for their produce. The cost of cultivation was also higher in contract production but still the contract farmers obtained better returns per hectare than non-contract growers. Overall contract production was found to be more efficient, though both categories of farmers operated at sub-optimal scale.

Another paper on Frito Lays' potato contract farming operations in Farukhabad district of Uttar Pradesh by Babu Singh *et al.* examines costs and returns from potato crop under contract and non-contract situation based on a sample survey of 60 farmers – 40 contract and 20 non-contract. It finds that cost of production was higher on contract farms due to higher cost of seed and other inputs. The potato yield as well as gross income was higher on contract farms. The difference in gross income was largely due to higher price received by the contract growers compared to that in the case of non-contract growers selling in the market. The average size of holding of the growers was found to be 1.95 ha and 45 per cent of the grower's area was under contract production. The farmers reported problems of delay in procurement of produce, payments, and delivery of inputs, besides high cost of inputs and manipulation of standards by the contracting agencies. The farmers appreciated the advantages of contract farming like lower investment, fair price, extension advice, and assured market for the produce, besides access to inputs.

S.R. Asokan and Anita Arya examine the status and the rationale for vertical coordination in broiler chicken industry. After describing the broiler industry supply chain, they examine the farmer level aspects of this coordination and dwell upon risk sharing between small poultry farmers and contracting agencies. They also report on some malpractices resorted to by the contracting agencies which were against the interest of the farmers. They conclude that the growing vertical coordination in this industry did not mean that the farmer benefited as the farmer and his family were residual claimants to the return from poultry contract farming.

Another paper on poultry contract farming by D.S. Navadkar *et al.* makes a case study of Venky's broiler contract farming, based on 10 contract and 10 non-contract poultry farmers in Pune district of Maharashtra. The paper finds that the contracting agency preferred more experienced farmers located in more accessible areas. After describing the type and nature of services provided by the contracting firm and charges for those services, besides specification of payment norms like Feed Conversion Ratio (FCR), and penalties for shortage or for excess mortality, the paper reports that the average operational cost per bird was higher for contract broiler farmers than their non-contract counterparts. This was due to higher variable as well as fixed costs per bird, though production was also somewhat higher under contract situation and, therefore, price realised per kg was higher despite the fact that the per kg. cost was higher under contract situation. This higher realisation was on account of higher average body weight gained per bird and the higher price realisation by the contract farmers. The contract broiler farmers faced problems like high mortality, poor quality, inadequate and untimely supply of inputs and incidence of diseases. On the other hand, the contracting firm suffered from defaults by the contracting farmers and high supervision cost. Many of these papers reconfirm findings of the earlier studies in contract farming in India (Singh, 2002, Kumar, 2006 and Singh, 2008).

#### *Fresh Food Retail Chains and Small Producers*

Two papers addressed the fresh food retail chain interface with farmers. D.V.S. Rao *et al.* examined the farmer linkage of the fruit and vegetable retail chain (Reliance Fresh) in Guntur district of Andhra Pradesh in the context of small vegetable producers and compared it with traditional market channel. The company procured only "A" grade produce referred to as Reliance Retail (RR) grade. It rejected non-RR grade consisting of small size, discoloured, deformed, damaged, diseased and pest infected produce. The prices paid to the farmers were determined based on the neighboring fruit and vegetable market (*mandi*) price and farmers were paid net of all expenses borne by the farmers in the *mandi* like transport cost, commission, *hamali* charges and any deductions. The produces was accepted or rejected based on visual inspection. The rejected produce was returned to the farmer which was sold in the local *mandi*.

