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Agribusiness in India: Some Facts and Emerging Issues*

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1. Introduction

The Oxford dictionary defines the word 'business' as buying and selling or trade or commercial work. The word trade or commerce means exchange of goods as a means of livelihood or profit. In our National Accounts, agro-processing, production of agro-chemicals and farm machinery, and trade (wholesaling and retailing) are considered as parts of manufacturing (industrial) or service (tertiary) sector. With structural transformation of the economy, the share of agricultural production (farming) in the economy is going down, and that of processing, distribution and trade is increasing. Further, with the increase in backward and forward linkages, the distinction between agriculture and agro-industry is getting blurred. Farm production, processing, and trade are getting increasingly coupled. The word 'supply chain' is being increasingly talked of and discussed. Supply chain is a coordinated system of organizations, people, activities, information, and resources involved in moving a product or service in physical or virtual form from supplier to the customer. Supply chain activities include transformation of raw material and components into finished products that are then delivered to the end customers.

In the developed countries, agribusiness is defined as the total output arising from farm production and product processing at both pre- and post-farm gate levels. In developing countries like India, the agribusiness sector encompasses four distinct sub-sectors, viz. agricultural inputs; agricultural production; agro-processing; and marketing and trade. All these add value

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or utility to the goods. Agribusiness is emerging as a specialized branch of knowledge in the field of management sciences. In this context, agribusiness can be defined as science and practice of activities, with backward and forward linkages, related to production, processing, marketing, trade, and distribution of raw and processed food, feed and fibre, including supply of inputs and services for these activities.

2. Need for Agribusiness Mode

Over the years, while the agricultural marketing and trade scenario has undergone tremendous changes, it has not changed enough to meet the emerging demand for such services. Some of the marketing system-related limitations have been as follows (Acharya, 2006):

(i) The market size is already large and is continuously expanding. The farmers' market linkages (both backward and forward) have also increased manifold, but the marketing system has not kept pace.

(ii) Private trade, which handles around 80 per cent of the marketed surplus, did not invest in marketing infrastructure due to excessive regulatory framework and dominance of unorganized sector.

(iii) Increased demand for value-added services and geographic expansion of markets require lengthening of the marketing channel, but this has been hampered by lack of rural infrastructure.

(iv) Direct marketing by 'farmers to consumers' remains negligible. In 85 per cent of the 27,294 rural periodic markets, where small and marginal farmers come in contact with the formal economy, facilities for efficient trade are still almost absent.

(v) For facilitating trade at the primary market level, 7161 market yards/ sub-yards have been constructed, but they have become inadequate, ill equipped, and mismanaged.

(vi) Food processing industry has a high multiplier effect and employment potential. But in India, the value addition to food production has been only around 7 per cent.

(vii) Due to lack of proper handling (cleaning, sorting, grading and packaging) at the farm gate or village level, about 7 per cent of grains, 30 per cent of fruits and vegetables, and 10 per cent of seed spices are lost before reaching the market.

(viii) An estimated Rs 50,000 crore are lost annually in the marketing chain due to poorly developed marketing infrastructure and inefficient system of marketing activities.

(ix) The State Agricultural Produce Markets Regulation (APMR) legislation has hampered the contract farming initiatives, which otherwise can be highly beneficial to develop linkages of farmers with the markets.

(x) Farmers, shifting to higher-value crops, face increased risks of fluctuations in yield, price and income.

Whether it is increasing the incomes of farmers, saving the national loss of farm products along the traditional supply chain or creating more employment opportunities, sound development of agribusiness provides a new frontier by creating an environment of much needed investment in agricultural marketing and trade. The Expert Committee on Agricultural Marketing, appointed by the Ministry of Agriculture, Government of India, in December 2000, estimated the investment requirement of Rs 2687 billion in agricultural marketing (Government of India, 2001). This includes possible investment of Rs 1364 billion by the private sector. The Working Group on Agricultural Marketing and Trade, appointed by the Planning Commission, has estimated the total investment requirement of Rs 643 billion during the XI Five-Year Plan, which includes a possible private sector investment of Rs 306 billion (Planning Commission, 2007). It is now absolutely clear that the needs for infusion of new technologies, and increasing the economies of scale in marketing for improving the efficiency of entire marketing chain can be met through higher level of investment in value addition and marketing system. Development and promotion of agribusiness sector, which has strong linkages with the agricultural production, agro-processing, and service sectors, is capable of influencing each one of them through adequate investment in marketing activities. This can make a valuable contribution in terms of creating additional employment in the non-farm sector. Promotion of the agribusiness can also substantially augment the availability of farm products. An international wheat expert was recently asked to suggest ways of augmenting the production of wheat in India by 25 million tonnes. He *inter alia* suggested that 5 million tonnes of wheat could be added to the food basket by saving post-harvest losses occurring due to insects, weevils, rodents and monsoon damage.

