A STUDY ON THE NEED AND PROBLEMS OF ORGANIC FARMING IN INDIA

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ABSTRACT

The inability of Indian agriculture to meet the demand for food in the country during the two and half decades immediately after independence had been a matter of concern at those times. The system of our agriculture based on the traditional knowledge and practices handed down from generation to generation could not produce enough to feed the increasing population. The green revolution fulfilled our aspirations by changing India from a food importing to a food exporting nation. The practice of organic farming, said to the best known alternative to the conventional method, also originated in the west, which suffered from the ill effects of chemical agriculture. However, organic farming is based on the similar principles underlying our traditional agriculture. Organic agriculture aims at the human welfare without any harm to the environment which is the foundation of human life itself.

Key Words: Indian Agriculture, Organic Farming, Farmers, Agricultural Credit, Chemical Farming

"The farmer works the soil, the agriculturist works the farmer." - Eugene F. Ware

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INTRODUCTION

It is quite natural that a change in the system of agriculture in a country of more than a billion people should be a well thought out process, which requires utmost care and caution. There may be several impediments on the way. An understanding of these problems and prospects will go a long way in decision making.

Sustainable development has caught the imagination and action all over the world for more than a decade. Sustainable agriculture is necessary to attain the goal of sustainable development. According to the Food and Agriculture Organization (FAO), sustainable agriculture "is the successful management of resources for agriculture to satisfy changing human needs while maintaining or enhancing the quality of environment and conserving natural resources". All definitions of sustainable agriculture lay great emphasis on maintaining an agriculture growth rate, which can meet the demand for food of all living things without draining the basic resources.

Organic farming is one of the several approaches found to meet the objectives of sustainable agriculture. Many techniques used in organic farming like inter-cropping, mulching and integration of crops and livestock are not alien to various agriculture systems including the traditional agriculture practiced in old countries like India. However, organic farming is based on various laws and certification programmes, which prohibit the use of almost all synthetic inputs, and health of the soil is recognised as the central theme of the method.

Adverse effects of modern agricultural practices not only on the farm but also on the health of all living things and thus on the environment have been well documented all over the world. Application of technology, particularly in terms of the use of chemical fertilizers and pesticides all around us has persuaded people to think aloud. Their negative effects on the environment are manifested through soil erosion, water shortages, salination, soil contamination, genetic erosion, etc.

LITERATURE REVIEW

Howard's (1940) Agricultural Testament draws attention to the destruction of soil and deals with the consequences of it. It suggests methods to restore and maintain the soil fertility. The study contains a detailed deposition of the famous Indore method of maintaining soil health. The reasons and sources of the erosion of soil fertility and its effect on living things are discussed. The criticism of the agriculture research and examples of how it had to be carried out to protect soil and its productivity are discussed in detail. Bemwad Geier (1999) is of the opinion that there is no other farming method so clearly regulated by standards and rules as organic agriculture. The organic movement has decades of experience through practicing ecologically sound agriculture and also in establishing inspection and certification schemes to give the consumers the guarantee and confidence in actuality. Organic farming reduces external inputs and it is based on a holistic approach to farming. He describes the worldwide success stories of organic farming based on the performance of important countries in the west. The magnitude of world trade in organic farming products is also mentioned. To the question of whether the organic farming can feed the world, he says that neither chemical nor organic farming systems can do it; but the farmers can.

Save and Sanghavi (1991) are of the view that after their intensive experiments with organic farming and narrating the results to the informed, it is time that the governments and farmers are brought around. They firmly state that the economic profitability of organic farming can be proved. Four crops of banana grown by the natural way on the same farm by them are compared with those produced by the conventional way. While the natural farm yielded 18 kg of banana in the first round, the conventional one gave 25 kg. 30 kg was the yield at the second round on both the farms. However, on the third round, the natural farm gave 25 kg, the conventional one yielded only 20 kg. The results on the fourth round were stunning - the plants on the conventional farm died out; but the natural ones gave 15 kg on an average. Thus, the aggregate output was 88 kg on the natural farm and 75 kg on the conventional one.

While, the natural banana commanded a price of Rs 2.50 per kg, the conventional one could fetch only Rs 1.75 per kg. This has been the major reason for the substantial net profit (Rs 154)

earned from the cultivation of natural banana (conventional banana could get only a net profit of Rs 26.25). The expenses incurred were Rs 66 and Rs 105 for the natural and conventional bananas respectively. However, a stringent cost and return analysis representing a larger sample size will be necessary to draw meaningful conclusions. It should be born in mind that the output obtained from the natural banana farm was also because of the accessibility to the inputs and expertise, which the authors happened to possess. Farmers placed in less advantageous positions may not derive such results. The price advantage to the natural organic farming products will also taper off when the supply increases. The environmental costs and returns have to be internalized and it is quite possible that the organic farming will prove to be a far better alternative to the conventional one. However, these aspects will have to be built into a scientific and tight economic reasoning, among others.

