Market liberalisation and globalisation are causing significant changes in food consumption pattern, production portfolio and food marketing systems in India. Food consumption pattern is changing fast. Demand for high-value food products including livestock products is increasing, and is accompanied by significant increase in their supplies. Consumers are becoming conscious about food safety and quality issues, imposing their preferences on the supply chain. And, in response to these developments, agri-food marketing system is also undergoing a transformation, from a fragmented system characterised by ad hoc transactions and dominance of intermediaries towards a co-ordinated supply system integrating production, procurement, storage, processing and distribution activities. At the same time, the ongoing process of globalisation of agri-food markets is creating both opportunities and challenges for the farmers. These developments in demand and food marketing systems are likely to bring livestock production systems under significant adjustment pressure, in terms of changes in production portfolio, scale of production and usage of inputs, technologies and services.

India’s livestock sector is dominated by small-scale producers, and there is an apprehension about the capability of smallholders to adjust to the emerging marketing environment because of a number of operational constraints they face in production and marketing. Their marketable surplus is small, while local rural markets are thin, and trading in distant urban markets is not remunerative due to high marketing and transaction costs. With this background in mind, participants in this session discussed a number of important issues related to marketing and trade of livestock and livestock products and identified critical areas for policy intervention and further research. These are summarised in the following paragraphs.

Structure and Performance of Markets

Livestock sector in India contributes nearly 30 per cent to agricultural gross domestic product and has been growing at an annual rate of 4 per cent. In spite of this, research on marketing of livestock and livestock products has not received as
much attention as the marketing of foodgrains. Markets for live animals are thin, *ad hoc* in nature and often located far away from production centres, resulting into high marketing and transaction costs. Governance of organised livestock markets is not conducive to efficient functioning of markets. Often, markets lack basic facilities and transparency in transactions. As a consequence, bulk of the trade in live animals, except poultry is informal, taking place between villagers and itinerary traders in rural areas. The itinerary traders often act opportunistically and exploit livestock farmers. Poultry marketing system however has undergone significant transformation from an informal system, dominated by a few traders to an organised marketing system.

The group discussed potential marketing options for live animals and their feasibility. For high-yielding cattle and buffaloes, two potential options were identified and discussed. The first option involves establishment of exchange markets, as in many developed countries, where farmers can sell and purchase quality animals. However, feasibility of exchange markets was questioned on the ground of their higher initial investment requirement. Yet, the group felt for the need to experiment this option by local institutions or private players. Second option concerns revival and strengthening of the institution of *Gausala* for reproduction and exchange of quality animals, besides performing its traditional function of caring for the old, fragile, sick and stray animals. There are successful examples where the *Gausala* functions as a hub for supply of quality animals to the farmers. For marketing of sheep and goats, the group emphasised that the government should encourage and facilitate collective marketing through institutions like co-operatives and self-help groups or even contract farming as in the case of poultry. Development of alternative marketing systems is imperative considering the rise in inter-state trade of live animals, mainly high-yielding crossbred cows and buffaloes.

Marketing of livestock products is also beset with several problems. Livestock products, mainly milk, are highly perishable and need to be transported to consumers or converted into less perishable products to avoid quantitative and qualitative losses. Majority of the producers lack access to markets, and even when a market exists their participation is constrained by small marketable surpluses. For example, over 60 per cent farm households in India produce less than a tonne of milk a year, and such a small scale is unlikely to generate much surplus for the market. Nonetheless, about 54 per cent of milk produced in the country finds way to markets, and 70 per cent of this is controlled by informal traders/vendors, and about 15 per cent each by co-operatives and private processors.

The group appreciated the role of dairy co-operatives in enhancing farmers’ access to markets and stimulating dairy sector growth. Nonetheless, dairy co-operatives have remained concentrated in a few states in the western and southern parts of the country. Thus, providing producers, especially those in remote areas, a remunerative and sustainable access to markets remains a major policy challenge. Contract farming in milk is a viable option to improve the producer’ access to
markets, and there are some successful examples of this. However, contract farming in milk remains concentrated in high potential areas, for example in Punjab, Haryana and western Uttar Pradesh. The group felt that the central and state governments should encourage and facilitate private dairy processors in the neglected, yet having considerable potential for dairy development.

India has huge populations of various livestock species, but imports huge quantities of hides and skins for its leather industry. This is largely because of neglect of marketing systems for by-products. Neither the modern marketing system was developed nor was the traditional system of collection of by-products maintained. In this context, there is a need for strengthening of the rural abattoirs, and collection mechanisms of hides and skins from the fallen animals.

The group also discussed price behavior and market integration in livestock products. The real prices of livestock products, mainly poultry meat and eggs have been declining, while the prices of feed ingredients are on the rise though with fluctuations. It was felt that decline in prices is essential to boost demand, but if not accompanied by a commensurate decline in feed prices, may adversely affect farm profitability. Markets for livestock products especially poultry and dairy are heading towards integration. Integration of markets is important to transmit price signals from one market to another and boost inter-regional trade.

