

ORGANIC FARMING: A SUSTAINABLE AGRICULTURE

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ABSTRACT

Organic farming is the farming in which only organic products is used for the cultivation of crop. This farming promotes the sustainable agriculture which means to conserve the natural resources that is degraded day by day by the use of chemical or synthetic fertilizers. The most important challenge in India has been to produce enough food for the growing population. Hence high yielding varieties are being used with infusion of irrigation water, fertilizers or pesticides. This combination of high yielding production technology has helped the country develop a food surplus as well as contributing to soil health, environmental pollution, pesticide toxicity and sustainability of agricultural production. Certified organic products including all varieties of food products including basmati rice, pulses, honey, tea, spices, coffee, herbal medicines are used in India this products is very helpful also conserve natural resources.

INTRODUCTION

Organic agriculture has been differently but the description offered by Lampkin (1990) appears to be the most the comprehensive one covering all essential features. To the maximum extent feasible, organic farming system relies on crop rotation, crop residues, animal manures, Legumes, green manures, off-farming, organic wastes and aspects of biological pest control to maintain soil productivity and tilth, to supply plant nutrients and also control insects, weeds and other pests.

The role of organic agriculture, whether in farming, processing, distribution, or consumption, is to sustain and enhance the health of ecosystem and organisms from the

smallest in the soil to human beings. In modern age, increasing pollution levels in every sphere of life is the key challenge in sustainable development of our environment.

Organic farming evolves thousand years ago. Ancient farmer's starts crop cultivation along the river belts by using natural resources. Indian scriptures Ramayana, Rigveda, Mahabharat etc. briefly mention the organic agricultural inputs by the farmers at that time. Sustainable agriculture is the agriculture that meets the needs of the present without compromising the ability of future generation to meet their own needs.

Organic agriculture is intended to produce high quality, nutritious, food that contributes to prevention health care. Organic farming promotes the sustainable agriculture which means help to stop exploiting natural resources. It conserves the fertility of soil, productivity of soil, soil texture is also maintained the organic farming.

International federation of organic agriculture movements (IFOAM): An international organisation established in (1972) for organic farming organisations defines goal of organic farming as: "Organic agriculture is a production system that sustains the health of soils, ecosystem and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects.

US department of agriculture: A system that is designed and mailed to produce products by the use of methods, and substances that maintain the integrity of organic agricultural products until they reach the consumer.

FAO: Organic agriculture is a unique production management system which promotes and enhances agro ecosystem health, including biodiversity activity, and this is accomplished by using on farm agronomic, biological and mechanical methods in exclusion of all synthetic off farm inputs.

NEED OF ORGANIC FARMING:

- With the increase in population our compulsion would not only to balance out agricultural production but to build it further in sustainable manner. The researchers have understood that the 'Green revolution' with high input use has reached a level and is presently sustained with lessening return of falling profits.

- Run off nitrate compounds during rains contaminates water resources
- Loss of soil richness due to excessive utilization of chemicals fertilizers and absence of crop rotation.
- Deep ploughing and heavy rains lead to the soil erosion.
- Destruction of the native species of animals and plants due to the introduction of exotic species and hybrids.

OPTIONS IN ORGANIC FARMING

1. **Pure organic farming:** Complete exclusion of inorganic fertilizers and pesticides., but advocates the use of organic manures and biological pest control methods.
2. **Integrated green revolution farming:** Basic trends of the green revolution such as intensive use of external inputs with limited damage to the environment and human health. Some organic techniques are developed and combined with the high input technology in order to create integrated systems such as Integrated Nutrient Management (INM). Integrated pest management (IPM) and biological control methods which reduce the need for chemicals.
3. **Integrated farming system:** low input organic farming in which farmers have to depend on local resources and ecological processes, recycling of agricultural wastes and crop residues.

CERTIFICATION OF ORGANIC PRODUCTS

Organic farming certification in India is governed by The National Programme for organic Production (NPOP) under the ministry of commerce and industry. This programme provides standards for organic production, systems, criteria and procedure for accreditation of certification bodies, the national logo and the regulation governing its use. Farms that have obtained organic farming certification and adhering to the norms specified by the National Programme for organic production will be allowed to use the following India organic logo in the produce.

Government scheme that promote organic farming

1. National mission for sustainable agriculture (NMSA)

2. Mission for integrated development and horticulture (MIDH)
3. Rastriya Krishi Vikas Yojana (RKVY)
4. National project on organic farming (NPOF)
5. National programme on organic production (NPOP)
6. National horticulture mission (NHM)
7. Horticulture mission for north east and Himalayan states (HMNEH)
8. Macro -Management of Agriculture (MMA)

SUSTAINABILITY ASSESSMENT OF FOOD AND AGRICULTURE SYSTEMS (SAFA)

In the absence of an assessment tool including all the sustainability pillars along the food and agriculture value chain, food and agricultural organisation developed a global holistic framework called SAFA. The framework built on already existing sustainability reference documents, standards, indicators and tools with the objectives to create a standardized system and a common understanding of sustainability, suitable for all contexts and sizes of operations. SAFA consists of four sustainability dimensions: good governance, environment integrity, and economics.

FUTURE PROSPECTS

India is bestowed with lot of potential to produce all varieties of organic products due to its various agroclimatic regions. In several parts of the country, the inherited tradition of organic farming is an added advantage. India has a strong traditional farming system with innovative farmers, vast dry lands and least use of chemicals. In a country like India where the agriculture is highly influenced by the vagaries of various biotic and organic farming is capable enough to provide economic security to the mediocre farmers as well. However , with the policies implemented by the government of India to encourage organic farming and the marketing of organic food products as well as the increasing demand of the organic products in the domestic as well as international market, there is ample scope for organic food industries to expand and generate revenue to strength the Indian economy.

CONCLUSION

India with diverse agroclimatic conditions has great potential for organic farming and many products are produced organically in India. For sustainable agriculture production, farmers must use organic fertilizers in place of synthetic fertilizer. This will not only be helpful in achieving ecosystem viability. Organic products give parents a healthy choice when it comes to their baby's nutrition. Organic products are the best from nature and the best for nature.

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