

# Organic Farming

## [UPSC Notes]

### What is Organic Farming?

Organic farming is an agricultural system that uses organic fertilizers such as green manure, compost manure, bone meal, etc., and gives emphasis on the techniques such as companion planting and crop rotation. This system of agriculture production combines biodiversity with healthy practices that lead to preserving natural resources. Organic farming is expected to become INR 75000 crore market by 2025.

### Organic Farming UPSC Notes- Key Points

- In 2016 Sikkim became India's first fully organic state.
- The major organic exports from India are sesame, flax seeds, medicinal plants, tea, soybean, rice, and pulses
- North East India is already promoting organic farming in India and here the use of chemicals is far less compared to the rest of the country. The tribal and island territories are also practicing organic farming
- In 2018-2019, there was an increase of almost 50% in organic exports that touched Rs 5151 crore.
- The demand for organic foods is increasing, and due to this, the exports from Mizoram, Assam, Manipur, and Nagaland, to USA, UK, Eswatini, and Italy have increased volumes.

### Characteristics of Organic Farming

- Protecting the fertility of soils by providing organic matter levels, boosting soil biological activity, and careful mechanical intervention.
- Providing nutrients to the crop indirectly by using relatively insoluble organic sources.
- Disease, weed, and pest control depend majorly on the natural predators, crop rotations, organic manuring, diversity, limited thermal, resistant varieties, and chemical, and biological intervention.
- Conservation of natural habitats and wildlife, and giving careful attention to the impact of the farming system on the environment.
- Meeting nitrogen self-sufficiency by using biological nitrogen fixation, legumes, and also effective recycling of the organic materials.

### Initiatives to Promote Organic Farming by Government

- Mission Organic Value Chain Development for North East Region (MOVCD)

- MOVCD or Mission Organic Value Chain Development for North East Region is a central sector scheme, and it is a sub-mission under the NMSA (National Mission for Sustainable Agriculture)
- Ministry of Agriculture and Farmers Welfare launched the MOVCED in 2015 for the implementation in the states of Assam, Meghalaya, Arunachal Pradesh, Mizoram, Manipur, Sikkim, Nagaland, and Tripura,
- The aim of this scheme was to enhance certified organic production in a value chain model which will establish a link between the growers and consumers to promote the development of the entire value chain.
- **Paramparagat Krishi Vikas Yojana (PKVY)**
- PKVY was launched in 2015 and it was an elaborated component of the SHM or Soil Health Management of the major project NMSA (National Mission of Sustainable Agriculture).
- The aim of PKCY is to promote the adoption of organic villages by cluster approach and the PSG (Participatory Guarantee System) certification.
- **Agri-export Policy 2018-** Organic farming in India has been positively impacted by focusing on the cluster and marking and promotion of “Produce of India”
- **Zero Budget Natural Farming-** this method of chemical-free agriculture draws from the traditional practices to Indian practices.
- **PM Formalization of Micro Food Processing Enterprises (PM FME)**
- This scheme was launched by the Ministry of Food Processing and Industries (MoFPI) as a part of the ‘Atmanirbhar Bharat Abhiyan.
- The aim of PM FME is to bring the new technology and affordable credit that would help the small entrepreneurs to penetrate new markets.
- **One District- One Product (ODOP)**
- The aim of ODOP is to encourage more visibility and sale of the indigenous and specialized crafts/products of Uttar Pradesh, which would lead to employment opportunities at the district level.
- To bring the economics of scale for the small and marginal farmers, the presence of aggregators is imperative.
- **Certification Schemes**
- FSSAI- Food Safety and Standards Authority of India is a food regulator in the country. FSSAI is responsible for regulating organic food in the market and imports.
- Participatory Guarantee System (PGS)) is a process of certifying organic products. PGS ensures the production of organic products takes place according to the laid-down quality standards.
- NPOP or National Program for Organic Production grants organic farming certification through a process of 3rd party certification for export.
- The Soil Health Card Scheme has resulted in a decline of 8-10% in the use of chemical fertilizers, and also enhanced productivity by 5.6%.

## Components of Organic Farming

Following are the components of organic farming

- Selection of variety
- Manage soil health
- Water management
- Maintain genetic diversity
- Weed management

- Pest and disease management
- Livestock management
- Nutrient management

## Need for Organic Farming

- The population in India is increasing day by date and we have to stabilize the agricultural production and increase it further in a sustainable way.
- The natural balance needs to be restored for the existence of property and life
- The agrochemicals are not renewable and their availability is decreasing which can cost our foreign exchange in the future.
- More demand for organic foods due to the food safety

## Advantages of Organic Farming

- Economical- with organic farming farmers can reduce their cost of production as they don't need to buy expensive chemicals so there is no extra expense.
- Return on Investment- the ROI is great because farmers use cheaper and local inputs to get the output.
- Nutritional- organic products have more nutrients as compared to the foods that are produced with chemicals, fertilizer, and utilized products.
- High demand- currently the market has a huge demand for organic products in India and also globally.
- Environment friendly- it is one of the best advantages of organic farming. Organic farming includes the usage of organic products so it does not harm the environment. It supports wildlife, especially in low lands.

## Disadvantages of Organic Farming

- Organic foods are expensive because the farmers don't get as much output as the conventional farmers do, and that's why organic foods cost 40% more.
- The quantity of organic foods produced is low so the marketing and distribution are not efficient.
- Organic products have a shorter shelf life and have more flaws than that chemical products.
- Lack of adequate infrastructure and marketing of the products.

## Types of Organic Farming

- There are two types of organic farming namely- Integrated organic farming and pure organic farming.
- Integrated organic farming includes the combination of nutrients management and pest management to achieve ecological demands and requirements.
- Pure organic farming is avoiding all the unnatural chemicals. In this process, all fertilizers and pesticides are obtained from only natural sources such as blood meal and bone meal.

## Organic Farming- Way Forward

- Organic farming is not a new concept in India and for a long time, farmers have been using organic residues, composts, cow dung, etc. organic farming is the answer to achieving food security and improving nutrition.
- With time, the popularity of organic farming is rapidly increasing and due to this farmers will soon see their rightful place in the global trade.
- New campaigns are highlighting the benefits of organic farming against the conventional system which would further boost the demand for organic farming.

