

# Lessons from other supply chain studies

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# Problems faced by smallholders

	Bangladesh		India		Sri Lanka	
	Jute	Potato	Mango	Pomegranate	Rubber	Pineapple
Inability to identify proper quality planting material	✓	✓				✓
Lack of knowledge of (or interest in) proper harvesting techniques		✓	✓		✓	
Lack of access to post harvest Infrastructure		✓	✓			
Lack of knowledge of (or interest in) proper processing techniques	✓				✓	
Inability to prove the quality of produce	✓	✓	✓		✓	

# Similarities between rubber and Jute

- Ability to store – semi perishable goods
- Processing required after harvesting
- Grading dependent upon visual inspection
  - Growers not able to get a good price due to lack of knowledge or bargaining power

# In Sri Lanka, natural rubber is sold mostly as RSS (43% of rubber production)

- Ribbed Smoked Sheet (RSS)
  - Made from processed latex
  - RSS quality grades go from 1 (highest) to 5 (lowest)
  - Grading is visual (based on on level of transparency, amount of blemishes, etc.)



# Distorted incentives

- Buyers find it costly to inspect each and every sheet
- Buyers *assume* a smallholder will give low quality, hence offer prices in two bands:
  - One for RSS 1 & 2; another for RSS 3,4 & 5
  - Within a band prices differ very little
- Therefore, smallholders often only make RSS 5

- Pandeniya Thurusaviya farmer society

[Video](#)

# Pandeniya Thurusaviya solved some things....

- Shared access to post-harvest infrastructure
  - Smoke house
  - Warehouse
- Got over the smallholder quality penalty
  - Internal pressure to conform to a specific quality
  - Use of same processing techniques + infrastructure
    - Processing of raw latex done by one person
    - Everyone uses the same smoke house

## .... but not others

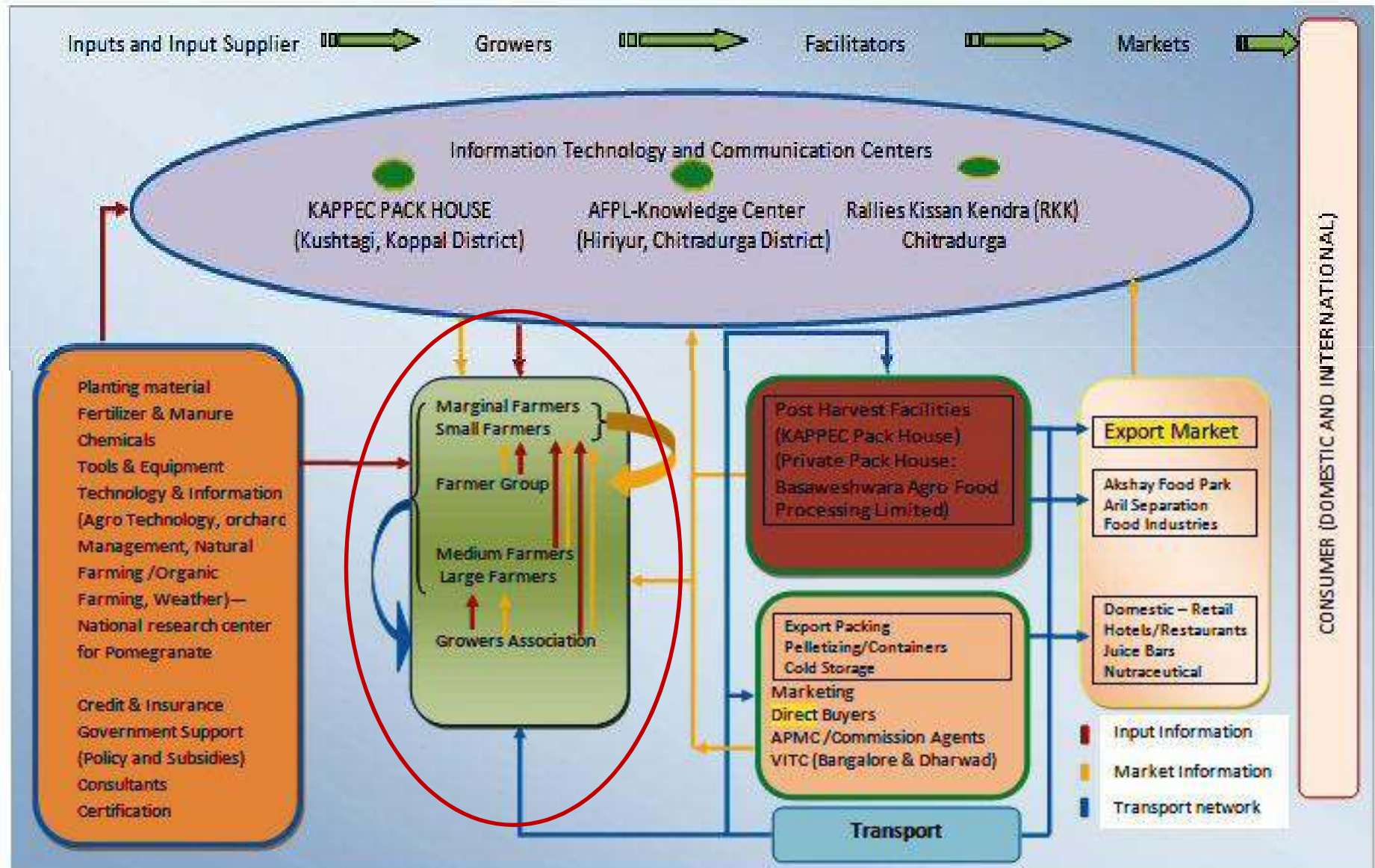
- Not scalable (membership static at 34 smallholders)
  - Reason: cannot get enough sellers to the regional auction
- Replicable but with a caveat
  - Not feasible to have too many regional auctions



# Another example of collective action from Ghana

- Farmapine Ghana Limited (FGL) was formed as a result of supply chain problems between pineapple growers and exporters
- It's a combination of farmer groups (or societies) and an out-grower model
- The system has been successful with expanding production from the FGL members
- Success factors:
  - Ability to form farmer groups
  - Availability of Financial assistance
  - Access to Technical expertise
  - Marketable produce

# Pomegranate value chain



# What role does collective action play in the pomegranate supply chain?

- Progressive farmers and large growers have their own system of collecting information. They help the small farmers through
  - Fighting diseases such as bacterial blight
  - Finding market information
  - Consolidating and exporting the produce

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# A method for identifying suppliers of quality planting material

- Develop a directory on planting material suppliers
  - Growers already try to find out who sells better quality material
- Use technology to ensure the directory is accessible to growers
  - Mobile is one of the most accessible form of ICTs
- Use reputational ranking system to provide information on who is able to provide good planting material

# Efforts underway to develop a directory of pineapple plant suppliers with a reputational ranking...

- Being developed - initial code developed at Random Hacks of Kindness, Montreal
- Reputational ranking system for suppliers of high quality suckers.
- Farmer enters a rating after using a supplier (e.g. 1 \*\*\*\*\*, or \*\*, etc.)
- Collected rankings available to interested farmers before they buy
- Concept (and open source code) useable in other value chains
  - Could potentially lead to real trades taking place online
  - Because lack of quality standards and signaling mechanisms can be solved

For more information:

[www.lirneasia.net/projects/agriculture](http://www.lirneasia.net/projects/agriculture)

search term: Agriculture, KBE

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