Choudhary Publishing Media

Indian Journal of Organic Farming
Volume 1 Issue 1; 2022

Current Scenario of Organic Farming

D. S. Srivastava[1*], M. Singh[2]
[1]Scientist, Plant Protection, Krishi Vigyan Kendra, (Indian Council of Agricultural Research) Katia, Sitapur, Uttar Pradesh, India
[2]Department of Botany, Institute of Science, Nagpur University, Nagpur, Maharashtra, India

Author for Correspondence: Email Id: dayaicar@gmail.com; sitapurkvk2@gmail.com

ABSTRACT

This paper attempts to compile diverse matters within the light of current developments in organic farming. The after effects of revolution have promoted the farmers to have need of organic farming. This paper represents the international and National scenario with reference to organic farming. In India, total area under organic cultivation practice as on 31st March 2020 (registered under National Programme for Organic Production) is 3.67 million Hectare (2019-20). This consist of of 2.299 million ha cultivable area and one more 1.37 million hectare for wild harvest collection. India has major number of organic cultivators but just 1.1% of acreage. The major issues rising in organic farming include yield decline in transfer to organic farm, soil fertility enrichment, and integration of livestock, certification limitations, ecology, marketing and policy support. The prospective for organic farming, has been discussed. It has been argued that organic farming is fruitful and sustainable, but there's a necessity for strong support within the sort of subsidies, agricultural extension services and research.

Keywords: *Organic Farming, Global Status, International and National Scenario, Current Scenario.*

INTRODUCTION

Green Revolution (GR) technologies, supported by policies, and fuelled by agrochemicals, machinery and irrigation, are known to possess enhanced agricultural production and productivity. Although these technologies significantly helped to deal with the food security of India, farmers using these technologies necessitate depending on the purchased inputs. The small farmers, who by income definition are in need of cash, are thus found to lag behind large farmers within the adoption of technologies. The manufactures of fertilizers and pesticides, the two key inputs of GR technologies, require fossil fuels and/or costly energy, and are related to serious environmental and health troubles. It's perhaps owing to these input issues and their harmful impacts, that the Intergovernmental Panel on international climate change (IPCC) has noted that agriculture as practiced at present (conventional agriculture, modern agriculture or GR agriculture) accounts for about one- fifth of the anthropogenic atmospheric trend, producing about 50 per cent and 70 per cent, respectively of the general anthropogenic methane and nitrogen oxides emissions [1].

Modern agricultural farming practices, alongside irrational use of chemical inputs over the past four decades have resulted in not only loss of natural habitat balance and soil health but have also caused many hazards like erosion, decreased water table, soil salinization, pollution thanks to fertilizers and pesticides, genetic erosion, ill effects on environment, reduced food quality and increased the value of cultivation, representing the farmer poorer every year. Farmers don't find agriculture a viable proposition anymore and actually, an outsized number of farmers have committed suicides. a number of the factors that contributed to this crisis in

farming might be the shooting-up of the worth of factory-made external inputs and therefore the government's slow with drawl of investment also as market intervention and more significantly, shifting of farming (mainly with homegrown inputs) to commercial farming (largely with purchased inputs). In other words, local indigenous farm techniques are exhausted and replaced by the fashionable techniques, leading to an unviable and unsustainable farm enterprise. It's during this context that alternative farm techniques and methods for growing crops need to be found within the larger interest. The principle of organic cultivation is attracting farmer's world over thanks to its various advantages over modern agricultural practices. Essentially, it's a farming system which supports and strengthens biological processes without recourse to inorganic remedies like chemicals or genetically modified organisms. Organic agriculture is productive and sustainable. Many state-supported agencies, non-governmental organizations (NGOs) and individuals have started experimenting with organic methods of food production within the recent past [2].

The definition of organic farming that is most frequently used is as follows: "Organic agriculture may be a holistic production management approach that promotes and increases agro-ecosystem health, including biodiversity, biological cycles, and soil biological activity. It emphasizes the use of management strategies over the use of off-farm inputs while taking into account the need for regionally tailored systems according to area variables. To do this, it is frequently done by using agronomic, biological, and mechanical means whenever possible rather than synthetic materials to fulfil any particular role within the system (FAO, 1999). A production system that uses a full range of pre- and post-plant tillage techniques (such as a plough, disc plant, and cultivator), synthetic fertilizers, and pesticides is referred to as "conventional farming." A significant degree of agricultural specialization characterizes it. Contrarily, a variety of crops is a hallmark of organic farming [3].

In this paper, an effort has been made to bring out the current situation of organic farming within the light of current developments at the global and national levels.

ORGANIC FARMING IN INDIA

Organic farming has long been practiced in India, but modernization strategies, notably the advent of new technologies, have increased the usage of chemicals. However, in recent years, constraints of agriculture that encouraged the use of chemicals and intense irrigation have become evident, leading to a rise in interest in organic farming. The resurgence of interest in organic farming is mostly due to two issues: declining agricultural productivity in some regions as a result of, among other things, excessive use of chemical inputs, declining soil fertility, and increased environmental consciousness.

