Pathways by Which Improved Information Can Affect Market Performance: Implications for Evaluation of MIS Impacts

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Workshop on Agricultural Market Information Systems in Africa: Renewal & Impact
Montpellier, France, 29-31 March 2010
Key messages

- Complementarity between public and private activities to improve market information

- MIS can improve market performance both through

  - Direct impacts on decisions of private actors:
    - Spatial and temporal arbitrage
    - Production decisions

  - Indirect effects via:
    - Complementarity with other hard and soft infrastructure (e.g., roads, credit programs),
    - Impacts on improving government policies
Key messages

Yet as one moves towards these more round-about impacts of MIS, it becomes increasingly difficult to quantify the impact of MIS due to:

- Problems of attribution of impacts to the MIS actions vis a vis other complementary and often contemporaneous actions (e.g., market reforms)
- The difficulty of specifying the counterfactual (in terms of the policy environment) for the without-MIS situation.
Why try to estimate impacts?

- Conceptual links between better information and improved market performance
- Reasons why private investment may lead to insufficient provision of market information
  - Indivisibility
  - Non-excludability
  - Uncertainty
  - Lack of effective demand among the very poor
- New ICT may change some of these reasons (e.g., non-excludability), increasing role for private info. provision
- Question remains: At margin, how much to invest in public provision of market information relative to other programs?
Pathways from better information to better market performance: implications for evaluation
Potential Direct Impacts of Better Market Information & Ways of Evaluating Them

- Rent redistribution in short run- e.g., reduction in intra-market margins following introduction of MIS
  - E.g., early work on Malian MIS
  - Value consumer savings per kg times market volumes
- Does not examine longer-run growth implications of such redistribution
Potential Direct Impacts of Better Market Information & Ways of Evaluating Them

- Improved spatial arbitrage of existing production → more stable and possibly higher average prices
  - Examples:
    - Jensen’s (2007) analysis of introduction of cell phones on Kerala fishermen’s prices
    - Jenny Aker’s (2009) analysis of impact of cell phones on marketing margins in Niger
  - Need good data; this approach captures 1st-round effects only—not longer-term growth or supply response
Example: Fish Prices & Mobile Phone Service in Kerala

Potential Impacts of Reducing Actors’ Price Forecast Error

- Aim is to model (using social surplus models) the costs reductions of being off of the equilibrium price and quantity

- Constraints:
  - How to know reduction in forecast error?
  - Quasi-static
  - Estimates of D & S elasticities

Estimates of with/without improved information over time

- Problems of attribution given the complementarity of information with other market improvements

- Better information as an input into better policies, which then improves payoffs to market information (both public and private)
  - Example of OMA in Mali
  - Problem for estimation of impacts → everything is endogenous!
So how to measure impacts of more dynamic effects?

- User satisfaction surveys? Identifying what information comes from MIS vs other sources, including the market itself?

- Contingent valuation? Problems of stated preference vs. revealed preference?
So how to measure impacts of more dynamic effects?

- Revealed preference of funding by public sector or through a users’ organization?
  - May be the most reliable indicator, but does this help you ex-ante?
  - Can you duplicate successful models from elsewhere?
    - Donor funding crowding out national funding?
    - Need an explicit transition strategy to national funding
- Are we pursuing an impossible objective in trying to precisely quantify the payoffs to improve market information?
- Quantify what you can, but then build credible stories on more dynamic effects
Your suggestions?

- Thanks for your attention and your help!