Challenges before Indian Agriculture: A Study

Dr. Nandkumar Laxman Kadam
Associate Professor and HOD Commerce,
Jaysingpur College, Jaysingpur,
Dist. Kolhapur 416101

Ranjit Dattatray Lidhade
Research Scholar,
Shivaji University, Kolhapur.

ABSTRACT

Agriculture, forestry and fisheries are dominant factors in national economy of the country.Agriculture is considered as backbone of Indian economy, since it contributes largest share of national income and gives source of livelihood to near about 70% of rural people.In addition, many industries are based on agricultural products which in turn increase income and generate employment. Due to almost all possible variations in soil, climate, natural conditions and richness in physical factor, Indian agriculture produces most of the major agricultural products of the world, even though lot of potential in this field, it has been neglected and facing lots of challenges and problems. A lot and repeatedly written and spoken on challenges & potential of Indian agriculture, it has already proved thatthere is need to develop agricultural process, post product process and educate and enable farmers to face the challenges. Government of India should also go beyond the traditional support to develop Indian agriculture. Tendency of Indian government and farmers must be changed as well as some remedial steps must be followed. This paper attempts to enquire about the challenges before the Indian agriculture and suggest some remedies possible.

Brief profile of Indian Agriculture

India is the largest agriculture powerhouse of the world. It is the world's largest producer of milk, pulses and spices and second largest producer of rice, wheat, cotton, sugarcane, vegetables, fruits and tea. Agriculture is the main profession of people in India and basic source of their livelihood.

Agriculture is the sector on which all other industries and sectors have been depended for raw material & further processing. Agriculture serves basic need of food. Without industrial products human being can survive but, not without agricultural products. In India Agriculture is the way of life.Agriculture is the process of cultivating and farming. It includes animal husbandry, dairy farming, poultry and fishery to sustain human life. Farming methods and practices in India have long history and evolved out of experience of ages.

In agriculture there are two most common farming practices.

a) Subsistence Farmingb) Commercial Farming

Subsistence Farming-: Subsistence Farming means farming is done for own consumption. Most of the farmers of India practices subsistence farming. In this farming production is mostly used by farmers and their family. So there is no production is left for selling purpose. In this farming most farms are small and fragmented. There is absence of modern technology like use of tractors, farming inputs, irrigation system, fertilizers etc

Commercial Farming-: Commercial Farming means farming is done for commercial purpose. In this farming most of the produce is sold in the market for earning money. Most Farmers uses modern technology,

irrigation system, fertilizers, pesticides, high yielding varieties of seeds etc.On the basis of weather condition in India there has two crop patterns namely *kharip*and *Rabbi*.Along with these crops some farmers are also taking some cash crops, vegetables and fruit crops like sugarcane, tobacco, soybean, tomato, grapes, banana, mango etc.

Type of crop	Major crops
Kharip Crops	Rice, Maize, Cotton, Jute, Groundnut, Pulses, Oilseeds, Tobacco etc.
Rabbi Crops	Wheat, Jowar, bajari, channa, etc.
Fruit Crops	Grapes, Banana, Papaya, Mango, Coconut, Orange etc.
Vegetable & Horticulture Crops	Tomato, potato, onion, Capsicum, Watermelon, Strawberry, Rose, Jarbera, Marigold etc.
Cash Crops	Sugarcane, Tobacco, Rubber, Tea, Coffee etc.

The total geographical area of India is near about 328 million hectors and gross cropped area is 190.08 million hectors. The fact is that most of the farmers in India having small land as little as two acres & less, farming on such land is uneconomical.

Rapid growth of Industrialization failed to accelerate rate of growth of employment that reduce overburden of on agriculture. In compare to foreign countries like USA, UK, China the proportion of people dependent on agriculture is high in India.So from employment generation view and income generation view agriculture is the most important sector in India. So development and growth of agriculture is necessary for sustainable development of nation.

Vidyanathan (2006) has mentioned that even though there is full of natural resources like water, healthy and variety of soil there has problem of fluids and droughts. This is only due to lack of proper irrigation facility and wastage of water.S.MahendraDev(2012) stated that agricultural growth depends upon small holdings agriculture. Indian Agriculture is the home of small and marginal farmers. Therefore the future of sustainable agricultural growth and food security in India depends on performance of small and marginal farmers

Objective of the Study

1) To study Indian Agricultural system and its role in Indian economy.
2) To study Challenges of Indian Agricultural System.

