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Organic farming in India: Sustainable Development and Farmers

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Abstract: *Organic farming can also be called other natural farming. Since 1990, the market of organic products in the world has increased significantly; Sikkim is the first state in a developing country like India, which became the first state to adopt organic farming, along with Tripura and Uttarakhand is also striving towards achieving the goal of organic farming. On one hand, efforts are made to increase production by using chemicals as much as possible so that the demand can be met and profits can be earned, but the current time changes. Where the use of chemical fertilizers has increased, on the other hand the crop is being produced using organic fertilizers. The producers of organic farming are allowed to use anything other than organic matter for protection and fertilization Today one district – one product scheme has helped small and marginal farmers to produce organic agriculture on a large scale. It turned out to be a traditional farming that promoted quality of production rather than profit. That is, in today's capitalist era, where big farmers do farming with the aim of earning profit by producing more and more, then organic farming proves to be unsuccessful. Apart from this, organic farming is expensive. In this article, efforts will be made to understand the need for organic farming, as well as the issues faced by organic farmers, and also the programmes in place to help them, including the long-term sustainability of organic farming in the future.*

Key Words*: - organic farming, farmers, sustainable development.*

1. INTRODUCTION:

Agriculture is the backbone of the Indian economy, with more than half of the population reliant on it for survival. Although its contribution to India's GDP is less as compared to other sectors and it is gradually decreasing due to traditional farming practices. And therefore, it is necessary to revive this basic sector. Organic farming is a holistic approach that along with increasing the socio-economic status of marginal farmers, it is also beneficial for the environment. Northbourne originated the term "organic" in his book "Look to the Land," published in 1940. (Nourthbourne, 2003) Also defines organic farming as ‘an ecological production management system that promotes and enhances biodiversity, biological cycles and soil biological activity’.

Traditional farming, on the other hand, is a farming approach that uses synthetic pesticides and chemical fertilisers in order to increase productivity and profit. Synthetic pesticides and chemicals capable of removing insects, weeds, and pests, as well as growth stimulants such as synthetic hormones and fertilisers capable of increasing the rate of growth are used in conventional farming (Worthington, 2001). Organic farming is in a nascent stage in India. About 2.78 million hectare of farmland was under organic cultivation as of March 2020, according to the Union Ministry of Agriculture and Farmers’ Welfare. This is two per cent of the 140.1 million hectare net sown area in the country (Khurana & Kumar, 2020). Another main definition is define by FAO that “Organic agriculture is a unique production management system which promotes and enhances agro-ecosystem health, including biodiversity, biological cycles and soil biological activity, and this is accomplished by using on-farm agronomic, biological and mechanical methods in exclusion of all synthetic off farm inputs” (FAO/WHO Codex Alimentarius Commission, 1999). Organic farming methods combine scientific knowledge of modern technology based on natural biological processes with traditional farming practices. Organic methods are used to make the environment pollution free without any ecological cost to increase sustainable production and to release nutrients into the crop. Its aim is to produce highly nutritious crops and the different ways of practicing organic agriculture are such as Crop Diversity, Crop rotation, Biological pest control, Soil management, Green manure Compost, Weed management.

1.1. NEED OF ORGANIC FARMING:

Because of the Green Revolution and its chemical-based technologies, production has nearly stagnated, dividends are gradually declining, and pollution, climate change, and other negative externalities are occurring as a result of the

usage of fossil fuel-based chemicals. According to (Kumar Yadav, 2021) there are following reasons for adopting Organic farming:

1. To accrue the benefits of nutrients
2. Stay away from GMOs
3. Natural and better taste
4. Direct support to farming
5. To conserve agricultural diversity
6. To prevent antibiotics, drugs, and hormones in animal products

Organic farming in India was primarily driven by civil society and farmers' movements. It has been promoted at the governmental level, primarily with an export-oriented approach, supported by a third-party certification system. This was part of the National Program for Organic Production (NPOP), which began in 2001 under the Ministry of Commerce and Industry's Agricultural and Processed Food Products Export Development Authority (APEDA). After that in 2005, the first organic farming policy of India was developed by the Ministry of Agriculture. Organic food is a product of the farming system in which the use of man-made fertilizers, pesticides is avoided; Organic farming does not use toxic pesticides, synthetic fertilizers, genetically modified organisms (GMOs). In addition, the organic product also ensures that strict organic farming standards are followed with respect to its positive impact on environmental protection.

