

# TRENDS OF ORGANIC FARMING IN INDIAN ECONOMY

Mr. Sunil Kumar,

Research Scholar,

Department of Economics,

Kurukshetra University, Kurukshetra, India.

**Abstract:** According to the ecosystem in organic farming there is the ability to improve the health of human by producing crops, preserving non-renewable natural resources and absorbing better food quality. Due to the presence of various agro-climate zones, India's geographical position is better than other countries to producing different types of organic products. The role of the Government in promoting organic farming is very important because the Government can spread awareness among organic products through appropriate regulatory policies and encourage farmers to produce organic food. Through appropriate marketing policies, the Government can increase the welfare of the society by providing the appropriate yield value to the farmers and meeting the Organic farming is a whole production management system which encourages and increases the environment of an agroecosystem including biodiversity, biological cycles and soil fertility related activity.

**Index Terms** – ecosystem, non-renewable, organic, biodiversity, biological cycles, fertility.

## Introduction

Organic farming is free of chemical pesticides and chemical fertilizers as it tries to strike a harmonious balance with a complex series of ecosystems. The International Federation of Organic Agriculture Movements (IFOAM) is the worldwide umbrella organization for the organic farming movement which has been established from 1972 at Bonn (Germany). According to IFOAM, "Organic Agriculture is a production system that sustains the health of soils, ecosystems and people. It relies on an ecological process, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic agriculture combines tradition, innovation and science to benefit the shared environment and promote fair relationships and good quality of life for involved". The development of organic agriculture is based on some principles which make it a very important economic activity of the world. These principles are the roots from which organic agriculture grows and develops. The principles apply to agriculture in the broadest sense including the way people tend soils, water, plants and animals in order to produce, prepare and distribute food and other goods. They concern the way people interact with living landscapes relate to one another and shape the legacy of future generations. The following are the important principles related to organic agriculture which preserve biodiversity in this world through organic farming.

The principle of Health

The principle of Ecology

The principle of Fairness

The principle of Care

## Objectives of the study

To understand trends of organic farming in India in the light of the experiences of other countries.

To analyze main obstacles in organic farming in India

## Research methodology

The study is based on secondary data. Historical information has been collected about the development of organic farming from various sources published from India and abroad, for example, annual reports published on organic farming by the European Union countries and annual report of International Organic Farming Movements (IFOAM) etc. have studied. And other books and journals related to organic farming have been reviewed. The relevant literature such as the topic and regulatory framework, different regulations official reports, research papers have been reviewed to analyses the key issues of the topic.

