

INDIAN SCENARIO OF ORGANIC FOOD MARKET

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Abstract

Organic products have been grown and consumed in India for thousands of years. Organic food demand starts to arise due to people's awareness towards conventional food's negative impacts and organic food benefits. Science last decade's organic food demands have continuously increased. The current study is highlight the government schemes for promoting organic food and evaluates the growth of the Indian organic food market. The data was collected from different reports, websites, journals and books etc. to evaluate the scenario of the Indian organic food market. Tables constructs for a better understanding of Indian organic food market growth and Indian organic food market across the globe. Studies find that the organic food market has grown year by year. India has the largest number of organic food producers and sixth in organic land. India's highest organic food export to the European Union (EU) followed by America (USA). Also found that government schemes/initiatives taken for organic growth in India such as PKVY, Jaivik Kheti portal, NMSA, MOVCDNER and National Project on Organic Farming that are contributing in the increasing demand of the organic food. **Key Words:** Organic food, certification, market, import, export, production, consumption

1. Introduction

Organic products have been grown and consumed in India for thousands of years. Indians have been applying organic techniques for agriculture since the ancient ages. In the year 1966, scientist M.S. Swaminathan brought a green revolution to the country. The farmers started using chemical fertilizers, pesticides, scientific methods machinery etc. to increase agriculture production, make India self-sufficient, and boost the export of agri products. But after several years people see the negative impact on agriculture sustainability as well as on human health. Organic food demand starts to arise due to people's awareness towards conventional food's negative impacts and organic food benefits. The market share of organic food products has very small proportion of the total food market. However, the organic food products demand as well as consumption of organic food products have continually increase over the world (Singh & Alok, 2022). Organic agriculture is a socially responsible and environmental approach in this product grown without the use of pesticides and chemical fertilizers (National Centre for Organic and Natural Farming). Certification of product that represent its organic or not helps the consumers to recognize authentic organic food products and protect the consumers from fake organic products (Singh & Alok, 2022).. Producer needs

to meet the specified standards to get the organic certification for their products. In India, two types of organic certification bodies are:

- a. National Programme for Organic Production (NPOP)
- b. Participatory Guarantee System (PGS)

NPOP and PGS-India are both programmes that are independent of each other. Certification of products under one system cannot be labelled under another program. Products certified by PGS-India can be traded only in the domestic market but products certified by NPOP can be traded in the domestic market. NPOP certification organic food products also eligible for export.

2. Literature Review

Organic food products are grown naturally using agricultural techniques (Akbar et al., 2019). It grows to debar the utilization of chemical fertilizers and pesticides use (Basha, 2017 and APEDA, 2020). According to the Organic Food Protection Act, 1990, “the foods come from living animals such as meat, eggs and dairy products, the animals not be fed any growth hormones or antibiotics is called organic”. Food that is natural and produced without any additives such as artificial fertilisers, chemicals, and pesticides is organic (Karthikeyan et al., 2019). It is beneficial for the environment, health and society. Organic food packaging, storage, processing and transporting are also controlled by the use of antibacterial agents, artificial pigments, chemical additives and other additives (Chai, Meng and Zhang, 2021). The organic food industry is at their nascent stage in India (Pandey & Mishra, 2016). Market of the organic food contributes to the sustainable development of the environment and considers the food safety concerns of consumers (Oroian et al., 2017, Paul & Rana, 2012 and Xie et al., 2015). Science last decade’s organic food demands have continuously increased (Du et al., 2017). Agriculture activity is associated with consumer health, sustainability and the environment (Nguyen and Vo, 2020). Modernisation (use of artificial fertiliser, pesticides, and chemicals) has negatively impacted the health of consumers, sustainability and the environment (Wang et al., 2021). People’s food product consumption increases continuously leading to several problems such as the generation of waste, an increase in pollution and global warming (Bosquez, Boltzmann and Quiroz, 2022). Due to this consumer’s concerns towards food safety and health concerns are growing (Thambiah et al., 2015). This concern of consumers increases the demand for organic food (Sharma, Uprety and Phuyal, 2016). The reasons for the growth in organic food demand on the global level are food safety, quality, fashionability and also environmental impact (Nguyen et al., 2019).

