

# **Center for Smart Agriculture**

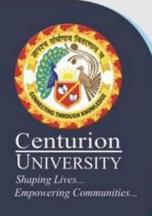
## **Organic Certification and Inspection**

**Systems** 



**Module 1: Organic Agriculture** 

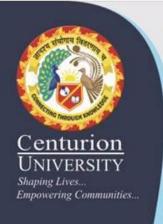
**Session1:** Introduction, Definition, Benefit



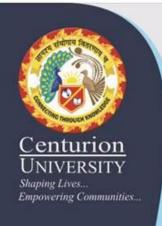
#### **ORGANIC AGRICULUTRE**

Organic Agriculture or farming is very much native to this land. Whosoever tries to write a history of organic farming will have to refer India and China.

The farmers of these two countries are farmers of 40 centuries and it is organic farming that sustained them.

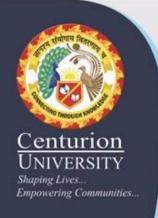


- Converting agriculture in to an organized business with the farmer, as an entrepreneur is the key to second green revolution
- ❖ Therefore, there is a need for paradigm shift in the way we perceive the agriculture.
- ❖ We must aim to ensure that it is productive, sustainable and profitable and is able to bring happiness among farm families.



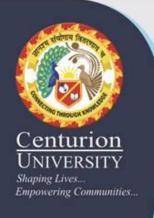
Organic Agriculture which in one hand precludes the use of synthetic chemical fertilizers, chemical pesticides, hormones and genetically modified crops and on the other hand adheres to the principals of

- ❖ Integrated nutrient management (INM), integrated pest management (IPM),
- ❖ Integrated weed management (IWM),
- ❖ Improved water management through water use efficiency (WUE),
- Use of appropriate local landraces of different crops,
- And also improved post-harvest technology.



Organic Agriculture is a system of crop and livestock production designed to optimize the productivity and health of diverse communities within the

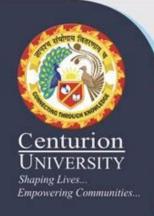
- ❖ Agro-ecosystem,
- Including soil organisms, plants,
- Livestock and people while prohibiting the use of Pesticides,
- Fertilizers,
- Genetically modified organisms,
- \*Antibiotics and growth hormones.



The principal goal of organic production is to develop enterprises that are sustainable and harmonious with the environment.

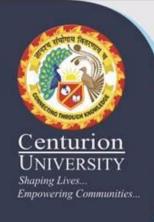


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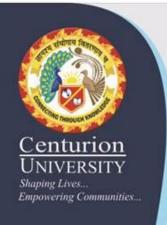
#### **Definition**

As per the definition of IFOAM "Organic agriculture is a production system that sustains the health of soils, ecosystems and people. It relies on ecological processes biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic agriculture combines tradition, innovation and science to benefit the shared environment and promote fair relationships and a good quality of life for all involved



#### **Definition**

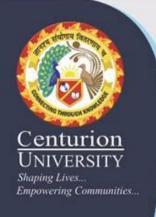
Organic agriculture is a holistic production management system which promotes and enhances agro-ecosystem health, including biodiversity, biological cycles, and soil biological activity. It emphasizes, the use of management practices in preference to the use of off-farm inputs, taking into account that regional conditions require locally adapted systems. This is accomplished by using, where possible, agronomic, biological, mechanical methods, as opposed to using synthetic materials, to fulfill any specific function within the system (FAO, 1999).



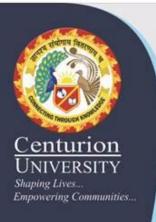
#### **Organic Concept and its Origin**

The term 'organic' was first used in relation to farming by Northbourne (1940) in his book *Look to the Land*:

- \*"The farm itself should have a biological completeness;
- ❖ It must be a living entity,
- ❖ It must be a unit which has within itself a balanced organic life'.
- Clearly, Northbourne was not simply referring to organic inputs such ascompost, but rather to the concept or managing a farm as an integrated, whole system.

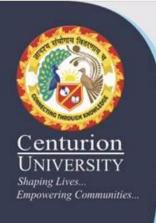


- ☐ Since the 1970s when organic agriculture re-emerged as an eco-agriculture, institutional strengthening and diversity became a part of the movement.
- ☐ Formation of IFOAM in 1972 indicated that the movement has come of age and that it is going to grow and make a place for itself in over all world of agriculture.
- ☐ Explosive growth of organic agriculture has occurred only since 1990s.



# This concept of organic farming is based on following principles

- ❖ Nature is the best role model for farming, since it does not use any inputs nor demand unreasonable quantities of water.
- The entire system is based on intimate understanding of nature's ways. The system does not believe in mining of the soil of its nutrients and do not degrade it in any way for today's needs.
- The soil in this system is a living entity

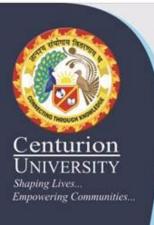


The soil's living population of microbes and other organisms are significant contributors to its fertility on a sustained basis and must be protected and nurtured at all cost.

❖The total environment of the soil, from soil structure to soil cover is more important.

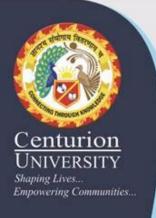


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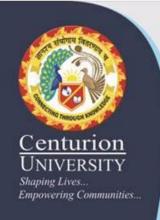


## Benefit of Organic Agriculture

- Greater yield stability, especially in riskprone tropical ecosystems,
- Higher yields and incomes in traditional farming systems, once they are improved and the adapted technologies are introduced,
- Improved soil fertility and long-term sustainability of farming systems,
- Reduced dependence of farmers on external inputs,
- Restoration of degraded or abandoned



- The access to attractive markets through certified products,
- ❖ New partnerships within the whole value chain, as well as a strengthened self-confidence and autonomy of farmers and
- **\*** Chemical residue free safe and healthy food for consumers.





# THANK YOU