



Review Paper

Emerging Trends in Indian Agriculture: A Review

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Abstract

Green revolution has been the major success story of free India. The nation that was frequently plagued by famines and chronic food shortage before green revolution, we are today in position where we are contending with the problem of surplus. From a food grain production around 55 million tons at the time of independence, we now boast of production of more than 250 million tons of food grain (2011). Agriculture has been a source of livelihood for more than two thirds of our population. Unlike developed nation, agriculture still remains the backbone of our country. To free India from its reliance on the developed nations for its food need, agriculture was promoted in a big way. Agriculture in India is not merely a business enterprise; it is more a way of life. Indian agriculture is undergoing rapid transformation since the introduction of green revolution technology. The recent policy of liberalization and globalization has opened up new avenues for agriculture modernization. This has not only stressed on improving agricultural inputs, infrastructural facilities in rural areas but liberalizing inputs reducing subsidies, loosening ceiling laws and generating agricultural surplus for home and international markets. In view of the increasing prosperity in the rural areas demands are being raised for agricultural taxation and according industry status to agriculture.

Keywords: Globalization, green revolution, liberalization, self sufficiency, sustainability.

Introduction

Unlike in developed nations, agriculture is still the single largest contributor to the GDP in India, contributing 14.5 per cent as against developed nations where the contribution of agriculture to GDP is less than 5 per cent. Although the contribution of agriculture has been gradually declining, the trend has been more visible in last decade. Infact there has been almost twofold increase in the number of persons dependent on agriculture, resulting in less per capita holding which retard effective utilization of resources. This implies that the growth in economy has not benefited the majority of population and the economic disparity is increasing instead of decreasing. The growth rate for the agriculture last decade is just around 2 per cent at par with what it was prior to the economic liberalization. In view of these facts the emerging trends in the Indian agriculture can be summed up as below:

Commercialization of Agriculture: With the introduction of Green Revolution in 1960s and consequent generation of agricultural surplus a new trend of commercialization started emerging in the Indian agriculture which was contrary to the traditional subsistent nature. Conscious farmers to day grow crops not exclusively for their own use but for selling the same in the market and obtain as much profit as possible. They are not interested in the cultivation of those crops which are non

remunerative or whose yield is very low. The decline in the area of coarse grains may be cited as an example. Pulses which have comparatively longer growing period and lower yield also fail to get favorable treatment. So, the glut in the production of a crop one year has adverse effect on its areal coverage and output in the following year. Higher remunerative prices in non-food crops are encouraging farmers to go for horticulture, floriculture, sericulture, viticulture, apiculture and similar activities as a result of which the areal coverage of food crops is declining in some areas. The area under cash crops as a percentage of total holding will increase. Many farmers are already combining social- forestry, livestock and poultry industry to support their income. This trend is likely to accelerate further.

Organic farming is one subject that has generated considerable interest among the farmers as well as general populace. As there is increasing awareness about the hazards of use of fertilizers and pesticides in the western countries, the demand for organically produced commodities is on the rise. India here has an advantage because unlike in developed nations, the size of holding is very small. As such the farmers are already not able to provide the necessary inputs for their crops. If the market is assured and the prices are higher, they can very easily shift to organic cultivation. Some positive trends are emerging in this activity. There is a significant area under the organic cotton in the Yavatmal district of Maharashtra and the cultivation is

managed by a co-operative society. Their importance is likely to increase further as they mean higher reward for the farmers.

Diversification of Agriculture: Another emerging trend in the Indian agriculture is leading towards diversification which is opening up the prospects for dairying, horticulture, truck farming, floriculture, aquaculture, sericulture, apiculture and agro-forestry etc. This has been made possible due to the development of irrigational facilities as a result of which multi-cropping has become the order of the day. Farmers can no longer afford to go for fallowing. Instead they prefer crop-rotation on scientific lines i.e., nitrogen consuming crops (cereals) followed by nitrogen fixing crops (pulses and beans) or striking a proper combination of tree crops-cereal crops, horticulture-animal husbandry - pisciculture etc¹.

Among horticultural products grapes, mangoes, oranges, bananas and apples etc. have great export potential. Export of grapes from Maharashtra to the Gulf countries is an encouraging feature. Most of the horticultural products face the problem of glut at the time of harvest.

There is enough scope for encouraging floriculture and enhance the quantum of export especially to the Gulf Countries where there is great demand for flowers. There are areas in the country where gladioli can be grown round the year. India has 200 varieties of roses and 370 varieties of aroids.

The Government of India has lifted import duty from the import of seeds, tubers, saplings and cuttings of flowers. A floriculture development project covering 200 ha of area and an investment of Rs. 420 million has been initiated near Bangalore with technical assistance from Holland which will be the largest floriculture project in Asia.

There is great potentiality for the development of aquaculture in India which will not only generate employment opportunities, improve the economic conditions of the rural poor but will also improve the quality of the diet and fetch valuable foreign exchange².

Apiculture is a subsidiary occupation to supplement farmers' income and to generate additional jobs for rural youths. In India about 100 million kg of honey is produced annually whose 10 per cent is derived from the Khadi and Village Industries. Majority of this production comes from Himachal Pradesh, Maharashtra. In India five varieties of bees are found of which is most important. Now melanoma and trogon varieties are gaining popularity. A number of centers have been established in the country to provide technical assistance and training for bee keeping. Two such centers are functioning at Almora and Haldwani in Uttar Pradesh.