3. Research Methodology

This research work is based on secondary data and is descriptive in nature. The data was collected from different reports, websites, journals and books etc. to evaluate the scenario of the Indian organic food market. Tables constructs for a better understanding of Indian organic food market growth and Indian organic food market across the globe. The current study highlight the government schemes for promoting organic food and evaluate the Indian organic market growth.

4. Data Analysis and interpretation

4.1. Global Organic Food Market

According to the Research Institute of Organic Agriculture Forschungsinstitut für biologischen Landbau (FiBL), 2021, 3.1 million farmers from 191 countries produced certified organic agri products on 76.4 million hectares of organic land in 2021 (FiBL Report, 2021).

It growing globally with increasing consumer demands towards organic food. The global organic food market reached over 124.8 billion Euros (FiBL Report, 2021).

- **Agriculture Organic Land:** 76.4 million hectares is the total organic agricultural land in 191 countries (FiBL Report, 2021).. Australia has largest area of organic land is 35.7 million hectares (MH) and another country is Argentina after Australia with (4.1 MH) and France (2.8 MH). India is in 6th rank with 2.7 million HA organic agriculture land.
- **Organic land ratio to total agriculture land:** Worlds organic land share is 1.6%. Liechtenstein Country at on top with a 40.2% organic land share of total agriculture land followed by Samoa is 29.1% and Austria with 26.5% organic land share in its total agriculture land. India at 69th position with a 1.5% share of agricultural land is organic.
- **Increase of land 2020 to 2021:** Worlds organic land area increased by 1.3 million ha from 2020 to 2021 and its organic land growth is 1.7%. China is on top in organic land growth which is 13% followed by France's organic land growth is 9% and Spain's organic land growth is 8%.
- **Producers:** The world has 3.7 million organic food producers. India has the highest number of organic food producers 1599010 followed by Uganda have 404246 producers and Ethiopia have 218175 producers.
- **Wild collection:** The World's 29.7 million hectares of land is used for organic produce. Finland is the first with 6.9 million HA land followed by Zambia have 2.5 million HA and Namibia has 2.3 million HA (FiBL Report, 2021).
- **Organic market:** World organic food market reached 124.8 billion Euro. The USA has highest organic food market 48.6 billion euros and Germany have at second number with 12 billion euros and France at third with 11.3 billion euros organic food market (FiBL Report, 2021)..

4.2. Asia organic food market

- **Organic agriculture land:** Total organic agriculture land in Asia is 6.5 million HA. It is 9% of worlds' organic agricultural land. China at the top with 2.75 million HA organic agriculture land followed by India with 2.66 million HA organic agriculture land.
- **Producers:** In Asia total number of producers is 1.8 million who are involved in organic food production. India on the top producer with 1599010. It is top in the world also.
- **Organic land ratio:** Asia's organic land ratio with total agriculture land is 0.4%. Timor-Leste is on the top with 8.5 % followed by South Korea with 2.5% and Sri Lanka with 2.4%.
- **Export to EU and US:** India is a top exporter to the European Union (EU) followed by America (USA). India exported 205928 MT to the EU and 43226 MT to the US. China at second with an export of 149283 MT to the EU and Pakistan at third with an export of 45244 MT to the EU.

4.3. Indian Organic Food Market

India is a potential market for the organic food market (Paul and Rana, 2012). India has highest number of producers in the world and 8th rank in terms of organic land in the world (FiBL & International Federation of Organic Agriculture Movement (IFOAM) Year Book, 2020). India has a 30 per cent share of total certified organic producers and 3.3% of the total cultivated area of India is used for organic farming (USDA, 2020). Expected (CAGR) of 10 per cent in 2016-2021 period. It expected it grows from US \$386.32 million to US \$10.75 billion for India's organic food sector (USDA Report, 2020).

