

## REVIEW PAPER

# Development of agribusiness industry in India: opportunities, challenges and solutions

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### ABSTRACT

Agribusiness industry deals with the production, processing, marketing and shipments of agricultural produce. It covers a variety of industrial, manufacturing and processing activities based on agricultural raw materials as also activities and services that go as inputs to agriculture. The development of the agribusiness industry can help stabilize and make agriculture more lucrative and create employment opportunities both at the production and marketing stages. This paper tries to explore the opportunities and challenges of agribusiness sector in the country. There is no doubt that agribusiness industry has a lot of potential to improve rural incomes and can play a very significant role in creation of employment for rural youths. The present study focused on the need to critically look at how can people get the opportunities and how can alleviate the constraints faced by the agribusiness sector in the country. There is also need to review the technological supply chain and storage facilities for a wide range of commodities produced in the country. A well-developed agribusiness system in country can make enables millions of farmers and agripreneurs to capitalize the emerging opportunities of the agriculture and allied sector. The development of agribusiness sector is the need of future to strengthening rural employment, food security and living standard of peoples in the country.

**KEY WORDS :** Agribusiness, Food security, Food processing, Contract farming and Agri retailing

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**A**gribusiness industry deals with the production, processing, marketing and shipments (exports/imports) of agricultural produce. Agri-business explores production, marketing and processing opportunities in area of agriculture and allied sector such as horticulture, forestry, fishery, livestock etc. It also covers improved growing techniques, agricultural machinery, fertilizer, pesticides pre- and post- harvest handling, storage, transportation,

packaging and labeling of agricultural products (Bairwa and Kushwaha, 2015). Agribusiness is also a corporate method of farming. The term agribusiness industry includes not only the farm itself but also the entire chain of agriculture related business including seed supply, food processing, machinery (Bairwa *et al.*, 2014a). The Agro-based industries are those, which are involved in supplying the farm with agricultural inputs besides handling the products of the farm (Famine Enquiry Commission, 1944). The Agro Industry means units which add value to agricultural products /intermediates/ residues, both food and non-food, by processing into products, which are marketable or usable or edible or by improving storability or by providing the link from farm to the market or part thereof (Gandhi *et al.*, 2001 and Kumar *et al.*, 2014). Agro industry also includes hi-tech and biotechnology based agriculture (Rajasthan Agro Industries Policy, 2009).

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The broad-based development of the agro-products industry will improve both the social and physical infrastructure of India (Pandey, 2013). Since it would cause diversification and commercialization of agriculture, it will enhance the incomes of farmers and create food surpluses (UNIDO, 2013). The development of agro-based industries commenced during pre-independence days. Cotton mills, sugar mills, jute mills were fostered in the corporate sector. During the post-Independence days, with a view to rendering more employment and using local resources, small scale and village industries were favoured. Agribusiness Industry can be widely grouped under the following kinds. Village industries comprise those that are run with minimal industries with very little machinery and a maximum of manual labour manufacturing products like papad, pickle etc. Small scale industries refer to those that are managed with a medium level of investment and machinery like oil mills and rice mills for instance. Large scale industries involve huge investments and extreme levels of automation producing commodities like jute, sugar and cotton products (Bairwa *et al.*, 2012 and Kumar *et al.*, 2014).

#### **Scope and opportunities of agribusiness sector in India :**

The food production in India is likely to grow two-fold in the next ten years. Thus, there is ample opportunities for investments in food and food-processing technologies, equipments, especially in areas of canning, dairy and food-processing, specialty processing, packaging, frozen food and thermo processing, cold chains and food retailing (Pandey and Tewari, 2010). Agro industry opportunities in India currently tend to favour growth and development of medium-scale industries that match the current production levels and the distortions in marketing of produce (Chandrasekhara and Durga, 2007). Market forces and the prevailing economic environment favour more down-sizing of large-scale processing systems and upgrading small-scale processing industries. This is mainly due to the fact that the demand for raw materials by large-scale manufacturers is currently not being met due to enterprises are operating below capacity (Bairwa *et al.*, 2014b). The potential for agro based industrialization, especially labour intensive industrialization, is truly enormous (Srivastava and Patel, 1994 and Bahal, 2008). In India, Government wish to promote agro-industries and offer people living in rural areas new avenues of employment close to the place they work and live. However, unlike in the west, where much of this was highly mechanized due to labour shortages, India need labour using technologies. In many developed countries, the strategy of food processing and agro industry was focused essentially on increasing farmers' incomes without a focus on generating rural employment (Srivastava, 1989). In a labour surplus economy like India, Government need solutions that increase producers' incomes but also generate new employment opportunities (George and

Bhaskaran, 2004). The food processing sector must have these objectives in mind (Prime Minister of India addresses Global Agro Industries Forum, 2008). The employment potential of agribusiness sector is very high because it employs 67 million people and has grown at a rate of 4.4 per cent per annum during the 10<sup>th</sup> five year plan. 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 (Singh 2007). There is a need of substantial investment in marketing infrastructure development. The scope and opportunities in agribusiness sector for investors exist in the production, processing, marketing, infrastructure, retailing, contract farming, and supply chain management (NAAS, 2006).