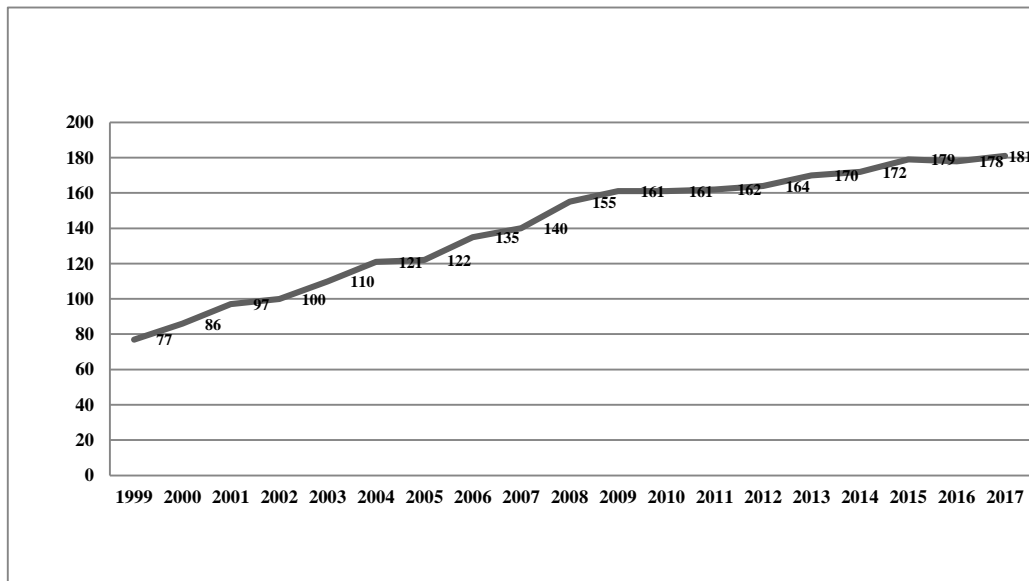
## The Global Organic Farming

Organic farming is gaining gradual momentum across the world. The growing awareness of health and environmental issues in the world has increased demand for organic food production. So the increasing demand for organic products is emerging as an attractive source of rural income generation. Organic agriculture has made a credible performance during the past few years. In this chapter, we examine the trends of organic farming at the global level who leading organic producers and the area of agricultural land under organic farming. The world's total organic farming system has registered an increase of 20% in 2017 compared to 2016. Globally, 1.4 per cent of the farmland is under organic farming. Many countries of the world have a higher area under organic farming.

Countries with the largest organic area in the total field are Liechtenstein (37.9 per cent), Samoa (37.6 per cent), and Austria (24 per cent). At present, in fourteen countries of the world, ten per cent or more fields are subject to organic farming.

To analysis, the above figure1 has shown the number of countries continuously increased from 77 in 1999 to 181 in 2017 at the world level scenario.

**Figure1 Number of countries involved in the development of organic agriculture 1999-2017**

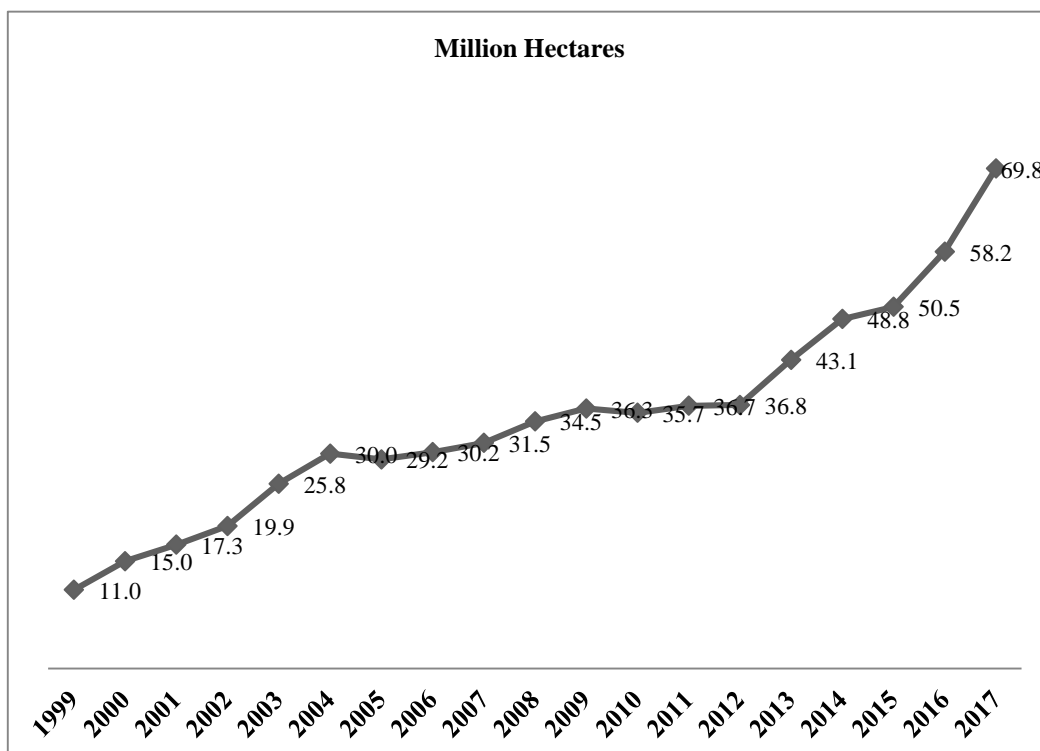


Source: FIBL-IFOAM-SOEL-Surveys 1999-2019

The world's total organic farming system has registered an increase of 20% in 2017 compared to 2016. According to the FIBL report, in the world, 69.8 million hectares of organic farming has been managed in 2017, which represents an increase of 20 per cent or 11.7 million hectares compared to 2016. This is the biggest increase in organic farming so far. Australia (35.6 million hectares) is the world's largest organic farming area and then there is the place of Argentina (3.4 million hectares) and China (3 million hectares) respectively.