Exports and Imports

Globalisation of agri-food markets under WTO is creating both an opportunity and a threat for livestock producers. Increasing global demand for livestock products offers an opportunity for exports. But at the same time, domestic demand for most livestock products is also increasing; indicating that domestic market for most livestock products is unsaturated and has tremendous potential to absorb incremental production. Therefore, excessive obsession with exports is not desirable. However, product-specific niche markets can be targeted to reap benefits of expanding global markets particularly for products whose domestic demand is relatively less and in which the country has a competitive advantage. For example, there is a considerable potential for export of buffalo meat. Simultaneously, continuous monitoring is required to contain looming threats of import surge, as it may adversely affect the domestic producers, especially smallholders. Tariff structure should be reviewed regularly as many developed countries are heavily subsidising their livestock production and exports. Concerted efforts and lobbying should be done in the global forum to pressurise developed countries to reduce support for production and exports of livestock products. Although India may not have access to developed country markets due to stringent food safety and quality standards followed there, with rise in world prices consequent to reduction in support, it can improve its access to markets in developing countries that have less stringent food safety and quality standards.
Food Safety Measures and Their Implications

Compliance with food safety measures has become an important issue in marketing and trade of food products. Livestock products are not an exception. With increasing awareness and purchasing power of the consumers, food safety and quality issues are going to be even more important in the future, both in domestic and international markets. The cost of compliance, investment required, handling practices in production and processing, and traceability of the products are some of the issues that need to be addressed to ensure safe and quality food to the consumers. In fact, the pathway from ‘farm to fork’ has to be tracked in order to identify the critical points requiring food safety intervention. Some initiatives have been taken in this regard at a few places which could be adapted in other locations. The group emphasised that the central and state governments should endeavour to prevent and control livestock diseases, create awareness among livestock producers about clean livestock production and strengthen infrastructure, service delivery system and quality control mechanisms to ensure safety and quality livestock products to the consumers.

Futures Trading

The possibility of futures trading in livestock products was discussed thoroughly. It was felt that futures trading may not be possible in all, but in some products like eggs, skimmed milk powder and whole milk powder. Some initiatives in this regard are desirable. Strategies and institutions need to be evolved to ensure that farmers do benefit from futures trading.

Organised Food Retailing and Its Implications for Producers

Organised retailing, though at present accounts for a miniscule share in the total food sales, its market share is likely to increase with unfolding of market liberalisation and globalisation. Private sector has been entering into food retailing in a big way, as is evident from the rise of supermarkets, discount stores, etc. This change in food retailing system will lead to a change in food procurement systems, away from traditional wholesalers towards independent procurement companies (dedicated suppliers) who often work with farmers or towards contract farming. The change creates an opportunity for smallholders, in terms of a better access to markets, inputs, services and technologies, and reduction in marketing and transaction costs. But, there is also a challenge for smallholders to meet the quantitative and qualitative requirements of the supermarkets. The evidence on the costs and benefits of changing food retailing system is anecdotal. The group felt the need for an in-depth assessment of the impact of the changing food retailing system on the welfare of farmers, especially smallholders.
POLICY ISSUES

Some important recommendations that emerged from the deliberations, and need greater policy focus are:

- Strengthening of markets for live animals, if possible evolve new market institutions, to incentivise farmers to scale up livestock production and adopt best production practices.
- Improvements in value-addition to livestock products to meet the growing demand for processed and value-added products, and also to contain import threats from the countries that heavily subsidise their livestock sector.
- Strengthen and promote institutions such co-operatives, producers’ organisations and contract farming that link producers to markets and reduce marketing and transaction costs.
- Create a level playing field for increased competition among various market players and regulate them to prevent collusive oligopsony.
- Evolve mechanisms that enable farmers share benefits of the institution-driven supply chains.
- Encourage and facilitate smallholders to collectivise as organisations to effectively deal with agribusiness firms.
- Develop a long term outlook for export of livestock products, which can provide a continuum to the policy thrust. Tendency of adhocism should be done away with.
- Create awareness about food safety issues among various stakeholders on the supply chain, and strengthen quarantine and animal health delivery systems to contain spread of infectious disease.

ISSUES FOR FURTHER RESEARCH

While the importance of livestock products in the food basket and as a source of agricultural growth is on the rise, research on marketing and trade of livestock products remains neglected. In this context, the following issues need an in-depth probing by the agricultural economists.

- Quantification of tangible and intangible costs and benefits associated with different supply chains to better understand their marketing efficiency, and scope for market intervention.
- Role and importance of institutions in reducing marketing and transaction costs to producers, and in ensuring food safety and quality to the consumers.
• Identification of conditions for the success and sustainability of institutions like co-operatives and contract farming.

• Participation of small-scale producers in institution-driven supply chains.

• Costs and benefits of compliance with food safety measures for farmers and industry. Studies are also needed to identify and quantify animal disease risks to human health.

• Studies on integration and price transmission in livestock products markets at national and regional level, and their implications for producers, consumers and agribusiness.

• Studies on integration and price transmission between global and domestic markets.

• Assessment of trade competitiveness of livestock products and its implications for smallholders.