THINK INDIA JOURNAL

ISSN: 0971-1260
Vol-22-Issue-14-December-2019

Organic Farming In India

Deepa Chaudhary*
Asst. Prof. in Geography
Lyallpur khalsa college Jalandhar

Amit Kumar**
Asst. Prof. in Geography
Lyallpur khalsa college Jalandhar

Abstract:
India is the seventh largest country in the world, and in terms of agricultural land, diversity in climate and terrain, and long tradition of farming systems, it has a very high potential for organic farming. 68 % of the agricultural land is rainfed, and in these areas inputs of intensive agriculture have so far not been too much applied. Increasing export demands of organic produce such as cotton, oilseed, processed food and spices compelled policy makers to promote organic farming in India. Organic farming, a holistic way of farming, is one of these alternate forms that are aimed at sustainable agricultural production. It relies on crop rotations, green manures, organic manures, biofertilizers, composts and biological pest management for crop production excluding or strictly limiting the use of synthetic fertilizers, chemical pesticides, plant growth regulators and livestock feed additives.

Key words: Organic farming, bio-fertilizers, green manures, chemical pesticides, livestock feed

Introduction

In the present agricultural scenario, crop yield is declining day by day despite maximization of chemical inputs. Vicious cycle of chemical farming is now exposed in the increasing crop un- sustainability, higher input requirement, poor soil quality as well as recurrent pest and disease infestation. Organic farming can solve many of these problems as this system helps to maintain soil productivity and effectively control pest by enhancing natural processes and cycles in harmony with environment. Today, it is clear to the agricultural community that organic farming is the best option for not only protecting/sustaining soil-plant –ecological relationship but to mitigate the adverse effect of climate change. In this background, an Indian organic farming practice called Inhana Rational Farming (IRF) Technology has demonstrated some promising results that have brought bring forth the relevance of organic farming in today's agricultural scenario.

Objectives of Organic Farming

Organic farming is mostly envisaged as the stoppage of synthetic inputs and their replacement by organic alternatives i.e. use of organic manures and natural methods of plant protection instead of using synthetic fertilizers/pesticides. Organic farming is a far deeper concept that mere non-chemicalization. In real sense it refers to a comprehensive approach towards improvement of both health of underlying productivity of the soil and plant leading to the enrichment of the surrounding ecology; which is a pre-requisite criterion for sustainable agriculture. According to IFOAM, "Organic agriculture is a production system that sustains the health of soils, ecosystems and people". It relies on ecological processes, biodiversity and cycles

ISSN: 0971-1260
Vol-22-Issue-14-December-2019

adapted to local conditions, rather than the use of inputs with adverse effects. The major objectivity of organic farming resides on development of a self-sustainable farming system in harmony with nature which delivers ecologically and economically.

Organic Farming in India:

India holds a unique position among 172 countries practicing organic agriculture: it has 6, 50,000 organic producers, 699 processors, 669 exporters and 7,20,000 hectares under cultivation. But, with merely 0.4 per cent of total agricultural land under organic cultivation, the industry has a long journey ahead. India produced around 1.35 million MT of certified organic products which includes all varieties of food products namely Sugarcane, Oil Seeds, Cereals & Millets, Cotton, Pulses, Medicinal Plants, Tea, Fruits, Spices, Vegetables, Coffee etc. The production is not limited to the edible sector but also produces organic cotton fiber, functional food products.

Organic Farming in world

According to the latest FiBL survey on certified organic agriculture worldwide, there were 50.9 million hectares of organic agricultural land in 2015, with the most organic agricultural land in Australia (22.7 m hectares) followed by Argentina (3.1 m hectares) and the United States (2 m hectares). There has been an increase in organic agricultural land in all regions with the exception of Latin America. A major relative increase of organic agricultural land was noted in many African countries, such as Kenya, Madagascar, Zimbabwe,

Constraints faced by the Indian organic growers

Despite efforts from government and other agencies, subsidies and other schemes, area under organic farming is still less than 1% of total cultivated area in India. The farmers adopting organic farming face difficulty to survive and market their end products.

Absence of supportive policy

The most important constraint felt in the progress of organic farming is the inability of the government to take a decision to promote organic agriculture.

Loss of crop yield

Farmers adopting conventional organic farming face huge losses i.e. upto 71%, in the initial years. Also the time required to achieve crop sustainability under present organic cultivation system is still unknown and thereby resulting in high cultivation cost and economic unviability. According to an USDA Survey, the organic yields were lower in 84% areas. The organic yield gap is predominant for row crops, fruit crops and vegetables.

