

Government promoted organic farming Schemes

The Government of India has been promoting organic farming in the country through two dedicated national schemes: Paramparagat Krishi Vikas Yojana (PKVY) and Mission Organic Value Chain Development for North East Regions (MOVCD-NER) since 2015 through state governments. Under these schemes, the support provided includes forming farmers' clusters or farmer producer organisations; input procurement; value addition, including post-harvest infrastructure creation; packaging; branding and publicity; transportation; and organising organic fairs."

Organic farming is supported under other national schemes, such as Rashtriya Krishi Vikas Yojana (RKVY), Mission for Integrated Development of Horticulture (MIDH), and the All-India Network Programme on Organic Farming under the Indian Council of Agricultural Research (ICAR). Certification of organic farming is either done through the Participatory Guarantee System (PGS) or third-party certification by the Agriculture Processed Food and Export Development Authority (APEDA) in the Ministry of Commerce.

Schemes By central sector for organic farming

- **Paramparagat Krishi Vikas Yojana (PKVY):** Encourages organic farming through cluster approach and participatory guarantee system (PGS) certification, with support for inputs, training, and marketing.
- **Mission Organic Value Chain Development for North Eastern Region (MOVCDNER):** Aims to develop certified organic production in the NE region with focus on processing, value addition, and market linkage.
- **National Mission on Sustainable Agriculture (NMSA):** Supports sustainable farming practices including organic farming through soil health management, efficient input use, and agro-ecological practices.
- **Rashtriya Krishi Vikas Yojana (RKVY):** Provides funding for state-level organic farming initiatives and infrastructure, encouraging innovation and organic input production.
- **Soil Health Card Scheme:** Promotes balanced use of fertilizers and organic manures by providing farmers with soil nutrient status and recommendations for organic amendments.

Opportunities in Organic Farming

- **Environmental Benefits:** Enhances soil health, biodiversity, and reduces pollution.
- **Healthier Food:** Free from synthetic pesticides and fertilizers.
- **Consumer Demand:** Rising awareness boosts market growth.
- **Government Support:** Subsidies and promotion programs aid farmers.
- **Technological Advancements:** Better pest and nutrient management.
- **Economic Viability:** Long-term gains through premium pricing and soil health.
- **Rural Development:** Creates jobs and supports local economies.
- **Climate Action:** Helps mitigate climate change through sustainable practices.
- **Fair Trade:** Encourages ethical and fair labor practices.
- **Resilient Systems:** Diversifies production and reduces dependency on inputs.

Challenges in Organic Farming:

- **High Costs:** Expensive transition and inputs.
- **Skill Gaps:** Lack of training and expertise.
- **Input Access:** Scarcity of organic seeds and bio-inputs.
- **Certification Hurdles:** Complex and time-consuming process.
- **Lower Yields:** Reduced output, especially early on.
- **Poor Market Linkage:** Weak infrastructure and marketing channels.
- **Pest Issues:** Harder pest control without chemicals.

क्रमांक: COOP/2023/KOTA/201080/25/11

ORGANIC FARMING

"Cultivating a Greener Future"

Agriculture Forum for Technical Education of Farming Society

Kota, Rajasthan



Gaurav Singh

(M.Sc. Agri.Agronomy), Department of Agronomy, AKS University

Amit Singh Tiwari

(Asst. Professor Agronomy), Department of Agronomy, AKS University

Abhay Singh Parihar

(M.Sc. Agri.Agronomy), Department of Agronomy, AKS University

Organic Farming :

Organic farming is a natural way of growing crops and raising animals without using harmful chemicals like synthetic fertilizers, pesticides, or genetically modified organisms (GMOs). Instead, it relies on eco-friendly practices that work with nature to keep the soil healthy, protect the environment, and produce safe, nutritious food. In organic farming, farmers use compost, green manure, crop rotation, and biofertilizers to maintain soil fertility. They also control pests and diseases using natural methods like neem oil, beneficial insects, and organic sprays. The goal is to grow food in a way that supports biodiversity, keeps the land fertile for future generations, and reduces pollution.

