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SCOPE AND OPPORTUNITIES FOR AGRI-BUSINESS DEVELOPMENT IN INDIA

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India has made considerable progress after the Independence as a result of which, we are among the first ten industrialised nations of the world. In every Five Year Plans we gave importance to both agriculture and industrial development and also created infrastructure for meeting the minimum needs of the people, generation of employment, alleviation of poverty, enhancing productivity, etc. In spite of these planned activities, agriculture and rural development have not kept pace with the rapid population growth in the country. However, thanks to the new liberalisation policy of the Government, agriculture/agri-business will help in increasing the production and income of the farmers, and improving the economic conditions of the other people living in the rural areas of the country. These policies and programmes will create scope and opportunities for agri-business development on a large scale in the country in the coming years.

The cultivated area of the country is about 140 million ha and the irrigated area is about 21 million ha during 1990-91. The agricultural production at that time was 50 million tonnes. Due to the increase in area under irrigation and introduction of high yielding varieties of crops, the total production is now at about 185 million tonnes. The area under irrigation has increased to 85 million ha. It is targeted to produce about 235 million tonnes by the turn of the century. The area under irrigation will be about 113 million ha after harvesting all the water resources. Though substantial development has taken place in various fields, the country has not entered the agri-business sector in a big way. Any how this has been realised in the last 3 or 4 years and many public/private firms/organisations are taking up this venture since it has very good potential in the country.

India has potential and prospects in the several areas of agri-business. The major areas are discussed below.

Fruits and vegetables

India is the second largest producer of fruits and vegetables. The total production is about 27.83 million tonnes of fruits and 54 million tonnes of vegetables. The farmers can grow any type of vegetable and fruit throughout the year since we have sunshine for 365 days in a year. This is not so in many countries in the world. Yet it accounts for less than 1 per cent of the world trade in these products. The ratio of fruits and vegetables exported fresh and those exported after processing was 8:1. Processing can multiply the value of the fruits and vegetables by 50- 500 times.

It is estimated that every year fruits and vegetables worth about Rs. 3,000 crores are wasted due to lack of post harvest processing in the country. At the same time, the per capita consumption of vegetables in India is 100-120 gm while China is using 250 gm. India can achieve the recommended minimum per capita consumption of 60 gm of fruits if the wastages are avoided.

There have been little efforts to explore the fruits (trees) that can grow in poor soil/degraded lands in the country. It is estimated that more than one third area is not producing anything which can be brought under cultivation with one or other kind of fruit trees. The country is having good water potential and the lands brought under tree crops can be irrigated by drip and sprinkler irrigation using ground water available in these areas.

Similarly, post harvest processing capacity is not of world standards and can handle only 0.5 per cent of the annual production as compared to 70 per cent in Brazil, 83 per cent in Malaysia, 70 per cent in Philippines and 30 per cent in Thailand. There have been substantial allocation to the extent of Rs. 1,000 crores for horticultural crops in the Eighth Five Year Plan. This will bring about 2.5 per cent of the present production to be processed by the end of 1997, which is also very meagre compared to other countries in the world as stated above.

If suitable action is taken to grow fruits and vegetables in additional land using the latest technologies, it is possible that our people can get the minimum daily requirement of fruit and vegetables and at the same time substantial quantity can be exported to Europe and North America. Some years back, we were importing even grapes (dried) but now it is exported to gulf countries. If necessary, the lands in the command areas can be used for vegetables and fruit trees to get more income to the farmers and by diversifying the cropping pattern.

Floriculture

Flowers are estimated to be grown in about 35,000 ha in the country of which 10,000 ha are under modern flowers like rose, carnation, orchid, etc. Major flowers grown are jasmine, marigold, rose, etc. In many countries including Israel, flowers are cultivated under green house conditions. Large areas are converted into green house in Europe to grow these crops throughout the year at an enormous cost. In India, the land and climate are suitable to grow all types of flowers throughout the year in one part or the other. It is not an exaggeration that in a distance of less than 100 km, from Coimbatore to Ooty, the farmers can grow any crop which is grown in the world. If flowers are grown, the main problem is the marketing. Otherwise, it will be wasted. We don't have cold storage facilities to store for 3 or 4 days.

World export trade in floriculture is about Rs. 42,000 crores, whereas India's share is only Rs. 130 crores. In Israel, the flowers plucked in the morning is sold in Paris, London, Stockholm, etc. in the evening. Thanks to the transport facilities and the Government policies/support. If India can learn lessons from them, it is possible to go for agri-business in floriculture in a big way in this country. This will not only increase the income of the farmers but also bring large amount of foreign exchange to the country.

