Transformation of Food Value Chains: What Every Agricultural Banker Should Know

Thomas Reardon
1. A huge majority of the food economy is **domestic** – trade (exports/imports) is a tiny share

a) 95% of Asian food economy is domestic; 5% is international trade;
b) Africa, consumption: 93% domestic, 7% imports; output: 90-95% domestic, 5-10% exports

While trade is important in a few products, the domestic sector is by far the most important

... I focus on domestic food sector in the talk
2) Domestic Food Market is urbanizing fast & urban market already majority

a) Rapid urbanization of population

... Asia: urban share of population: 18% in 1950, 44% in 2010, projected 56% by 2030

... Africa: 40% in 2010

b) Urban food markets already the majority of food consumption and markets!

... Asia: 65-75% of food expenditures by urban consumers

... Africa: 50% of total food, 60% of marketed food, by urban consumers ... like Asia! (compare with 5-10% share of exports in output...)
rural-urban food VCs are the majority of food in the countries

extreme importance of these VCs for national food security

... and for farmer incomes

Lengthening of VCs from rural to urban areas – implying need for midstream + downstream services

... but also increasing vulnerability of food supply chains to cities

Another opportunity for finance & investment...
3) Importance of Midstream & Downstream parts of VCs

a) Food Security debate long focused on the farm sector (of course, important)

b) But 50-70% (grains vs perishables) of the costs and value in VCs are formed after the farmgate

... midstream (wholesale/brokers/logistics & processing)

... downstream (retail)

→ finance for midstream/downstream segments is as important for food security as for farms
4) Downstream: rapid rise of non-grain consumption

a) Share of grains falling in consumption:
... Asia urban areas: cereals share about 25% in total food expenditure
... Asia rural areas: 37%
... Similar trends in Africa, Latin America

b) Rapid rise of consumption & VCs of vegetables, fruit, meat, fish, dairy

⇒ While urban share of food market is 60%, urban share of non-grain markets is 80%
→ Opportunity for finance for perishables: cold chain & logistics for perishables & irrigation/greenhouses

→ Opportunity for finance for meeting quality & safety requirements of medium + large processors
5) Downstream: Rapid Rise of Supermarkets

a) Spread of supermarkets earliest (1990s/2000s) in Asia & Latin America

... but emerging in Africa

b) Mainly focused on urban markets, transforming them rapidly

c) Supermarket sector growing 2-4 times faster than GDP/capita

... displacing small shops & wetmarkets
→ Opportunity for finance for processors, wholesalers, and farmers to meet supply chain needs of supermarkets

→ Rapid decline of consumer finance from small shops, opportunity for consumer finance
6) Midstream in the VC: Rapid rise of food processing segment

a) Processed foods in consumption rising rapidly:

... in Asia, already 60% of food expenditure in rural areas, and 30% of that is “high processed”

... in Asia, figures are 73% and 42%
b) Rapid investment in processing sector in rural & urban areas

... proliferation of SMEs processors (QUIET REVOLUTION in SMEs in processing)

... BUT increase in scale (investment by large processors)

... AND technology change (capital/labor ratio increase)

→ Increase in investment finance needs for processing sector
7. Rapid transformation of the wholesale/logistics segment

a) Fast spread and growth of public wholesale markets: 10,000% in China in 1990s

b) Recently: Emergence of modern specialized logistics/wholesale companies serving large processors & supermarkets
c) But Extremely rapid growth – QUIET REVOLUTION - in the wholesale & logistics SMEs in rural & urban areas!

... 10’s of 1000s of SMEs in trading, cold chain, logistics, making investments

➡ Some “value chain finance” and a little “bank finance” but mainly “own finance”

➡ Opportunity for finance of this segment, neglected!
d) But rapid DISAPPEARANCE of traditional “village traders”
... “disintermediation” in supply chains – fewer hands along longer supply chains

e) AND huge disappearance of traditional TRADER FINANCE to farmers!! CONTRARY TO CONVENTIONAL WISDOM
... India: from our large surveys: 2% of farmers got this finance and 2% of traders gave it
➡ Rise of farmers’ self-finance (sales + nonfarm income)
➡ But opportunity for accessible bank finance to farmers
8. Upstream: Importance of agricultural commercialization + rural labor markets for farm finance

a) Farmers heavily engaged in the market as sellers and buyers of food
... in Asia, rice farmers sell 60-90% of their crop
... in Asia, rural households buy 60-80% of their food

b) They finance food consumption from crop sales + rural nonfarm income (RNFI) + migration
... RNFI about 40% of rural incomes in Asia, Africa, 50% in Latin America
9. Upstream: Transformation of input supply sector

Similar trends to processing:

... huge expansion (chemicals, seeds, farm machines as farms intensify technology to meet food and VC demands)

... large investment by SMEs

... emergence of large scale players

➤ Opportunities to finance retailers, traders, processors in these input supply chains