

An Opportunity for Radical Change in Indian Agriculture

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Abstract:

There has been a need for radical change in Indian agriculture in the 21th century, and chemical farming is going outdated gradually. Farmers' financial condition will not be improved and their labour cost will not be a fair until the huge savings take place in production costs. Demanding prices based on the production costs is a practice of keeping farmers in poverty forever. The prices are not based on production cost anywhere. Prices are solely decided on the basis of demand and supply. For the sake of subsistence in the global competition, the product quality will have to be improved by reducing the cost of production and prices based on it. Today, the needs of poison-free food are felt by the citizens of rich countries. Indian farmers can produce the goods as they expect, but for that, farmers need to change their farming practices, which is an opportunity in the 21st century.

Keywords: agriculture, chemical farming, production costs, poverty, opportunity

1. Introduction:

It was assumed that after independence, Indian farmers' poverty will be no more but it was in vain. Many government schemes did not help farmers for improving their economical status but it is observed that those schemes lead them to burry in the poverty. They were forced to use technology for production by importing technology from outside the country. Emphasis was given for using of non-essential chemicals. In the name of the Green Revolution, India's agriculture and livelihoods was destroyed in order to run new companies which resulted the peasantry began to use various chemical fertilizers and pesticides to increase agricultural production. Due to this poisonous material, the land has become infertile and today the farmers have been unable to get any produce from these infertile land that caused farmers are caught into debt. Many farmers have no choice but to commit suicide. This is the current status of farmers.

2. Significance and Choice of the Proposed Study:

The agricultural practices have undergone radical changes in the course of time particularly, from the invention of agriculture in the world to the present. Some of the changes are beneficial whereas some are worth the loss. In spite of this, agriculture is the strongest base of the Indian economy since primitive age. Even today, a large portion of the population of the Indian economy is dependent on agriculture for a livelihood. The agricultural sector has provided the employment to a growing population. It has been seen that Economic, social and political development has come up from agriculture itself. In the post-independence period, there were several ways to increase agricultural production to fulfill the needs of the growing population. At the same time, the transition in agriculture has been seen noteworthy that is from the survival agriculture to the commercial farming.

While selecting the subject of the study it has been taken into account that, how has it changed since the origin of agriculture, how is it being done nowadays and needs to be done for a favorable situation. The land is no longer productive where chemical fertilizers, pesticides and water are being used excessively or used excessively. So, production is decreasing whereas production costs are increasing. Many farmers are thinking of leaving farming and staying away from its practice. But the question is, where will they go? In the sphere of industry there is depression. The industry is thinking to reduce the workforce. Recruitment in government jobs has almost stopped. It is only possibility to make avail employment of millions of youth in the future in India if the radical changes are made in Indian agriculture. So, the subject has been selected for study.

3. Scope of the Study:

While studying 'An Opportunity for Radical Change in Indian Agriculture' the present research paper discusses the historical brief summary from the origin of agriculture to the present and the need for organic and contractual agriculture.

4. Objectives of the Proposed Study:

1. To find out the sources / origin of farming
2. To study the nature of ancient Indian agriculture
3. To understand Indian agriculture in the British era
4. To summarize the changes during the Green Revolution
5. To study the need for organic and contractual methods of agriculture

6. To Discuss the possibilities of 21st century Indian agriculture

5. Assumptions / Hypothesis:

1. Farming was being done earlier in some other countries than India
2. Indian agriculture has a history
3. Indian agriculture was in a dull state during British rule
4. Indian agriculture has been changed during the Green Revolution,
5. nowadays Organic and contract farming is practically profitable
6. 21st century Indian agriculture should prove certain

6. Research Methodology:

The secondary sources have been referred for the proposed study. This includes various reference books, periodicals, newspapers, magazines, dissertations, internet websites, etc. The major findings of the study have been drawn through the help of analysis from the collected and analyzed information from the secondary sources.

7. Analysis of the Study Component:

In order to discuss the opportunity for radical change in Indian Agriculture, some study elements have been decided and its explanation have been given as follows.

1. Origin of Agriculture Practice:

The agriculture Practice in the world was first started some 10,000 years ago in the fertile region of the Middle- East, where its geometrically structure looks like crescent moon, is known presently by names of countries; Syria, Lebanon, Kuwait, Iraq, Israel, Jordan and Palestine. Before starting actual farming, humans were observing the vegetation in their vicinity and observing the edible food and especially the seeds. By harvesting of suitable seeds that can be sown in the following year's season and after harvesting from the sowing of one seed, many more seeds can be harvested, and the techniques of agricultural practice come into existence.

In the early days, the cultivation, sowing and other activities of farming were done by human hands but later human took the advantages from domestic animals. Early in the period, varieties of wheat and pulses were discovered from some varieties of grass. It started to be used as food. After the detection of livestock in this area, milk was added to the food. The agriculture practice was spread gradually from the Middle East to other countries of Asia-Egypt and Europe. After the discovery of agriculture in the Middle East, the agricultural method is believed to have

arrived in India after 3500 years. Therefore, it can be assumed that Indian agriculture has a 6500-year history. This gives information of origin and spread of agriculture practice in India.