In figure2, conspicuously displays the trend growth of the world's total organic agricultural land during 1999-2017.

**Figure2 the growth of organic agriculture land 1999-2017 (Million Hectares)**

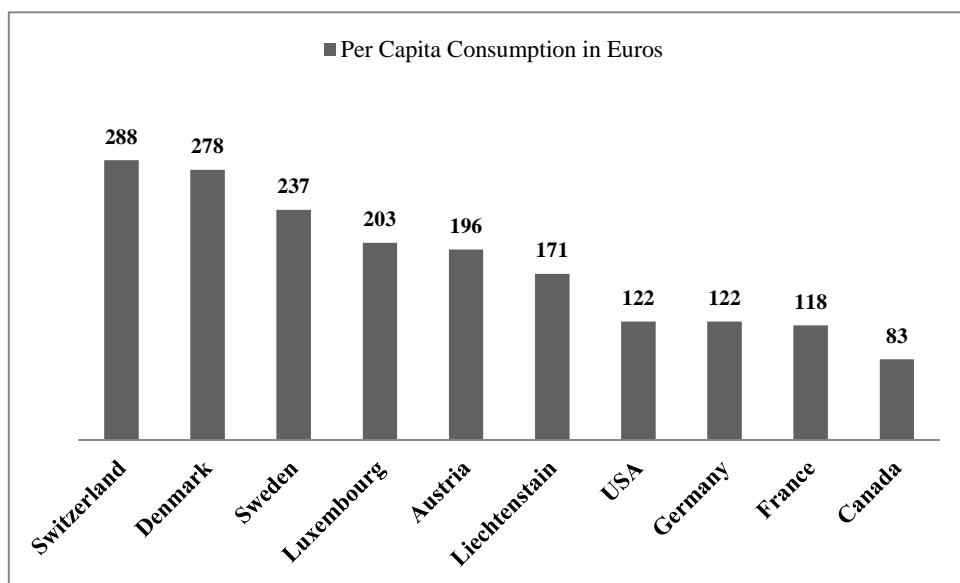


Source: FIBL-IFOAM-SOEL-Surveys 1999-2019

A look at the figure2 reveals an increasing trend in the world’s total organic agricultural land, increased from 11 million hectares in 1999 to 69.8 million hectares in 2017, a 534.54% growth.

Figure 3 displays the top ten countries with the highest per capita consumption in 2017.