#### **Major challenges in development of agribusiness sector in India :**

One of well known principle problem of business sector is that lack of efficiency, competence and allied factors in management may prove detrimental to the industry concerned and agri industry is not exception in this respect. Industrial sickness, managerial problems, marketing problems, quality control, infrastructural problems and financial crunch are some major hurdles in the path of successful running and achievements of an industry (UNIDO, 2013). In the context of Indian agribusiness industry these problem are faces by many industrial units. So far as the managerial problem are concerned, labour problem and production problem creates harmful observations in the smooth functioning in the enterprise. Industrial sickness is also a common phenomenon in the industrial sector and it has led to winding up of many industrial units (Reddy, 2001 and Hans, 2006). Yet another problem relates to quality control, as it is a vital factor which determines the credibility and value of the product. No doubt, there are so many difficulties with certain industries due to non-availability of power, raw material, financing, marketing of products and constructions are big challenges for establishment, smooth running and proper development of agro based industries in Indian scenario (Basu, 2007). Indian Agri industry is mostly faced with formidable problems of shortage of raw materials, lack of research, proper management and acute dearth of funds (Hans, 2006). In the present situation, as the agricultural produce moves from the farm gate to the food plate, maximum is consumed by the end consumer through the wholesale and retail network (close to 80%) leaving out just 3 per cent and 17 per cent to the processing and the export sector (Fig. 1). As a result, there is huge opportunity for both of these sectors namely processing of foods and exports. The aim should be to facilitate the existing entrepreneurs and encourage new players to get into both the areas.

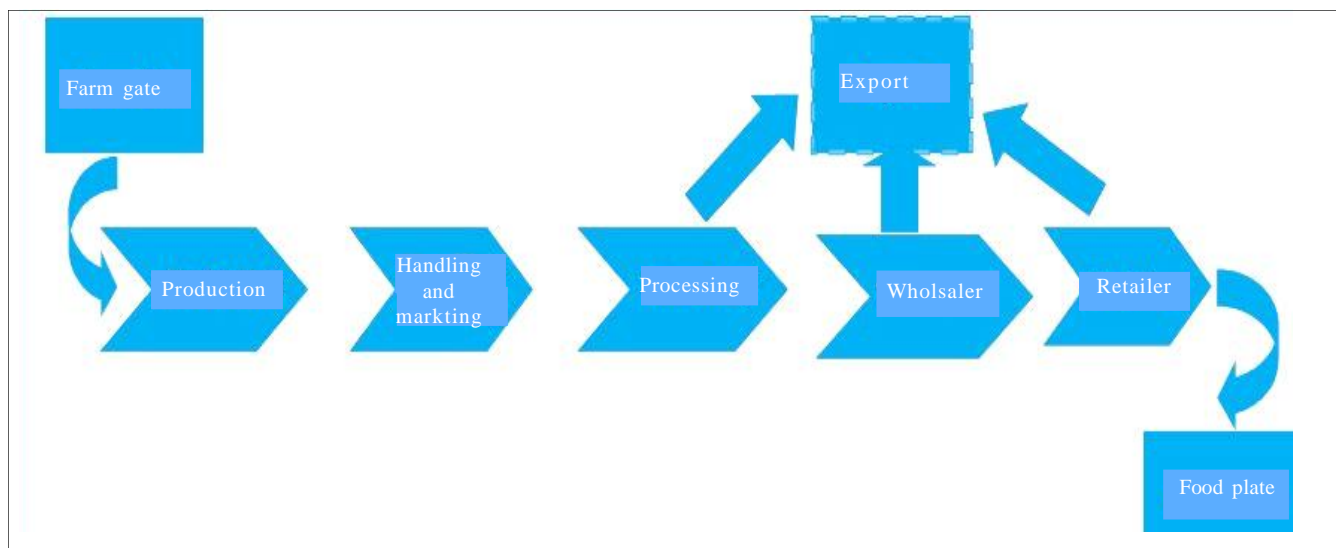


Fig. 1: From farms gate to food plate

The managerial skills required for the management of agribusiness firms are not very much different from another in large scale business organization. The managerial functions of planning, organizing, staffing, directing and controlling are common to both agri sector and other large scale sector. The owner of an agribusiness firm requires all the qualities of a good manager. He must co-ordinate the functions of purchasing, production, marketing and financing etc. In fact, the lack of skilled personnel has been an important hurdle in the development of Agribusiness industry. Small agro firms cannot afford to training and developing specialized staff of their own. Therefore, these agri organizations have a necessarily need for some trained and professional managers for the growth and development of business (Chadha and Gulati, 2007). There are some major problems in the way of agribusiness development :