Exports were important, though maybe to a smaller extent than in other nations. Through the use of organic wastes, integrated pest management (IPM), and integrated nutrient management (INM) techniques, the Tenth Five-Year Plan supports the promotion of organic farming (GoI, 2001). Even the Ninth Five-Year Plan placed focus on promoting organic produce in plantation crops, spices, and condiments as well as adopting organic and bio-inputs to safeguard the environment and promote sustainable agriculture. Several ministries and government departments at the central and state levels are among the organisations and countries that are now working to promote organic farming in India [4].

The National Programme for Organic Production (NPOP) was launched by the Indian government in 2001. The ECU Commission and Switzerland are aware of the NPOP

standards for production and authorisation system as being similar to their national standards. The Department of Agriculture (USDA) has thus acknowledged the NPOP agreement assessment measures of certification as being equivalent to those in the US. These identifications allow importing nations to accept national organic products that have been properly certified by our nation's approved certifying authorities.

In terms of the overall area under organic agriculture, India is now ranked 33rd, while its proportion of agricultural land used for organic crops is 88th. According to the Agricultural and Processed Foods Export Development Authority (APEDA), there are approximately 2.8 M ha (2007–2008) of certified farmland, of which 1 M ha are under cultivation, while the other M ha are covered by forest (wild collection). However, an estimated 69 Mha is traditionally farmed without the use of chemical fertilizers and will be qualified for certification using the current methods or with minor adjustments.

Although many of these farms are modest holdings (almost 60% of all farms in India are only one ha), certifying these farms still poses a hurdle. Smallholders and farmers with limited resources may not be able to afford the cost of certification, they may be illiterate and unable to maintain the necessary records, or they may be using native cultivation methods that are unpredictably different from those allowed by organic certification systems. These farms mostly produce for domestic consumption and only supply the local markets on sporadic occasions when there are surpluses. For farms, these barriers make it difficult to reap the potential benefits of organic certification [5].

Even if organic farming isn't yet widely practiced, a recent survey shows that its prominence has increased significantly over the past 20 years. Since the turn of the millennium, the area of land used for organic farming has increased by about five times. With 1.94 million hectares (mha) under organic cultivation in 2018, India was among the top 10 nations. With over a third of the roughly 2.8 million organic farmers worldwide, the nation also had the most of them at quite 1,000,000 [6].

STATUS OF INDIA

1) 1.1% land of total farmland under organic cultivation in 2018
2) 1.14 mln organic producers — 41% of the 2.8 mln global total
3) 1.9 mha under organic agriculture (including in-conversion areas) — 2.7% of the 71.5 mha global total.
4) 64% increase in organic land in decade through 2018; 8.9% growth from 2017 to 2018.
5) 1.4 mha of wild collection area
6) 0.13 mha of oilseed organic area — 0.5% of global total
7) 0.14 mln organic cotton farmers over 0.22 mha certified organic cotton area
8) 47% of world’s organic cotton production

Organic farming was native to India. Indian farmers, within the past, practiced nature-friendly farming but after the revolution, they started using agro-chemicals excessively. High-input rigorous agriculture debilitated the humans, animals and environment. The current agrarian crisis, agro-biodiversity loss, natural resources degradation and changing climate have aggravated things, raising questions on sustainability of this type of agriculture.

Organic and natural farming present a replacement opportunity. However, funds allocated to organic agriculture were miniscule: Combined budget allocated to flagship schemes like

Paramparagat Krishi Vikas Yojana, Organic Value Chain Development for North East Region and National Project on Organic Farming was but Rs 700 crore for 2020-21. In contrast, central subsidies for chemical fertilisers were Rs 70,000-Rs 80,000 crore annually. The central and state governments got to make a paradigm shift and make an ecosystem for farmers to support organic and natural farming. this will help achieving several of the United Nations-mandated sustainable development goals by helping with food and nutrition security, tackling global climate change , rural development, employment generation, increasing farm income, conserving natural resources, improving biodiversity and health [9].

National Programme for Organic Production (NPOP)

Organic products are cultivated under a system of agriculture without using chemical fertilizers and pesticides with an environmentally and socially responsible approach. This is repeatedly a way of farming that works at grass root level preserving the reproductive and regenerative capacity of the soil, good plant nutrition, and management of soil, produces healthy food rich in energy and strength which has resistance to diseases. India is bestowed with lot of potential to supply all sorts of organic products thanks to its various agro climate.

The long-standing practise of organic farming is a benefit in many regions of the nation. This provides a guarantee for organic producers to disrupt the market, which is expanding both domestically and internationally. According to statistics, India ranks first in the world in terms of the overall number of producers and eighth in terms of organic agricultural land as of 2020. (Source: FIBL & IFOAM Year Book, 2020). The National Programme for Organic Production is being carried out by the APEDA, Ministry of Commerce & Industries, Government of India (NPOP). The programme includes certification of Certification Bodies, organic production standards, organic agricultural promotion, marketing, etc.

The European Commission and Switzerland have recognised the NPOP standards for production and accreditation system as being equivalent to their national standards for unprocessed plant products. USDA has also acknowledged NPOP's conformity evaluation techniques for accreditation as being similar to those used by NOP people.

