

Small-Scale Farmers Participation in Coordinated Supply Chains

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ARD Learning event
April 6, 2005

Important issues

Main Question: Can small-scale farmers participate in markets for high-value products?

- Trends in food markets
- The food safety factor
- What are coordinated supply chains?
- Why are they needed?
- What is their penetration?
- What are incentives for investing in coordinated supply-chains?
- Factors affecting participation of small-scale farmers?
- Possible policy interventions

Trends in food markets (1)

- Growing consumer demand for variety, quality, year-round supply of fresh products, 'healthiness', convenience, safety, value added and social values
- Supermarkets, food industries and food services heavily compete for market shares and emerge as global buyers with requirements for quality, safety, year-round supply, social and environmental standards
- Technology plays strong role in information management, food processing, post harvest handling, logistics

Trends in food markets (2)

- Trade liberalization, especially tropical and off-season fresh products: global sourcing of fruits, vegetables, fish
- Private requirements for quality and safety are often more demanding than public ones
- Drive for market and product differentiation, and brand image to escape somewhat from competition
- Economies of scale in retailing, transport, logistics
- Trends in developing countries are similar, impact levels still much lower

The food safety factor (1)

Issues

- Food scandals in many countries
- Mass media and food scares
- Better detection methods
- Increased income and urbanization
- Public distrust in regulators, scientists

Government responses

- Reform in food safety legislation, management
- Tightening requirements – product and process standards
- Intensified testing

The food safety factor (2)

Private sector responses

- Facing commercial risks, opportunities
- **Control of supply chains** from farm to table through
 - Preferred suppliers
 - Tracking and tracing
 - Certification of Good Agricultural Practice, Good Manufacturing Practice, etc.
- Abandoning sourcing from open wholesale markets, shift to integrated and coordinated supply chains

What are coordinated supply chains?

- Coordinated supply chains are:
Durable arrangements between producers, traders, processors and buyers about what and how much to produce, time of delivery, quality and safety conditions and price.
- **Example:** contract farming
- They include exchange of information; sometimes also help with **technology** and **finance**
- Created by private sector investment with commercial objectives (food industries, specialized traders)

Why are coordinated supply chains needed?

- Government cannot control each package on safety; **process controls** needed
- Modern safety and quality control starts at production; **total quality management**
- Coordinated supply chains fit **logistics requirements** of modern food markets, especially for fresh and processed food
- Important tool in **competitive strategies**

Penetration of coordinated supply chains

Penetration depends on:

- Level of consumer income
- Stringency of quality and safety risks
- Magnitude of possible savings in logistics
- Market power of buyers, processors

High penetration in

- Top-end retail market for fresh produce
- Sensitive food industries, e.g. dairy industries
- Sensitive food services, fast food chains, top-end restaurants

Low penetration in

- Bulk commodities
- Low-end of market

Penetration of coordinated supply chains in developing countries

- **Rapidly increasing** in production segments for exports to industrial countries
 - Fresh products
 - Sensitive processed products
- **Emerging** in domestic formal retail segment, food processing
- **Absent** in traditional food markets, low value commodities, subsistence farming

What are incentives for investors to form coordinated supply-chains?

Possible benefits:

- Price premiums that can be obtained by
 - Shifting to higher quality and safety standards
 - Shifting to higher end markets
 - Adding more value
- Cost reduction: more efficiency and lower transaction cost
- Logistics: daily fresh supply over long periods
- Regular supply for processing plants
- Achieving economies of scale and scope
- Reduction of risk

Strength and weaknesses of small farmers in high-end markets

Strengths

- Lower cost (20-40%), especially in labor intensive products
 - No overhead for supervision, high motivation
- Access to land

Weaknesses

- Knowledge about modern markets, modern technology, chemical inputs
- Loyalty, contract enforcement
- Lack of access to capital
- Poor organization
- Difficult to generate volume of consistent quality
- High transaction cost for outside organizers

When can small farmers participate in coordinated supply chains? (1)

Small farmers can be included if **chain leaders** (exporters, traders or large-scale producers) expect benefits to outweigh costs

Important considerations are:

- Risks of working with small farmers
- Benefits and costs

When can small farmers participate in coordinated supply chains? (2)

Risks of working with small farmers affected by

- Government control of not permitted agrochemicals
- Government support for proper use of agrochemicals
- Possibilities for contract enforcement
- Complexity of technology
- Mutual trust between enterprises and farmers
- Organization, leadership

When can small farmers participate in coordinated supply chains? (3)

Benefits and costs differ

- Products, market segments
 - High-value products
 - labor intensive products
 - relatively low investment costs
 - buyer monopsony
 - economies of scale in the market
- Experience in enterprise of working with farmers, e.g. suitable contractual relations, benefit sharing, loyalty
- Experience of farmers of working with enterprises, e.g. reduced transaction costs for **well-organized groups with good leadership**
- Public support for high set-up cost in training, technology
- Adequate investment climate -- infrastructure, public and commercial services

What could be done for boosting involvement of small farmers in coordinated supply chains?

- Keep private firms in driver seat – otherwise they will not invest
- Adequate laws and regulations; enforcement (a.o. agro-chemicals)
- Provide support for overcoming lack of experience and trust (experienced independent mediators)
- Promote organization of small producers with good leadership and understanding of market requirements
- Assist in training and in applied technology (GAP, GMP)
- Provide adequate infrastructure and related services

Final remarks (1)

1. Many coordinated supply chains with **small farmers** emerged without public support.
2. In many cases adequate **public support** is crucial
 - Proper **investment climate**, level playing field
 - Infrastructure, services
 - **Market failure**
 - High transaction cost
 - High asymmetric information cost
 - Externalities in markets for agrochemicals

Final remarks (2)

3. In some cases **policy failure** is main obstacle
 - bias against small farmers
 - No level playing field in access to resources
 - culture of poor contract enforcement
 - failing to deal with negative externalities in agrochemical markets
 - obstacles for establishing producer organizations
4. In some cases **market failure** cannot sufficiently be mitigated by sustainable investment, innovation, organization
 - **large-scale enterprises** can create much on-farm and off-farm employment in serving high-end markets