2. INDIAN ORGANIC FOOD INDUSTRY: PRESENT GROWTH AND FUTURE ASPECTS:

Organic farming can help to encourage agricultural diversification and the long-term production of healthy food, as well as increase household income and address environmental concerns. Organically cultivated foods are becoming increasingly popular as a result of their nutritional and health benefits. India ranks first in Asia (fifth in the world) with 23 lakh hectares of area under organic farming, as per the FiBL (The Research Institute of Organic Agriculture) & IFOAM (International Federation of Organic Agriculture Movements) Organics International report 2021.The FiBL survey report also indicate that The Indian organic food market has also seen a surge with a market size touching $820 million in 2020, which was just about $200 million in 2018 and is likely to grow at a CAGR of 24% during 2021-2026. Organic farming is currently practiced on 3.8 million hectares of cultivable land by 3 million farmers, with export and domestic demand totaling Rs. 7,000 crore and Rs. 4,400 crore, respectively. Organic oilseeds, oilcakes, cereals, sugar, fruit pulp, and spices are among the products we send to the United States, the European Union (EU), and Canada. Overseas demand for India's organic farm products grew rapidly, beating the Covid-induced delays in the supply chain in the pandemic year, and exports of such items grew 51% in FY2011. Among the states in India, Maharashtra, Rajasthan, Karnataka, Odisha, Uttarakhand, Madhya Pradesh and Uttar Pradesh have substantial area under organic cultivation. The main crops are cotton, paddy, wheat, legumes, millet, vegetables, fruits, grains, oilseeds and sugarcane. The outbreak of COVID-19 acted as a catalyst in motivating people to adopt a healthy and nutritious lifestyle. Due to global pandemic there has been a huge increase in public awareness of organic food products that are considered healthier than conventional alternatives that promote clean eating and overall health. Indian consumers have become more aware of the presence of chemicals in conventionally grown foods, prompting organic market players to come up with innovative ways to meet the health needs of their customers.

