

## Definition of Organic and Urban Farming

The term organic defines a substance as a living material whether of plant or animal origin. Organic is therefore any chemical compound containing carbon or any substance derived from living organisms, be they plants or animals. Organic farming is a production system which avoids or largely excludes the use of synthetic compound such as fertilizer, pesticides, growth regulators, and livestock feed derivatives. Organic farming system recently rely on crop rotations, crop residues, animal manure, legumes, green manures, off-farm organic wastes and aspects of biological pest control to maintain soil productivity and tilth, to supply plant nutrient and to control insects, diseases, weeds and other pests.

Urban farming refers to farming activities in a city where particular crops are grown or animals are raised for home consumption and for commercial purposes.

### Distinction between Organic and Conventional Agriculture

	<b>Conventional Agriculture</b>	<b>Organic Agriculture</b>
1. <b>Quality:</b>	Size, Colour	Taste, nutrient content
2. <b>Plant nutrition:</b>	Urea, NPK, SSP	Fallow planting, leguminous cover
3. <b>Pest Control:</b>	Synthetic	Biological
4. <b>Weed Control:</b>	Herbicides	Cover crop   Mulching

### The driving force in organic agriculture are:

**Health Consideration:** Poisonous residues from synthetic agrochemicals, fertilizers, growth regulators are harmful to man.

**Sustainable environment:** Guaranteeing the future safety of the environment.

**Conservation of Bio-Diversity:** Existence of different form of flora in the environment

### Basic terms in Organic Agriculture

1. **Certification:** The process of certification is the compliance to agreed set of specification or procedure in handling of organic produce. It is an agreed standard that is transparent and well known to everybody.

2. **Traceability:** This is the process | ability to track every activity that has gone on the production and handling of food and fibre.

3.. **Eutrophication:** Is a process by which plant growth increases in a pond or lake. It generally promotes excessive plant growth, decay, favour certain weed specie over others and is likely to cause severe reduction in water quality.

4. **Conversion:** is a process by which an enterprice that have been running on a conventional principle moves into organic agriculture.

### **Major types of Horticultural Crops Grown**

These include fruit tree such as Mango, Coconut, Citrus, Cashew, Pear, Apple; Vegetables such as Leafy vegetables, fruit vegetables, spices; flowers and shade trees.

**Home gardening:** This is the principal source of fresh vegetable supplies for most home. Home gardeners grow various types of local vegetables that supply an important part of family needs.

**Market Gardening:** Its operation goes beyond family needs. It takes care of home consumption and city market. Market gardeners no longer grow local varieties of vegetables, but those which can be most profitably grown. There are competition in production and sales.

**Commercial Production:** This is the principal source of vegetables for big city markets for fresh consumption and seed processing. It is more extensive and specialized than market gardening and area of production is determined primarily by climatic and edaphic factors.

### **Production Systems**

**Mixed Farming:** The practice of mixing crops and animals together on the same piece of land.

**Multiple Cropping:** It is the practice of growing two or more crops simultaneously on the same piece of land. Depending on crop intensification and arrangement, multiple cropping can be divided into mixed cropping or intercropping relay intercropping, strip intercropping sequential cropping and crop rotation.

### **Environmental Factors Influencing Organic Agriculture**

These can be classified into Human environmental factor and Material Environmental factor. The two factors operate separately or dependently.

**Human environmental factors:** are made up of economic, institutional and social elements.

**Economic Factors:** Include policy which determine quantities, qualities and distribution of inputs and outputs. It influences the physical infrastructures such as transportation and roads, water and light supply, marketing, e.t.c

**Institutional Factors:** Include the laws of the land, credit and marketing conditions,

contractual agreement, property right to land and water, distribution of fertilizer, planting

material, grading and taxation.

**Social factors:** It deals with the culture and custom within a community. It determine the types of commodities grown which depends on the taste of the people.

**Material environmental factors:** consist of physical elements such as climate (rainfall, temperature, relative humidity, light etc), soil, topography and biological elements (Vegetation, weeds, plants, pests and diseases).

**Urbanization | Socio-ecological factors:** These factors are associated with the demographic growth i.e human population, availability of water, land etc.

### **Problems Associated with Organic Agriculture**

There are several problems confronting organic and urban farming. These include soil fertility maintenance, weed control strategies, insect pest control strategies, disease control strategies, availability of fertile land in urban areas, source of planting materials processing and storage facilities e.t.c.