With these acknowledgments, importing nations would accept national organic products that have been properly certified by India's approved certifying authorities. APEDA is also undergoing a bilateral equivalency process with countries including Canada, Japan, South Korea, Taiwan, etc.

AREA

3.67 million Hectares are currently being certified as organic as of March 31, 2020. (2019-20). This contains 2.299 million ha of arable land and an additional 1.37 million ha for gathering wild produce. Madhya Pradesh has the most land certified as organic out of all the states, followed by Rajasthan, Maharashtra, Gujarat, Karnataka, Odisha, Sikkim, and Uttar Pradesh. Sikkim made the noteworthy accomplishment in 2016 of turning all of its arable land (more than 75000 acres) to organic certification.

PRODUCTION

In 2020–21, India produced around 3496800.34 MT of certified organic products, including processed foods, oil seeds, sugar cane, cereals & millets, cotton, pulses, aromatic &

medicinal plants, tea, coffee, fruits, spices, dry fruits, vegetables, and coffee. The assembly also creates useful food items, organic cotton fibre, and other things outside just edibles. Madhya Pradesh is the top producer among the several states, followed by Maharashtra, Karnataka, Uttar Pradesh, and Rajasthan. Oil seeds are the only leading category in terms of commodities, followed by cereals and millets, tea and coffee, fibre crops, fodder, pulses, sugar crops, medicinal/herbal and aromatic plants, spices, and condiments.

EXPORTS

The total amount of exports in 2019–20 was 6.389 lakh MT. Around INR 4,686 billion was realized through the export of organic foods (689 million USD). Exports of organic goods go to countries including Canada, Switzerland, the United States, Australia, the European Union, Israel, the United Arab Emirates, Japan, Vietnam, and New Zealand. In terms of realizing export value Processed foods, including soy meal, take the lead among products with a 45.87 percent market share, followed by oilseeds (13.25 percent), plantation crop products like tea and coffee (9.61 percent), cereals and millets (8.19%), spices and condiments (5.20%), dry fruits (4.98%), sugar (3.91), medicinal plants (3.84 percent), etc. [10].

CONCLUSIONS

The paper has shown that outlook about organic farming are different, mainly among the experts. The divergence about the effectiveness and yield enhance in organic farming are acute, but there's a robust harmony on its eco-friendly nature and inherent ability to safeguard human health. There are strong views against organic farming principally on the grounds of possibility of feeding a billion people, its monetary and economic viability, and availability of organic inputs and distribution of know-how. Conversely, numerous studies have revealed that organic agriculture is fruitful and sustainable. There are many of us who, while approving organic agriculture, advocate a careful change of farms into organic, in order that yield loss is taken care to the point possible.

Currently, there's lack of state subsidies or support to form conversion to organic status easier or cheaper. The questions on the yield and economic viability of organic farming are critical, and there are not any experiential studies available within the Indian perspective comparing the financial and ecological returns of organic farms with reference to conventional farms.

Organic agriculture has been ignored within the agricultural policy, and therefore there's less government support for the encouragement of organic agriculture, as it exists for the traditional agriculture within the sort of subsidies, agricultural extension services and official research. Given proper support, organic farming will grow immensely in India, particularly within the dry land regions of the country, taking benefit of the variety of soil and climate.

REFERENCES

1) *Paull, John (2011).* "Organics Olympiad 2011: Global Indices of Leadership in Organic Agriculture" (PDF). *Journal of Social and Development Sciences. 1 (4): 144–150.* doi:10.22610/jsds.v1i4.638.
2) Paull, John & Hennig, Benjamin (2016) Atlas of Organics: Four Maps of the World of Organic Agriculture, Journal of Organics. 3(1): 25-32.
3) Paull, John & Hennig, Benjamin (2018) Maps of Organic Agriculture in Australia, Journal of Organics. 5 (1): 29–39.
4) *Willer, Helga (February 10, 2016).* "Organic Agriculture Worldwide 2016: Current Statistics" (PDF). *FiBL and IFOAM Organics International.*

5) *Willer, Helga (February 10, 2016).* "Organic Agriculture Worldwide 2016: Current Statistics" (PDF). *FiBL and IFOAM Organics International.*
6) "Enhancing Linkages Between Tourism and the Sustainable Agriculture Sectors in the United Republic of Tanzania" (PDF). *United Nations Conference on Trade and Development. 2015.*
7) *Weidmann, Gilles (2010).* "The World of Organic Agriculture: Statistics & Emerging Trends 2010" (PDF). *FiBL and IFOAM.*
8) "Aid for Trade Case Story: The East African Organic Products Standard" (PDF). *OECD and World Trade Organization.*
9) *Taylor, David (August 2008).* "Recovering the Good Earth: China's Growing Organic Market". *Environmental Health Perspectives. 116 (8): A346–A349.* doi:10.1289/ehp.116-a346. JSTOR 25071128. PMC 2516578. PMID 18709158.
10) "USDA Census of Agriculture news release". *USDA Census of Agriculture. USDA.* Retrieved 26 November 2016.