Kaushik (1997) analyses the issues and policy implications in the adoption of sustainable agriculture. The concept of trades off has a forceful role to play in organic farming both at the individual and national decision making levels. Public vis-a-vis private benefits, current vis-a-vis future incomes, current consumption and future growths, etc. are very pertinent issues to be determined. The author also lists a host of other issues. While this study makes a contribution at the conceptual level, it has not attempted to answer the practical questions in the minds of the farmers and other sections of the people.Sharma (2001) makes a case for organic farming as the most widely recognized alternative farming system to the conventional one. The disadvantages of the latter are described in detail. Other alternatives in the form of biological farming, natural farming and permaculture are also described. The focus is on the organic farming, which is considered as the best and thus is discussed extensively. The work is not addressing the relevant issues in the adoption of organic farming on ground.

Veeresh (1999) opines that both high technology and sustainable environment cannot go together. Organic farming is conceived as one of the alternatives to conventional agriculture in order to sustain production without seriously harming the environment and ecology. However, he says that in different countries organic farming is perceived differently. While in the advanced countries, its focus is on prevention of chemical contamination, we, in countries like India are concerned of the low soil productivity. Even the capacity to absorb fertilizers depends on the organic content of the soil. The principles of organic farming are more scientific than those of

the conventional. India's productivity of many crops is the lowest in the world in spite of the increase in the conventional input use. The decline in soil nutrients, particularly in areas where the chemical inputs are increasingly being used in the absence of adequate organic matter is cited as a reason for low productivity. Doubts about the availability of massive sources of organic inputs also exist. He advocates an advance to organic farming at a reasonable pace and recommends conversion of only 70 per cent of the total cultivable area where unirrigated farming is in vogue. This 70 per cent supplies. only 40 per cent of our food production. While this analysis has several merits, it is more addressed to the policy makers and less to the farmers.

Sankaram Ayala (2001) is of the view that almost all benefits of high yielding varieties based farming accrue mostly in the short term and in the long term they cause adverse effects. There is an urgent need for a corrective action. The author rules out organic farming based on the absolute exclusion of fertilizers and chemicals, not only for the present, but also in the foreseeable future. There ought to be an appropriate blend of conventional farming system and its alternatives. The average yields under organic and conventional practices are almost the same and the declining yield rate over time is slightly lower in organic farming. The author also quotes a US aggregate economic model, which shows substantial decreased 5aelds on the widespread adoption of organic farming. Decreased aggregate outputs, increased farm income and increased consumer prices are other results the model gives. While the details about this US analysis are not known, its relevance to India where we already have the lowest yields of a number of crops under the conventional system appears to be open.

Singh and others (2001), recording the experiments on rice-chick pea cropping sequence using organic manure, found the yields substantially higher compared to the control group. Similar results were obtained for rice, ginger, sunflower, soyabean and sesame. Ahn Jongsung opines that organic agriculture is economically viable (Anon, 1998). The author gives emphasis on marketing the organic products on the basis of reputation and credibility. In Japan, the farmers sell the produces directly to the consumers. The Kenyan farmers have seen that in organic farming, costs go down and profits increase. A farmer from UP who allotted a portion of his land exclusively for organic farming found that the yields of sugarcane, rice, wheat and vegetables were lower than those under chemical farming. An Englishman, settled in Tamil Nadu, who runs

an organic farm in 70 acres planted with coffee, citrus, other fruits, rice, pepper and vegetables says that he does not earn a profit and does not have confidence in organic farming.

Somani and others (1992) have published a collection of 42 papers presented at a National Seminar on Natural Farming. Korah Mathen recounts several problems in evolving representative and rigorous yardsticks for comparison between modern and alternative farming. Yields cannot be compared, because of monoculture nature of chemical farming with those of multi crops raised under organic/natural farming. Economic analysis is also problematic because one has to quantify the intangibles. He advocated the resource use efficiency analysis. But the question of profitability of different systems of farming seems difficult to be examined in the absence of an economic analysis although the author does not rely upon it. Save (1992) found that after three years of switching over to natural cultivation, the soil was still recovering from the after effects of chemical farming. When the soil regained its health, production increased and the use of inputs decreased. The farm, which was yielding 200 to 250 coconuts per tree, gave 350 to 400 per annum.Rahudkar and Phate (1992) narrate the experiences of organic farming in Maharashtra. Individual farmers growing sugarcane and grapes, after using vermi compost, saw the soil fertility increased, irrigation decreased by 45 per cent and sugarcane quality improved. The authors say that net profits from both the sugarcane and grape crops are high in organic farms.The foregoing overview of the literature makes it clear that opinions about organic farming are divided both among the farmers and experts. A recent study shows the inappropriateness of the cost and return accounting methods adopted to find out the economics of the organic farming (Prakash, 2003). An economic evaluation of the bad effects of
inorganic agriculture and their internalization through environmental taxes is proposed for a market based approach to promote organic farming in India.