**Figure3 Ten countries with highest per capita consumption in 2017**

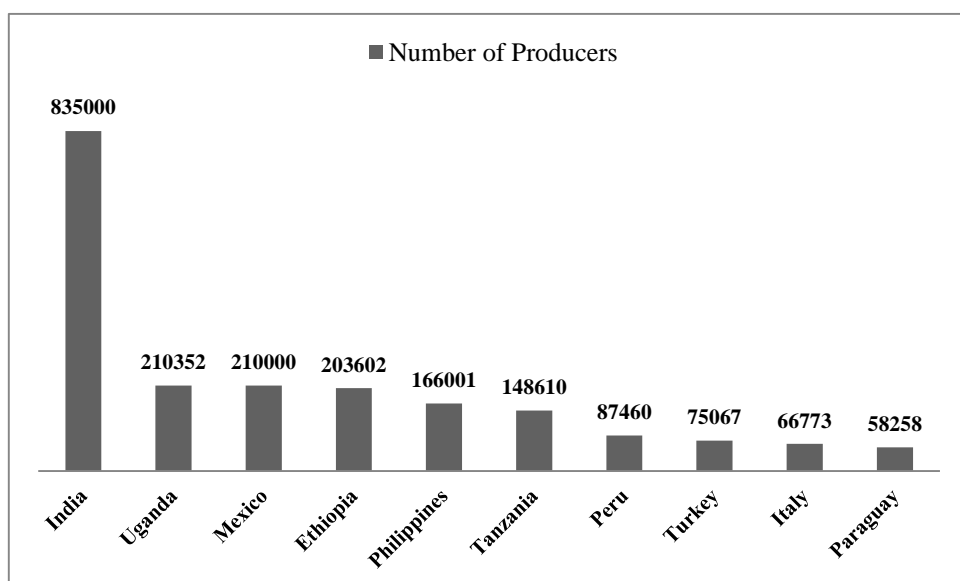


Source: FIBL-AMI Survey 2019

A look at Figure 3 clears that in 2017 Switzerland is the first place in the world with 288 Euros consumption per person. It is closely followed by Denmark with 278 Euros consumption per person on organic food. Other countries such as Sweden, Luxembourg, Austria, Liechtenstein, USA, Germany, France and Canada etc. are closely following Denmark in consumption per person of organic food products.

According to the FIBL Survey 2019, the number of organic producers worldwide is estimated to be 2.9 million in 2017, which is 5 per cent higher than in 2016. The figure4 displays the top ten largest countries of organic producers in the world in 2017.

**Figure4 Ten largest numbers of the organic producer countries in 2017**

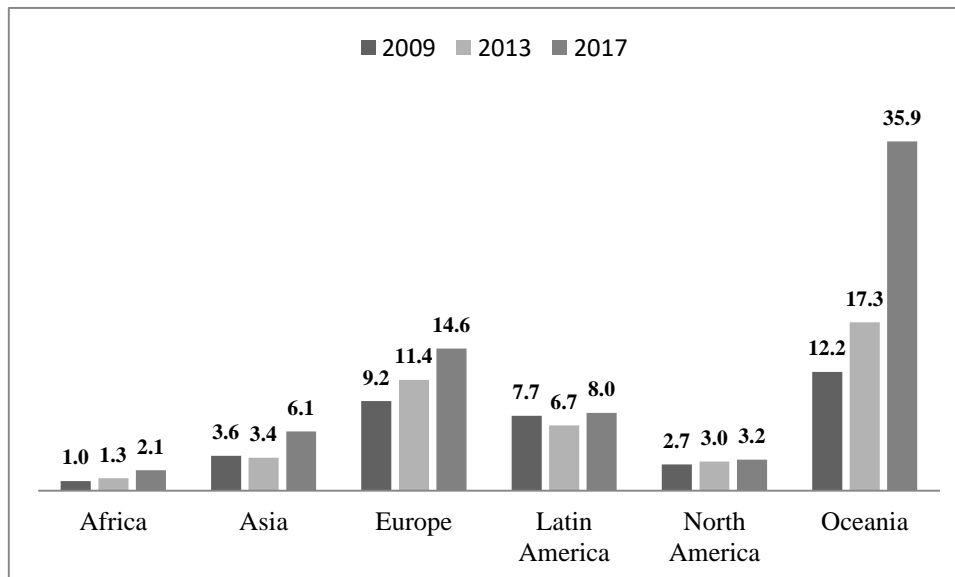


Source: FIBL Surveys 2019

The looking at Figure 4, it is found that India is at the top with the highest number of producers (835,200) in the world, followed by Uganda (210,352), and Mexico (210,000).

Currently, there is an increase in the area under organic farming in all continents. Due to the large increase in the organic sector in Australia, the global total of more than half of organic agricultural land is now in Oceania (35.9 million hectares). Europe is the second-largest region (14.6 million hectares) of the world, then this is followed by Latin America (8 million hectares). The figure5 has displayed to the increasing growth of the organic agricultural land in different continents of the world in the time period between from 2009 to 2017.