Non achievement of expected quality

Most of the organic produce fails to achieve the desired intrinsic and extrinsic qualities as expected under organic cultivation, and thereby lose the consumer base.

Failure of organic pest management

Following the conventional cidal approach of pest management utilizing weaker organic pesticides cannot resolve the pest/disease issues in organic agriculture. And this forms the major reason for crop failure under organic. Shortage of biomass and

ISSN: 0971-1260
Vol-22-Issue-14-December-2019

livestock Conventional farming practices, increased mechanization and decreasing per capita land holding has led to scarcity of bio- resource for compost production that forms a major bottleneck towards large scale organic conversion.

Lack of quality seeds supporting organic agriculture

Hybrid seeds are designed to respond to fertilizers and chemicals. Presently Genetic and fertilizer sensitive seed and planting materials rules the market with negligence on indigenous varieties, which are more suited for organic farming. There is a large vacuum in the availability of quality organic seeds and forms a major constraint for the farmers willing to adopt organic farming.

Lack of storage, transport &organized organic marketing system

The challenge posed by inadequate agricultural infrastructure and cold storage facilities translates to loss of produce due to spoilage. Additionally, poor road infrastructure especially in the hilly States, results in poor and delayed connectivity to farmer markets.

Vested interests of chemical and pesticide lobby

The seed, fertilizer and pesticide industry as also the importers of these inputs to the country have a stake in the conventional farming and their opposition to organic farming is one of the biggest hurdles towards dissemination of organic farming.

Lack of awareness and guideline for organic farming

There is lack of adequate research and development backup as well as training related to Organic Farming in India. Most of the farmers in the country have only vague ideas about organic farming and its advantages as against the conventional farming methods.

Inability to meet the export demand According to a study by Garibay and Jyoti (2013), Indian organic exports faces different constraints viz. high price expectations in relation to quality, inconsistent quality and residues, time consuming and complicated paper work etc. as result of the export demand is left unattended.

Complexity and high cost of organic certification system

Complexity regarding organic certification, high cost as well as time frame (3 years in most cases) forms one of the major constraints for small land holders.

Scarcity and high cost for quality analysis

There is scarcity of economic facilities for quality assessment of organic inputs and organic produce. As a result there is lack of quality mapping of most of the organic produce (especially for domestic market), which opens up the scope for spurious products in the niche organic market and thereby leads to the decrease in the consumer interest towards organic products.

In a nutshell, there has been dearth of comprehensive organic farming practice/s which can ensure ecologically and economically sustainable organic crop production without any time lag. It is true that there is lack of proper infrastructure and government support towards organic marketing. But at the same time higher marketability cannot be achieved only in the name of organic. To make this a reality, we need to bring forth a comprehensive organic package of practice that is Safe,

ISSN: 0971-1260
Vol-22-Issue-14-December-2019

Effective, Complete, Convenient and Economical - the 'Five Indispensable Criteria' for delivering truly sustainable and large scale organic agriculture.

Overcome the Technological Challenges

Inhana Rational Farming (IRF) Technology is based on the 'Element Energy Activation' (EEA) Principles which is inspired by the evolutionary concept of Vedic philosophy IRF technology was first introduced as a complete organic package of practice in 2001

(i) Energization of soil system i.e., enabling the soil to function naturally as an effective growth medium for plants (Barik et al., 2014a) and chemical functions that leads to activation of the plants' host defense mechanism (Barik et al., 2014b).

(ii) Energization of plant system i.e., enabling higher NUE alongside better bio The Technology bears the essence of Trophobiosis theory and reaches to the root cause of pest interference and works towards amelioration of factors that favorably signal pest/disease advances.

Conclusion

Ecologically and economically sustainable organic farming is the pre-requisite for enabling wider adoptability, secured livelihoods and ensuring affordability at the consumer's end. India has a rich history of organic farming and the increasing domestic market of organic food can provide the necessary drive to the organic movement. Awareness program at both the consumer and farmers' level is necessary for bringing about large scale organic conversion. But most importantly innovative organic farming technologies like Inhana Rational Farming (IRF) can popularize the practice even among the resource poor farmers by ensuring ecologically and economically sustainable organic crop production in a time bound manner. Case studies of IRF Organic Practice also testify the corresponding GHG mitigation and adaptation potential as rejected in the high carbon sequestration, soil resource regeneration, high energy use efficiency as well as development of plant resilience; but the highlight remains its cost effectiveness and time bound results.

Reference

- **https://en.m.wikipedia.org**
- **http://www.britannica.com**
- **www.nationalgeographic.com**
- **www.farmingindia.in**

