Modernizing Markets, Small Farmers, and Food Security

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Research Question

How does modernization of the marketing system in developing countries impact poverty and food security?

Two primary threads:

• Small farmers in Nicaragua:
  What are the effects on small farmer assets and incomes?

• New intermediaries in the Chinese food system:
  What is the role of new supply chain intermediaries in organizing production and marketing?
Supermarkets’ Global Reach: Walmart 2014

Walmart retail locations in 15 developing countries
More Walmarts now per capita in Nicaragua (one per 7000 people) than the United States (one per 7600 people).
Retail expansion transforms agricultural production and marketing

- Supermarkets source fresh fruits and vegetables in-country
- Modernization of agricultural supply chains
- Governments and the private sector emphasize “direct farm” sourcing - eliminating middlemen
Why direct farm sourcing?

- Government goals: reduce rural poverty and improve rural sector food security, decrease prices for urban consumers
- Supermarkets: save money on procurement, establish control of sourcing, traceability
- Farmers: improve prices, decrease marketing costs

Will small farmers be included? Will they benefit?
Nicaragua - small farmers

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4. Ongoing: effects on food security, dietary diversity, pesticide use
Is Walmart “direct farm” sourcing in China?
China - modern intermediaries

A different sourcing model for a very different context:

- Fragmented landholdings, limited logistics infrastructure
- Supermarkets cut out traditional intermediaries
- But rely on new intermediaries to purchase from farmers

Role of intermediaries largely absent from the supermarket literature

- Focus on small farmers or country-level trends
- Our study offers a first look at these meso-level actors
- Just completed survey of 198 intermediary supply companies working with or managing 460 farm bases
China - modern intermediaries

Intermediate supply companies are critical, determine:

- How Chinese farmers participate in supermarket supply chains
- Potential channels of impact on rural households
- Whether and how the agri-food sector can deliver on food safety
- Benefits (prices, safety) to urban consumers

Activities:

- organize production
- consolidate land
- handle logistics
- invest in cold chain
China - modern intermediaries

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  - Mean farm size is 5184 mu (about 850 acres)
Ongoing work

- Studying the production models used by Chinese supply companies
- More focus on supply chain intermediaries
  - response of traditional intermediaries to exclusion
  - robustness of the modern system to perturbations (role of intermediaries)
  - emergence of new intermediaries in other countries
  - NGOs as intermediaries in some contexts
  - effects on urban consumers - price levels and variance
- Transition at a nascent stage - need studies on small farmer participation and welfare dynamics
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