Foresight Exchange Workshop

“How to integrate agriculture and environmental stakes in foresights?”

Presentation n°3 (A. Wongdeethai, STI)
Thailand Agricultural Foresight 2020

With the support of the following institutions:

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APEC Center for Technology Foresight

Mission of APEC CTF

- **RESEARCH:** APEC-wide Foresight Studies
  - 8 Projects finished since 1998, focusing on high impact area such as water, education, nanotechnology and energy, low-carbon society
  - Methodologies include Delphi, Scenarios, and TRM
- **CONSULTING:** for Public and Private Sectors
- **TRAINING:** Seminars and Workshops (2-3 times a year)
  - Conference on Foresight and Emerging Technologies

Towards “Best Practice” in Technology Foresight
The generic foresight process framework

**Inputs**
- Strategic intelligence scanning, Delphi

**Analysis**
- Emerging issues/trends analysis
- Systems thinking, Causal Layered Analysis

**Interpretation**
- Scenarios, visioning, backcasts, roadmaps

**Prospection**
- Reports, presentations, workshops, multimedia

**Outputs**
- Strategy development & strategic planning: individual, workgroup, organisation, society, etc.

*Source: Voros (2003)*
Objective

Exploring and envisioning possible futures of what could be in the coming years, in order not only to survive but to thrive, and sustain in those harsh environments.
Commodity Value Chain

1. Market Demand
2. Supply Response
3. Input supplies
4. Production
5. Harvesting
6. Post Harvest Handling
   - Fresh Market
   - Value Added
7. Consumers

Value Added

Demand

Supply Response
Outputs

- 2 Workshops (farm sectors: distributor/ wholesaler/ retailer > 100 participants)
- 1 Public hearing (consumer > 100 participants)
- Processes/ scenario planning: brainstorming, focus group, card techniques (trends, driving force (social, technology, economics, environment, politics: STEEP); uncertainties
- Scenario logics (3 scenarios):
  1) Wild trees
  2) Planted trees
  3) Fallen trees
Jointly conducted by

- Knowledge Network Institute of Thailand (KNIT)
- The Federation for the Promotion of Ministry of University Affairs
- National Science Technology and Innovation Policy Office (STI)
- APEC Center for Technology Foresight (APEC CTF)
- Faculty of Agriculture, Kasetsart University (KU)
- Thailand Environment Institute (TEI)
- Bank for Agriculture and Agricultural Co-Operatives (BAAC)
- National Research Council of Thailand (NRCT)
- Thailand Research Fund (TRF)
- Agricultural Research Development Agency (Public Organization) (ARDA)
- Thai Public Broadcasting Service (Thai PBS) (TV channel)
- Thai Post Today (newspaper)
Thailand Agricultural Foresight 2020: **Scenario logics**

1. **Wild trees**
   - Climate Change
   - Politics
   - Tech. Development
   - Local knowledge
   - Cluster/Networking
   - SME growth
   - Agri-Food Biz

2. **Planted trees**
   - +/- Climate Change
   - Politics
   - Prachaniyom 2.0
   - National Agri. Plan
   - Social network
   - Creative Agri-Industry
   - Value added market

3. **Fallen trees**
   - Climate Change
   - Politics
   - Agri. Policy - no direction
   - LE growth (w tech.)
   - Land grabbing (nominee)
   - Precision farming
   - Low Agri. Pop.
   - Low competitiveness
   - Agri.-DARK AGE
Outcomes - on process

- Foresight for Faculty of Agriculture, Kasetsart University (KU)
- Thai Rice Strategy: Foresight (TRF, TDRI, STI)
- Agricultural Education System (KNIT)
- STI for Agriculture Foresight (STI)
Agricultural Innovation Systems

Macroeconomic & International Regulatory Environment

Physical Infrastructure

Education System & Training

Agricultural Innovation Capacity

Product Market Conditions

Sector Performance Growth, Jobs, Competitiveness

Farming & Soil Conditions

Source: Adapted from OECD, Managing National Innovation Systems, 1999
Current situations: High impacts

Death 297 persons, loss 2 persons.
Impacted 61 provinces, 606 sub province.
Impacted 2,488,482 households 8,568,095 persons

Picture credit: Keradit, James, 14 Oct 2011

Source: Department of Disaster Prevention and Mitigation, 15 Oct 2011