**Figure5 Growth of the organic agricultural land in the continents 2009-2017**



Source: FIBL-IFOAM-SOEL-Surveys 2010-2019

A look at Figure 5 clears that in the year 2017, Oceania continent is the first place to increase the area under organic farming in the world, but in 2011, the area of organic farming in Oceania is decreasing. In 2017, Europe is the second largest continent to increase the area under organic farming. After this, the area under organic farming is following of Latin America (8 million hectares), Asia (6.1 million hectares), North America (3.2 million hectares) and Africa (2.1million hectares) respectively.

### The development of organic farming in India

The area of organic farming has been growing for the last few years at Indian context. Report of 11th Plan and National Commission on Farmers has considered organic farming as one of the most important tools for the second green revolution in the country, both of which have recommended for organic farming in particular in the field of eco-zone. Organic farming helps the nation's producers and consumers to produce and supply adequate safe and nutritious food. Environmental benefits, health aspects and farmer empowerment are other important factors that affect farmers to move to organic farming. Basically, in India, organic farming is based on intense export, so very few products are sold in the domestic market. Conventional products are available at a relatively cheap rate compared to organic products, so traditional products are preferred in comparison to organic products in the domestic market. Organic farming is a method of farming that works at grass root level preserving the reproductive and regenerative capacity of the soil, good plant nutrition, and sound soil management, produces nutritious food rich in vitality which has resistance to diseases. Expectations of India are important in achieving the production of all organic products due to the presence of various agro-climate zones rather than the other countries of the world. At present globally, India is ranked 9th in the case of organic farming land and is number one in the number of total producers. The Government of India has implemented the National Programme for Organic Production (NPOP). The national programme involves the accreditation programme for Certification Bodies, standards for organic production, promotion of organic farming etc. The NPOP standards for production and accreditation system have been recognized by the European Commission and Switzerland for unprocessed plant products as equivalent to their country standards. Similarly, USDA has recognized NPOP conformity assessment procedures of accreditation as equivalent to that of US. With these recognitions, Indian organic products duly certified by the accredited certification bodies of India are accepted by the importing countries.

#### Area

According to the FIBL survey 2019, the total area under organic farmland certification process (registered under the National Programme for Organic Production) is 1.78 million Hectares. Among all the states, Madhya Pradesh has covered the largest area under organic certification followed by Rajasthan, Maharashtra and Uttar Pradesh. During 2016, Sikkim has achieved a remarkable distinction of converting its entire cultivable land (more than 76000 ha) under organic certification.

**Table1: Year wise growth of the organic farmland in India 2001-2017**

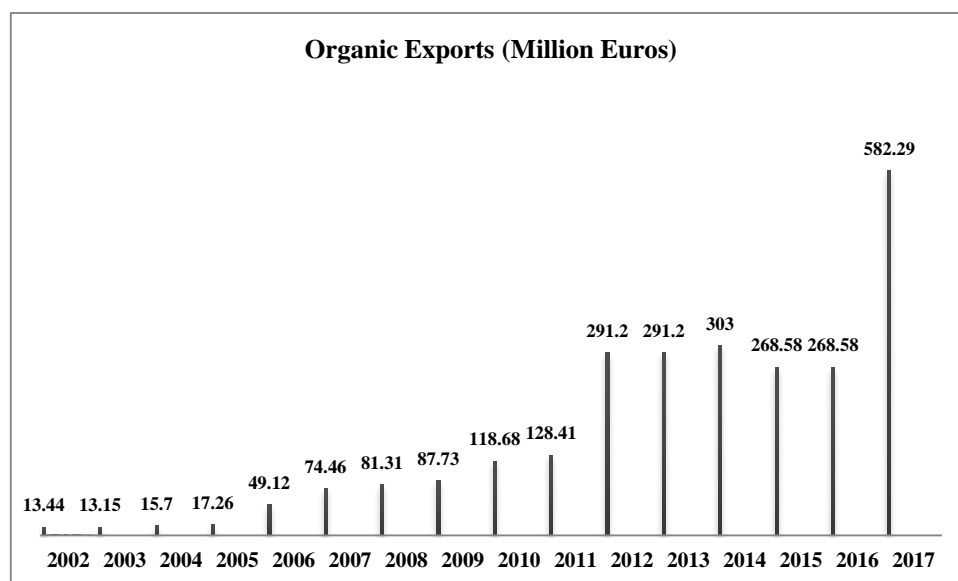
Year	Area in Hectares
2001	41,000
2003	73,500
2005	185,937
2007	1030,311
2009	1180,000
2011	1084,266
2013	510,000
2015	1180,000
2017	1780,000

