

ORGANIC FARMING

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Arable Farming
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**Agriculture &
Rural Development**
Department:
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North West Provincial Government
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Presentation Outlines

- Introduction.
- Principles
- Practices
- Advantages
- Disadvantages
- Conclusion



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1. INTRODUCTION

- There has been a growing awareness about health and environmental issues.
- Consumers are becoming concerned about the quality and safety food that they eat.
- Concerned about the effect of pesticides, fertilisers on their health and livelihoods.
- Organic agric. seems to be the a viable solution to most of these concerns.
- Organic agric. is not new but has been used for so many years by our great, grand parents in rural areas.
- What is ORGANIC FARMING?
 - Type of farming that is done without the use of synthetic chemicals such as pesticides, fertilisers, fungicides, insecticides, or genetically modified seeds.
 - Organic farmer uses a range of techniques that help sustain ecosystems, reduce pollution while at the same time improving both the production and quality of nutrition.
 - Depends on local available resources.
 - Maintains soil fertility.
 - It involves the use of farming systems such as **crop rotation, natural composting, environmental friendly pest control, intercropping, mulching, Conservation tillage etc.**



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Principles Of Organic farming

- Organic farming methods accord with the four basic principles that reveal their essence:
 - Health
 - Ecology
 - Fairness
 - Care



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Principles Of Organic Agriculture

– Health

- The principle of health in organic farming suggests **avoiding dangerous chemicals** leaving poisonous residues that have a negative impact on multiple levels, affecting microscopic soil organisms, crops, animals, and humans.

– Ecology

- The principle of ecology in farming involves **utilizing environmentally friendly techniques** like the ones fostering soil quality (preventing depletion, erosion, degradation) or eliminating nature pollution. It also means providing favourable living conditions for all ecosystem members since they closely interconnect



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Principles of OF

– Fairness

- The principle of fairness in organic farming advocates a **decent and respectful attitude to all participants of the business:**

– Care

- Think of the future generation.



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Organic Farming Practices

- **Crop Rotation:** Planting of different plant species on the same piece of land season after season.
 - Eradicates pest and weed infestations.
 - Prevents soil erosion with different root systems.
 - Protects soil from depletion
 - Boosting yields and reduces costs.
- **Mulching:** Cover the soil with organic or inorganic materials.
 - Prevent weed seed germination.
 - Preserve moisture
 - Recycling of nutrients and maintain soil temperature.
- **Cover Cropping:** This farming approach implies covering the field with any plant species, either for a certain season or perennially, partially between the crop rows.
 - Cover crops tackle soil erosion
 - Improve water filtration and aeration with their roots.
 - They also eliminate weeding with upper parts, by hiding unwanted vegetation from the sunlight.



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OF Practices cont.

- **Green Manures**

- Mixing green plants with the soil enriches it with organic matters and nitrogen in particular. It also increases moisture levels and adds nutrients for microorganisms, thus improving the soil quality. The described method of agriculture also reduces weed infestation.

- **Animal Manures**

- This organic farming practice enriches the soil with natural components that originated from animals, either raw or composted

- **Integrated Weed Management**

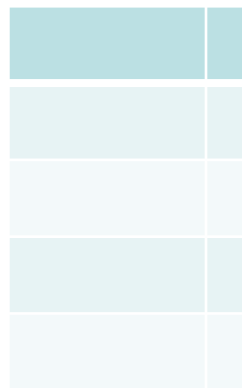
- Heavy chemicals are prohibited in organic farming. That's why weed control is performed via other options of integrated weed management (prevention, biological, physical, and cultural):
 - manual weeding;
 - crop rotation;
 - mulching;
 - natural chemicals to stop germination;
 - introducing populations of birds/insects to consume weed seeds, etc.



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OF practices cont.

- **Integrated Pest Management**
- Manual removing of pests.
- Biological enemies (predators) like ladybugs vs aphids.
- Natural pest repellents like neem, citronella, garlic, lavender oil, among others.



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Advantages Of Organic Farming

- Prohibits health-threatening chemicals;
- Avoids costs for expensive synthetic additives;
- Ensures food quality;
- Provide enough to eat,
- Protects environment;
- Recycles natural wastes for manure;
- Boost soil quality.
- Mitigates climate change by reducing greenhouse gas and increasing carbon storage



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Disadvantages Of Organic Farming

- Labour intensive because it involves manual work.
- Frequent weed, pest and disease control.
- Shortened shelf life because no preservatives.
- High price organic products vs conventional ones.
- Difficulty in getting the Organic farming product to be certified.



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Conclusion

Plant organic, eat organic and save planet earth against any form of degradation for the benefit of the future generation.

THANK YOU



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