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

- ➔ **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)