2. Agriculture in Ancient India:

The agriculture in ancient India had consistency with local area by using cuticle seeds, maintaining soil texture and biodiversity in agriculture were the three mainstay. It is considered that this is the strong base on which Indian agriculture seems to have lasted about 6500 years. People knew then that water, soil and forests need to be conserved. He had also known his relationship with forest for agriculture production. In South India, ponds were retained at village level and irrigation water was provided for agriculture. People would do the most of the agricultural and agricultural activities collectively. Even, they had a system for overcoming drought. They had a grain storage system, was called *pev*, which would help in times of difficulty. Therefore, even during the two thousand years before the English rule, many droughts occurred, but no loss of human has been recorded in the history.

3. Indian Agriculture in the British Era:

Agriculture was self-sufficient until the time of British rule over India. Farmers have the freedom to decide what to grow and how to grow crops from the farm and its utility. But, in British times peasant decisions were restricted. First of all, they detracted the rights of the people of the forest. The farming tax was raised. The farmers were obligated to give farming tax whether crop comes or not. The British emphasized cash crops like cotton, sugarcane, indigo and groundnut rather than crops that fulfill the livelihood of farmers. Such a British policy resulted economic scarcity of agricultural producers and food shortages. This erroneous policy lead a new class of landlords and money lenders who begun to loot farmers. Due to the forced recovery of the farming tax, the farmers became indebted and moneylenders started to take over the land due to non-repayment of loans. During this period, the poverty was hiked in the rural areas of the country that resulted the loss of agriculture occupation until the time of independence of the country. There were eleven famines in the British era. Millions of people died due to wrong government policies. In short, in British era there has been a huge suffering of agricultural producers and other people.

4. Indian agriculture during the Green Revolution:

After the independence of India, we faced different challenges of agriculture. There was not only food problem for the growing population but also we had to face drought. Despite all

this, attempts were made to increase food production by giving priority to agricultural development in the early days, but the expectations were not fulfilled. Therefore, it had to be imported from a country like the US. As a solution to this, in the sixties of 20th century, the central government adopted the policy of green revolution technology to make the country self-sufficient in food production.

The Green Revolution technology included a trilogy of high yielding advanced seeds, chemical fertilizers and pesticides that led to the birth of hybrid seeds and increased agriculture production and it appeared that farmers were obligated to use it. The Green Revolution began with the first wheat and then rice. Later, the technology was adopted in the case of other crops. Due to the widespread adoption of this technology, the food production in India increased drastically in later times. Once, our country was a food importer after independence, but later due to the Green Revolution technology, we started exporting agriculture products for later times. This is called as a success of the Green Revolution.

The side effects of this technology have also been widely seen in the past. Those are economic, social and environmental. Due to the widespread use of technology created in the early days of the Green Revolution, agricultural production increased greatly. But, according to some studies, per hectare agriculture production was going down because of the lack of other nutrients from the land which are required for the crop and improper supply of organic fertilizers is being wasted. In order to maintain production growth levels, the use of chemical fertilizers as well as pesticides have been increased a lot. During the period, their prices increased noticeably due to the increase in capital expenditure of the farm and the production was decreased but on the other hand market prices of agricultural produce did not hike. All these factors resulted in a decline in agricultural profits and increased farmers' indebtedness. It has been observed that Indian farmers commit suicide due to non-payment of timely loans. So, this grim picture depicts the plight of Indian agriculture in the present.

It has been come across that due to the green revolution, the production of wheat and rice crops have been increased, but the production of pulses, cereals and oilseeds has not been increased as desired. Therefore, it's prices were high and common people do not buy such food products. This is one of the reasons of malnutrition in common masses of the country. Apart from this, the use of this technology is reducing the groundwater level due to its excessive use. The adverse effects on the health of all, such as saline soils, diminished levels of organic carbon

in the soil and the resulting infertility of land, poisoning of food chain due to overuse of technology, have created a lot of health implications today. Therefore, such issues can be considered as an opportunity, rather than weaknesses, for a radical change in Indian agriculture.

5. The Need of Organic and Contract Farming:

After the Green Revolution, it was realized that there is strong need for an organic farming. It has become necessary today to understand that there is a natural provision for getting supplements for crops whenever it needs. The chemicals have about 200 years history but on the other hand it cannot be forgotten today that vegetation was created thousands of years before the human birth. In the organic farming, the system of nature is followed where farming is done only with the help of local resources. So, it results in reduction in production costs and increases production. Therefore, he does not need any kind of crop loan. The farmer in this type of agriculture is completely independent but only hard work is required along with.

