Value Chains for Staples Compared to Other Crops: Implications of Key Differences and Comments on Competitiveness

At:

Observations from:
Michigan State University’s Food Security Group-West Africa
(Staatz, Demble, Diallo, Kelly, Haggbblade, Murekezi, Theriault, Boughton, Perakis and Adjao)

Presented by:
Michael T. Weber, Professor Emeritus
Overview - Staple Crop Value Chains

This presentation will:

• Highlight 7 Areas of Comparative Differences of Staples with Other Crops

• Discuss Key Implications of These Differences

• Comment on Sources of Competitiveness in Staple Food Value Chains & Important Related Challenges
1. Staples are More Storable

- Cassava an exception but still somewhat storable in live form in the ground.
- Implications:
  - Less potential hold-up problems with buyers
  - Less potential gain to resolve such problems via group action
  - Fewer incentives to form/sustain groups
  - Often private sector can carry out marketing roles more cheaply - fewer internal transaction costs - compared to group action
  - Some scope for group action in initial assembly
2. Staples Have Thousands/Millions of Points of Production & Exchange

- Horticulture and export cash crops tend to be more geographically concentrated in production and assembly

- Implications:
  - Fewer leverage points in value chain for actions at given level to improve the entire chain
  - Relatively harder to impose taxes/subsidies
  - Transportation/transfer costs loom large especially for small lots
  - May be fewer agglomeration economies for concentrating support services to farmers in localized zones
3. Many Producers are Net Buyers Rather Than Net Sellers
(Often a Majority Can Be Net Buyers to Some Degree, or Not In The Market at All)

• Implications:
  – There can be a relatively wide range of “smallholders” & respective capacities
  – Effectiveness of the value chains requires improvements in multiple-sub channels & in selling as well as buying for net buyer farmers and other local consumers
  – Upgrading smallholders to capture emerging urban & export markets are important but are not the only challenges
  – Programs/policies/technologies for various VC sub channels
  – Local market challenges – value chain & processes for delivering products/services in rural areas for net buyers
  – May be issues for creating incentives for local storage to avoid backhaul costs and localized out of stock difficulties in hungry season
4. Production & Marketing Among Net Sellers May Be Relatively Concentrated

• Such results among net seller smallholders can be exacerbated when large scale commercial farmer present

• Implications:
  – Good news is that these subcomponents/participants of staple value chains may hold opportunities for growth
  – Bad news is that benefits from investments and subsidies are often highly concentrated - many farmers left out or benefit little
  – Political & economic interest groups tend to protect this concentration
  – Improvements needed but may be slower coming and hard to quantify for poorest participants – helps some leave VC
  – Need multiple actions and policies to reach multiple targets
5. Staples Are Important in Consumers’ Budgets

• Implications:
  – Key food prices are politically sensitive
  – Govts much more involved in pricing/trade issues
  – Input and output price polices are very blunt tools
  – Some strategic export crops – like cotton are an exception
  – Unpredictable government involvement can be major hindrance in private sector investment in the off-farm parts of value chains
6. Staples - Relatively Less Product Differentiation (especially at low levels of consumer income)

• Implications:
  – Staple value chains more participatory – more farmers can produce at low quality standards
  – As consumer incomes grow, product differentiation increases, demanding that farmers & traders increase quality standards
  – This can be an opportunity for some to learn and improve if relevant VC subcomponents are organized in a way to pass benefits back to investors
  – With staples the pooling of different products can make this process very difficult
  – These trends are slower for staples compared to some other crops for domestic and export markets
  – Poor quality assurance mechanisms can disrupt transition
7. Staples - Relatively Low Unit Values

• Implications:
  – Its hard to farm one’s way out of poverty on 1-2 ha or less of staples, especially if rainfed/one crop yr
  – For many staple smallholders just increasing connections to markets and on-farm productivity unlikely to be a major way out of poverty
  – But making rural staple mkts more reliable may allow a wide range of smallholders to take risks with crop and employment diversification, relying on rural staple mkts for their food
  – Bulk commodities can evolve into more sophisticated VCs but depends on careful investment in the VC drivers and complementary infrastructure & education
Sources of Competitiveness -1

• WB study – Awakening Africa’s Sleeping Giant showed that staple-food VCs in several African Countries had competitive costs at farm level.
• This was lost quickly when moving from the farm toward regional and international mkts.
• Main difficulty was very high logistical costs – inland transport, doing business, port charges.
• Overall the off-farm portions of the VC are critical on both input and output sides.
Sources of Competitiveness - 2

• Looking closer at on-farm cost of production, long-term competitiveness is problematic
  – Soil mining not sustainable
  – Low returns to labor (indicating few alternatives, hence not a very good pathway out of poverty)

• Bottom line – need to find
  – Sustainable productivity increases **both** on and off farm to lower unit costs
  – Look for drivers of productivity increases in niche mkts
  – Eventual growth in off-farm portions of VCs may offer additional employment, but given supply of labor, rural wages not likely to rise sharply for some time
Sources of Competitiveness - 3

• Increasingly competitiveness comes through reducing transaction costs, especially for meeting quality standards as markets become more segmented
  – Examples from Mali and Senegal are illustrative of challenges and opportunities [Mali, Senegal]

• Also important for capturing regional trade opportunities
  – Identify reliable trading partners across borders
  – Meet their quality requirements
  – Completing requirement of trading across borders
Source of Competitiveness - 4

• Competitiveness is important in multiple market niches in a given value chain
• Need to work with a range of vertical sub channels in a given value chain
• Seek broad-based value chain upgrading and competitiveness enhancements
• Seek inclusiveness for a wide range of smallholder and other rural stakeholders
Cassava Commercialization in Mozambique, Donovan et. al. (Draft 2011)
Nearly 50% of rural farm HHs are net buyers of maize

- 49% net buyers (45% buy only; 11% did not produce maize)
- 28% net sellers
- 23% produced but did not sell nor buy maize

Fig 6: Smallholder Farmers Maize Market Position

Source: CSO/FSRP- Supplemental Survey 2008
Fig 7: Zambia Smallholder Maize Production, Sales and Assets

Source: 2008 (07/08 Crop Marketing Season)
In Mali processors complain about inability to get quantity @ quality (ie volumes of consistent quality of maize needed to run their plants).

Because it is difficult politically to enforce contracts with farmer groups when they do not respect quality standards, processors either:

- Turn to imports
- Vertically integrate into farming
Senegal Case Study from Andrew Keck

THE INDUSTRIAL MAIZE VALUE CHAIN

Seeds
- Private seed producers
- Industrial maize
  - Networks of smallholders and larger farms

Agriculture input and material suppliers

“CONSOLIDATORS”
- SODEFITEX, SOENA, RESOPP, SEDAB

Contracts

CREDIT

Third party warehousing

CMS
- ACEP
- CNCAS

Avisen, NMA, SEDIMA, Moulins Sentenac...
- Poultry feed

Chocosen and others:
- Bouillon and infant cereals