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Organic Farming in India - A Summary

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Abstract

India produces a large variety of food crops including cereals, pulses and oilseeds. Diversified agriculture is the priority of the Central Government, and technical and financial support is being extended to farmers to encourage diversification especially in the areas of horticulture, floriculture, medicinal and aromatic plants, apiculture (Bee-keeping) and sericulture. Organic farming was practiced in India since thousands of years. The great Indian civilization thrived on organic farming and was one of the most prosperous countries in the world, till the British ruled it. Increasing pesticide residues in food materials, eutrophication of surface and ground-waters and increasing nitrous oxide emissions which are detrimental to the ozone layer of the atmosphere, drew attention towards the harmful effects of modern agriculture and environmentalists pressed hard for a more sustainable agriculture. An attempt is made to analyze the importance of organic farming, principle of organic farming, Organic farming in rural economy, consumption pattern and export of organically produced products in India.

Introduction

With 67% of our population and 55% of the total work force depending on agriculture and other allied activities, agriculture meets the basic needs of India's growing population. It has been estimated that for India to achieve a double digit GDP growth rate, agricultural growth of around 4% is required. Agriculture is the backbone of the Indian economy. Still there are increasing investment opportunities in the sector due to the rising need for quality and value-added products. The Definition of the word "Organic" is an ecological management production system that promotes and enhances biodiversity, biological cycles and soil biological activity. It is based on the minimal use of off-farm inputs and on management practices that restore, maintain and enhance "ecological harmony" [National Standards Board of the US Department of Agriculture (USDA)]. It may be emphasized here that in the production and marketing of organically produced agricultural products, the check is on the process of its production rather than the product per se, although quality standards, which are quite strict, have to be adhered to.

The steering committee, under the Chairmanship of Dr. M. S. Swaminathan, appointed by the task force on organic farming of the ministry of agriculture and cooperation, advocated giving boost to organic farming in rain fed areas and in north eastern states, where there was limited use of fertilizers and other agricultural chemicals. Madhya Pradesh, Uttaranchal and Sikkim have already declared themselves as organic states. At Maharashtra alone has a sizeable of about 0.5 million ha. Under organic farming will not help. For marketing the organic produce at a premium price, proper certification is a must (Rajendra, 2007).

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Main Principles of Organic Farming

The main principles of organic farming are the followings:

- To work as much as possible within a closed system, and draw upon local resources.
- To maintain the long-term fertility of soils.
- To avoid all forms of pollution that may result from agricultural techniques.
- To produce foodstuffs of high nutritional quality and sufficient quantity.
- To reduce the use of fossil energy in agricultural practice to a minimum.
- To give livestock conditions of life that confirm to their physiological need.
- To make it possible for agricultural producers to earn a living through their work and develop their potentialities as human being.

The four pillars of organic farming are:

- Organic standards.
- Certification/ Regulatory mechanism.
- Technology packages.
- Market network.

Organic Farming in India

Organic farming was practiced in India since thousands of years. The great Indian civilization thrived on organic farming and was one of the most prosperous countries in the world, till the British ruled it. In traditional India, the entire agriculture was practiced using organic techniques, where the fertilizers, pesticides, etc. were obtained from plant and animal products. Organic farming was the backbone of the Indian economy and cow was worshipped (and is still done so) as a god. The cow, not only provided milk, but also provided bullocks for farming and dung which was used as fertilizers.

The Indian states involved in organic farming in India are as follows: Gujarat, Kerala, Karnataka, Uttaranchal, Sikkim, Rajasthan, Maharashtra, Tamil Nadu, Madhya Pradesh and Himachal Pradesh.

Main organic agricultural products of India: Bajra-mustard-wheat, Dungarpur Pulses-cereals, Chilly, Bajra, Cereals-cereals, Mustard, Cereals-pulses, Til, Kholar, Wheat, Maize, Nagour Guar-cumin, Ginger, Guar-wheat, Soybean, Moong, Large cardamom, Mustard, Passion fruit, Ganganagar Cotton, Bhilwara Urd, Jaisalmer Bajra, Bharatpur Bajra and wheat, Jhunjhunu Pulses and wheat, Alwar Wheat and bajra, Banswara Maize, Cotton-grass, and Jaipur Guar.

Prospects and Benefits of Organic Farming

High Premium

Organic food is normally priced 20-30 % higher than conventional food. This premium is very important for a small farmer whose income is just sufficient to

feed his/her family with one meal.

Low Investment

Organic farming normally does not involve capital investment as high as that required in chemical farming. Further, since organic fertilizers and pesticides can be produced locally, the yearly costs incurred by the farmer are also low. Agriculture greatly depends on external factors such as climate, pests, disease. Furthermore, most of the small farmers are dependent on natural rain for water. Therefore in cases of natural calamity, pest or disease attack, and irregular rainfall, when there is a crop failure, small farmers practicing organic farming have to suffer less as their investments are low. (It should be noted that while shifting from chemical farming to organic farming, the transition might be costly).

Less Dependence on Money Lenders

Many small farmers worldwide commit suicide due to increasing debt. Since chemical inputs, which are very costly, are not required in organic farming, small farmers are not dependent on money lenders. Crop failure, therefore, does not leave an organic farmer into enormous debt, and does not force him to take an extreme step.

Synergy with Life Forms

Organic farming involves synergy with various plant and animal life forms. Small farmers are able to understand this synergy easily and hence find it easy to implement them.