#### **Shortage of material and power :**

There is acute shortage of basic raw materials required by agro units. These units are under a handicap in obtaining raw material of requisite quality of reasonable prices. Agro industries are face shortage of power due to this problem; they are unable to make full utilization of plant capacity. Majority of them cannot afford to install their own power generating sets to ensure uninterrupted operations.

#### **Lack of adequate finance :**

All business firms require sufficient funds to meet their fixed capital and working capital requirements. Agro based units are often unable to procure adequate financial resources for the purchase of machinery, equipment and raw materials and for meeting day to day requirements. Credit facilities for agri business organizations are inadequate and they have to

depend largely on internal resources. Sometimes, small agribusinesses units have to close downer curtail their operations due to shortage or lack of funds.

#### **Outdated technology :**

Majority of the agro based units uses old techniques of production and outdated machinery or equipments. They cannot afford new latest and costly machines and equipments due to lack of poor financial conditions and unknown about technological aspects. Technical and ICT tools are most beneficial factors for smooth running of any business organizations in this most competitive and challengeable era.

#### **Inadequate marketing facilities :**

An agri business unit has to face several difficulties in the marketing and distribution of agricultural products because they have not their own marketing network. Agro based industries cannot afford to spend much more on advertizing, transportation and other promotion activities for good marketing of their products.

#### **Weak organization and management :**

Agri business firms are generally managed by the owner who does not have professional qualification and required skills for efficient management of enterprises. There is lack of proper division of work and specializations. They have not accepted modern and technological methods for proper management of the business organization.

#### **Lack of trained personnel :**

In agribusiness industry, there is lack of such personnel in organization who is posses the motivation and competence to make a project viable and successful. Agro business firms

find it to difficult to recruit, retain, and motivate to the managerial and technical skilled personnel in the organization as they look for better opportunities.

#### Research and development :

Lack of research and development in agribusiness sector are a major problem in successful running and development of agro based industries in India. Productive research in production, marketing, planning and distribution of agricultural products are still very far from the agribusiness sector. There is also lack of research about consumer habits, demands and what they prefer in consumption which affects the sales of agricultural products.

#### Lack of infrastructure facilities :

Infrastructure have very crucial and major role in the development of agribusiness industry. Lack of transportation, communication, warehouses and other essentials facilities are common hurdles in the path of development of agribusiness sector in India. Agricultural produce such as fruits and vegetables are wasted about 30 per cent of total production per annum due to perishable nature and lack of proper transportation and storage facility.

#### Lack of modern machinery :

Non availability of modern and technological advanced

machinery are another serious problem which create hindrances in the production process of agribusiness sector in India. There is need of hours that modern machines and technological advanced equipments facilities should be available and must be accepted for development of any business organization in this competitive era.

#### Production problems :

The choice of products and the techniques adopted for their production, therefore occupies the most important place, in the planning of modern labour intensive agri based industries. Quantities and qualitative production also a major issues in agri industry in India. What to produce, how much to produce and how to produce are the major question in the production process of agricultural business industry in India.

#### Seasonality of products :

Most of agricultural produce are seasonal in nature. Due to this nature there is no continuous and stability in the supply of primary raw materials, which are the necessary for industrial production process. This is under utilization of the full capacity of the plant/units. For example: fruits and vegetables are seasonal crops.

#### Other problems :

Perishability nature of produce, seasonality of products

Table 1 : Major challenges in agribusiness sector		
Sr. No.	Bottlenecks	Sub-points
1.	Lack of infrastructure	Post harvest: cold storage, warehouse Collection centers Processing units Distribution centers Perishable cargo centers Private markets Refrigerated vans
2.	Lack of marketing reforms	Apmc act Allowing of fdi in retail sector/ infrastructure Amendments in ppp sector
3.	Lack of research and extension	New crop production technologies Research on high yielding seeds Dissemination of information on crop certification Handling and storage of produce Emphasis on credit to farmers
4.	Lack of credit	Increasing reach and easy availability of credit Low level of interest subvention by govt.
5.	Lack of information	Price information Crop certification Logistics cost
6.	High delivery charges affecting exports	Handling charges Low competitiveness

demand, higher transportation cost, wrong selection of products and location and faulty planning are another some major problems of agri industries in India.