The paper makes case studies of three farmers – one supplying to Reliance Fresh, one supplying to the traditional market and one, a previous supplier to Reliance Fresh and presently supplying to the traders in the local market. All the three farmers were owners of marginal farms but operated four to ten acres of leased in land. They grew vegetables on half or one acre each during *kharif* as well as rabi seasons. The major crops grown were ladyfinger and chillies, besides cotton. The case studies of ladyfinger showed that the farmers sold vegetables only for three to four days a week during a three month crop season and quantity sold was 70-80 kgs. per day. The open market had no grading system and the market price realised after all deductions of marketing costs was lower than that paid by Reliance Fresh. The farmers selling in the open market paid 10 per cent commission, Rs. 8/- per quintal market fee and another Rs. 8/- per quintal as hamali charges. There were no rejections in the open market on quality basis. The cost of production was same and most of the decisions on crop cultivation were taken by the farmers in all channels. The packing material of the farmer was returned in the Reliance Fresh channel unlike in the *mandi* channel. For these and other reasons like no rejections, and reasonable price, farmers preferred the traditional market channel. But, the open market intermediaries extended cash advances to farmers unlike Reliance Fresh. The marketing cost incurred by the farmer was as high as 17.65 per cent of the gross price received by the farmer as against only 2.63 per cent in the case of Reliance Fresh giving a difference of 13 per cent. The authors recommend that the chain should also purchase non-RR quality produce and provide extension to enhance farmer profitability to make the chain attractive to the farmers. There was no doubt that smallholders were involved in these chains as suppliers but going by their operational holdings, they were not so small.

Another paper by K.C. Badatya on vegetable retail chains and their implications for farmers reviews the changing environment in agriculture because of the policy changes and the entry of food retail chains through contract farming and other procurement arrangements. The paper, besides describing some contract farming experiences in Punjab and Andhra Pradesh, reports the operations of a retail chain – Vishwas -in Andhra Pradesh which is into the business of agricultural services, operating 270 outlets in four south Indian states based on interaction with 51 vegetable farmers associated with this chain. The paper reports that the chain follows a business associate model at the local level and provides all the agricultural inputs and other services like soil testing, bank loan facilitation, and extension. On the output side, the outlets purchase crops like chillies, maize, vegetables, and spices without any formal contract arrangement. The prevailing market prices are paid to the farmers and produce is sold to end users like Metro Cash and Carry. The farmers reported some decline in cost of production due to the intervention by the retail chain besides improvement in yields of vegetable crops. This is no different from the other fresh produce retail chains in terms of procurement practices.

The third paper by Deepak Shah on implications of retail revolution in India discusses the current status of retailing in India including its various segments and

finds that the share of the organised retail in food and grocery segment was 0.5 per cent in 2004. It then goes on to examine other aspects of corporate entry into the farm sector including contract farming and rural and agri retail initiatives. It identifies real estate, capital availability, legal framework, human resources, supply chain development and logistics as the major challenges for Indian retailing besides competition from the traditional retailers.

#### *Marketing of High Value Produce in APMC Markets*

Two papers dwell on the functioning and performance of regulated and non-regulated markets in specific context of Uttar Pradesh. J. Rai *et al.* analyse the production and marketing of chilli in Kanpur Nagar district of Uttar Pradesh based on a survey of 16 marginal and 8 small farmers. They report that the cost of production was lower on marginal farms. However, yield of chilli was higher on small farms compared with that on marginal farms. The net income per hectare was marginally higher on small farms and input-output ratio somewhat lower on small farms compared with marginal farms. The two marketing channels-without wholesaler and with wholesaler- showed that farmer preferred the former channel in terms of number of farmers though an equal amount of market surplus was sold through each of the two channels. The producers received 86 per cent of the consumer price of chili incurring only 3 per cent of the total as marketing cost in channel without the wholesaler. On the other hand, in the channel involving a wholesaler, the net price received by producers was only 65 per cent of the consumer price and marketing cost somewhat higher (3.38 per cent). The paper recommends organisation of the chilli growers into an association to reduce marketing cost and improve price realisation.

