

# Dynamic, Innovating SMEs in the Value Chain Midstream in Africa & Asia

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# 1. Huge change downstream in past 25 years, on the demand side

## 1.1. Rapid urbanization

... urban share of national food consumption averages 65% (35% rural)

**1.2. Import share of national food consumption averages 10%** (90% domestic supply)

**1.3. Rural-urban FVC (food value chains) grew 800%** in Africa and South Asia over 25 years

... and lengthened with urbanization

**1.4. Purchases average 60% of rural consumption** (so FSC to rural areas important now)

**1.5. Purchases in national food consumption 65% + (60%\*35%) = 85%** (15% is subsistence farming)

## **1.6. Consumption of purchased-processed food now important**

... in Africa and Asia

... in urban and rural areas

... among poor and middle class

## **1.7. Consumption of non-staple grains (fruits, veg, meat, fish, milk, oils) rose quickly**

... 1.1-1.7 → huge growth in midstream (wholesale, logistics, processing)

## 2. Quiet revolution in midstream SMEs

**2.1. Urbanization & diet change drove massive increase in the “midstream” of food supply chains**

**2.2. “Quiet revolution” of SMEs!**

**... Proliferation of 10's of millions of SMEs in processing, wholesale, 3PLS (transport, warehouse, cold storage)**

**2.3. SMEs are 80% of midstream in Africa & South Asia**

**... and 68% of food in Africa & Asia handled by SMEs**

## **2.4. Yet midstream SMEs are neglected in research & policy debate in domestic food security debates**

... often called the “missing middle”

... but it is not missing! it is massive & growing fast

... we thus call it the “**Hidden Middle**”

## **2.5. Midstream SMEs are ALREADY extremely innovative**

... my recommendation for policy/action is FIRST & MAINLY to HELP them in their own local innovations

... to justify these last two points I will:

→ Define (broadly) innovations

→ Show SMEs are already dynamically innovating

# **3. There is already massive dynamic -- innovation by midstream SMEs**

## **3.1. Innovation is broad idea – for example**

- a) Innovation is producing new product/trait with existing tech
- b) Innovation is producing existing product with new tech/organization/suppliers
- c) Innovation is producing existing product in new place
- d) Innovation is selling existing product to new place/consumers

## **3.2. Innovation is relative to the recent normal LOCALLY**

**Often innovation in a local setting seems “not a jazzy new thing” to outsiders (like digitalization)**

... but the local innovation is very new and innovative in the local place

... an existing product or technology or service but now an innovation in new places

# 4. Many examples of SME rapid “local innovations”

## 4.1. Cold storages in potato area near Delhi – huge innovation locally in the 2000s

- a) **BOOM: 1% farmers used cold storages in 1999; 99% in 2009, driven by CONFLUENCE of factors**
  - b) **“pulled” by massive growth of Delhi market**
  - c) **“linked” by highway development**
  - d) **“fueled” by electrification**
  - e) **“fed” by farmers shifting from grain to potatoes**
  - f) **“NARS-helped” - breeding storable potatoes**
  - g) **“watered” by spread of cheap irrigation pumps**
- ➔ avalanche of investments only by local SMEs, adopting existing basic technology**





## **4.2. Aquaculture value chains/clusters Bangladesh (IFPRI/MSU)**

**a) SME farmed fish VC grew 15-fold in 25 years**

**b) feed sector tripled in 5 years**

**c) big shift from traditional variety (carps) to fast-growers (tilapia, catfish)**

**d) MIDSTREAM SMEs in the supply chain tripled in 10 years**

Bangladesh aquaculture,  
wholesale, hatcheries: 300% in 10  
years; feed mills: 600%



**4.3. Tanzania: shift in 2010's from unpackaged bulk sale to packaged, branded milled maize by SMEs (MSU, Sokoine)**



# Boom in SME's in food processing: packaging, labeling, branding



## **4.4. Teff in Ethiopia (IFPRI)**

**a) transporter SMEs massive investment: walk/horse to vehicles in teff value chain in 10 years (100 years in US)**

**b) huge jump in urban wholesale, milling, prepared sales of enjera and milled teff**

**c) spontaneous clusters**

**d) reduction of transport costs (50%) and mill and wholesale margins**

Teff wholesalers, truckers, millers  
boom: 300% in 10 years



**INJERA**  
**ADDIS ABABA**  
**ETHIOPIA**

**THE MAKING OF INJERA - TEFF**

## **4.5. Booming Nigeria maize/feed/chickens-eggs complex (MSU)**

- a) huge growth in chicken farming at SME scale**
- b) intense involvement of women**
- c) marketing to growing towns**
- d) 600% feed sector growth in 10 years**
- e) SME traders grew long north south supply chain for maize and feed**





## **4.6. Common characteristics of all these cases (and many others)**

**a) All for domestic (not export) market**

**b) no government management, program, or  
direct help (tiny share got subsidy)**

**c) Spontaneous clusters (not managed clusters  
like agro-parks or SEZs)**

**d) no NGO help**

**e) No special credit facility and no bank help**

**f) no contract farming by big company**

**g) but ... huge government role in “enabling conditions” (roads, electricity, crop varieties, wholesale markets)**

# 5. Conclusions

- a) **Quiet revolution midstream SMEs in Africa & Asia**
- b) **Hidden Middle not Missing Middle!**
- c) **Many cases of dynamic spontaneous clusters of SMEs undertaking “local innovation” where conditions good**  
... basic technologies from other places adopted in a new place = powerful (and dominant type) of innovation already taking place
- d) **Recommendation: identify & leverage/facilitate emerging “boomlets”**  
... avoid reinventing the wheel ...
- e) **Recommendation: focus FIRST & FOREMOST on spreading existing basic innovations into products, places, and supplier types (e.g., women)**