Processing of agricultural commodities

Agro-processing means increasing the production by suitable conservation and minimisation of losses, and improving product quality.

The post harvest processing capacity at present is negligible for fruits, vegetables and other perishable products. Cereal processing mills out dated and need to be modernised. We have to identify the zones based on soil, rainfall, climate, etc. to grow fruits, vegetables and flowers suitable for that area and to develop appropriate processing industries so that agri-business can be developed on a large scale. The Government is helping by giving special concessions to develop the world class processing of fruits and vegetables competitively. It makes available fruits and vegetable through extended shelf life. It includes packaging, proper storage and suitable transportation. It also avoids losses due to spoilage and ensuring better price to the grower. A National Horticultural Board is set up to provide market information and behaviour of major markets to the growers. The Government has established a ministry, Department of Food Processing which gives incentives to food processing industries in the country. All these will boost the agri-business in the country.

Cereals-rice/wheat and other crops

India has attained self sufficiency in food. It is now exporting rice and wheat to some countries including China. There is a vast scope for exporting the cereals from India in the years to come to various needy counties.

The average per hectare yield of paddy in India is only 3 tonnes, whereas it is 12 tonnes in Egypt, 8-10 tonnes in Taiwan/Korea, etc. Some farmers in India have also taken 12-15 tonnes, but the average yield is very low. It is stated by the Stanford University, U.S.A. that if the fertile lands between Yamuna and Ganga alone is properly utilised, we can feed not only our people but also give food to the other countries. Therefore, it is necessary to increase the productivity in all cereal crops and reduce the area of the crop. The land thus saved can be used to grow fruits, vegetables and flowers. It is high time to have agri-business in cereals, especially in wheat and rice which will enhance the living conditions of the poor farmers.

World production of mushroom is 3.7 million tonnes whereas the production in India is only 25 tonnes. We have the necessary material

such as rice straw and technology to grow mushroom and hence there is great scope in this business in the future.

By 2000 AD the requirement of biofertiliser in India will be 8 lakh tonnes against the current production of 4000 tonnes. Entrepreneurs can take up this agri-business in a big way in the coming years. All these indicate the potential of agri-business development in India.

Small agricultural implements/machineries

In the field of farm machinery, our farmers need number of small gadgets for various farm operation for growing conventional, horticultural and plantation crops. It is very difficult to get labourers for farm operations and hence there is scope for developing small machinery and tools for agricultural operations. Further, there is tremendous scope for export of hand tools, animal drawn implements, sprayers and processing equipments for developing countries of Africa, Middle East and South East Asia. Already Indian made pump sets/motors are having good market in the developing countries. Hence, many agricultural implements manufacturing workshops can be established in all places.

Drip and sprinkler equipments

Though India's irrigated area is about one third of the world, the area under drip and sprinkler irrigation is very meagre as compared to the total drip and sprinkler area in the world. The area under drip is 70,000 ha and under sprinkler, it is about 0.6 million ha. It is estimated that in the next 10 years, the area under drip and sprinkler will be about 1 and 5 million ha, respectively. To achieve this goal, necessary equipments are to be manufactured and supplied to the farmers. There are few companies who manufacture and export the equipments to Europe and U.S.A. These products are well received and there is scope in exporting in large quantities. Therefore the agri-business in irrigation equipments not only in the domestic but also in the international market are ample. This will increase the income and employment opportunity of the farming community as well as the manufacturing companies.

Human resources development

India is an agricultural country. More than 65 per cent of the population depend on the land. The farmers mostly depend on the rain which gives water/moisture for growing crops. Since different crops in different zones are grown throughout the year, information about cultivation and package of practices, irrigation methods are to be imparted to them and perfected. Lot of research on the above area is going on in the country. There are about 28 agricultural universities with numerous regional research stations to take up research in various crops and package of practices. India has the 2nd largest number of scientists in the world and hence it is possible to help the various countries in imparting training to the field staff and farmers on various subjects. This will also bring good business in the future.

India's share in the world trade was only about 0.5 per cent during 1993-94 which raised to 0.7 per cent in the last 2 years. If the trend continues it is expected that the trade may go upto 1.5 per cent by next year. This is because of raising the exports and the opening up of domestic market rapidly. India will make its presence felt on the world trade scene. Agri-business will have its share in both domestic and international market in view of the conducive atmosphere and high potential in all crops, including cereals, fruits, vegetables, flowers and plantation crops in the coming years.