

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

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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