IIT KHARAGPUR

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Organic Farming for Sustainable Agricultural Production

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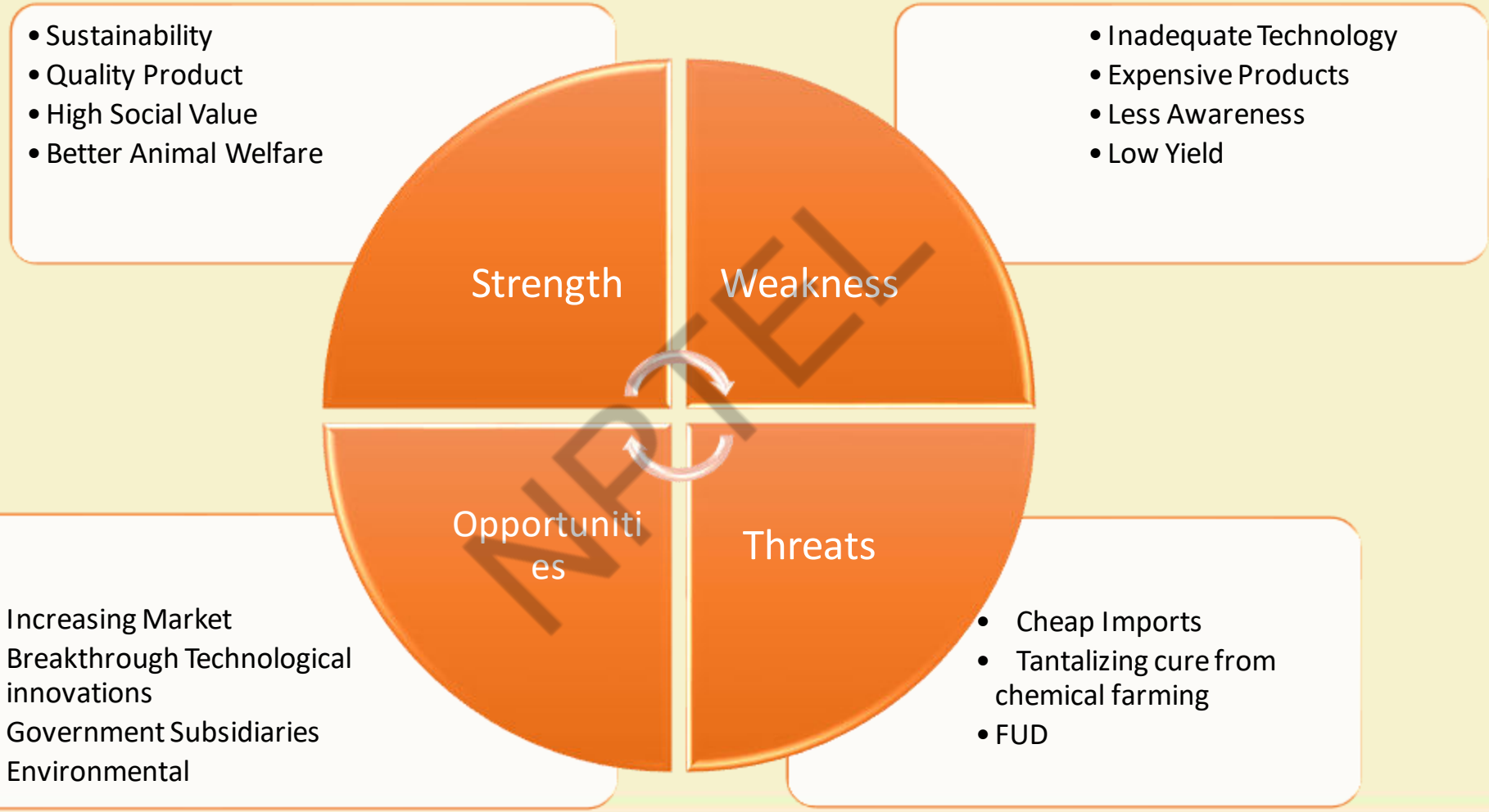
Lecture 06: SWOT Analysis of Organic Farming

