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Organic Agriculture: Key Role of Promote Human Life

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Organic farming is a holistic production management system that supports and improves agroecosystem health, including biodiversity, biological cycles and soil biological activity. Organic farming, also known as organic farming or organic farming, is a farming system that uses fertilizers of organic origin, such as compost, green manure, and bone meal, and emphasizes techniques such as crop rotation and companion planting. It was created in the early 20th century as a response to rapidly changing agricultural practices. Organic farming is farming that prioritizes healthy food, healthy soil, healthy plants and a healthy environment along with crop productivity. organic crops have higher antioxidant activity and 18 to 69% higher concentrations of a number of individual antioxidants; increased intake of polyphenolic substances and antioxidants is associated with a reduced risk of some chronic diseases, such as cardiovascular and neurodegenerative diseases and some cancers

There are many explanations and definitions for organic farming, but they all agree that it is a system that relies on ecosystem management rather than external agricultural inputs. It is a system that begins to consider potential environmental and social impacts by eliminating the use of synthetic inputs such as synthetic fertilizers and pesticides, veterinary drugs, genetically modified seeds and breeds, preservatives, additives and irradiation. These are replaced by site-specific management practices that maintain and increase long-term soil fertility and prevent pests and diseases.

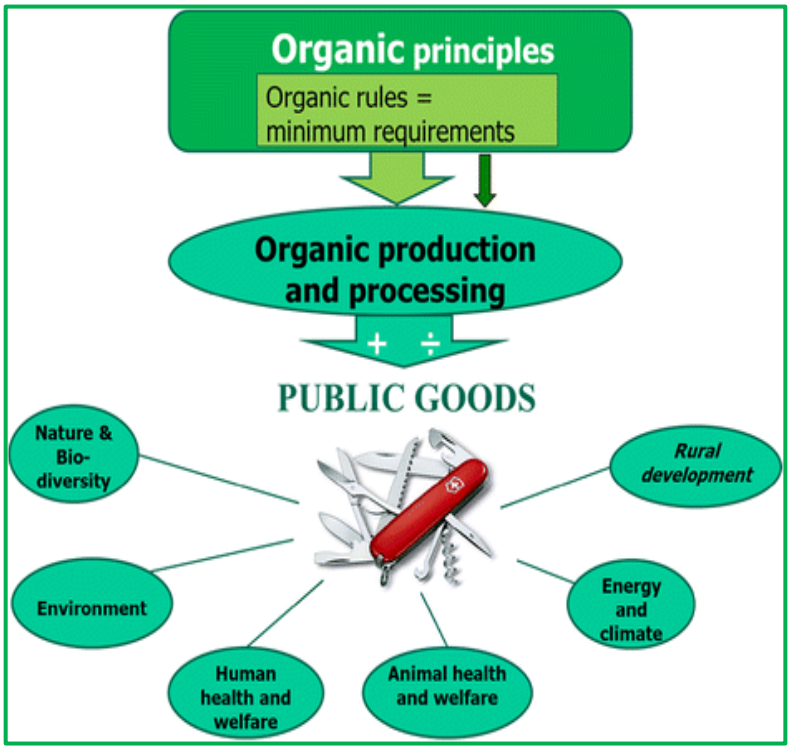
"Organic agriculture is a holistic production management system that supports and improves the health of the agro-ecosystem, including biodiversity, biological cycles and soil biological activity. It emphasizes the use of management practices in preference to the use of off-farm inputs, bearing in mind that regional conditions require locally adapted systems . This is achieved, where possible, by using agronomic, biological and mechanical methods, as opposed to using synthetic materials to perform any specific function within the system."

Environmental benefits of organic agriculture

- **Sustainability in the long term**
- **Soil.** Soil building practices such as crop rotation, intercropping, symbiotic associations, cover crops, organic fertilizers and minimum tillage are essential to organic practices. These support soil fauna and flora, improve soil formation and structure, and create more stable systems. On the other hand, the cycle of nutrients and energy increases and the ability of the soil to retain nutrients and water improves, which compensates for

not using mineral fertilizers. These management techniques also play an important role in controlling soil erosion.

- **Water**. In many agricultural areas, groundwater pollution from synthetic fertilizers and pesticides is a major problem. As their use is prohibited in organic farming, they are replaced by organic fertilizers (e.g. infiltration. Well-managed organic systems with a better ability to retain nutrients significantly reduce the risk of groundwater pollution.
- **Air and climate change.** Organic farming reduces non-renewable energy consumption by reducing agrochemical needs (these require large amounts of fossil fuels to be produced). Organic farming contributes to mitigating the greenhouse effect and global warming through its ability to bind carbon in the soil. Many management practices used in organic agriculture (e.g., minimum tillage, returning crop residues to the soil, use of cover crops and rotations, and greater integration of nitrogen-fixing legumes) increase carbon return to the soil, increasing productivity and promoting carbon storage. A number of studies have revealed that organic carbon content in soil is significantly higher under organic farming.
- **Biodiversity.** Organic farmers are stewards and users of biodiversity at all levels. At the genetic level, traditional and adapted seeds and breeds are preferred for their greater disease resistance and resistance to climatic stress. At the species level, diverse combinations of plants and animals optimize nutrient and energy cycling for agricultural production. At an ecosystem level, the maintenance of natural areas in and around organic fields and the absence of chemical inputs creates suitable habitats for wildlife. Frequent use of underutilized species (often as rotational crops to build soil fertility) reduces the erosion of agrobiodiversity and creates a healthier gene pool – the basis for future adaptation.
- **Genetically modified organisms.** The use of GMOs in organic systems is not permitted at any stage of the production, processing or handling of organic food. Since the potential impact of GMOs on the environment and health is not fully understood, organic farming takes a precautionary approach and chooses to support natural biodiversity. The organic label therefore provides a guarantee that GMOs have not been intentionally used in the production and processing of organic products. This is something that cannot be guaranteed for conventional products, as labeling of the presence of GMOs in food products has not yet come into force in most countries. However, with the increasing use of GMOs in conventional agriculture and due to the way GMOs are transmitted in the environment (e.g. through pollen), organic farming will not be able to ensure that organic products are completely GMO-free in the future.



Organic farming a key role in human life

Organic farming reduces non-renewable energy consumption by reducing agrochemical needs (these require large amounts of fossil fuels to be produced). Organic farming contributes to mitigating the greenhouse effect and global warming through its ability to bind carbon in the soil.

- It is fresher. Organic products are bought fresh from farmers.
- Does not contain chemicals and pesticides.
- Does not contain GMOs.
- It is seasonal.
- It is healthier and more nutrient rich for you.
- Organic production is more sustainable.
- Supports local farmers directly.
- Saves the environment.

One of the main advantages of organic food is its natural appeal. Organic food cannot contain any artificial colours or preservatives; it also contains fewer chemicals and pesticides due to the methods that must be used in its production to ensure it meets the standards of the organic food industry.

Both organic and conventional farming systems have the potential to produce food that is safe for human consumption. Organic food and conventional food are comparable mainly in terms of safety and nutritional value.

Conclusion

Organic farming is a holistic production management system that supports and improves agro ecosystem health, including biodiversity, biological cycles and soil biological activity. it is a system that relies on ecosystem management rather than external agricultural inputs. It is a system that begins to consider potential environmental and social impacts by eliminating the use of synthetic inputs such as synthetic fertilizers and pesticides, veterinary drugs, genetically modified seeds and breeds, preservatives, additives and irradiation. Organic farming reduces non-renewable energy consumption by reducing agrochemical needs (these require large amounts of fossil fuels to be produced).

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