Challenges and new approaches in building markets for smallholder farmers

Alain de Janvry

Evidence to Action: Building Markets for Small-Scale Farmers
May 1, 2014 | Berkeley, California
Issues to be addressed

Growth diagnostic for Sub-Saharan Africa

• Recent acceleration of growth, largely mineral exports driven, with entry of large farms
• But continuing extensive rural poverty, urbanization running ahead of employment, expanding urban slums

Normative policy response

• Need growth that is more inclusive, more employment creating, more pro-poor, more endogenous
• For this: use the growth of agriculture and agroindustry as the best instrument to jump start industrialization (WDR 2008)
Questions

• How to accelerate the growth of agriculture?
• How to include smallholder farmers?
• How to give a role to large farms in support of pro-poor growth?
• How to take advantage of the mineral exports boom in support of agriculture?

Elements of an answer

• Past agricultural growth has been largely driven by horizontal expansion
Horizontal (area) vs. vertical (yield) expansion as a source of agricultural growth

- East Asia, South Asia: mainly yields
- Latin America; area then yields
- Sub-Saharan Africa: mainly area
Horizontal (area) vs. vertical (yield) expansion as a source of agricultural growth

- Easily accessible land is largely exhausted; average farm size is falling in most countries.
- Need shift to vertical expansion: role of technology.
Yields remain largely stagnant
Use of fertilizer lowest in SSA
The puzzle of continuing low productivity

• How do we explain the puzzle of low yields? Low fertilizer use?
• Many conditions must hold for technology adoption
  – Availability
  – Profitability
  – Information and learning
  – Access to credit and insurance
  – Behavior: capacity to decide
• Add dynamics/sustainability: deep markets with prices that will be sustained as supply increases
Consider the theory of the technological treadmill

• If inelastic demand (non tradable goods): supply shifts, prices collapse, producers lose, technology adoption not sustained

• If elastic demand (tradable goods): supply shifts, prices remain stable, producers gain, technology adoption spreads.
Indirect evidence on inelastic demand and shallow markets

- Prices fall with fertilizer subsidies in Malawi
- Highly unstable prices for local foods with weather shocks
- One Acre Fund success reflected in decline in local food prices
Prices of imported and domestically produced cereals

- Very little price transmission from imported to domestically produced goods.
- High price instability of domestic goods with weather shocks.

Niamey, 1994-2008
How to make demand more elastic so technology adoption spreads?

• Link smallholder farmers to markets
  • Infrastructure
  • Make markets work better: information, competition
  • Contracts in value chains with agro-exporters, agroindustry, supermarkets: productive alliances
• Take advantage of growth corridors opened by mineral export boom (map)
Growth corridors linked to mining in Africa

(Weng et al., 2013)
Proposed research initiative:

• Take advantage of large farms to open new areas and new markets: large farms-small farms complementarities and partnerships (Brazil)
• Then once demand is more elastic, increase investment on the supply side: R&D, local adaptation
• Map price ratios: \( \frac{p_{fert}}{p_{cereals}} \) → static profitability
• Map elasticity of demand → dynamic profitability → Focus technological effort where price ratios are favorable and demand can be sustained. Then expand.
Questions

• How to accelerate the growth of agriculture?
• How to include smallholder farmers?
• How to give a role to large farms in support of pro-poor growth?
• How to take advantage of the mineral exports boom in support of agriculture?