Already, there is a considerable income diversification in the rural areas. A recent study by NCAP (Birthal *et al.*, 2007) has revealed that out of the total income of farm households, around one-fourth (24.4 per cent) is contributed by non-farm business. For sub-marginal and marginal farmers, it is considerably higher at 33.9 per cent and 27.4 per cent, respectively. It is in this context that a transformation from ‘agriculture’ to ‘agribusiness’ is being advocated and espoused. The basic philosophy of promoting agribusiness lies in the statement “Eat what you can and CAN what you can not”.

3. Size of Indian Agribusiness

The size of agribusiness can be analyzed from the following different angles:

(i) The value of agricultural products marketed at the first point of sale during 2004-05 was Rs 5053 billion, which included Rs 3323 billion of crop products, Rs 1387 billion of livestock products and Rs 343 billion of fisheries products.

(ii) The value of farm inputs marketed during 2004-05 was Rs 727 billion, which included seeds, fertilizers, pesticides/insecticides, repair and maintenance services, livestock feed/fodder, organic manure, and electricity/diesel.

(iii) The value of agro-processed products during the year 2004-05 was Rs 4169 billion, in which Rs 2960 billion was from registered manufacturing units and Rs 1209 billion from unregistered manufacturing establishments. These included processed dairy products, meat and fish, fruits and vegetables, edible oils, grain milling products, beverages, tobacco and leather products.

(iv) Considering all these segments (primary agricultural products, farm inputs and processed products), total value of agribusiness was arrived at Rs 9949 billion.

(v) These apart, value addition takes place during the marketing system. During 2004-05, value addition from trade and hotels and restaurant activities (GDP) has been estimated as Rs 4178 billion and Rs 416 billion, respectively. If atleast 20 per cent of value addition in trade is considered on agriculture related-products (and 100 per cent in hotels and restaurants), these activities are worth Rs 1251 billion.

(vi) Agribusiness also includes trade and sales of imported agricultural products. Total value of imported agricultural or processed products in 2004-05 was Rs 228 billion, which included Rs 111 billion worth of edible oils.

(vii) Thus, the total Indian agribusiness is worth atleast Rs 11.43 trillion or Rs 11,43,000 crores.

The size of agribusiness can also be looked at from the angles of structure of agribusiness, as discussed below:

(i) The primary producing units are around 121 million operational holdings, of which 63 per cent (76 million) are of less than one hectare in operating size, on an average, 0.4 hectare of land. Assembling of farm products from such a large number of small production units is a huge task.

(ii) There are around 5 million wholesale traders and 11.2 million retailers of agricultural and other commodities. Out of 11.2 million retail outlets, 3.7 million are estimated to be food retail outlets.

(iii) Agro-industries include both organized and unorganized sector units. There are 17.0 million units in the unorganized sector, of which 13.91 million are agro-based. Out of 13.91 million agro-industrial units in the unorganized sector, 12.32 million are own account manufacturing establishments (OAME), 1.2 million are non-directory manufacturing establishments (NDME) and 0.39 million are directory manufacturing establishments (DME) (Chadha and Gulati, 2007).

(iv) There are 5.11 million food processing units in the unorganized sector, of which 4.62 million are OAMEs, 0.36 million are NDMEs and 0.13 million are DMEs (Chadha and Gulati, 2007).

(v) The units in the organized sector are few in number but account for a bulk of the total gross value addition. There are 35,000 modern rice mills, 20,000 pulse mills, 5198 fruit and vegetable processing units, and 400 fish processing units. There are 426 sugar mills, and 3619 grinning and pressing units (Singh, 2007).