Source: FIBL Surveys 2019

### Production

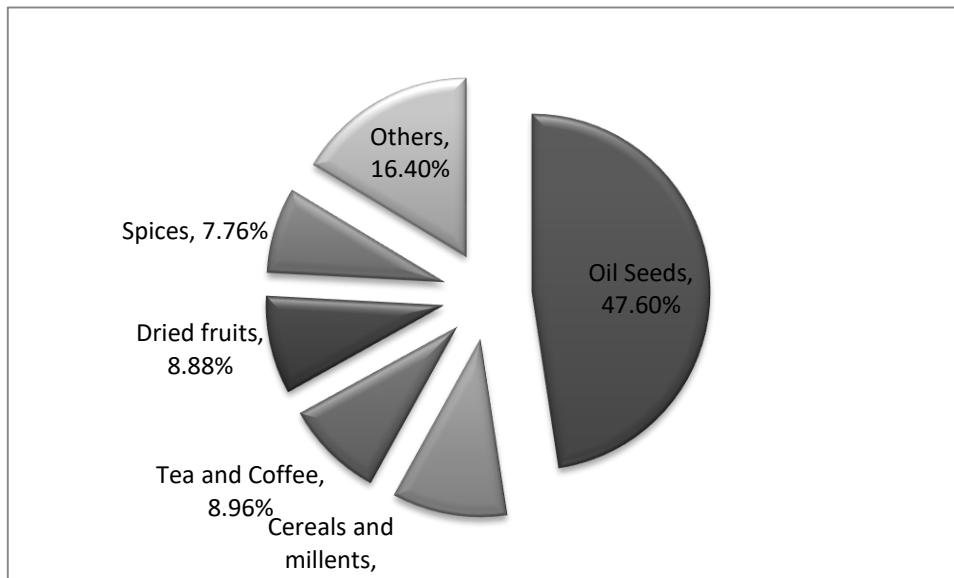
In the year 2017-18, about 1.70 million MT of certified organic products have been produced in India, which includes all varieties of food products such as oilseeds, sugarcane, various grains, cotton, pulses, medicinal plants Besides producing tea, fruits, spices, dry fruits, vegetables, coffee, etc. also produces organic cotton fiber, functional food products etc. In terms of products Oilseeds are the single largest category in India.

### Exports

**Figure6: Year wise organic exports of India (Million Euros)**

Source: FIBL Surveys 2019

According to the figure 6, the total quantity of India's exports is 4.58 lakh metric tons. The receipt of organic food exports is approximately Rs. 3453.48 crores (582.29 Million Euros). Organic products are exported to the United States, European Union, Canada, Switzerland, Australia, Israel, South Korea, Vietnam, New Zealand, Japan etc.

**Figure7: Distribution of Indian exports in term of organic products**

Source: FIBL Surveys 2019

According to figure7, in terms of export value oilseeds (47.6%), cereals and millets (10.4%), tea and coffee (8.96%), dried fruits (8.88%) and spices (7.76%) are the major organic products.

### **Main obstacles in organic farming in India**

Due to the reduction in profitability from agriculture, the economic condition of the farmer in India has reached a miserable situation. At present, 90 per cent of the farmers in the country is trapped in financial indebtedness. In these situations, organic farming can improve the financial condition of farmers, because the benefits of farmers are increased by reducing the cost of farming. Apart from this, every person in the country can get better quality foods easily by organic farming. Due to the consumption of organic food improves the health of the person. Despite the more benefits of organic farming, farmers are facing many obstacles in its expansion. The following main obstacles are in adopting and continuing organic farming in India.