#### **Ways of harnessing the potential of agribusiness in India :**

The issues facing agriculture and agri-business and solution suggested are as detailed hereunder :

#### **Modernization of existing agri-infrastructure and creation of new capacities for handling and storage of agricultural produce :**

A lot of post harvest infrastructure exists in the country both in public (FCI, state warehousing corporation and central warehousing corporation) as well as private domain. In order to enable an organized development of Agri-infrastructure in the country, a Central agri-infrastructure corporation (CAIC) needs to be created by the union government at the central level. Central agri-infrastructure corporation (CAIC) should work on the lines of NHAI in the road sector focusing on the creation of infrastructure in a PPP framework. The role of CAIC would first be to map the existing infrastructure (taking the help of NABARD) with respect to the different crops grown in the various districts of the country, with specific emphasis on those districts where crops have to be stored in order to help the farmers realize a better value due to change in prices. The CAIC in its due course will bring measures to incentivize the private players for getting into Agri-infrastructure creation as well as re-modeling on the existing infrastructure to suit the current market situation like remodeling the existing mandis as terminal market, creation of refrigerated transport etc.

#### **Risk mitigation of agriculture through insurance :**

In the current scenario, only the notified crops are covered and District Magistrate's certificate is needed for claim settlement. The coverage needs to be increased with subsidization of the insurance schemes - both by the State and Central government. Agriculture insurance, like motor insurance should be made mandatory; their settlement made faster (reduced from 1.5 years currently to 40 days) and banks should be asked to bear the insurance burden along with the interest cost. Agricultural universities need to work with AIC to evolve the best possible model, taking the risk away from the farmers. Also, insurance cover needs to be developed for horticulture and fisheries. A comprehensive insurance solution will be evolved in collaboration with Agriculture insurance corporation (AIC).

#### **High cost of credit delivery to the agriculture sector and absence of linkages :**

Cost of credit to be lowered by the use of technology (Use of IT) and New form of banking structures like Business correspondent (section 25 companies who handle cash),

outsourced partners and facilitators. Efforts should also be made to strengthen farmer clubs and giving them legal status and involving NGOs/SHGs for developing linkages.

#### **Incentivizing commercial banks to increase credit flow to agriculture sector as well as rural India :**

To increase the penetration of commercial banks in the rural areas of India, the structural changes are required such as interest subvention to be increased from 2 per cent to actual, Data on agri-credit should be maintained at the district level by the lead bank of the district and the same should be shared with all the other banks on the lines of credit information bureau (CIB), rural branches should be provided with at least one Agri graduate in every branch of banks in the country thereby banking industry will be able to equip itself with the necessary skill and also facilitate the welfare of the rural masses, especially farmers, a joint public-private sector bank consortium should be created. The consortium may focus on identifying activities for the various states and giving it a push in the state in collaboration with the state government. NABARD should be part of this consortium and a comprehensive research for finding the right agro business models that should be adopted in India should be explored.

#### **Small and marginal farmer is always distressed on the viability of his project :**

Farmer is stressed more on the viability of the project and they do not get the debt. Formation of SHGs should be encouraged for the creation of joint liability groups helping the farmer to bring in economies of scale. Alternate occupation should be suggested to the small and marginal farmers having 2 acre of land in terms of dairy, poultry and piggery. Government should restrict the land use of fertile land (those having multiple crops) for agricultural purposes only and barren land should be encouraged for industrial development.

#### **Agriculture credit guarantee scheme :**

It is proposed that a scheme similar to that of CGTMSE (being managed by SIDBI for the SME sector) should be brought in for the agriculture sector with the sole purpose of risk mitigation.

#### **Food processing sector :**

This sector needs Government encouraging for making the entry of entrepreneurs into the food processing.

#### **Export competitiveness :**

Agro products face the challenge of high freight charges at the international level. The government may consider incentivizing the exporters with drawbacks encouraging exports.

**Conclusion :**

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 fiber. Taking into consideration the ground reality and the existing gaps, a need was felt on behalf of all banks to take over the mantle of bundling investment and technology needed to facilitate the transformation of Indian agriculture into agribusiness by the conceptualization and implementation of integrated supply chain engineering on a globally competitive scale. The study finds that the agribusiness sector can contribute a large share of overall employment as well as value addition and income generation. Indian agribusiness industry has a lot of potential to improve rural incomes, nutrition and social empowerment, and hence is a very critical area for investment. A well-developed industry will enable millions of farmers to capitalize on the emerging opportunities and make a significant impact on rural income and employment generation. There is a need to critically look at how can be alleviate the constraints faced by the agribusiness sector in the country. There is also need to review the technology supply chain for a wide range of commodities produced in the country.

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