(vi) Most of the food processing units are in the unorganized sector and Indian food market continues to be dominated by the fresh food segment. According to one estimate, Indian food market comprises 10 per cent processed segment, 15 per cent semi-processed segment and 75 per cent as fresh food segment. Processing is reported to be around 2 per cent in fruits and vegetables, 37 per cent in milk, 21 per cent in meat, 6 per cent in poultry and 11 per cent in marine fish. Fruit and vegetable processing is projected to go up to 10 per cent by 2010, taking the food-processing segment to 32 per cent of the total food market. The overall value addition in food products, which is currently 8 per cent, is likely to increase to 35 per cent by 2025.

4. Emerging Areas of Agribusiness

4.1. Agribusiness Opportunities

As already mentioned, for improving the efficiency of the marketing system, there is a need of substantial investment in marketing infrastructure, both physical and institutional. The investment needs and opportunities for investors exist in the following broad areas (NAAS, 2006):

(i) Production

- Production of high-yielding seeds
- Production of high-quality planting material, including use of tissue culture methods of micro-propagation
- Nurseries, including hardening nurseries

- Organic farming
- Production of microbial cultures and vermicompost, and
- Floriculture

(ii) Processing

- Fruit and vegetable processing, including dehydration, canning, aseptic packaging, processing of underutilized fruits, and processing for other products like grape raisin, osmo air-dried fruits, fruit toffee, bleached dry ginger and spices' powders
- Processing of maize for starch and feed through improved mini/ small mills and dry milling plants
- Processing of millets for various purposes, including malt from finger millets and RTE (Ready-to-Eat) products
- Processing of sugarcane for various jaggery products like spiced jaggery, powdered jaggery, and jaggery cubes
- Processing of herbal and medicinal plants
- Processing of dairy products
- Processing for poultry products, including poultry dressing, and
- Processing of livestock products and livestock wastes

(iii) Infrastructure

- Cool chain infrastructure, including cold stores
- Storage and warehousing
- Specialized transport services
- Packaging infrastructure, including pack houses, and
- Agri-clinics and service centres

(iv) Trade and Others

- Procurement through contract arrangements, including contract farming
- Retailing
- Supply chain management, and
- Capacity building, including human resource development in agribusiness.

Many of these activities can be taken up by small and micro enterprises (SMEs). The employment potential of SME sector is very high. It already employs 67 million people and has grown at a rate of 4.4 per cent per annum during the 10th Five-Year Plan.

These apart, several companies and food chains are now sourcing agricultural products from India to feed their outlets across the world. Further, our exports in several agricultural sub-sectors are increasing. For example, India now is a net exporter of livestock products. During the triennium ending (TE) 2006, our exports were valued at US$ 676 million, which included US$ 441 million worth of bovine meat.

The food miles (the distance food travels) are increasing due to developments in food technology, transport technology, ICT and biotechnology. The India's food companies are also globalizing. India's food industry transnationality index* had increased from 59 in 1990 to 79 in 1999, and is the highest among all the industries.

4.2. India's Retail Sector

As already mentioned, there are around 11.2 million retail outlets of which nearly one-third are food retail outlets and two-thirds are non-food outlets. Indian retail sector is estimated to be worth US$ 330 billion or Rs 13.2 trillion. It is projected to increase to US$ 427 billion by 2010 and to US$ 637 billion by 2015. Given this rate of growth, it is increasingly attracting the attention of corporates, both domestic and foreign.

At present, the organized retailing constitutes only 2 per cent of the total retail sales but is expected to go to 10 per cent. Organized retailing in India was first started by the textile mills by opening their own retail outlets. Later, pure organized retailers (other than manufacturers) also entered. The old belief that organized sector retail shops are more expensive is now giving way.

In India, food is the largest segment of retail industry. There are around 3.7 million food retail outlets with an estimated turnover of Rs 7400 billion (Chengappa *et al.*, 2007). Food retailing in India is, by and large, unorganized, highly fragmented and predominantly small, family owned businesses (Singh, 2007). About 78 per cent of these function with only family labour. Nearly 96 per cent of the food outlets are small with less than 500 sq ft area. Unorganized food retail segment consists of kirana shops, selling dry food products, and fruit/vegetable shops and hawkers (pushcart walas) selling wet food products. As the unorganized retail outlets are under-capitalized, these are not able to cater to the consumer demand for value-added services, thus providing the edge to the organized retail sector. Organized food retailing,

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* Transnationality index is the degree to which a company is internationalized and is measured by comparing the company's assets, employment and sales at home and abroad. Thus, there are considerable opportunities for agribusiness entrepreneurs in all these areas.

which till recently accounted for only around 2 per cent of the total food retail sales, is expected to reach around 20 per cent by the year 2008. Food retail sector is reported to employ about 21 million people.