- **Area:** Total organic certified area till 31st March 2021 is 4339185 hacter (ha), in which cultivation area is 2657889.33 ha and 1681295.61 ha wild harvest area. Madhya Pradesh is a state with the largest organic certified area followed by Rajasthan, Maharashtra, Chhattisgarh and Himachal Pradesh. Sikkim only a state that achieved the goal of converting its entire cultivating land into an organic certified area in the year 2016.
- **Production:** According to the Agricultural and Processed Food Products Export Development Authority in 2020-21 organic production was 3496800.34 metric tons (MT) (APEDA, 2021). The highest-produced commodities are sugarcane, oilseeds, followed by cereals and millets in India.
- **Export:** In 2020-21, 888179.68 MT exported and Rs. 707849.52 lakhs are raised by organic food export (APEDA, 2021). Soya meal has the largest portion of total realize export volume with 57% followed by oil seeds (9%), cereals and millets (7%), tea & coffee (6%), condiments and spices (5%) and others (APEDA, 2021).

4.4. Organic food products Consumption in India

Indian organic food domestic market rapidly developing due to consumer demand increasing continuously (USDA report,). The main reasons behind increase od demand are oriented products, wider availability in the market, new brands' entrance in the market, organic products sell in packed form (USDA report). Improving the certification process and increasing the number of certification agencies has enabled the entry of medium and small-organic food product producers thereby increasing competition in the market and the price of organic food is reduced to some extent (USDA report). In India, a young and educated demographic of individuals is grown and individuals are more concerned about food safety and health. It grows the demand and consumption also. Nowadays modern retail outlet like Organic India, FabIndia, 24Seven etc. are opened that provide certified organic products and retail industry also provide space for organic product categories to fuel the organic food product demand. Speciality organic stores in metropolitan cities cater to high-income individuals and organic prepared food is also available in restaurants and hotels. E-commerce companies like Jaivik Haat, Nourish Organics, Otipy, big-basket etc. are emerging channels that provide organic food products.

Organic beverages and food consumption has grown in India for some number of years due to an increase in purchasing power as well as an increase in awareness towards the benefit of organic food products (PIB). Organic beverages and food retail sales reached 69 million US Dollars in the market year 2019. Also, organic product demand surged after 2019 due to the COVID-19 pandemic in the same year (PIB).

Table1: Consumption of organic food in India

Category	2015	2016	2017	2018	2019	2020
Organic packaged food	\$6.7 Million	\$7.8 Million	\$9.2 Million	\$10.2 Million	\$11.1 Million	\$11.8 Million
Organic Beverages	\$32 Million	\$38.5 Million	\$45.3 Million	\$51.4 Million	\$57.9 Million	\$65.1 Million
Health & Wellness	\$10678 Million	\$12279 Million	\$14200 Million	\$15526 Million	\$16848 Million	\$18158 Million

Source: USDA Report, 2020

The below table shows the four-year data of the number of farmers, ICS groups, processors, traders, production, export etc.

Table2: Stakeholders, Import & Export, Production of Organic Food

Operators	2020-21	2019-20	2018-19	2017-18
Individual fam producers	3495	3060		1918
ICS groups	4781	3968 (13.601 farmers)		3488 (10.91 lakh farmers)
Processors	1703	1667		1081
Trader	745	784		822
Wild operators	71 (collectors: 8724)	89 (collectors: 16458)		79
Total operators	10795	9568		7388
Total farmers	1599010	1363166		1093288
Export MT	888179.69 MT	638998.40 MT	614086.40 MT	458339.017 Ton
Export amount (INR and USD)	707849.52 lac/ 1040.96 USD million	468590.82 INR/ 689.10 USD million	515076.43 INR/ 757.47 USD million	3453.48 Crore INR/ 515.44 million USD
production	3468991.98 MT	2709119.52		1675560.700
Area	4339184.93	3669801.33	3428638.780	3566538.79

Source: NPOP report

4.6. Government schemes/initiatives for promoting organic farming in India

The Government of India initiatives to promote organic farming. Some initiatives are mentioned below:

A. Paramparagat Krishi Vikas Yojana (PKVY):

Scheme run under the government's sustainable agriculture national mission. It aims to establish excellence in organic farming. For this, it is focused on traditional methods and modern science mix-ups for the mode to install sustainability in farming. It helps in buildup of soil fertility, and conservation of resources and provides safe and healthy food. It also empowers the farmers (input production, assured quality). Direct marketing and value addition.

PGS India's key approach for quality assurance under this scheme.

