Sustainable
vs
Organic

Organic Farming

History

- Developed in a response to environmental harm caused by use of chemical pesticides and synthetic fertilizers in conventional agriculture in the 1940s.
- Evolved by farmers who believed the use of *animal manures*, *cover crop, crop rotation* and *biological based pest controls* result in better farming system.
- Organic farming has been defined by the National Organic Standards of the U.S. Department of Agriculture since 2000.

Organic Farming

Key aspects

Agricultural system that uses ecologically based *pest controls* and *biological fertilizers* derived largely from animal and plant wastes and *nitrogen-fixing* cover crops.

Improves soil health

Enhances biodiversity

Minimizes off-farm inputs

Doesn't allow synthetic pesticides, synthetic fertilizers, ionizing radiation, sewage sludge, and genetically engineered plants or products.

Sustainable Farming

History

- At the same time the Green Revolution was exporting modern high-technology agriculture around the world, a counter movement was beginning – the Sustainable Agriculture Movement.

- In 1985 Food Security Act authorized sustainable agriculture research and in 1989 $4.45 million allocated for the Low-Impact Sustainable Agriculture (LISA), which later became Sustainable Agriculture Research and Education Program (SARE).

- The sustainability movement believed monoculture farms with annual plants that required a lot of external input to grow, should be replaced by polyculture of perennial plants where one species would compliment each other. The term *Agroecology* was created in 1987.
    - *Agroecology: The study of the interactions between plants, animals, humans and the environment within agricultural systems.*

Sustainable Farming

Key Aspects

- Farming practice for growing food without depleting natural resources by meeting the needs of the present without compromising the ability of future generations to meet their own needs.
- Enhances natural resources upon which the society lives.
- Conservation of soil, water, and nutrient resources.
- Enhance social well being of the organization and local community.

Key Differences

Organic	Sustainable
Organic farming is a concept defined legally as the market for “organic” food.	Sustainable is unofficial but measurable through economic profit, social benefits for the community and environmental conservation.
Organic Crops are defined by what they are not – they are NOT grown using commercial pesticides, artificial fertilizers or sewage sludge and not processed using food additives or ionizing radiation, antibiotics or genetically modified organisms.	Sustainability emphasizes new techniques and varieties of traditional crops that the poorest farmers can produce with limited training.
Mainly focuses on production aspect of farming.	Focuses on holistic eco-minded farming structure.

Organic Certification

- Defined formally by governments worldwide.
- Organic farming has been defined by the National Organic Standards of the U.S. Department of Agriculture since 2000.
- Companies become certifying agents for Organic Certification.
- “Made with Organic Grapes” is allowed for Organic farmed grapes.

Sustainability Certification

- Sustainability Programs worldwide.
  - New Zealand, Chile, Argentina uses sustainably farmed on logos.
- California based programs:
  - Fish Friendly Farming
  - Sustainability In Practice (SIP)
  - California Sustainable Winegrowing Alliance (CSWA)
  - Lodi Rules
- Certified Sustainable for CSWA is available. Claims of sustainably farmed is allowed and doesn’t require certification.