Organized retailing takes place under different formats. Globally, there are six retail chain formats, viz. hyper markets, super markets, super centres, warehouse clubs, discount stores, convenience stores and pop and mom stores (Chengappa *et al.*, 2007). In India, 14 companies run departmental stores and several others are regularly entering the retail segment in different formats. It is reported that there are at least 24 hyper markets, 358 super markets, 240 convenience stores, and 464 discount stores. Organized sector players are also doing assembling, storage and sales to other retailers. Some Indian super markets are 'Food World', 'Nilgiris', 'Subhiksha', 'Fab Mall', 'Giant', etc. Super markets consider fruits and vegetables as destination category of goods to attract more customers. Some other agricultural retail chains are: 'E-Choupals' and 'E-Sagars' (ITC), 'Krishi Vihars' (M&M), 'Aadhaars' (Godrej Agro), 'Kisan Sansars' (Tata) and 'Reliance Fresh/ Reliance Retail'.

'Food World' was the first super market started in Bangalore and it is now considered as the largest food chain in India. It reportedly has 34 stores in Chennai, 29 in Bangalore, 17 in Hyderabad and 7 in Pune, besides stand alone stores in Coimbatore and Mysore. For each city, it follows a hub and spoke model and employs a large number of women to perform various operations in the supply chain. Super markets use various channels to manage supplies (Chengappa *et al.*, 2007; Singh, 2007). Some of these are:

(i) Direct, uncontracted purchases from farmers at individual super markets

(ii) Purchases from wholesalers, who either work directly with farmers or through wholesale markets

(iii) Purchases through independent procurement companies (dedicated suppliers) who often work with farmers approved by super market chains

(iv) Purchases through government-sponsored distribution centres

(v) Purchases through informal farmers' groups, farmers' associations or cooperatives

(vi) Purchases through large individual farmers who often sub-contract part of the supply to smaller farmers

(vii) Leasing of space within the store on a commission basis to traders, farmers and cooperatives, and

(viii) Multiple channels.

4.3. Contract Farming

The organized sector is using contract farming model for meeting its requirements for retailing, processing or export purposes. Despite several advantages of contract farming, the coverage continues to be limited. As per the statement of Union Minister of State for Rural Development in the Parliament on September 3, 2007, the total area under contract farming was 4.26 lakh hectares, most of which was in three states of Tamil Nadu (2.37 lakh ha), Punjab (1.21 lakh ha) and Orissa (0.60 lakh ha). There are 18 companies/organizations that are involved in contract farming. These are Hindustan Unilever, WIMCO, Pepsi, Food Pro, NDDB, Maxworth Orchards, Cadbury India, BILT, ITC, JK Paper, AV Thomas, Reliance Agrotech, Godrej Agro, United Breweries, DCM Sriram, Markfed, L&T, and Escorts.

Contract farming has been traditionally a common practice for the paper industry, match stick manufacturers, and now in seed production. Contract farming lowers transaction cost for the company and reduces market risks for the farmer. It is certainly a viable alternative to corporate farming. Some sort of contract farming is also prevalent in sugarcane and dairying, but it is not treated as a formal format of contract farming in the common parlance. The studies show that the experience with contract farming has been a mixed one. Contract purchaser becomes a sort of monopsonist with all the associated disadvantages. Also, there is an evidence of tendency of exclusion of small and marginal farmers on the part of contracting companies. Nevertheless, it has been found to be successful in several cases, including gherkins (no local market) and basmati rice (for exporting firms). With adequate hassle free safeguards, advance contract between the farmer and buyer can be an important pathway for minimizing farmers' marketing risks and increasing their incomes.

4.4. Recent Initiatives

For the promotion of agribusiness, several initiatives have been taken during the past five years, which have created a favourable environment for the growth of agribusiness. Several marketing-related restrictions have been withdrawn or replaced. Amendments in State Agricultural Produce Markets Regulation Acts are being made to facilitate setting up of private markets, direct purchases of farmers' produce and contract farming arrangements. Several monetary concessions have been announced by the central and state governments. These include 100 per cent excise exemption for 10 years, 100 per cent income tax exemption for five years (later withdrawal in phases), and capital investment subsidy of 15 per cent (upto Rs 30 lakh).

