
SUMMARIES OF GROUP DISCUSSION

Subject I

Livestock Marketing and Supply Chain Management of Livestock Products

Rapporteur: Pratap S. Birthal*

In the last five decades, India's livestock sector has not only grown but has also experienced a gradual structural transformation. From a subsistence economic activity in the 1960s and 1970s, the animal husbandry with a share of about 27 per cent in the agricultural gross domestic product (GDP) has now emerged as the largest agricultural activity in rural India. The size of livestock sector, in value terms, is now 1.25 times the size of foodgrain sector. There was a remarkable increase in milk production from around 20 million tons in the 1960s to 133 million tons in 2012-13, raising the overall growth of livestock sector to 4.5 percent during 2001-2014 from less than 2 percent during 1961-1980. Likewise, the poultry production also grew tremendously.

The revolutionary progress in livestock sector can be attributed to the spread of dairy co-operatives, and private sector participation in poultry that aimed at developing supply chains to provide farmers a remunerative access to markets and affordable livestock products to consumers. The successes, however, were not universal. Dairy co-operatives remain concentrated in Gujarat, Maharashtra, Karnataka, Tamil Nadu and Kerala; and private investment in poultry in Andhra Pradesh, Tamil Nadu, Maharashtra and Karnataka. Nonetheless, these initiatives to an extent could motivate farmers to enhance livestock production, and also to private sector to increasingly participate in livestock industry.

The Government of India liberalised livestock industry for the private sector participation in its first wave of economic reforms in 1991. Since then there has been significant increase in private investment in livestock industry. The size of private dairy industry that was almost equal to the size of co-operative sector in the early 1990s has now grown 70 percent bigger. The entry of private sector in livestock industry helped scaling of the livestock activity at upstream of the supply chains. For instance, two decades ago hardly there were a few poultry units of size more than 10000 birds, but now poultry units of such a scale are rare. It is not that smaller farm disappeared or displaced by larger farms with increasing private investment, but these have scaled up to grow bigger through contracts with stakeholder downstream of the chain.

Notwithstanding increasing commercialisation at downstream of the supply chain, the livestock production especially the dairy production remains dominated by smallholders, who still face a number of constraints in their transition towards commercialisation. Besides the constraints of feed, health and reproduction, the poor access to markets and finances is one of the barriers to scaling up the livestock activity. Limited access to credit restricts smallholders

*National Centre for Agricultural Economics and Policy Research, New Delhi 110012.

from adopting improved technologies, use quality inputs, and undertake long-term investments in dairy business.

Further, smallholders still find themselves at a disadvantage in the market place, particularly in the backward regions, where local rural markets for livestock products are thin, and trading in distant urban markets is not remunerative due to higher transaction costs in relation to the marketed surplus. Further, there is also an apprehension that with globalisation of agri-food markets small-scale producers, entrepreneurs and processors may be more affected because of their lack of resources, especially capital to improve upon their technological capabilities to face the growing global competition. Smallholder livestock production systems need to adjust to the emerging marketing systems, which may be difficult if not supported with finances, technologies, information and services.

The financial requirements of smallholders are not large, yet the financial institutions are reluctant to finance them because of high cost of lending relative to loan size, their low repayment capacity and limited collateral. Thus, most of the time smallholders resort to informal lenders for their financing needs. In India, dairying and shares around 5 per cent of the agricultural credit, much less than its share in agricultural output.

The growing demand for livestock products accompanied by concerns for food safety offers an opportunity for greater vertical coordination between farmers and processors. Some of the constraints that smallholders face can be alleviated using a value chain approach that brings together different chain actors viz. farmers, aggregators, traders, processors and financial institutions to gain control over the processes of production, marketing, processing and distribution in order to realise scale economies, reduce transaction costs, and minimise uncertainties in supplies of outputs and inputs including credit.

There are two worlds of livestock in India. One world is concentrated in high-income and agriculturally developed states with fairly high degree of commercialisation as dairying in Punjab and Haryana, and poultry in Andhra Pradesh, Tamil Nadu and Maharashtra; and the other world comprises the backward states where livestock production is subsistence-oriented. Therefore, the strategy for value chain development will be different for two worlds. This requires identification of production niche in the lagged regions or alternatively the pre-conditions for entry of development of market. The governments are required to create enabling conditions ensuring availability of feeds and fodders, and veterinary and breeding infrastructure.

There are successful innovative models of linking farmers to markets, but these are localised. These include contract farming, self-help groups, producer associations, etc. and need replication taking into consideration the regional specificities.

Informal value chains are still important to serve the local markets in the backward regions. These include milk vendors and peri-urban dairies which locally procure or produce milk and sell directly to the consumers or institutions in the locality or nearby cities and town. Many a times, vendors operate inter-linked transactions by advancing credit to the producers. These chains need further probe for their efficiency, sustainability and impact.

Food safety and quality issues are becoming more important in export-driven value chains. Now the food safety regulations are in place in order to ensure that consumers get safe and quality foods. The issues that need attention should focus on compliance with food standards, and their costs of compliance at different stages of the value chain, and also distribution of benefits along the value chain.

Meat processing is largely in the unorganised sector which is often poor in infrastructure and hygiene. There is a need for implementation of food safety regulations for assuring consumer of the safety of the product. This requires developing a system of traceability along the value chain.

On the other hand, the organised sector caters to the needs of export markets, mainly the Southeast Asian countries that have less stringent food safety standards. India has a large potential for export of bovine meat. Capturing a share of developed country markets would require investment in modern value chains (cold storages, refrigerated transportation, packaging, etc.) and implementation of food safety standards along the value chain. Milk pricing by co-operatives is rigid and does not take into consideration the seasonality in production, giving rooms for opportunistic behaviour to the competitors and also incentives for milk suppliers to default. Hence, there is a need to bring an element of flexibility in price setting, as most private processors also consider co-operative prices as floor prices.

Dairy co-operative system faces significant bureaucratic and political interventions, limiting the efficiency of the co-operative system. To improve efficiency, there is a need to transform co-operatives into producer companies that combine professionalism with the principles of co-operation. Producer companies are in their infancy and need state support in terms of access to credit, insurance, etc. There is a need to make comparative analysis of the performance of co-operatives, private processors and producer companies for their efficiency and inclusiveness.

Markets for live animals are unorganised and inadequate, and lack basic facilities for animals and their owners. These limit benefits to farmers. There is a need to improve market infrastructure and regulate trade for improving efficiency of markets for live animals.

Value chains for small ruminants and pigs have not received much attention in economic analysis. There is a need for studies focusing on production-marketing linkages for these animals. Another grey area for research is the value chains feeds and fodders, pharmaceuticals, etc., and service delivery systems.

Developing value chains inclusive of smallholders is a challenge, but not difficult if there is some intermediation by NGOs, or governments to organise scattered production through producers' associations and self-help groups. This would reduce transaction costs to processors as well as producers. It also reduces supply risks to processors. Smallholders need to be backed by support services, provision of inputs, information.

Finally, database on livestock production, marketing, processing is poor. There is a need to create database on these parameters at state and district levels.

To conclude revolutionary progress in livestock production is demand-driven. The income elasticity of demand is higher compared to most other food commodities. Livestock production is concentrated among households at the bottom of land distribution, which in combination with increasing demand for livestock products suggests that at similar rate of growth, livestock would have a larger effect on poverty reduction compared to crop sector.