



ORIGINAL RESEARCH PAPER

Commerce

BIO ORGANIC FARMING-AN OVERVIEW

KEY WORDS: Bio-Organic Farming, Fertilizers, Productivity, Soil, Farmers.

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ABSTRACT

The study explains that the overview of Organic farming in India. The position of agriculture sector in present scenario, and what are the features and limitations of Bio-Organic farming in India.

INTRODUCTION

In India, agriculture is the largest sector of economic activity. It provides food, raw materials and above all, the employment to a very large proportion of population. The national output depends on the output in agriculture, as it is one of the most dominating sectors in India. For the same reason, it has to provide the capital required for its own development and make available surplus for national economic development. At the same time, the exports of primary produce earn valuable foreign exchange which can be used to import capital goods for the development of industry and infrastructure. Because of all these reasons, an improved and efficient agriculture is a dire necessity in our economy. The vital role of agriculture arises out of the position the agrarian sector occupies in the overall economy of the country. 80 percent per cent of the population resides in the rural areas and 72 per cent of the work force depends on agriculture for their livelihood. Agriculture is the back-bone of the Indian economy, and hence, the very existence of economic activities of entire people in the country is dependent on the state and health of its agriculture sector. Since last 30 years, the fertilizer industry in India has grown tremendously. The Government is keen to see that fertilizer reaches the farmers in the distant and hilly areas. This is the reason why it has been decided to decontrol the prices, distribution and movement of phosphatic and potassic fertilizers. Some steps are implemented to assure an increase in the supply of nonchemical fertilizers at reasonable prices. In India, there are 53 fertilizer quality control laboratories. Since bio-fertilizers are regarded as an effective, cheap and renewable supplement to chemical fertilizers, the Government is implementing a National Project on Development and Use of Biofertilizers. This scheme covers one national and six regional centers for organizing training, demonstrating programs and quality testing of bio-fertilizers.

Organic farming is gaining popularity all over the world as it can diversify agricultural production system toward attaining improved productivity, farm income as well as food safety. The rise of organic farming was driven partly by consumers' concern with food quality and safety, as well as the protection of the environment. Organic Farming produces safe and nutritious food as it helps prevent soil pollution by stopping risky chemical reactions in the soil and avoiding produce contamination, as well as soil erosion, by wind and rain. One of the important parties that can enable the country to produce more organic products through organic farming is the growers or farmers. The final decision of farmers to use a new practice like organic farming system is usually the result of their knowledge of the practices as well as their perception. Therefore, the main purpose of this preliminary study was to investigate the knowledge, perception or attitude, and practices towards organic farming.

to the use of chemical insecticides, herbicides and fertilizers is still need to be improved. Besides, their attitude towards organic farming system is also still negative. In term of practices, they are still dependent on conventional practices (i.e. chemical) especially to control pests and diseases. However, they did use more organic matters (e.g. animal manure, plant manure, and kitchen waste) to fertile their plants at least for the last 12 months ago. It is essential to make farmers aware of the benefits of organic farming.

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The knowledge on organic farming concepts especially pertaining to the use of chemical insecticides, herbicides and fertilizers is still need to be improved. Besides, their attitude towards organic farming system is also still negative. In term of practices, they are still dependent on conventional practices (i.e. chemical) especially to control pests and diseases. However, they did use more organic matters (e.g. animal manure, plant manure, and kitchen waste) to fertile their plants at least for the last 12 months ago. It is essential to make farmers aware of the benefits of organic farming.

With the increase in population our compulsion would be not only to stabilize agricultural production but to increase it further in sustainable manner. The scientists have realized that the Green Revolution with high input use has reached a plateau and is now sustained with diminishing return of falling dividends. Thus, a natural balance needs to be maintained at all cost for existence of life and property. The obvious choice for that would be more relevant in the present era, when these agrochemicals which are produced from fossil fuel and are not renewable and are diminishing in availability. It may also cost heavily on our foreign exchange in future.

The key characteristics of organic farming include

1. Protecting the long term fertility of soils by maintaining organic matter levels, encouraging soil biological activity, and careful

The knowledge on organic farming concepts especially pertaining

mechanical intervention

2. Providing crop nutrients indirectly using relatively insoluble nutrient sources which are made available to the plant by the action of soil micro-organisms
3. Nitrogen self-sufficiency through the use of legumes and biological nitrogen fixation, as well as effective recycling of organic materials including crop residues and livestock manures
4. Weed, disease and pest control relying primarily on crop rotations, natural predators, diversity, organic managing, resistant varieties and limited thermal, biological and chemical intervention
5. The extensive management of livestock, paying full regard to their evolutionary adaptations, behavioral needs and animal welfare issues with respect to nutrition, housing, health, breeding and rearing
6. Careful attention to the impact of the farming system on the wider environment and the conservation of wildlife and natural habitats.

The Features of Organic Farming

1. No Poison Is Always Great

Organic farming does not use any type of harmful chemicals to keep pests away, unlike the majority of industrial farming. They use all natural methods that do not harm the consumer or the environment that they are grown in. Herbicides, pesticides, and artificial growth hormones are all forbidden on an organic farm.

2. Closely Regulated

In order for a food to be labeled as organic, the entire process of which is was created is thoroughly investigated. The organic food industry is internationally regulated, which means that organic means the same standards where followed, no matter where in the world it was made. This helps the consumers to know that they are truly getting what they think that they are.

3. Better Taste and More Nutrition

Fruits and vegetables that are organically raised have a much better taste than other mechanically farmed ones. This is due to the fact that they are given a much longer time to develop and are not pumped with artificial things. The sugar structures in these crops have more time to mature and develop into a tasty and nutritious product.

