

# Institutionalizing and Scaling up SPS/Food Safety Capacity through a Food Safety Knowledge Network Pilot in Southeast Asia

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STDF Working Group Meeting March 19, 2010





# Challenge: How to institutionalize and scale up market access for small/medium suppliers?

- Global food industry is eager to improve the safety and quality of product from suppliers, and to do this more efficiently and at lower cost.
- Small and medium producers/suppliers are largely excluded from high value markets because they lack the capacity to meet rigorous safety and quality standards.
- Important part of the solution requires coordinated public-private efforts to:
  - Develop harmonized, internationally recognized (public and private) competences in relation to food safety for individuals at all levels and in all sectors of the food supply chain.
  - Strengthen the local level institutions that will build professional capacity in these areas.
  - Scale it up by providing an internet-based framework for accessing knowledge and resources enabling institutions and professionals to easily and quickly acquire the core competencies needed to meet food industry requirements.





# The Food Safety Knowledge Network (FSKN) takes a major step toward this solution

- FSKN is a joint initiative of Michigan State University and the Global Food Safety Initiative (GFSI), with the specific aims to:
  - Provide a harmonized platform whereby food safety professionals can assess and improve their knowledge and skills.
  - Facilitate the production of safer food.
  - Enhance the competitiveness of small/medium growers and producers.
  - Enable access to markets through local sourcing and to high value export markets for emerging countries.
  - Achieve pragmatic cost reductions through the elimination of corrective actions and more efficient auditing.
  - Secure food industry supplier base in terms of food laws and food safety with improved conformity.





#### Food Safety Knowledge Network Phase I Logic Model

#### Input

Industry leadership partnering with Consumer Goods Forum - Global Food Safety Initiative

#### **Activities**

Co-creation of competency framework, training modules and assessment tools for food manufacture based on CODEX standards

MSU & community of research, education, and training providers

MSU will provide the community with online community building and social networking

Four pilots using various

methods completed-

all materials in English

and Chinese available

MSU's extensive technical, elearning and ICT, and open education expertise

Phase 1

**Outputs** 

Cost reduction in supply chain and greater employee retention and motivation

Harmonized approach to public/private standards allowing participation of more individuals and suppliers

Training materials for individuals including online assessment and corporate toolkit through GFSI

OER/Food Safety Knowledge Network website launched in February 2010

#### **Outcomes**

Increased number of highly skilled food safety professionals around the world



# Elements of FSKN pilot tested and ready for localization, institutionalization and scale up

- Competency Framework developed by an FSKN Technical Working Group consisting of members from industry, academia, and international agencies.
  - Established framework of 89 competencies in 13 areas
  - Public and private standards are both reinforced and their compatibility is underscored in the competency framework... all maps back to CODEX standards.
  - Provides a degree of standardization but allows for flexibility in country level localization.
- Training Modules for each of the 13 areas covered under the Basic Level requirements for food manufacture were developed by international food safety experts.
- Assessment Tools developed to determine baseline knowledge and skills of participants in training programs and improvement in knowledge conferred by training.





# FSKN Pilot Activities (Sept 2009 - present)

- Chennai, India: Face-to-face training program on Basic Level for food manufacture. Conducted digital capture of training modules for subsequent online pilots.
- India: eLearning pilot conducted for suppliers to METRO Cash and Carry in India.
- Egypt: Face-to-face training program for METRO (Makro) suppliers in partnership with UNIDO (Arabic translation).
- China: Face-to-face training program for Coca-Cola bottlers and suppliers (Chinese translation).
- India: Distance education pilot conducted for Tata Tea (in process).