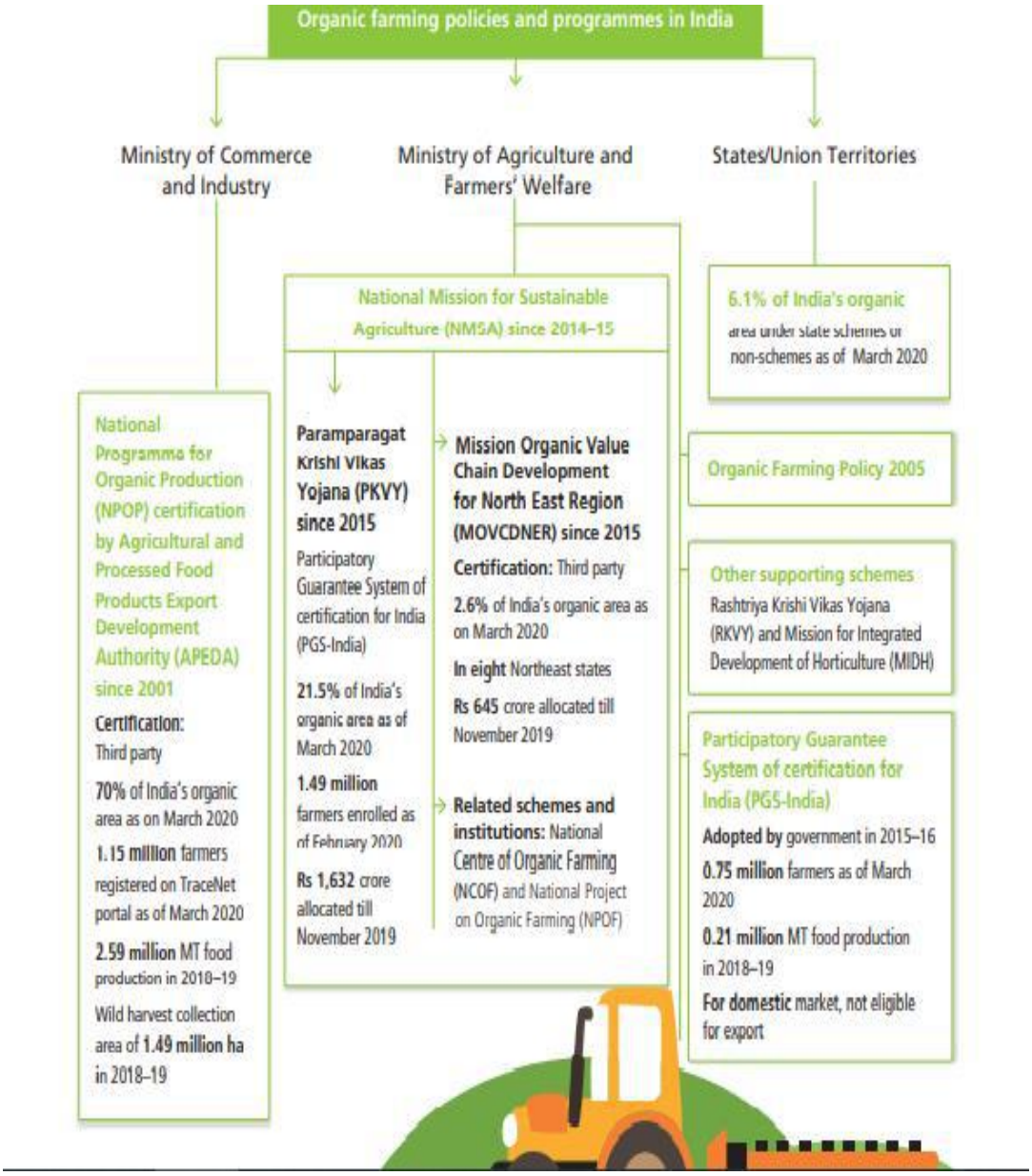
3. ORGANIC FARMING COVERAGE IN INDIA:

India has the largest number of organic producers in the world and ranks ninth in terms of its area of agricultural land under organic cultivation (PIB 2020). As per the Ministry of Agriculture and Farmers' Welfare (MoAFW), 2.78 million hectares was covered under organic farming in India as of March 2020. This is about 2 per cent of the 140.1 million hectares net sown area in the country (Khurana & Kumar, 2020). Madhya Pradesh leads with 0.76 million hectares under organic cultivation, accounting for almost 27% of India's total organic agricultural area. About half of the area under organic cultivation is in the top three states— Rajasthan and Maharashtra are the other two. Organic farming in all states of the country, including Sikkim, was declared 100 per cent organic in 2016.
In India, there are around 1.9 million farmers, or 1.3 percent of the 146 million agricultural workers. As of March 2020, these landowners were registered under the two certification systems, i.e. the participatory guarantee system for India (PGS India) and third-party certification of the NPOP. Also in the union budget 2020–21, Rs 687.5 crore has been allocated for the organic and natural farming sector which was Rs 461.36 crore in the previous year.

4. ORGANIC FARMING POLICIES AND PROGRAMMES IN INDIA:-

The following chart shows the various government policies to promote organic farming and welfare of farmers practicing organic farming.

Figure: 1



Source: Adopted from Khurana and Kumar report

The "One District One Focused Product" (ODOFP) initiative, recently launched by the Government of India to enhance agricultural productivity as well as for states to strengthen their organic production plans to conserve precious soil resources, A right step in this direction, which lists agro-climatic crops, for which the niche demand can be further increased.

5. ORGANIC FARMING AND INDIAN FARMERS:

Around 80% of all farms worldwide are small farms with up to two hectares of land on which marginal farmers depend for their livelihood. Such farms are often the backbone of agriculture in developing countries, but they may not always take environmental protection into account. Due to local infrastructure deficiencies, many smallholders have been put under pressure as a result of globalization. Smallholder farmers can benefit from technology by being able to network or form collaborations through collaborative projects facilitated by digitalization.