Principles of Organic Farming :



(1.) Health

- Organic farming aims to protect the health of soil, plants, animals, humans, and the entire ecosystem.
- It avoids harmful chemicals and focuses on natural methods that support well-being.

(2.) Ecology

- This principle encourages farming that works with natural systems and cycles.
- It promotes biodiversity, soil fertility, and the conservation of water and energy.

(3.) Fairness

- Fairness means respecting the rights and well-being of farmers, workers, animals, and consumers.
- It supports fair trade practices, good working conditions, and animal welfare.

(4.) Care

- This principle is about protecting the environment and future generations.
- Organic farming takes a precautionary and responsible approach to decisions and techniques.

Components of Organic Farming

Organic farming relies on several key components to maintain soil fertility and productivity while minimizing environmental impact. These include crop rotation, use of organic fertilizers and manures, green manures, cover crops, and biological pest and disease control. The goal is to create a sustainable and healthy ecosystem within the farm, rather than relying on synthetic inputs.



(1). Crop Rotation:- It is the method of growing several types of crops in the same area, according to different season in a sequential way. Here land is fixed but crop is rotated year after year according to their demand of nutrients and water. It helps to check the erosion, improves soil fertility and stabilizes income.



(2). Green Manuring:- Green Manuring is a process cultivating the plants and crops and which are uprooted and ploughed into soil to make them decomposed and act as organic matter and make source of nutrients for the soil to increase its quality. e.g. Crotolaria juncea, cowpea and other leguminous crops.



(3). Vermicompost :- Vermicompost is the product of composting processes using various species of earthworms especially red earthworms, to create mixture of decomposed vegetation or food wastes. Earthworms are called "Farmer's Friend". Earthworms help to improve soil conditions by maintaining soil texture and structure with good aeration.



(4). Biological Management :- Biological management in organic farming involves using natural enemies like predators, parasites, and pathogens to control pests and diseases, reducing the need for synthetic pesticides. This approach aims to maintain a healthy ecosystem and promote biodiversity by supporting beneficial organisms and natural pest control mechanisms.



(5). Livestock production:- Organic farming proposed to keep domestic animals use to increase the sustainability of the farm. Livestock plays a vital role in organic farming. The products of the animals like dung (act as Organic material and having much nutrients), urine (rich source of nitrogen) are useful for making compost manure.



(6). Bio-fertilizers :- There are some living micro-organisms, which provide nutrients to plants when applied to the seeds, plant surface or soil. They colonize on the plants parts, roots and promotes plant growth by increasing the supply or availability of primary nutrients to the plants. e.g. Azolla, Blue Green algae etc.



(7). Composting :- Compost is highly rich in nutrients and works as organic material. It is commonly used for manuring in crops. It can be made by decomposing farm waste, vegetables waste, food waste and crop residues onto a certain temperature and humidity for a certain period under controlled conditions.

Organic Farming in India

Aspect	Details
Organic Farming Land	1,764,677.15 hectares (certified), 3,627,115.82 hectares (under conversion)
Global Rank (Certified Area)	4th (as per IFOAM Statistics 2022)
Top States (by Organic Area)	1. Madhya Pradesh 2. Maharashtra 3. Rajasthan 4. Gujarat 5. Karnataka
First Fully Organic State	Sikkim (75,000 hectares of organic agricultural land)
Global Rank (Number of Farmers)	1st
Current Export Value	Rs 5,000–6,000 crore
Projected Export by 2028	Rs 20,000 crore (3–3.5 times increase)
Major Export Products	Organic cereals, pulses, oilseeds, spices, tea, coffee, fresh produce
Key Export Destinations	United States, European Union, Japan

** (As of March 2024)

State - wise organic coverage (Proportion to the net sown area of the state)



Percentage of net sown area under organic farming

0.2 100

**Source : Lok Sabha 2019 ; Ministry of Agriculture & Farmers Welfare