Traditional Knowledge

Small farmers have abundance of traditional knowledge with them and within their community. Most of this traditional knowledge cannot be used for chemical farming. However, when it comes to organic farming, the farmers can make use of the traditional knowledge. Further, in case of organic farming, small farmers are not dependent on those who provide chemical know-how.

Organic Food Consumption in India is on the Rise

The most important reason for buying organic food was the concern for the health of children, with over 66% parents preferring organic food to non organic food. Though organic food is priced over 25% more than conventional food in India, many parents are willing to pay this higher premium due to the perceived health benefits of organic food. The increase in organic food consumption in India is evident from the fact that many organic food stores are spurring up in India. The pattern of organic food consumption in India is much different than in the developed countries. In India, consumers prefer organic marmalade, organic strawberry, organic tea, organic honey, organic cashew butter and various organic flours.

Exports is Driving Organic Food Production in India

The Indian government is committed towards encouraging organic food production. It allocated Rs. 100 crores or USD 22.2 million during the Tenth Five Year Plan for promoting sustainable agriculture in India. APEDA (Agricultural and Processed Food Export Development Authority) coordinates the export of organic food (and other food products) in India. The National Programme for Organic Production in India was initiated by the ministry of commerce. The programme provides standard for the organic food industry in the country. Since these standards have been developed taking into consideration international organic production standards such as CODEX and IFOAM, Indian organic food products are being accepted in the US and European markets. APEDA also provides a list of organic food exporters in India.

Organic food products exported from India include the following-

Organic Cereals: Wheat, rice, maize or corn;

Organic Pulses: Red gram, black gram;

Organic Fruits: Banana, mango, orange, pineapple, passion fruit, cashew nut, walnut;

Organic Oil Seeds and Oils: Soybean, sunflower, mustard, cotton seed, groundnut, castor;

Organic Vegetables: Brinjal, garlic, potato, tomato, onion;

Organic Herbs and Spices: Chilli, peppermint, cardamom, turmeric, black pepper, white pepper, amla, tamarind, ginger, vanilla, clove, cinnamon, nutmeg, mace;

Others: Jaggery, sugar, tea, coffee, cotton, and textiles.

Organic Certification

Organic certification provides transparency in certification and improves the images of organic agriculture. Organic certification addresses a growing worldwide demand for organic food and finished organic products. It is intended to assure Quality and prevent fraud and to promote commerce and trade. Certification is essentially aimed at regulating and facilitating the sale of organic products to consumers. For organic producers, certification identifies suppliers of products approved for use in certified operations. For consumers, "certified organic" serves as a product assurance, the certification programs vary with country or regions and the certification label is very particular to the country. All the standards used in certification were developed early by IFOAM and is reviewed every two years by the General Assembly of IFOAM. IFOAM has established an accreditation program for supervising the

international trade of organic products.

Organic Standards

The standards are indicated as directions of sustainability. The organic standards were defined as minimum production practices and requirements, which must be followed strictly if the agricultural products to be labeled as organic.

1. Global standards: (GMP)
 - i. Mandatory Standards – CODEX
 - ii. Voluntary standards - IFOAM
2. Regional standards - EU
3. National standards - NSOP
4. Certification standards

Organic Certification Agencies

GoI- Director General of Foreign Trade, New Delhi, The organic certificate issued by a certification agency accredited by one of the accredited agencies - APEDA. The Government of India recognized the 21 agencies for organic certification.

Indian Organic Certification Agencies

1. Agricultural and Processed food products Export Development Authority (APEDA) (www.apeda.com)
2. Tamil Nadu Organic Certification Department (www.tnocd.org)
3. Spice Board (www.indianspices.com)
4. Coffee Board (www.indiacoffee.org)
5. Tea Board (www.teaboard.gov.in)
6. Coconut Development Board
7. Cocoa and Cashew nut Board
8. Association for Promotion of Organic Farming (APOF) - Bangalore
9. Indian Society for Certification of Organic Products (ISCOP) - Coimbatore
10. Indian Organic Certification agency (INDOCERT) - Cochin
11. SKAL INTERNATIONAL Inspection & Certification agency - Bangalore
12. IMO Control Pvt. Ltd. – Bangalore
13. Ecocert international – Aurangabad
14. Bioinspectra – Cochin
15. SGS India Pvt. Ltd. – Gurgaon
16. LACON – Thiruvalla
17. International Resources for Fair Trade (IRFD) – Mumbai
18. One Cert Asia – Jaipur

19. National Organic Certification (NOCA) - Pune

International Organic Certification Agencies

1. International Federation of Organic Agriculture Movements (IFOAM)
2. Argencert
3. California Certified Organic Farmers (CCOF)
4. The Ecological Farming Association
5. Organic Farming Research Foundation (OFRF)
6. Organic Trade Association
7. Community Alliance with Family Farmers
8. Institute for Market Ecology (IMO), Bangalore
9. SKAL INTERNATIONAL, Switzerland
10. ECOCERT INTERNATIONAL
11. DEMETER

Conclusion

Organic food production costs are higher in the developed countries as organic farming is labour intensive and labour is costly in these countries.

However, in a country like India, where labour is abundant and is relatively cheap, organic farming is seen as a good cost effective solution to the increasing costs involved in chemical farming. The increasing demand for organic food products in the developed countries and the extensive support by the Indian government coupled with its focus on agri-exports are the drivers for the Indian organic food industry.

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