Criteria of organic area selection

- Mainly promoted in rain-fed, tribal and hilly areas because their usage of chemical pesticides and fertilizers is very low and have good accessibility to the market.
- Large patches up to 1000ha area covered by the cluster approach will be adopted
- Subsidy ceiling with a eligibility of farmer have hold maximum of one factor area.
- Formed gram panchayats based on farmer-producer organization
- Try that the crossed Cluster shall be in contiguous patches

B. Jaivik Kheti portal

Department of Agriculture of the Ministry of Agriculture along with MSTC take the initiative for promote organic farming at global level by starting a Jaivik Kheri portal. Organic farmers sell their produce products on a Jaivik Portal. It promoting benefits of organic farming and provide a online platform to organic farmers for selling their organic produces.

It is. an E-Commerce platform as well as a knowledge platform. It has a repository of success stories, videos, case studies, organic farming practices and other material related to organic farming. It facilitates organic farmers and also promotes organic farming. A large range of organic products available on these e-commerce platforms such as grains, vegetables, fruits pulses etc.

This portal provides organic product to the consumers at their doorstep at much as lower prices. Organic farmers try to meet consumers' demand for organic food products by available them at the doorstep and at lower prices than prices in the market. Stakeholders like regional councils, government agencies, farmers, local groups and input suppliers are linked on a single platform or portal.

Those mechanism such as price quantity bidding, auction, reverse auction and book building.

Registered farmers: 609120 (Uttarakhand followed by UP, MP and Rajasthan). Haryana at fifth from the bottom.

Local groups: 18326

Input suppliers: 89

Buyers: 8248

C. National Mission for Sustainable Agriculture (NMSA)

Objectives

- To make agriculture climate resilient, and sustainable with more productive and remunerative agriculture. It is done by promoting a farming system that is based on location-specified integrated.
- To conserve natural resources.
- To conserve soil and maintain its fertility through adopting soil management practices such as soil testing, soil fertility maps, judicious use of fertilizers etc.
- To optimum water utilisation by adopting efficient water management techniques. To achieve more crop per drop we must utilise the water efficiently.
- To develop farmers' and other stakeholders capacity.
- To establish coordination between different departments and ministries for accomplishing key objectives of the scheme.

D. Mission Organic Value Chain Development for North East Region

It is a central government scheme launched during 12th plan period, that comes under a national mission for sustainable the 12th plan period.

Objective of the MOVD-NER

- To promote and make capable to farmers for making their conventional farming into a commercial organic enterprise with end-to-end facilities for produce, process, store and marketing.
- To create partnerships between the organic businessman and farmers in domestic as well as export market.
- To support the development of the whole value chain from inputs, certification, collection, aggregation, processing, brand building and marketing. To develop the link between growers with consumers by developing certified organic production.

E. National Project on Organic Farming (NPOF)

It is a scheme launched in 10th five-year plan by central government and these schemes come under the Department of Agriculture and Cooperation.

- To promote organic farming through the buildup of the technical capacity of all stakeholders.
- Provide training related to the certification system
- To act as central data collection and information centre related to all aspects of organic farming.
- Conferences/seminars and trade fairs conducted for the creation of awareness.
- Organic inputs come under a quality control.
- It is regulating the PGS-India and is focused on affordable organic certification system.

5. Conclusion

In the world, India is among the largest producers of organic food and is having 8th rank in terms of organic land. Till 31st March 2021, the total organic certified area is 4339184.93 hacter (ha). Being among the highest producers, 888179.68 MT of organic food was exported in 2020-21. There is an increase in demand for organic food because of oriented products, wider availability in the market, new brands' entrance into the market, and organic products sold in packed form (USDA report). In recent times, modern retail outlets like Organic India, FabIndia, 24Seven etc. have been started that are providing certified organic products and

along with this, space for organic product categories to fuel the organic food product demand is also given by this retail industry. In India, the consumption of organic beverages and food has grown in recent years due to the increase in purchasing power and awareness towards the benefits of organic food products (PIB). Along with this, there are Government schemes/initiatives taken for organic growth in India such as PKVY, Jaivik Kheti portal, NMSA, MOVCNDR and National Project on Organic Farming that are contributing in the increasing demand of the organic food.

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