Keeping in view the growing importance of agri-exports in improving farmers' incomes, the government has set up several agri export zones (AEZs). Further, to help exporters in meeting phytosanitary requirements, several initiatives have been put in place. Regulatory authorities at the state level have been notified. The quality standards have been harmonized and publicized and requirements of necessary documents have been specified. Every exporter is required to obtain an IEC (Import-Export Code) from the Director General of Foreign Trade and then get registered with APEDA. Those who plan to export some products, can either register themselves or contact registered export houses, whose names and details are available on websites of APEDA and Indian Trade Promotion Organization.

While Indian companies are increasingly entering the retail business, foreign direct investment (FDI) in retail is not allowed. It is allowed in franchising and commission agent services. It is also allowed in wholesale business with case by case approval from the Reserve Bank of India. However, foreign retailers can operate in India through joint ventures (where Indian partner is an export house), franchising/local manufacturing/sourcing from small scale sector (e.g. McDonalds), and through cash and carry operations (e.g. Metro in Bangalore) (Chengappa *et al.*, 2007).

Considering that traditional supply chain is fragmented, there is presence of a large number of intermediaries, and the existing market yards are dominated by the association of a few traders, the growth of organized retail (through India's corporate sector or FDI) provides several advantages. It brings in new technical know how in marketing and reduces inefficiency in the supply chain. It improves quality of services to the consumers and creates employment for the youth. It also helps in achieving international quality standards and thus boost exports, leading to increase in farmers' incomes.

5. Some Emerging Issues

5.1. The Concern

The issues that are emerging relate to the need for change in the paradigm of functioning of agricultural systems. What is needed is improvement in the existing marketing system that reduces cost by saving the losses in the marketing chain, increasing the competition thereby reducing undue profits of some intermediaries and creating the additional employment opportunities in the agricultural marketing system. This would help farmers, consumers as well as unemployed youth.

There is considerable potential of creating more lucrative and attractive jobs for the youth in agribusiness activities. Super markets and retail chains will need many times more young business graduates. It needs to be noted that already between 2000 and 2005, India created 1.1 million jobs per year, which is the highest among BRIC (Brazil, Russia, India, and China) countries. However, the changes in agri-food systems have significant implications for growth, poverty and food security. On the positive side, agribusiness is responding to the strong consumer demand for high-value commodities, processed products and pre-prepared foods. There is in fact expansion of demand for farm products. It provides new opportunities to farmers for value addition, while agro-processing firms provide them crucial inputs and services and also cover a part of their risk. If properly used and understood, it should turn out to be bonanza for the farmers. Investment is flowing thick in agribusiness, and agribusiness and super market retail boom is a new mantra. Many companies have already invested billions either directly or through local partnerships. There is likelihood of agribusiness firms with all their managerial abilities, finding new ways to use the demand opportunities. However, fears are being expressed that, by virtue of their capital and scale operations, these firms may space out small traders, processors and retailers. In this context, two most important issues today relate to (a) expansion of organized retail segment, and (b) entry of global players in the retail sector. Our focus here is on agricultural commodities, including food products.

5.2. Retail Sector Issues — Modern Retail Outlets

Agriculture and retail sectors are the two largest employers in India. The entry of organized sector in retail business brings with it more investment in marketing and creates millions of jobs, but may also displace the existing self-employed people. The basic question is whether we need more relatively high profile jobs or continue with a scenario where many families eke out a living through microscopically small one person or one family enterprises. There is a demand for organized retailing services. It is not only the high-end consumers but also the middle class and lower-middle class consumers that are going to the organized retail stores for lower price, better service and shopping comfort, particularly when these are available in the neighbourhood.

Apart from the fears of partial displacement of the existing informal retail outlets, the main issue relates to the nature of market structure that may emerge when the market share of modern retail outlets goes up. The tendency of increased consolidation (both horizontal and vertical) of agribusiness firms may lead to a situation of monopsony/monopoly or at the most monopsonistic/monopolistic competition, that may not be more perfect than the existing imperfections in the market.

