Agro-Industry and Food Chain

From processed food perspective

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What is Included in the Agro-Industry Cluster?

- Manufactured food products for human consumption
- Meat and dairy products
- Snack foods
- Food additives
- Feed additives
- Flavor and fragrances
- Fruit juices
- Soft drinks
- Alcoholic beverages
- Flowers
- Farm suppliers
- Food distribution
- Food refrigeration, packaging, and processing
Market Trends

- Globalization
- Reduction in tariff and non-tariff barriers
- Maturing market in industrialized countries
- Growing, but challenging, markets in developing countries
- Internationalization of tastes
- Ethnic niches and special taste market segments
Consumers’ strong preferences for convenience and speed (prepared or packaged food, and fast food)

Rising middle classes in developing countries

Increased urbanization

Rise of women in the work force (fast food, and more meals away from home)
Market Trends

- Strong brand name recognition (e.g., McDonalds, Pizza Hut, etc.)
- Concern for food safety (e.g., Mad Cow Disease)
- More emphasis on healthier (low fat, low cholesterol food “organic” foods)
- Preference for less processing and food additives in food
Prepared food for fast food and other food service companies (airlines, hotels, and educational institutions)

- Pre-cut salads
- Fresh fruits
- Fruit juices
- Fresh vegetables including lettuce and tomatoes
- Baked bread and buns
- Prepared potatoes
- Frozen hamburger patties and frozen chickens
Agro-Industry: Emerging Products and Services

Consumer-ready processed foods for supermarkets

- Canned fruits and vegetables
- Frozen foods including vegetables and meats
- Dairy products
- Fresh and frozen meats
- Fish fresh and frozen fish
- Soft drinks
- Alcoholic beverages
Emerging Products & Services

Tropical fruit and fruit juice markets

- Mango
- Papaya
- Guava
- Passion Fruit

Fruit Uses
- Juice blends
- Desserts
- Dairy products bakery goods
- Salad dressings
Key Competitiveness Drivers

Market Driven

- Responding to market needs
- Emergence of distribution as competitive weapon
- Service as well as features
- Healthy, safe, and convenient products
Supply Chain Routes:

Source: Kaarin Goodburn (2006). Food Safety & Technology Management Consultant, Chilled Food Association
TREES of change in food system

- Technology
- Regulation
- Environment
- Economy
- Society

These drivers are interrelated and interdependent (e.g. rise of refrigeration is linked to demand for chilled products)

Their impact will vary through the supply chain

Definition of Traceability

1. EU 178/2002

“the ability to trace and follow a food, feed, food producing animal or substance intended to be or expected to be incorporated into a food or feed, through all stages of production, processing and distribution” (article 3 (15)).

2. Codex Alimentarius Commission

“the ability to follow the movement of a food through specified stage(s) of production, processing and distribution”
3. US Food and Drug Administration (FDA)
   “the ability to identify by means of paper or electronic records a food product and its producer, from where and when it came, and to where and when it was sent” (OECD, 2003).

4. ISO
   “ability to trace the history, application or location of an entity by means of recorded identifications” (ISO 8402).
Traceability is defined as a ‘watch word’ for consumer and regulatory confidence with respect to food quality, food safety and the infrastructure for producing, processing and delivering food products from the point of origin to the point of sale.
Traceability System

Paper-based

Electronic-based
External and Internal Traceability

Landing Site → Processor → Retailer → Consumer

Landing Site → Farm → Processor

Internal Traceability

Receiving → Processing → Storage → Despatch
Components of Traceability System

Business goals – tracking and tracing

Technology
Information
Process
Organization

Implementation
Traceability Objective

- Managing risk related to food safety
- Establish credibility by providing reliable information
- Customer demand
- Improve product quality and processes
Functional Roles for Traceability within the Food Supply Chain

- **Food safety incidents**: requiring robust traceability to facilitate rapid response to breakdowns in food safety, allowing remedial actions, such as product withdrawals and recalls to be initiated for the purposes of protecting public safety.

- **Food residue surveillance programmes**: using traceability systems to facilitate food sampling at appropriate points throughout the food supply chain, testing of residues, such as pesticides, and mapping to establish where in the supply chain excessive residue levels may have occurred.

- **Risk assessment from food exposure**: where a traceability system can facilitate access to information concerning foods or food ingredients that may have significance with respect to food safety.
Functional Roles for Traceability within the Food Supply Chain

- **Enforcement of labeling claims**: using traceability to help resolve allegations of false labeling and to help determine supply chain integrity with respect to food claims.

- **Fraud**: wherein effective traceability, regular audit and reconciliation measures can assist in preventing fraud and theft of food items.

- **Food wastage**: where traceability and associated quality control systems can be applied to speed up and improve food distribution processes and reduce food wastage.

- **Meat hygiene**: where traceability can help enforce and support meat hygiene in processing and handling of food within the supply chains.
Working Together, Improving Communications, Innovating Solutions

Partners

Food Processors

Utilities

Government

Trade Allies

Research & Educational Institutions

David Zepponi (2006), NWFPA President
GLOBALIZATION: KEY DRIVERS

- WTO - 1995
- FTAs (130 since 1995)
- Trade liberalization
- Rapid exchange of technology/information
- Global sourcing

FDI
Myanmar
Food Industry
Thanks...

For your kind attention!