

# **Rapid Transformation of Agrifood Value Chains in Asia**

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

**... 95% of Asian food economy is domestic; 5% is international trade**

**... While trade is important in some items, the domestic sector is by far the most important overall**

**➔ I focus on domestic food sector in the talk**

## **2) Domestic Food Market is urbanizing fast & urban market already majority of food market**

**a) Rapid urbanization of population in Asia**

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

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

**... 65-75% of food expenditures by urban consumers**

**.. 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**

### **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)**
- Productivity of (and investment in) midstream/downstream segments is as important to food security as farm productivity is**

## **4) Demand Side: 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%**

**b) Rapid rise of consumption & VCs of vegetables, fruit, meat, fish, dairy: 75% & 63% of food expenditures!**

**c) While urban share of food market is 60%, urban share of non-cereals markets is 80%**

- Rapidly rising importance of cold chain & logistics for perishables & irrigation/greenhouses**
- Rising importance of meeting quality & safety requirements of medium + large processors**

## 5) Supply Side: Rapid transformation of Agrifood Value Chains

- a) Rapid **rise in the VOLUME** of rural-urban value chains (now moving 60-70% of food in Asia)
- b) Rapid **rise in the geographic LENGTH** of VCs from rural to urban areas –
  - ➔ **Implies a river of money flowing from cities to farmers in deep rural areas**
  - ➔ **but also implies increasing vulnerability of food supply of cities** (long supply chains are vulnerable to energy shocks & climate shocks)



## c) **Double Revolution in the value chains:**

... a **MODERN revolution** (rise of supermarkets, large processors)

&

... a **QUIET revolution** (grass-roots investments by 10's of 1000s of small/medium enterprises along the supply chains)

... **findings based on our “stacked surveys” of 8000 farms/firms** in segments along value chains in past 8 years in Indonesia, China, Bangladesh, India, Vietnam, Philippines

## 6) Downstream: Rapid Rise of Supermarkets

- a) **Spread of supermarkets** earliest (1990s/2000s) in Asia & Latin America
- 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 investments for processors, wholesalers, and farmers to meet supply chain needs of supermarkets**

## **7) Midstream in the VC: Rapid rise of food processing segment**

**a) Processed foods HUGE in consumption rising rapidly:**

**... in urban Asia, overall 73% of food expenditure is processed, with “low processed” 58% of the total processed and 42% “high processed”**

**... in rural Asia, overall 59% of food expenditure is processed, with “low processed” 69% of the total processed and 31% “high processed”**

**b) Rapid investment in processing sector in rural & urban areas**

**... proliferation of Small/medium processors (QUIET REVOLUTION in processing)**

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

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

## **8. 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**

**... like Bimandiri in Indonesia**

**c) But Extremely rapid growth – QUIET  
REVOLUTION - in the wholesale & logistics  
firms 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”**

**d) But rapid DISAPPEARANCE of traditional “village traders”**

**... “disintermediation” in supply chains – fewer hands along longer supply chains**

**e) disappearance of traditional TRADER FINANCE to farmers - CONTRARY TO CONVENTIONAL WISDOM about “tied output credit markets”**

**... Bangladesh, China, India, Vietnam: 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**



# **9. 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, farmers sell 60-90% of their rice crop, 80-90% of their fruit/veg 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

# **10. Upstream: Transformation of input supply sector**

## **a) 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

**b) Rise of “ag service firms” (farmers  
“outsourcing” labor/input services**

... “cross-province grain harvesting  
mechanization services in China”

... sprayer-traders in mango sector in Philippines  
and emerging on Java

# 11. Conclusions

- a) There is a rapid transformation of agrifood value chains in Asia
- b) This transformation is a combination of a Modern Revolution and a Quiet Revolution all along the supply chains.
- c) This transformation is and will be key to food security in the region