In some parts of the country, there have been protests from traders' and vendors' groups against the emerging modern retail sector. Some state governments have asked the companies to close their outlets in the interest of maintenance of law and order. However, the central government has asked the states to ensure trouble free business by retail chains. The argument for protests is that corporates buy directly from the farmers, save transaction costs and sell at lower prices to the consumers; thus the existing traders are losing their business. The fact is that the existing players are now facing stiff competition from the organized retail outlets. The protests have been mainly in the states of Uttar Pradesh, Madhya Pradesh, Jharkhand, West Bengal, Kerala, and Orissa, and recently in Mumbai too. Consequently, some organized retailers have decided to roll out from the fruit and vegetable business in areas where they have faced opposition and hostility. The opposition to modern retail outlets has been mostly in those states where farmers are relatively more marginalized. A noteworthy aspect has been that farmers in general are favourably placed with modern retail outlets and the central government has asked the states to ensure trouble free business by the retail chains.

There is no comparable large and diverse economy anywhere in the world that has such an antediluvian distribution system for the basic commodities of daily needs as we have in India. If the government and the industry do not nip this growing tide against the modern retail sector, the impact can be more disastrous for the agricultural sector as a whole, rather than for the business houses who have announced ambitious plans to enter the sector. All big players are diversified business houses. They can very easily afford to shelve their plans and divert resources to other exciting opportunities in India and abroad.

(i) The losers in the process could be millions of middle and lower income Indians who would have potentially benefited from the competition and efficiency induced lower prices, better quality, superior service and shopping comfort.

(ii) The losers could also be millions of farmers who would be constrained to continue to sell to the middlemen that have no qualms in creating scarcity when it suits them, only to raise the final price for the consumers, even as the farmers continue to receive low prices.

(iii) The losers could also be millions of average men and women who could have found better jobs (sales and supply chain) with their otherwise nearly unemployable situation.

(iv) The losers could also be state governments who would have otherwise gained from better tax compliance at the retail end.

Considering the wider importance of modern retail stores and emerging organized supply chains, and keeping in view the arguments against these, there is a need for initiatives and measures that would help in taking care of the possible negative impact on some sections. First, as in Bangladesh, non-governmental organizations (NGOs) in the rural areas should become active in organizing farmers for increasing their bargaining power. Second, the existing traders and retailers should be provided with liberal loan facilities so that if they so desire, can enter in setting up their own retail outlets and supply chains. Third, major retailers and supply chains should be persuaded or facilitated to use the existing traders or commission agents as their sourcing agents and vendors as their sale outlets, as is being successfully done by some companies. Fourth, agribusiness models (whether modern retail chains or otherwise) can be set up in the public-private partnership format. A very successful case is of Uttarakhand State Seeds and Tarai Development Corporation. The stakeholders or partners are state government (30 per cent), Government of India (21 per cent), State Agricultural University (15 per cent) and farmers (34 per cent). The Corporation is using private companies for sale of seeds and is also involved in the export of seeds. Further, quite a few modern retail outlets launched by farmers' groups/cooperatives/companies or consumer organizations are working successfully at many places in the country. Fifth, possible unfair trade practices of agribusiness firms can be regulated by (a) enforcing transparency in contracts and procurement; (b) strengthening of farmers' cooperatives or self-help groups; (c) providing for public scrutiny of acquisitions and mergers; and (d) strict social or public auditing of food and trade flows. And sixth, prudent regulation of corporate retailers as has been done by several countries, may be put in place. For example, there is enforced zoning for mega retailers in Japan and Thailand. In the USA, some states have put in city limits for the organized retailers. In France, there is regulation for retailers with larger than specified carpet area. We should devise our own regulatory system.

5.3. Entry of Global Agribusiness Firms

The other equally important issue relates to the entry of global agribusiness firms in the Indian market for trade, particularly the retail sector. No doubt, global firms bring with them technology, capital and managerial skills, but there are several other aspects that need to be kept in view while allowing foreign direct investment in the retail sector. First, global firms, by their very strategy, maximize their profits by procuring or purchasing from globally cheapest markets/areas/countries and indulge in dumping, leading to pricing out of domestic producers and local small retailers. Second, global agricultural trade is highly asymmetric in the sense that there is a large number of producers, very few traders and a large number of consumers. It has been reported that top 10 companies' control on global trade is 84 per cent in agrochemicals, 51 per cent in seeds, 24 per cent in food retail, and more than 90 per cent in foodgrains trade (CENTAD, 2007). Third, owing to the concentration of trading power among few companies, international decline in basic commodity prices has not resulted in cheaper food in importing countries. And fourth, global firms indulge in lobbying to influence the national and international policies in their favour. It is in this context that the option of allowing entry of global firms and FDI in the retail sector needs to be carefully analyzed. China has restricted foreign holding only up to 49 per cent in the retail sector. Philippines has imposed sourcing and reciprocity requirement on foreign retailers. India will also need to put in place adequate safeguards in this area.

