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Center for Smart Agriculture

Organic Certification and Inspection Systems



Module 1: Organic Agriculture
**Session 3: Characteristics Of Organic
Agriculture**



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Comparative Perspective of Organic and Conventional Agriculture

- ✓ While organic agriculture aims to be environmentally sustainable, it has not yet reached its goals and there are issues that still need to be addressed. One such issue is about the yields
- ✓ High input-high yielding systems are currently failing to feed the world, not because of problems with productivity, but because of problems with food distribution and social organization, and serious concerns such as poverty, racism and gender imbalance.



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Why Organic Agriculture ?

- ❖ Yields equivalent to or better than conventional agriculture can be achieved under organic systems, although it requires long term planning;
- ❖ Yields decrease during conversion period but then improve afterwards;
- ❖ Organic farms have higher soil biological activity and biodiversity;
- ❖ Weeds can have major impact on yields and pests on specific crops, are problematic;



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- ❖ Organic agriculture causes no/or very little pesticide contamination in food, people and the environment; and
- ❖ The beneficial effects of organic agriculture in food quality are appealing but are yet to be authenticated.



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Key Characteristics Of Organic Agriculture

- ❖ Relies primarily on local, renewable resources;
- ❖ Makes efficient use of solar energy and the production potential of biological systems;
- ❖ Maintains the fertility of the soil;
- ❖ Maximises recycling of plant nutrients and organic matter;



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- ☐ Does not use organisms or substances foreign to nature (e.g. GMOs, chemical fertilizers or pesticides);
- ☐ Maintains diversity in the production system as well as the agricultural landscape;
- ☐ Gives farm animals life conditions that correspond to their ecological role and allow them a natural behavior.



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Organic agriculture contributes to poverty alleviation and food security by a combination of many features, such as;

- ☐ Increasing yields in low-input areas;
- ☐ Conserving bio-diversity and nature resources on The farm and in the surrounding area;
- ☐ Increasing income and/or reducing costs;
- ☐ Producing safe and varied food;
- ☐ Being sustainable in the long term.



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THANK YOU