India ranks second in silk production in the world after China. It has the unique distinction of producing all the four commercial varieties (mulberry, tasar, eri and muga) of the silk, of which the

first alone accounts for about 90 per cent of the total production. The total raw silk production during 1991-92 was 11,748 tones (10,667 tones as mulberry silk). The main producing states are Karnataka, Andhra Pradesh, Tamil Nadu, West Bengal and Jammu and Kashmir³.

March towards Grey Revolution: After the success of Green, Yellow, Blue, Brown and White Revolution India is marching towards what is called as Grey Revolution i.e. use of information technology in agriculture. All the above revolutions have been with the single objective of increasing production. The extensions activity was limited to providing physical inputs viz. fertilizers, seed, pesticides, among others. The government intervened heavily in the market to ensure fair price to the farmers and to make available goods to the consumers at an affordable price, bearing heavy subsidy burden in the process. However all this is undergoing a change. The extension efforts are now directed towards providing farmers with the knowledge of the market conditions, so as to enable him to decide what to produce, how and , how much to produce, when and where to sell. The farmer can also avail information regarding the weather conditions and decide his farm operations. The use of GIS is also being promoted in a big way, which will be helpful in precision farming.

Increasing Importance of Contact

Cooperative Farming: With the entry of MNCs in the agriculture sector and their specific requirement of raw materials it is expected that the contract farming will receive a shot in the arm. Although the Pepsi experiment in Punjab has not been entirely successful, for lack of backward linkages, this sector seems to be lucrative one. This will also result in increased farm mechanization and will result in greater economies of scale. Further it will decrease the percentage of population depend on agriculture will decline. Cooperative farming is also making a comeback. The sugar cooperative in Maharashtra, milk cooperatives in Gujrat are the path breakers. Many horticultural products are now marketed by cooperative societies, which reduce the cost of marketing for the farmers by eliminating middlemen. Cooperative farming also reduces the cost of inputs, farm operations and makes possible increased farm mechanization.

Declining Public Investment in Agriculture: The last decade has been a decade of economic reforms for India. It has also seen decline in the public investment in agriculture. Agriculture sector has not been touched by reforms. There is a feeling of receiving step-motherly treatment being meted out to the agriculture sector. If at all there is a talk, it is for all the wrong reasons like support price, subsidies etc. No serious efforts have been made to give a boost to agriculture production. During the ninth plan the Agriculture sector has been allotted 4.9 percent of the total outlay. However in the first four years of the plan the actual allotment has been nowhere near it. This is when we talk of growth rate of over 5 per cent in agriculture. What the

government has done instead is hiking the MSP for food grain under political compulsions and at the same dismantled PDS. Now the situation is such that food grain is rotting in FCI stores, while people continue to die of hunger. The increase in rice production in Assam and other eastern states is not the result of the government effort but because of increased private investment in the form of tube wells. The subsidies are likely to reduce further, which will mean that the cost of cultivation will increase. The Much talked crop- insurance scheme has failed to provide the farmers with much needed economic stability. In this regard the Kisan Credit Card (KCC) scheme must be launched. It helps the farmers to have an easy access to cash to procure farm inputs when needed.

Agriculture: A Source of Employment: Agriculture has been an important source of employment for the majority of our population. As mentioned above two-third of our population is directly or indirectly dependent on agriculture for its livelihood. Much of the employment in agriculture in India is a disguised employment meaning, it employs more than what is required and gives a false picture of employment generation. This is primarily due to availability of cheap labor, lack of alternative means of employment⁴. Majority of population thus employed is unskilled labour. This picture is undergoing a change increased farm mechanization has considerably reduced the need for manual labor, but increased cropping intensity thereby generated employment. The packing and processing industry have also emerged at alternative source of employment. The horticulture and medicinal crops have secular demand for skilled labor. It is now evident that the percentage of population dependent on agriculture will reduce considerable in the coming year, which is a welcome sign. Even now the government figures do not reflect the ground reality as many have registered themselves as agriculturists or landless laborers only to get benefit of government schemes⁵.

Growing Role of NGOs in Agricultural Development: The most heartening feature in the present situation is the increasing role being played by NGOs in agriculture and rural development. There is numerous success stories of it, SEWA in Gujrat Tarun Bhart Sangh in Rajasthan, Anna Hazare in

Maharastra are some examples of what NGOs can achieve if they have sincerity of purpose. More such examples are coming to light. As the farmers are primarily poor and backward they need a helping hand in their desire to march ahead⁶. They are hesitant in approaching the government agencies as they do not trust it. NGOs are acting as bridge not only between the government and farmers but also between researchers and farmers. In the new millennium their importance is going to increase further and they will have a major role to play in agricultural and rural development.

Conclusion

After years of unidirectional march towards achieving self sufficiency in food grain production, Indian Agriculture is all set to change its track. There has been paradigm shift in the way agriculture is done in the last few years and the Indian farmer is gearing up himself to face the challenges of globalization.

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