6. Concluding Observations

Dr M.S. Swaminathan has repeatedly said, "if farm ecology and economics go wrong, nothing else will have a chance to go right in agriculture". Right farm economics is as simple as remunerative price and assured market for the farmers. He has also related right economics with non-violence when he said "non-violence to farm women and men who toil day and night can be expressed in terms of remunerative price and assured marketing opportunities for their products". These statements, coming from a Plant Breeder/Geneticist and the first winner of World Food Prize, have great significance for our pricing and marketing policies. The shift of focus from 'production only' to 'production as well as efficient marketing' has come after a very long time.

Despite several forms of government intervention and a number of marketing development programmes, the marketing system for farm products has continued to suffer from several weaknesses. The farmers have borne the brunt of these weaknesses. The private sector, for long, did not invest or shied away from investment in the agricultural marketing activities. It is only during the past five years or so, i.e. the second phase of liberalization, that the agricultural marketing reforms were initiated. One of the outcomes of these initiatives has been the entry of private sector in agribusiness activities on a substantial scale.

A shift from 'agriculture' to 'agribusiness' is being viewed as an essential pathway to revitalize Indian agriculture. While the share of pure agriculture in GDP may decline, the share of agribusiness will not and is bound to go up with the demand for value addition continuously increasing. It is in this context that it has long been argued for redefining agriculture as 'the science and practice of activities relating to production, processing, marketing, distribution and trade of food, feed and fibre' (Acharya, 2006).

Implicit in this definition are two ideas. One is that while planning and macro managing the agricultural sector, the focus should now shift from 'only production' to 'production plus all other associated activities' that constitute agribusiness. And second is the shift from production to innovation, which is the specific requirement of entrepreneurship. Essentially, entrepreneurs are innovators. Innovation has been the key to success of every entrepreneur, be it a farmer or trader. Entrepreneurs strive to compete with others through innovations. Through innovations small farmers or small enterprises are able to counter the disadvantages of size and scale.

Finding the balance between development potential arising out of investment by the private sector and implications of these developments for employment of a considerable section of society is one of the major challenges of policymakers today. While some issues are only apprehensions, the others are real. There is a need for *ex ante* assessment of the outcomes of the current wave already underway. Whether agribusiness and retail food chains help improve the agricultural marketing efficiency. While the new firms will carve out market space for them, they would also need to realize returns for their investments. In this context, how much benefits of the reduced marketing cost would they transfer to the farmers and consumers? Food chain owners consider working with small and marginal farmers a cumbersome and costlier proposition. Will they encourage farmers' organizations to assist in sourcing the farm products? To what extent, these firms will be able to use the expertise and experience of the existing traders and vendors? What is going to be the overall employment scenario? Can the entry of organized retail chains help India become more internationally competitive? Further, given the advantages of hawkers and street corner shops and the purchasing habits/behaviour of a large number of consumers, what is the upper limit of the market share that the modern food retailers can capture? The most important issue, of course, relates to the legal and regulatory framework that is put in place, which will determine whether or not adequate private investment flows in these activities and the market structure that ultimately emerges is more or less perfect than what we have today.

We are at the crossroads of agricultural marketing development in the country. Unless we are careful, we may commit either type 1 or type 2 error. We may move along the road where we should not be moving or we may not move along the road where, in fact, we should be moving. The policy analysts, agricultural economists and marketing specialists have a great challenge in advising the country, i.e. policymakers, businessmen and farmers, in selecting the road which, while takes the country forward on a higher growth path, will help our farmers and farm women increase their incomes. Our scientific analysis should lead to carving out a path out of poverty, food insecurity and malnutrition for all those who have waited enough, in the shortest possible time.

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