4. Costs Are Lowered

There is a deep stigma around anything organic that it had to have cost an arm and a leg to cultivate. This is actually the opposite of the truth. When you cut out the time that is spent to farm organic crops, the actual costs are minimal. These farmers do not have to shell out large amounts of money for expensive chemicals and massive amounts of water, unlike industrial farmers.

5. The Environment doesn't suffer

Another thing that benefits from the use of organic farming is the environment! In industrial farms, the chemicals that are used are seep into the ground and contaminate the soil and local water sources. Humans, animals, and plant life are all affected negatively by this. With organic farming, there are no chemicals used, so no pollution occurs either.

The Limitations of Organic Farming

1. Lack of Awareness

It is a fact that many farmers in the country have only vague ideas about organic farming and its advantages as against the conventional farming methods. Use of bio-fertilizers and bio pesticides requires awareness and willingness on the part of the farming community. Knowledge about the availability and usefulness of supplementary nutrients to enrich the soil is also vital to increase productivity.

Farmers lack knowledge of compost making using the modern techniques and also its application. The maximum they do is

making a pit and fill it with small quantities of wastes. Often the pit is flooded with rainwater and result is the top of the compost remains under composted the bottom becomes like a hard cake. Proper training to the farmers will be necessary to make vermin compost on the modern lines.

2. Output Marketing Problems

It is found that before the beginning of the cultivation of organic crops, their marketability and that too at a premium over the conventional produce has to be assured. Inability to obtain a premium price, at least during the period required to achieve the productivity levels of the conventional crop will be a setback. It was found that the farmers of organic wheat in Rajasthan got lower prices than those of the conventional wheat. The cost of marketing of both types of products was also same and the buyers of wheat were not prepared to pay higher prices to the organic variety.

3. Shortage of Bio-mass

Many experts and well informed farmers are not sure whether all the nutrients with the required quantities can be made available by the organic materials. Even if this problem can be surmounted, they are of the view that the available organic matter is not simply enough to meet the requirements.

The crop residues useful to prepare vermi-compost are removed after harvest from the farms. and they are used as fodder and fuel. Even if some are left out on the farms termites, etc destroy them. Experiments have shown that the crop residues ploughed back into soil will increase productivity and a better alternative is conversion into compost.

The small and marginal cultivators have difficulties in getting the organic manures compared to the chemical fertilizers, which can be bought easily, of course if they have the financial ability. But they have to either produce the organic manures by utilizing the bio-mass they have or they have to be collected from the locality with a minimum effort and cost. Increasing pressure of population and the disappearance of the common lands including the wastes and government lands make the task difficult.

4. Marketing Problems of Organic Inputs

Bio-fertilizers and bio-pesticides are yet to become popular in the country. There is a lack of marketing and distribution network for them because the retailers are not interested to deal in these products, as the demand is low. The erratic supplies and the low level of awareness of the cultivators also add to the problem. Higher margins of profit for chemical fertilizers and pesticides for retailing, heavy advertisement campaigns by the manufacturers and dealers are other major problems affecting the markets for organic inputs in India.

5. Lack of Financial Support

The developing countries like India have to design a plethora of national and regional standards in attune with those of the developed countries. The adoption and maintenance of such a regulatory framework and its implementation will be costly.

6. Low Yields

In many cases the farmers experience some loss in yields on discarding synthetic inputs on conversion of their farming method from conventional to organic. Restoration of full biological activity in terms of growth of beneficial insect populations, nitrogen fixation from legumes, pest suppression and fertility problems will take some time and the reduction in the yield rates is the result in the interregnum. It may also be possible that it will take years to make organic production possible on the farm.

Small and marginal farmers cannot take the risk of low yields for the initial 2-3 years on the conversion to organic farming. There are no schemes to compensate them during the gestation period. The price premiums on the organic products will not be much of help, as they will disappear once significant quantities of organic farm products are made available.

7. Inability to Meet the Export Demand

The demand for organic products is high in the advanced countries of the west like USA, European Union and Japan. It is reported that the US consumers are ready to pay a premium price of 60 to 100 per cent for the organic products. The upper classes in India are also following this trend as elsewhere. The market survey done by the International Trade Centre (ITC) during 2000 indicates that the demand for organic products is growing rapidly in many of the world markets while the supply is unable to match it.

8. Vested Interests

Hybrid seeds are designed to respond to fertilizers and chemicals. The seed, fertilizer and pesticide industry as also the importers of these inputs to the country have a stake in the conventional farming. Their opposition to organic farming stems from these interests.

9. It's a Whole Lot More Work

It takes a whole lot of hard work to successfully grow crops organically. There is a high amount of farmer interaction time with their crops. Whether it be to ensure that the plants remain pest free in an organic way, or to act as weed prevention, the time required is significantly higher than plants and crops produced industrially.

10. The Consumer Pays The Price

Organic foods in the supermarket are infamously higher than others. This is one of the biggest reasons that people do not fully support the use of organic farming, and not nearly enough people are enjoying the great benefits that it could bring.

Important Facts About Organic Farming

- The Green Revolution in the 1940's spurred on the organic food movement.
- Many people believe that the environmental benefits that are gained from organic farming are offset by the pollution caused when transporting it.
- In order for a chicken to be labeled as organic it cannot live any part of its life inside of a cage.
- The use of organic farming actually helps to greatly improve the soil quality of whatever area that it is done in.

CONCLUSION

It is believed by many that Organic Farming is the much healthier and sustainable option. Organic Farming has several major strengths than conventional farming. The major strengths are: Organic farming provides safety, healthy and tasty organic food which 'Lives up to its Promise'.

Despite of much benefit, many farmers are not adopting that because it has limited weakness when compared to conventional farming. The main limitation that Organic farming is that Lack of awareness and Less incentives from Government.

So, the Government of India has to provide policies to promote Organic farming for an Healthy environment.

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