LSMS-Integrated Surveys on Agriculture: main features, trade offs and lessons learned

Gero Carletto
Development Economics Research Group
The World Bank
MOTIVATION

Importance of agriculture for poverty reduction, yet:

- Poor data: low quality, inadequate periodicity and comparability, lack of policy relevance
- Failure to address high levels of diversification, linkages to non-farm, poverty, health, ...
- Institutional constraints in agricultural data production and analysis
- Lack of analytical capacity
- Poor dissemination of data and findings
- Overall, too little attention to agriculture and agricultural statistics
OBJECTIVE

Improve the availability, quality and relevance of agricultural data for policy and research in Sub-Saharan Africa
COMPONENTS

- Household survey data production
- Methodological validation/research
- Capacity building
- Dissemination
COUNTRIES

Tanzania
Uganda
Malawi
Nigeria
Niger
Ethiopia
MAIN FEATURES

• Panel
  – Frequency
  – Tracking of movers
  – Tracking of split-offs

• Sample design
  – Population-based frame
  – Sample size
    • Relatively small at baseline
    • Domains of inference
MAIN FEATURES (cont’d)

• Integrated approach
  § Multi-topic survey instrument
    § Agriculture plus non-farm, poverty, nutrition, *inter alia*
  § Build on existing/planned surveys
    § National Strategy for the Development of Statistics (NSDS)
    § Countries examples
  § Improved links to other data sources
    § Small area estimation
    § Geo-referencing

§ From Centralized to Field-based to CAPI data entry
METHODOLOGY

- Recall vs. Diary (vs. crop cutting)
- Use of mobile phones
- Plot measurement
- Income sources
  - Agriculture (FAO/RIGA)
  - Livestock (ARD, ILRI)
  - Fishery (WFC)
  - Non-farm enterprises (KCP; FAO/RIGA)
- Sourcebooks
LESSONS LEARNED

- Standardization with customization
- Integration with existing/planned surveys comes at a price but ...  
  - Sustainability and country ownership  
  - Medium-term horizon
- Tracking “grossly underestimated”
- Concurrent data entry is not about technology
CHALLENGES

• Integration
• Institutional framework
• Analytical capacity
• Level of representativeness (sampling)
• Burden on respondents
• Donor coordination
• Managing expectations
“In handling innovations, patience is a virtue”

Anonymous
UGANDA NPS

• UBoS
• On-going government plan: 1st wave funded (Netherlands), combined with UNHS, no agriculture
• Two panel visits (as in 2005/06)
• GPS plot measurement
• Field-based data entry, moving to CAPI in wave 2
• Crop cards
MALAWI IHS3

- NSO
- Multi-donor effort: DFID, Norway, Irish Aid, MCC, GTZ
- Sample:
  - 12,000 households, of which 3,000 panel
  - Main regions, main crops
- Two panel visits
- Field-based data entry
ETHIOPIA AgSS

- CSA
- AgSS: 60,000 households, 2,000 resident enumerators; crop cutting at cluster level
- Crop estimate: highly controversial
- Subsample of AgSS (8,000 households)
- Extra layer of supervision
- Field-based DE, CAPI on subset
- Linking crop cutting to households?
- Pastoralist?