#### Why Michigan State University as an implementing partner?

- Institutional strengths in SPS management, food safety and value chain development
  - Institute of International Agriculture (IIA)
  - Institute for Food Laws and Regulations (IFLR)
  - Institute for Food and Agricultural Standards (IFAS)
  - National Food Safety and Toxicology Center (NFSTC)
  - Food & Society Alliance
  - Research/Academic Units. Department of Food Science and Human Nutrition; Department of Horticulture; Department of Supply Chain Management; School of Packaging; Department of Entomology; Department of Agriculture, Food and Resource Economics.
  - Close ties with GlobalGap
- \* A wealth of experience from international projects/programs
  - Past 5 years: 21 Projects in IIA focused on SPS management, food safety and value chain development in developing countries.
  - Focus on both public and private standards.
  - Food Safety Knowledge Network (FSKN) is a pillar to MSU's continuing efforts to build capacity in these areas.





### Project/program examples...

- Rwanda Horticulture Export Standards Initiative (RHESI), STDF funding, 2007-2009.
  - Targeted key regulatory and institutional capacity gaps in SPS management systems, particularly for fruits and vegetables exports.
  - Developed Rwanda's new Plant Health and Agrochemicals Law(s).
  - Development of a legal framework for the establishment of the National Plant Protection Service (NPPS).
- India Horticulture Development Alliance (IHDA), USAID funding, 2008-2011.
  - A broad-based and inclusive coalition established to sustainably increase profits of small and medium size producers and processors of selected Indian horticulture commodities.
  - Corporate partners include Reliance, ITC, Metro, Food Bazaar-Pantaloon, YES bank, the Confederation of Indian Industries and GlobalGAP.
  - Helps develop value chains for horticulture products that have high potential for expanded distribution and sales in India's rapidly-evolving food retail sector and high value export markets.
  - IHDA aims to achieve this overall goal by building capacity of Indian producers and processors to meet public and private international standards, e.g., food safety, good agriculture practices (GAP), quality control, and traceability.





## Implementation approach and partners

#### Implementation of program activities through local partners

- Localized two-country approach (Thailand and Vietnam) with extensions to other countries in Southeast Asia.
- Opportunity to work through Kasetsart University in Thailand and Can Tho University in Vietnam. Two top food and agricultural institutions with dedicated programs in agribusiness, production, food science, packaging and related areas.
- These are strong partners with a commitment to professional development, sustainability and with close ties to their respective Ministries of Agriculture and to the local private sector.
- Location will make these countries a good hub for expansion to the region (possibly with ASEAN and longstanding partners in China). Low cost, easy connections.

#### Targets

- Focus on primary production and manufacturing (F&V, others).
- Principles: institutionalization, scaling up, sustainability and learning.
- Partners include other universities, SPS focal points, private sector food companies.





#### Pilot activities...

- Design. Together with industry partners, SPS Focal Points and private sector suppliers develop and test key components of the Food Safety Knowledge Network (FSKN) for fruits and vegetables value chains targeted at supplier, manufacturer and primary production levels.
- Localize. In partnership with local experts, adapt generic FSKN content and learning materials to make them available in local languages and more appropriate for local cultural norms and practices.
- ❖ <u>Institutionalize</u>. FSKN-based curricula/learning modules institutionalized through partner universities and other training organizations in targeted countries.
  Trainers are trained in use of FSKN for improved SPS management.
- ❖ <u>Deploy</u>. Cooperation between food industry (producers, processors, suppliers, retailers, exporters, etc.), institutional partners, SPS Focal Points in the application of the FSKN curricula and materials to bolster capacity of value chain actors to meet applicable standards.
- Learn. Learn from the regional program what works and what does not work, with an eye to making replication and expansion into other countries and regions more effective and efficient.





### Conclusion...

- Opportunity to take a major step forward in tailoring, testing and launching an exciting new platform for enhancing food safety/SPS management capacity
  - With food industry buy-in and participation
  - Enabling smallholder producers to access global and domestic markets
  - Helping to integrate public and private standards
  - Experienced institutions in MSU and international partners
  - In a region ripe for institutionalizing (high demand) and scaling up (potentially large numbers)





## Thank You!

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