If we close the nutrient systems that are currently in use and arrange to replenish what is taken from the soil, then the soil fertility will continue to increase. Therefore, it will be possible to avoid the use of chemical fertilizers completely. Giving back to the soil will make our land more productive day by day and it will be clear that there is no need for external supplements for agriculture in the form of chemical fertilizers.

Today, Indian farmers are spending millions of rupees on chemical fertilizers, pesticides and hybrid seeds. Due to this, the farmers are stuck into debt as the cost of production has been increased and registers his protest for the economic loss. Today, agricultural production, with the help of modern technology, has declining demand in the market and in other countries. Thus, the prevailing picture is that Indian agriculture does not able to pay at least production cost at the same rate and cost.

Today, modern farming is seen as having adverse effects on the health of the human being. That's why, man is rapidly going away from such type of production which is lead by chemical interference and accepting organic agriculture product. It is an assumption that health of human being will be improved if they accept organic product because it is found not poisonous. The pollution will be in under control, the demand for the product in the market will increase and so the production will increase. Likewise, their profit ratio also will be increased. As soon as the Indian farmers understand this, they will be able to produce organic food, which

will be health conscious. Therefore, in the 21st century, organic farming has become a need for us and that will create an opportunity for Indian farmers.

Contract farming is an agreement between agricultural producer and buyer as per the production and supply scheme. Contract farming can facilitate the farmers financially.

It remains possible to buy qualitative goods for the production, and the foremost thing is the less risk through fluctuations in market demand and prices. The purchasers of agricultural products benefit from the guarantee of a reliable supply of quality goods. So far, contract farming has shown that it is a profitable in many respects. However, while doing so, there is also a need for the support or participation of farmers' associations, NGOs and the government. Therefore, contract farming would be of great interest to farmers in the 21st century.

6.The Norms of Indian agricultural in 21st Century:

It is expected that the Indian agriculture in 21st century should fulfill some norms in order to prove some advanced criteria by leading some radical transformation in the current agricultural system. It should be based on new science, should enhance the productivity of agriculture, protect the environment, be based on local resources, be cohesive in nature, provide sustainable production, be self-reliant and productive to agricultural producers. Even, it should be debt free and should generate employment in the village, must produce poisoning free food and should draw attention of the knowledgeable masses and be able to supply adequate food to the growing population.

Conclusion:

Through the present study, some of the important findings have been given as follows:

- 1) It has been seen that the agriculture practice in the world was started first around 10,000 years ago in the fertile region of the Middle- East and assumed that Indian agriculture has a 6500-year history.
- 2) The ancient Indian agricultural system shows how humans can better deal with the crisis of water, soil and forests in a better way.
- 3) During the British reign, farmers were imposed various restrictions and faced economical, social and political oppression.
- 4) During the Green Revolution, there was a huge increase in a few agricultural productions but it did not increase in all agricultural production. As far as its shabby side is

concerned, some experts believe that agricultural products have a gradual adverse effect on human health. Therefore, there is a need for a change in the agricultural system.

- 5) It is observed that, Organic and Contract farming will be beneficial because it reduces production costs and increases in productivity, yield and soil fertility of the farmers.
- 6) If agriculture practice is done on the basis of these criteria, it will make Indian farmers more self-reliant.

Summing up:

It is the responsibility of the Indian farmers to restore heaven-like pride of the motherland India. Indian farmers can do this easily. A kind of complete revolution is to be expected for this. By recognizing a need of a new direction for Indian agriculture, our farmers have to adopt organic and contractual farming practices as soon as possible and bring about change into the development of country, agriculture land and farmers too.

Bibliography:

1. Lanjewar Narendra, ShetkaryachyaAtmhatya: ChintananiUpay,SumeruPrakashanDombivali (W), 2007.
2. Dr. Gaikwad Mukund, ShetichaVikasKal-Aaj-Udya, Continental Prakashan, Pune. 2003
3. Bhosale P.B. AapanShetkarianiAAplaSamaj, KrushiGranthBhandar, Pune, 2010
4. Dr. Ingale M.R. VartmanParisthitimadhe Dr. BabasahebanceVicharachiAvshyakata, Prashant Publications, Jalgaon, 2012.
5. Mungekar Bhalchandra, Bhartatil Arthik Sudharanaani Dalit: Ek Ambedakari Drushtikon, Sugava Prakashan, Pune, 2003
6. Hake Ganesh-Sampadak, Agroteque, Masik, May-2011
4. Dr. Vani Nita, KrushiArthshastr, Prashant Publications, Jalgaon, 2012.
8. Dr. Gaikwad Mukund, Kararshetiani Company Sheti ,GodavaPrakashan, Pune. 2006
9. PatilN.D.AapliJaminAapliSheti, Continental Prakashan Pune, 1993.
10. Yojana- Magazin, 11th Edition, June- 2014
11. Yojana- Magazin ,06th Edition, April- 2016
12. Arthsanvad, Volume 38, 04th Edition, January- March 2015