Disputes about the profitability and yield increases in organic farming are acute, but there Is a consensus on its eco-friendly nature and inherent ability to protect human health. There are strong views for and against organic farming (the latter, mainly on the grounds of practicability of feeding a billion people, financial and economic viability, availability of organic inputs and the know-how). Those who are totally against it are prepared to ignore the ill effects of the conventional farming system. There are many who while approving organic agriculture, want a

mixture of both the systems or advocate a careful approach by proceeding slowly towards the conversion of the conventional farms into organic. The questions about the yield and financial viability are crucial from the point of view of farmers; but they remain unanswered to a large extent. The study of a geographical area in the country endowed with a large number of resources for organic farming, but has not made any significant stride towards it, is also not found in the literature overview.

PROBLEMS AND CONSTRAINTS

The most important constraint felt in the progress of organic farming is the inability of the government policy making level to take a firm decision to promote organic agriculture. Unless such a clear and unambiguous direction is available in terms of both financial and technical supports, from the Centre to the Panchayath levels, mere regulation making will amount to nothing. The following are found to be the major problem areas for the growth of organic farming in the country:

- Lack of Awareness
- Output Marketing Problems
- Shortage of Bio-mass
- Inadequate Supporting Infrastructure
- High Input Costs
- Marketing Problems of Organic Inputs
- Absence of an Appropriate Agriculture Policy
- Lack of Financial Support
- Low Yields
- Inability to Meet the Export Demand
- Vested Interests
- Lack of Quality Standards for Bio manures
- Improper Accounting Method
- Political and Social Factors

CONCLUSION

The ill effects of the conventional farming system are felt in India in terms of the unsustainablity of agricultural production, environmental degradation, health and sanitation problems, etc. Organic agriculture is gaining momentum as an alternative method to the modern system. Many countries have been able to convert 2-10 per cent of their cultivated areas into organic farming. The demand for organic products is growing fast (at the rate of 20 per cent per annum in the major developed countries).It appears that India is lagging far behind in the adoption of organic farming. So far, the only achievement seems to be the laying down of the National Standards for Organic Production (NSOP) and the approval of 4 accreditation agencies (all government bodies) whose expertise is limited to a few crops. The following are some of the issues, which require attention at the government policy making levels if we want to lay the spadework for the spread of organic agriculture in the country.

Substantial financial support by governments (Central, state and lower level bodies) is absolutely necessary to promote organic farming. A major factor behind the progress made by the major organic countries has been the very liberal subsidies provided by the governments. In India, organic farmers do not receive the benefits of government subsidies as they are targeted at the conventional cultivation. Given the low risk bearing capacity, the need to make the organic farming an attractive proposition at least during the initial period, the likely prospect of loss of productivity for some time, and the non-existence of marketing channels for organic produces the financial support must be adequate.

The suggestion to begin the introduction of organic farming in the north-east region and in the dry farming areas of India is a well thought out proposition. However, it should be remembered that these regions are inhabited by the poorest and least advantaged groups whose dependence on agriculture for a livelihood is total. A programme for organic agriculture in these areas must be fully supported by the full compensation both in cash and kind to the farmers in the event of the loss of production they would suffer till it reaches the levels of the days prior to the adoption of organic farming. A fair, quick and efficient delivery system for such assistance, perhaps by keeping the government bureaucracy at a distance should also be in place beforehand.

Market development for the organic products is a crucial factor to promote domestic sales. Supplies do not match the demand for organic products in the country and the absence of proper links between the two has been pointed out for the tardy growth of organic farming in the country. An important role of the government in this direction is giving various supports to the producer and consumer associations to market the products.

The producer organizations must be encouraged to get accredited for inspection and certification in accordance with the NSOP. They can also have own standards and even symbols. This may also reduce the costs of certification besides the simplification of the process.

A vigorous campaign to highlight the benefits of organic farming against the conventional system is essential to increase the awareness of the farmers and consumers.

Identification of crops for cultivation on the organic farms is important. The examples of soyabean in Madhya Pradesh and cotton in the rainfed areas could be kept in view in the process.

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