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Center for Smart Agriculture

Organic Farming



Module 1: Introduction to Organic farming

Session 3: Conversion of soil to organic



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- The organic farm development and organic management is a process where use of organic material instead of chemicals are there.

Specific steps need to be followed become an organic farmer:

- Collect information.
- Try out the most promising practices on a small-scale.
- Implement organic practices on the entire farm.



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1. Good information first

- Farmers who are interested in adopting organic farming practices are recommended to get in contact with farmers in the area, who already practice organic farming to learn from them to make compost, growing green manure etc.
- Farmers who are interested in converting their farm to organic agriculture, need to know the following specific information:
 - How to improve soil fertility?
 - How to keep crops healthy?
 - How to best increase diversity in the farm?
 - How to keep livestock healthy?
 - How to give value to organic products and how to successfully sell them?



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2. Getting familiar with organic practices

To minimize risks of crop failure and losses of animals, and avoid frustrating overload, farmers are recommended to implement organic practices step-by-step to a limited extent, selecting specific practices at a time and testing them on selected plots or selected animals only.





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Criteria for crop selection during conversion

- Grow crops that contribute to improvement of soil fertility.
- Farmers who keep livestock need to grow pasture grass and legumes.
- Select crops with low risk of failure. Cereals and legumes such as maize, sorghum, millet, beans and peas are especially suitable for conversion, since they cost little to produce, have moderate nutrient demands and are robust against pests and diseases.
- High-value short term crops, such as most vegetables, are more delicate to grow and highly susceptible to pest and disease attack. Therefore, they should not be grown on a larger scale.
- High-value perennial crops such as fruit trees take at least three years until the first harvest from the date of planting.
- For new plantations, species and varieties must be carefully selected to suit the organic market and production requirements.
- The better a crop variety matches local soil and climate conditions, and is tolerant or resistant to common pests and diseases, the better it will grow.



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2. Full conversion to organic farming

In a third step, implementation of organic practices throughout the entire farm should be considered, once sufficient experience with different practices has been gained.



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Benefits of Organic Farming

- Improving soil fertility based on the recycling of farm own organic materials and enhancement of farm own biomass production.
- Encouraging positive interactions between all parts of the production system (the farm ecosystem) to enhance self-regulation of pests and diseases.
- Optimizing the balance between feed production and livestock.



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THANK YOU