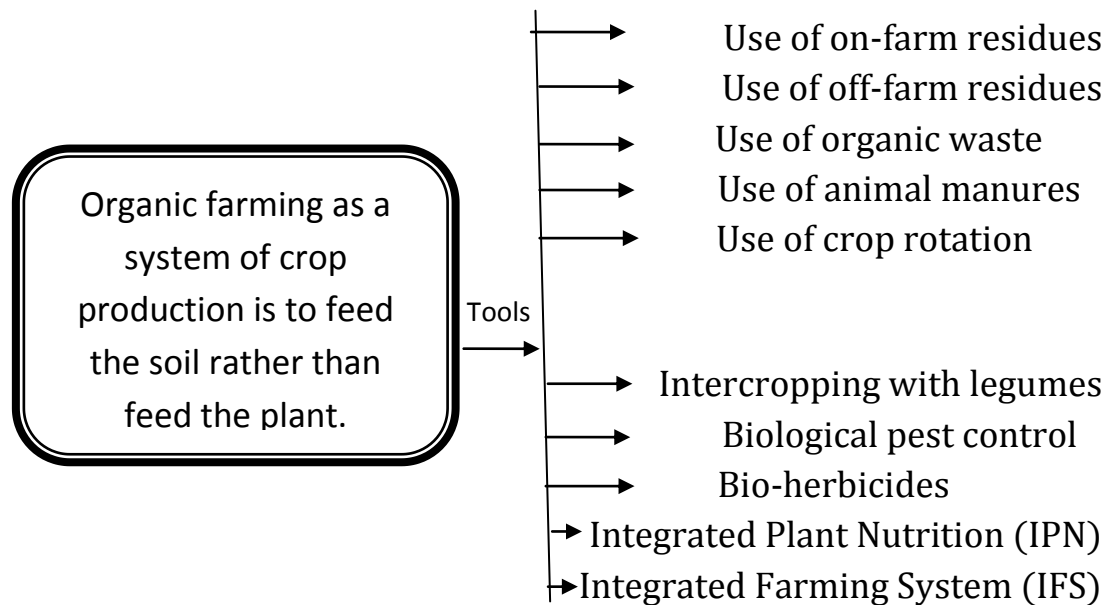


Chapter No. 08 Organic Farming-Its Meaning, Components of organic farming, scope and importance of organic farming in India, Aims and objectives, advantages and difference between organic farming and conventional farming.

- **Organic farming:-** It is a production system which avoids or largely excludes the use of synthetically compounded fertilizers, pesticides, growth regulators and livestock feed additives is called as organic farming.
- Organic farming system rely or largely depends on crop rotation s, crop residues, animal manures, legumes, green manures, off-farm organic wastes, mechanical cultivation, mineral bearing rocks and aspects of biological pest control to maintain soil productivity and to supply plant nutrients and to control insects, weeds and other pests.



➤ **Aims of organic farming:-**

- 1) Maintain soil health
- 2) Maintain Ecological balance
- 3) Avoid Ground water and air pollution
- 4) Maintain soil and crop productivity

➤ **Components of Organic farming:-**

1) Crops and soil:- Organic farming system encourages the use of crop rotations and manures to maintain soil fertility. Green manuring and intercropping with legume is important aspect for biological farming systems. It not only reduces the weeds but reduces leaching of nutrients and soil erosion.

2) Organic manures:- Organic material such as FYM, biogas slurry, compost, straw, crop residues, green manures and cover crops are good substitutes for inorganic fertilizers. Similarly, sea weeds, fish manure, basic slag and rock phosphate also proved better. Organic material helps in improving physico-chemical properties of soil. It reduces soil erosion. Crop rotation and green manuring are known to be improve soil fertility.

3) Non-chemical weed control:- Weed control is one of the main concerns in organic agriculture as use of herbicide is strictly prohibited due to environmental pollution. Crop rotations, green manuring, manure management, tillage generally used to prevent weeds. In addition, mechanical and thermal methods also used in controlling of weeds.

4) Biological pest management:- Control of insect pests and pathogens is a challenging job in organic farming. The conservation of natural enemies of pests is important for minimizing the use of chemical pesticides and for avoiding multiplication of insecticide resistant pests. Botanical pesticides derived from neem as well as parasitoids like Trichoderma, Bacillus thuringiensis and NPV (Nuclear Polyhedrosis Virus) are used in pest management.

Concept of Organic Farming:-

- Organic farming refers to the agricultural systems used to produce food and fibre.
- Organic farming systems do not use toxic chemicals, pesticides or fertilizers. Instead of they are used on the development of biological diversity and maintenance and replenishment of soil fertility.

- Organic foods are minimally processed to maintain the integrity of the food without artificial ingredients, preservatives or irradiation.
- Organic farming describes two major aspects of alternative agriculture.
 - a) The substitution of manures and other organic matter for inorganic fertilizers.
 - b) The use of biological pest control instead of chemical pest control.

❖ **Aims and Objectives of Organic Farming:-**

1. To provide food of high nutritional quality in sufficient quantity.
 2. To work with natural systems rather than dominating them.
 3. To encourage and enhance the biological cycles within farming system involving micro-organisms, soil flora and fauna, plants and animals.
 4. To maintain and increase the long term fertility of soils.
 5. To avoid all forms of pollution that may result from agricultural techniques.
 6. To maintain the genetic diversity of the agriculture system.
 7. To consider the wider and ecological impact of the farming system.
 8. To maintain the ecological balance.
- Characteristics of Organic Farming:-
 - Maximum but sustainable use of local resources.
 - Minimum use of purchased inputs.
 - Ensuring the basic biological functions of soil, water, nutrients and humus.
 - Maintaining a diversity of plant and animal species as a basis for ecological balance and economic stability.
 - Increasing crop and animal diversity in the form of agroforestry systems, integrated crop/livestock systems etc.
 - Advantages of Organic Farming:-
 - Organic manures produce optimal conditions in the soil for high yield and good crop quality.
 - They supply primary, secondary and micro-nutrients to crops.
 - They improve growth and physiological activities of plants.
 - They improve physico-chemical properties of soil.
 - Addition of organic carbon in the organic matter is the source of energy for microbes which help in better soil aggregation.

- They reduces need of purchased inputs.
 - Minimizes pollution due to waste material.
 - Organic fertilizers are considered as complete plant food.
 - Organic matter restores the soil pH.
 - Organically grown crops produced nutrition and healthy food free from toxic residues.
 - Organically grown plants are more resistant to disease and insect pest.
 - There is an increase in consumers demand for organic produce.
 - Organic farming prevents soil as well as environmental degradation.
 - Organic farming helps to regenerate degraded lands.
 - Due to diversification of crops there is more secured income.
 - It minimizes the cost of production through use of on-farm inputs.
 - Quality of food material is safe without any health hazards.
- ✓ Disadvantages of Organic Farming:-
- 1) In changing over to organic farming initial crop loss generally occurs.
 - 2) There are no fully developed markets for organic products.
 - 3) Biological controls may have weakned or destroyed due to organic chemicals.

➤ Difference between Organic Farming and Conventional Farming.

Sr. No.	Organic Farming	Sr. No.	Conventional Farming
1.	Ecological oriented, economy, efficient labour input.	1.	Economical orientation, mechanization, minimizing labour inputs.
2.	Diversification, balanced combination of enterprises.	2.	Specialization, disproportionate development of enterprises.
3.	Stability due to diversification.	3.	