Challenges before Indian Agriculture

a) Agriculture is an unplanned activity; no systematic and organizational planning is involved in cultivation, harvesting and irrigation.In India Farming activities are done without proper planning. Traditional practices are used for cultivation and harvesting. Proper water management is not done when water resources are available plenty of water is used for farms. Fertilizers and pesticides are not used according to soil requirement.

b) Scarcity of water is major problem faced by Indian farmers.Scarcity of water is manmade problem of India.30% of rural population lack access to drinking water. Only 48% of rainfall ends up in India's rivers, and out of that only 18% can be used.

c) Climate condition has great effect on agriculture at every stage. There is lack of proper climate prediction system.In India there is no proper mechanism for climate prediction so every year due to climate problem lot of farmers suffering losses at the time of harvesting crops.

d) Most of the markets are dominated by middlemen's and they make economic exploitation of farmers. In a market price of crop or grain is fixed by middleman and they are also exploiting farmers by taking crops or grains at lower price and by charging commission, octroi, rent etc.

e) Many Indian farmers having small farms and which are economically unfeasible.Due to geographical structure and family system agricultural lands are fragmented in various parts. So in such small farms farming is very costly activity. Modern Machinery, irrigation facilities cannot be used in such type of farms effectively and also not affordable to farmers.

f) Farmers are interested in production of crop but not interested in marketing of that crop. Farmers can take the production of crop but they cannot sell the crop individually in market. They cannot reach to the customers directly; they have also no time to sell the crops in market to individual customers. There is also problem of warehouse to store the grains or crops.

g) Minimum Price fixed by government for various crops is not economically affordable to farmers.If we compared the Minimum Support price (MSP) of each cropper year provided by government we found that there is only 3 to 5% increase per year but cost of production increases 10 to 20% every year.

h) Due to global warming and changing climate conditions agriculture is facing various risks like famines, droughts and floods, erratic rains.There has increase in earth's average surface temperature which leads to disturbance of climate condition and results in sudden heat, erratic rains etc. Global warming is faced because of deforestation, increase in CO_2,growing population and urbanization.

i) There is lack of agricultural research and lack of government support for farm mechanization. Many Agricultural universities and colleges works on research but it cannot reach to the farmers and farmer oriented research is not made effectively.

j) Due to growing Population there is less availability of land for farming and there is extreme burden on land to produce greater quantity, high quality and affordable food for public.In 1995 the population of India was near about 961 million. According to latest census figures total population of India is estimated at 1299 million. The population of India represents 17.99% of world's total population which states that one person in every 6 people is resident of India. So it represents that area of agricultural land becomes less year by year.

k) Even though 70% of people are depended on agriculture farmers are facing problem of labour. Peoples are not interested to work in agricultural field.Today Agriculture is considered as unprofitable sector. Farmers are not getting manpower to work basic agricultural operations like cultivating, tilling, harvesting etc. Due to unavailability of manpower farmers can't do their farming operations in time.

Conclusions

When we discussed the nature of Indian agriculture and challenges we found that Indian agriculture has lot of potential but facing number of problems.

1. No proper planning is made by farmers at every stage of farming which results into unprofitable agriculture.
2. Where capacity of taking three crops in a year with favourable climate, farming in India is unprofitable.
3. Agriculture has major problem of water and facing drought situations even though availability of natural water resources and sufficient rainfall.
4. Minimum price fixed by government is not sufficient and according to current cost of production.
5. Government has not given importance to agricultural sector and not supporting to farmers in a proper way.

Suggestions

a) There is urgent need of proper water management to resolve the problem of scarcity of water. Most of the agricultural lands are not getting water due to not the lack of water but lack of water management. Only irrigation facilities are not sufficient to provide water to entire cultivable land. Water management plans must be implemented along with group efforts like rain water harvesting plan, 'water cup' movementby Satyamev Jayate team etc.

b) Connecting the rivers throughout the country will solve the problem of droughts floods etc.

c) There is need of climate prediction system or weather risk management system to alert farmers in case of extreme weather or extreme change in climate.

d) Farmers must try to marketing of their crop and must involve in further processing of their crop if necessary to get higher profit.

e) Government should provide minimum support price for each crop according to cost of production and geographical situations.

f) Government should support and promote to agricultural research. New inventions, advanced technology, new patterns and trends must be implemented to face the future challenges. Small farmers should be motivated to acquire new source of income by acquiring new skills.

g) Farmers should try to acquire farm mechanization with group farming methods.

h) Farmers must be aware about various schemes provided by government, like crop insurance, subsidies, credit facilities, irrigation schemes etc.

i) Government should change their view about farmers and support them as they are the backbone of nation.

j) Peoples should also change their tendency and must see the agriculture as profession and business.

References

Vidyanathan (2006) 'India's Water Resources Contemporary issues on Irrigation' Oxford University press New Delhi.

http//www.igdr.ac.in/pdf/publication/WP-2012-14.pdf

Dwivedy,N (2011) 'Problems faced by Agricultural sector in Developing Countries with Special reference to India' International journal of rural studies 18(2)

www.indiastat.com/agricultur/2/agriculturallanduse.

Dr.G.L.Jain (2010) 'Indian Agricultural Development' Shree Niwas Publications (Jaipur) ISBN 978-81-88730-77-3

http://farmer.gov.in/marketprice.html

www.slideshare.net/rebamaslam95/roles-&-problems-of-agriculture

www.tradingeconomics.com