

Product quality in supply chains

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Introduction

In complement to the other contributions to this workshop, my presentation will focus on a literature survey on product quality in supply chain.

We have already seen that quality of production is a central element of small-holders participation in global value chains. But putting quality at the center of stakeholders concerns has deep consequences for the organization of the whole value chain.

Industrial organization literature has studied those issues for a long time and can bring some important insights into the picture.

Introduction

Some key insights :

- Focusing on quality increases the number of dimensions along which competition/cooperation take place. It exacerbates informational problems among actors. It modifies economies of scale.
- The importance given to quality may be demand driven or may be strategic. In the latter case, distorting surplus sharing along the supply chain.
- Contracts and certification should be considered as complements (rather than substitutes). Combining the two may be necessary to optimize the organization of the supply chain.

Introduction

Plan of the presentation :

1. Quality attributes of agri-food products,
2. Quality differentiation on markets,
3. Quality provision along the supply chain.

Quality attributes of agrifood products

Classification :

- Search,
- Experience, and
- Credence goods.

Quality standards :

- Non-tariff trade barriers,
- Catalysts limiting informational asymmetries.

Quality attributes of agrifood products

Traceability systems :

- Efficient traceback of products to limit treatment cost of a problem,
- Identify credence attributes,
- Strengthen liability incentives.

Quality disclosure : brands, warranties, licensing and labels

- Voluntary or mandatory,
- Public intervention or emerging from market forces alone.

Quality differentiation on markets

Demand-driven quality differentiation :

- Diversity in production costs,
- Diversity in consumers' tastes (marginal rate of substitution between quality and money)
- Second-degree price discrimination,
- Strategic motive to relax price competition.

Quality differentiation on markets

Producers revealing quality :

- Unraveling,
- Signalling,

Market for certification :

- Certificate is itself a credence (or at best an experience) good,
- Business model of certifiers,
- Competition among certifiers.

Quality provision along the supply chain

Supply chain organization :

- Repeated interactions and reputations,
- Economies of scale, concentration and market power.

Vertically related markets :

- Strategic motives for quality standards,
- Different interests along the supply chain, regarding quality standards.

Quality provision along the supply chain

Contracting :

- Multiple purposes : to secure supplies, mitigate hold-up, trade-off incentives and insurance, bundle product and services, etc.
- Guaranteeing quality can be achieved via contractual agreements,
- Focus on quality may reinforce the interest in contracts for other purposes.

Contracts and certification :

- Certification can solve basic quality issues,
- Certification → More verifiable information → easier contracting.

Final remarks

Designing efficient agrifood supply chains in developing countries will certainly necessitates the combined use of multiple instruments (contracts, certification, quality standards, etc.) and the collaboration of multiple actors (producers organizations, third-party certifiers, intermediaries, etc.)

What role for governments, donors, and civil society organizations :

- Provide the public goods that are necessary for the smooth functioning of agrifood supply chains and the inclusion of small-holder farmers,
- Ensure that the interests of small-holder farmers are not neglected.