

Center for Smart Agriculture Organic Farming



Module 1: Fundamentals of Organic Farming

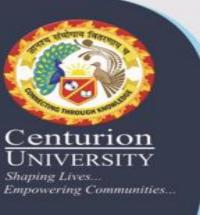
Session 1: Introduction to Organic farming: Definition, Concepts,

Principles, Objectives



Organic Farming

"Organic agriculture is a unique production management system which promotes and enhances agro-ecosystem health, including biodiversity, biological cycles and soil biological activity, and this is accomplished by using on-farm agronomic, biological and mechanical methods in exclusion of all synthetic off-farm inputs"



"Organic farming is a system which avoids or largely excludes the use of synthetic inputs (such as fertilizers, pesticides, hormones, feed additives etc.) and to the maximum extent feasible rely upon crop rotations, crop residues, animal manures, off-farm organic waste, mineral grade rock additives and biological system of nutrient mobilization and plant protection"



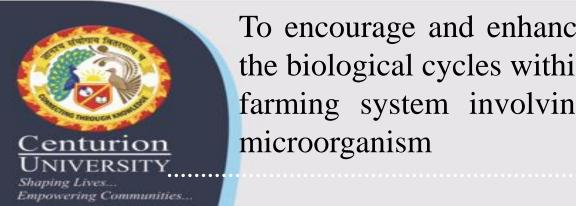
OBJECTIVES OF ORGANIC FARMING

To produce food of high nutritional quality in sufficient quantity





To work with natural systems rather than seeking to dominate them



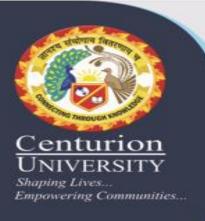
To encourage and enhance the biological cycles within farming system involving microorganism



To maintain and increase the long term fertility of soils

To use, as far as possible, renewable in locally resources organized agricultural systems







To work, as much as possible, within a closed system with regard to organic matter and nutrient elements

To give all livestock, conditions of life that allow them to perform all aspects of their innate behavior

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To avoids all forms of pollution that may result from agricultural techniques

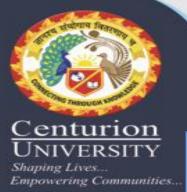


To maintain the genetic diversity of the agricultural system and its surroundings, including a safe working environment



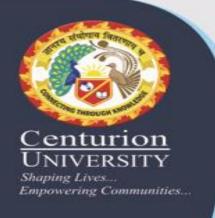


To consider the wider social and ecological impact of the farming system



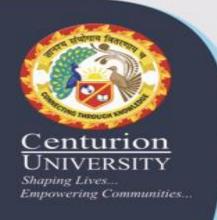
4 Basic Principles of Organic Farming

| Ž | Principle of | Principle of | Principle of | Principle of |
|-----|-----------------------|---------------------|----------------------|----------------------|
| ies | HEALTH | ECOLOGY | FAIRNESS | CARE |
| | | | | |
| | | | | |
| | Organic agriculture | Organic agriculture | Organic agriculture | Organic agriculture |
| | should sustain and | should be based on | should build on | should be managed |
| | enhance the health of | living ecological | relationships that | in a precautionary |
| | soil, plant, animal, | systems and cycles, | ensure fairness with | and responsible |
| | human and planet as | work with them, | regard to common | manner to protect |
| | one and indivisible | emulate them and | | • |
| | | help sustain them | life opportunities | being of current and |
| | | • | | future generations |
| | | | | and the environment |



As organic management is an integrated approach; manipulation and adoption of one or few steps may not yield significant results. For optimization of productivity all the essential components need to be developed in a systematic manner.

- (i) Habitat development
- (ii) On-farm facilities for input production
- (iii) Cropping sequence and combination planning
- (iv) 3-4 year rotation plan and
- (v) Growing of crops suiting to the region, soil and climate.



Thank You