Assessing the Performance of Supply Chains from a Smallholder Perspective: A Model of Farmer-Buyer Engagement and its Application in Nepal

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Introduction

• Linking famers to markets is crucial for livelihoods and food security
• Increasingly coordinated supply chain might exclude smallholders
• Explore the ability of supply chain to sustain smallholder engagement
• Analyse what channels are used (not used) by smallholders and why they are (or are not) used
• Suggest ways of increasing chain robustness for smallholders
Conceptual model

• Farmer-buyer dyad is a key interface
• This dyad is sustainable if it generates acceptable level of risk and rewards
• Chain is robust, if it contains one or more sustainable farmer-buyer dyad(s).
• The wider the range of sustainable dyads to choose from, the more robust is the chain
• Study uses a model based on transaction cost economics to analyse dyadic relationships
Conceptual model...

Increasing frequency of transactions

Informal market

Increasing complexity of transactions

Spot market

Increasing behavioral & environmental risk

Vertical integration

Increasing asset specificity

Relative contracting

Conventional contracting

No-transaction
Research approach

• Four smallholder supply chains were studied. This paper relates only to the chain for organic fresh vegetable in Kathmandu

• Case study method

• Interviews with: Producers (6), Immediate buyers (2), Potential buyers (2), Staff of government and non-government agencies (3)
Research approach.....

1. Identify existing and missing dyads
2. Match observed and missing dyads with postulated modes of engagement
3. Test propositions about the drivers of transaction costs in observed and missing dyads
4. Recommend policy or management interventions to open new, sustainable dyads
5. Robust chain
Organic fresh vegetable supply chain in Kathmandu

Producers/Producer group or cooperative

Organic wholesaler

Supermarket

Hotel

Farm

Conventional retailers/street vendor

Organic Retailer

Restaurant

Farm
Where do these dyads fit in the model?

- **Informal market**
  - Farmer-consumer dyad

- **Spot market**
  - Farmer-supermarket dyad
  - Farmer-hotel dyad

- **Conventional contracting**
  - Backward integration by organic retailer & hotel
  - Conventional retailers, Organic retailer and wholesaler dyads

- **Relational contracting**
  - No-transaction dyad
    - Farmer-supermarket
    - Farmer-hotel

- **Vertical integration**
  - Increasing behavioral & environmental risk
  - Increasing complexity of transactions
  - Increasing asset specificity
  - Increasing frequency of transactions
What drives the observed dyads and why are some modes of engagement missing?

- No-transaction: Easy physical access and low complexity of transaction.
- Informal market: Frequency of transaction.
- Spot market: Absence of rules and standards.
- Conventional contracting: Complexity.
- Relational contracting: Asset specificity.
- Vertical integration: Internal enforcement insufficient to deter behavioural risk.

Environmental & behavioural risk: Too much environmental & behavioural risk.
Recommendations

• Promote shared investment in labelling and promotion

• Role for government extension agencies in creating new dyads
  - Establishing standards and rules
  - Facilitating farmer marketing groups and advising them on production plans, technology and Participatory Guarantee Systems
  - Improving physical and legal infrastructure
  - Mandating extension staff to facilitate and witness contracts, and
  - Providing easy access to legal recourse for small claims
Questions/suggestions

THANK YOU !!!