Factors that drive up the price of organic foods include high cost of obtaining organic certification, high cost of manpower in this sector, lack of subsidy on organics in India as opposed to chemical inputs. But with increasing health awareness, consumers are ready to pay a higher price. Nevertheless, due to these problems, due to insufficient supply of organic products, its cost increases. Many farmers are hesitant to switch to organic farming because of the high production costs and the three-year transition period required before their farms can be certified. There is a lack of understanding among farmers about the differences between conventional and organic farming. Today, in organic farming, we are seeing that government and non-government organizations prescribe standard products and procedures that farmers are expected to follow. Here, the products may be different than in traditional agriculture, but the process is the same. This process does not help the farmers to re-clear their understanding of nature. Due to which neither they are able to make proper use of their knowledge and experience to combine traditional and modern agriculture using proper techniques. In this fast-paced scenario, small farmers need better access to capital and education. The most difficult task is to train marginal farmers to develop managerial abilities as significant as physical capital. Marketing for organic products as well as vocational training is required. Small organizations of farmers also need to be strengthened for technical knowledge of production. Appropriate technical assistance and subsidized support should be provided to them. Appropriate should be provided for value addition and quality improvement in the supply chain. A specialized web page, *jaivikheti.in*, has been created as a knowledge dissemination and e-commerce platform.

6. ORGANIC FARMING AND SUSTAINABLE DEVELOPMENT: FUTURE ASPECTS:

India is an agriculture based country, 67% of its population and 55% of its manpower depends on farming and related activities. Agriculture meets the basic needs of India's rapidly growing population. India is the second-largest exporter of organic products in Asia, but its export volume comprises just about 0.55% of the global trade in organic produce (GOI, 2019) Due to the potential environmental benefits of organic products and their compatibility with integrated agricultural approaches to rural development for developing countries like India, organic farming can be considered a tool for development. According to (Bhardwaj & Manisha, 2019), the following are found to be the **major problem areas** for the growth of organic farming in the country:

- Lack of Awareness
- Output Marketing Problems
- Shortage of Bio-mass
- Inadequate Supporting
- Infrastructure High Input Costs
- Marketing Problems of Organic
- Input Absence of an Appropriate
- Agriculture Policy Lack of Financial Support
- Low Yields
- Inability to Meet the Export
- Demand Lack of Quality Standards for Bio Manures
- Political and Social Factors.

India is blessed with a variety of naturally viable organic forms of nutrients in various parts of the country, which would aid in organic crop cultivation (Reddy, 2010). The very basic approach to organic farming for the sustainable environment includes the following (Yadav, 2017):

1. Improvement and maintenance of the natural landscape and agro-ecosystem.
2. Avoidance of overexploitation and pollution of natural resources.
3. Minimization of the consumption of non-renewable energy resources.
4. Exploitation synergies that exist in a natural ecosystem.
5. Maintenance and improve soil health by stimulating activity or soil organic manures and avoid harming them with pesticides.
6. Optimum economic returns, with a safe, secure, and healthy working environment.
7. Acknowledgement of the virtues of indigenous know-how and traditional farming system.

(Soumya, 2015) also suggested that Implementation of a strategy encompassing food security, generation of rural employment, poverty alleviation, conservation of the natural resource, adoption of an export-oriented production system, sound infrastructure, active participation of government, and private-public sector will be helpful to make revamp economic sustainability in agriculture.

7. CONCLUSION:

Organic farming is more environmentally friendly than conventional farming. Organic farming promotes consumer health by keeping soil healthy and maintaining environmental integrity. Furthermore, the organic produce market is now the world's fastest expanding market, including in India. Currently, there are now insufficient state subsidies to promote organic farming, and organic agriculture must evolve to become more economical. As a result, organic farming can help to encourage agricultural diversification and the long-term production of healthy food, as well as increase household income and address environmental concerns. Organically cultivated foods are becoming increasingly popular as a result of their nutritional and health benefits. Now it is well known said by the reputed news article that is, "Organic agriculture is the best insurance policy that India can have for its population with better performance on productivity, environmental impact, economic viability and social well-being."
(www.thehindubusinessline.com)

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