Another paper by Keshav Prasad *et al.* compares the functioning of regulated and unregulated markets for vegetables in central Uttar Pradesh. It reports that 97 per cent of the vegetable produce was sold in the market by the producers. The producer's share in consumer's rupee in cabbage and chilli was 37 per cent and 48 per cent in regulated markets compared with only 36 per cent and 43.5 per cent respectively in unregulated markets. The marketing costs and margins were inversely related to the producer's share in the consumer's rupee. The marketing costs were lower in regulated market and marketing margins more or less same in the two markets, thereby giving a better producer share in the regulated market. The marketing efficiency was found to be significantly higher in both the crops in regulated market as compared with that in the unregulated market. The paper recommends reduction in commission, provision of efficient transport, innovation in packaging and storage, and strengthening of cooperative marketing institutions to improve marketing efficiency in vegetables.

### *Rural Retailing and Farmers*

There were two papers on this aspect of corporate interface with the rural sector. The paper by Rakesh Singh *et al.* examines the role of rural retail chains in input delivery with specific case of HKB. Based on a survey of 120 farmers in Hardoi district of Uttar Pradesh where the first outlet of HKB was established in 2002, they find that the Bazaar offers services like soil testing and credit, besides various agricultural inputs. The paper reports that farmers rate the HKB outlet very high on timely availability of fertilisers, quality seeds, and access to agricultural inputs.

S.B. Nahatkar *et al.* examine the perception of cotton growers and market intermediaries in cotton seed marketing in Buldhana district of Maharashtra based on sample survey of 5 distributors, 65 dealers and 195 cotton growers. They report that private sector companies dominated the seed market with 86 per cent market share and farmers preferred features like high yield, short crop duration, and tolerance to biotic factors in seed selection. Their experience in farming, adoption by progressive farmers, and demonstration in the village, besides availability of credit and varietal replacement affected their purchase of a specific cotton seed variety. On the other hand, the wholesalers and the dealers were of the view that company brand image, farmers' self-preference for seed quality, crop demonstration, and farmer meetings affect sales of cotton seed as a product.

#### ISSUES FOR DISCUSSION

The papers provide evidence on the various dimensions of the corporate interface with the primary producers and report that though costs of production in contract farming are generally higher, contract farming does lead to higher net returns for producers. Similarly, food retail chains offer lower cost outlet to the supplying farmers for their produce compared with *mandi* where they have to incur many costs. Though the papers have addressed several issues of contract farming and retail chain interface adequately, the other important issues which escaped the attention of researchers and need discussion are:

1. Use of 'producer's share in consumer's rupee' methodology to measure marketing efficiency of different channels needs to be critically examined as now most of the commodities procured are sold by the buyers in value added form who invest substantial resources in this value addition and to make the product marketable. There is need to explore other ways of judging the farmer benefit in this context.
2. Nature of contracts with primary producers and their practice across crops and new situations. For example, retail chains and contracting agencies offer APMC market price based prices to growers in almost all situations of such



interface. If APMC markets were efficient discoverers of price, why were they condemned and alternatives to such markets sought?

3. Logic and utility of 'contact farming' (as against contract farming) as practiced by most of the retail chains, from a producer's risk reduction perspective.
4. Mechanisms designed/attempted by farmers/groups/consumers to deal with large corporate sellers and buyers and their effectiveness.
5. Ecological and resource use implications of corporate intervention in the longer term from farmer livelihood sustainability and resource use sustainability perspective.
6. Implications of contract farming type of mechanisms for farm workers, gender, and child labour.
7. New and better employment generation, improvement in food quality, and lower consumer prices due to entry of food retail chains and the consumer and the employee perceptions of store ambience and employee treatment.
8. Employment and livelihood implications for small retailers/vendors due to entry of retail chains and any attempt to involve traditional vendors and traders in input and output markets into these chains.
9. Market concentration vis-a-vis higher competition due to entry of large corporates into agricultural input markets and food retail and implications for producer and consumer interest.
10. Impact of retail chains and private markets on the traditional wholesale markets (regulated and unregulated) which may be important channel for small producers.
11. Impact of agricultural input retail chains on local input dealers and their perceptions and strategies.
12. Effectiveness of policies in input and output markets and new policies needed to leverage the positive effects and minimise the negative impacts of food and agri input retail chains, especially the amended APMC Act with the state level variations and examination of the state Acts for producer interest protection and facilitation of the retail chain interface.

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