SWOT ANALYSIS



Strength

Sustainability

- Satisfy human food needs and make the most efficient use of non-renewable resources and on-farm resources
- Enhance environmental quality and the natural resource base upon which the agricultural economy depends
- Sustain the economic viability of farm operations
- Enhance the quality of life for farmers and society as a whole
- Organic community shares information on technologies

Quality Product

- Free from dangerous pesticides and chemicals
- High in anti-oxidant content and nutritive value
- Branding and integrety

High Social Value

- Volunteerism, self-help and self-determination
- Address consumers' interests in health and wellness
- Healthy Society
- Health Benefits

Animal Welfare

- Good Animal Health
- Quality Animal Product
- Harmony with Environment

Weakness

Technological

- The sector lacks an adequate production knowledge base
- Limited supply of seed, manure and pesticides for organic farming
- Plant and animal breeding has not focused on characteristics suited to organic production.
- Labour intensive process to ensure that the plants remain pest free in an organic way, or to act as weed prevention.
- The knowledge base for organic processing is limited
- Organic storage, packing and transport facilities are lacking

Expensive Products

As the yield is low, so the farmers have to quote a higher price for the products in order to overcome their cost of production .

Weakness(contd.)

Less awareness among the farmers

There is a lack of research and extension support for organic farmers. It is very difficult for a traditional farmer to adopt and learn the technology and practices of organic farming and the process of transition can take time. A new farmer will require proper guidance from a trained organic farmer time to time.

Low Yield

- Low yield as compared to conventional farming
- High cost per unit production
- Immature market

Opportunities

Increasing Market

- Organic farming is one of the fastest growing segments in agriculture
- Increasing health awareness
- Increasing concerns toward adverse effects of chemical farming on environment and health
- Market demand for organic products is strong
- More Entrepreneurs entering this field
- There is an emerging pattern of social consciousness among consumers
- Consumer is focussing more on the procurement of locally grown food and associates local with organic
- Public sentiment against genetically modified (GM) crops supports the organic sector
- Health professionals and environmental groups are supportive of organic principles and practices
- The organic sector is well suited to marketing systems that allows producer to consumer contact

Opportunities

Breakthrough technological innovations

- Producers lack of organic inputs such as certified organic seeds and transplants, plant and animal breeds appropriate for organic production
- Bridge the gap of time effectiveness between conventional and organic farming
- In-depth research on organic inputs and product development
- Reduce the cost of production
- Conversion of waste land/barren land to organic farming system

Government Subsidiaries

- Better Government coherent policies
- Increase in Government subsidy for Organic Farming

Opportunities

Environmental

- The International Panel on Climate Change (IPCC) has outlined a need to reduce greenhouse gas emissions such as carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O) from agricultural production systems. Organic farming reduces emissions and meets IPCC requirements.
- Compared with conventional farming, organic farming stores more carbon, does not require the input of synthetic nitrogen and pesticides, eliminates non-biological N_2O emission, and consumes less water.
- Organic farming systems use 60% less energy than conventional
- Organic systems have more active soil microflora and greater assimilation of CO_2 compared to conventional systems
- Longer rotations with leguminous plants in organic systems produce greater organic C sequestration, improve soil physical properties, reduces N losses by 50% compared with conventional systems, and lower global warming potential.

Threats

Cheap Imports

- Cheaper imported agro-products
- Cheaper conventional farming products

Tantalizing cure from Chemical Farming

- Chemical farming has tantalized the farmers with quick fixation of problems.
- As a result chemical farming has become more alluring than organic

FUD: Fear, Uncertainty and Doubt

- The perception that organic farming methods will not provide enough food to feed the world.
- The perception that organic food is not as safe as conventionally produced food.
- Integrity of organic producer and misinformation generated by those ignorant of organic sector