#### **The low education level of farmers**

The level of education of farmers in India is very low. Due to which farmers do not use profitable innovation in agriculture to increase the productivity of the farm. Due to low education, farmers are producing less in the traditional manner.

#### **Small land holdings**

In the world, India is the second largest country in terms of population, but it is in seventh place in terms of geographical area. There is excessive pressure of the population on the land, due to which the average per capita operational size of land holdings in India 1.33 hectares which are far below the world average of 3.7 hectares per person. Economically, small operation land holdings are less profitable in terms of high productivity.

#### **Low yield of organic crops**

The main purpose of agriculture is fulfilling the food requirements of the people of any economy. Along with this, it is important to maintain an increase in productivity of crops in the future so that the food needs of the future population can be fulfilled. Comparative study of the quantity of organic crops production and production of conventional crops per acre by the farmers has shown that productivity of organic crops is less than conventional crops. Due to low productivity, farmers are less interested in the production of organic crops.

#### **Low use of organic inputs**

At present, the government is constantly trying to promote organic farming, but still very few farmers are using organic inputs in agriculture. Farmers tend towards chemical cultivation due to low production and unavailability of inputs in organic farming. Many farmers know about the damage caused by chemical input based farming, but due to lack of production of organic farming and unavailability of organic inputs in the market, farmers could not shift from chemical farming to organic farming.

## Pest and Weed Control

Green Revolution Program is a package program in which high yield variety seeds, timely irrigation, chemical fertilizers and pesticides etc. should be used to increase the productivity of the crop. Organic farming uses natural input and biofertilizer to increase the productivity of the crop. The lack of information about the use of biofertilizers in farmers and availability of chemical inputs such as chemical fertilizers, pesticides, weed control, etc. are the main reasons which are hindering the development of organic farming.

## High Cost of organic products

The cost of the organic products is high as a comparison the conventional products which only rich and foreigners can afford. If the government makes available inputs related to organic farming at reasonable prices to the farmers, then more organic food products can be available at lower prices.

## The high cost of the certification process

Organic farmers are not able to afford organic certification. According to government order in 2001, for the trade of organic products, it is necessary to get certification for the related product. The poor farmers of India are not in a position to spend money on organic certification, because most farmer's financial position cannot bear the cost of organic product certification. For this reason, farmers also hesitate to adopt organic farming.

## Lack of marketing quality

Due to low levels of education, it is not possible for the farmer to sell organic products at a reasonable price by adopting new methods of marketing, but by organizing, sales can be increased.

## Suggestions to removes obstacles of organic farming

In India, several institutions and movements are making concerted efforts to promote organic agriculture and to bring changes in the policies favouring ecological agriculture. The potential of organic farming in India is largely untapped. Given these above obstacles, a strong organizational support structure is prerequisite to increase the area of organic farming in India and to motivate the farmers. A systematic structure in the country works as an effective and capable network to provide proper training in organic farming. It gives proper and adequate technical advice to the farmers. Through financial support, it can be motivated to farmers for participation organic farming related seminars, workshops etc and get to help proper skill development training related to organic farming. So the government needs to spread awareness about organic farming through proper policy making. Through the implementation of appropriate policies for the marketing of organic food products, the government can encourage the domestic sector to demand organic products in the country. Small farmers can be encouraged by reducing the cost of certification of organic products and by providing technical support to adopt organic farming. Demand for organic products can be expanded in both domestic and international markets by the government through disseminating market information and establishing marketing channels. The most important work in the success of organic farming is to give special training to the farmers. The country's success in organic farming depends on two aspects: training and certification. Farmers should be trained on soil building, pest management, inter-crop, and preparation of compost and manure. There is a need to make certification of organic products through such as the programs of the National Organic Farming Center (NCOF) and the Partnership Guarantee Scheme (PGS) mandatory. The government can be improving the health of consumers through awareness about the health benefits of organic products. Thus, the benefits of the environment, as well as healthy and non-chemical products through organic farming, are fulfilling to make for both the farmers and the consumers.

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