Investing in Agriculture Statistics in support of food security, agriculture and rural development programmes and projects

Global Strategy to Improve Agriculture and Rural Statistics

Implementation Plan

Relevance to monitoring results of investment in agriculture

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Outline

- Introduction

- The Global Strategy to improve agricultural and rural statistics
  - Why the need for a Global Strategy?
  - The process of preparation of the Strategy
  - The three pillars of the Strategy

- Implementation Plan of the Global Strategy
  - Comprehensive Statistical Capacity Building Programme
  - Relevance to monitoring results of investment in agriculture

- Monitoring results of investment in agriculture: Framework and Frequency of various Indicators

- Data Framework
  - Sources of data
  - Tools: Surveys vs. non-formal appraisal methods
  - Comparison of key features of different surveys

- Applying Data collection tools for M&E
INTRODUCTION

Agricultural development is vital to achieve the MDGs particularly poverty, food security and environmental sustainability (World Development, report 2008, “Agriculture for Development”)

Now renewed commitment to agriculture within the international development community.

Greater need for support to agriculture
- Recent food crisis due to skyrocketing food prices and lowered food reserves
- Increasing recognition of interaction between agriculture and the environment.

Monitoring is an increasing priority:
- Food security, measure agricultural performance and results of agricultural investment
INTRODUCTION (2)

- Good quality statistics key to agriculture investments and monitoring and evaluation of results

- Data is unavailable for
  - Decisions on marketing, investment or policy
  - To assess impact of current commitments or policies.

- Countries lack capacity to produce, analyse and report on the minimum set of agricultural data
WHY THE GLOBAL STRATEGY?

The following main problems are common to many developing countries:

- limited staff and capacity of the units that are responsible for production of agricultural statistics;
- lack of adequate technical tools, statistical methodology and survey framework to support data production efforts;
- insufficient funding allocated for agricultural statistics from development partners and national budgets;
- lack of institutional coordination which results in the lack of harmonized and integrated data sources;
- lack of capacity to analyze data in a policy perspective which results in a significant waste of resources as large amounts of raw data are not properly used;
- difficult for data users to access existing data with no metadata and indication of quality.

**Global Strategy** aims at addressing these issues with a long term implementation plan.
THE GLOBAL STRATEGY TO IMPROVE AGRICULTURAL AND RURAL STATISTICS: The process

- 40th Session in February 2009 of the United Nations Statistical Commission (UNSC) recommended to produce a Global Strategy
- Sets out a programme of statistical capacity building to improve agriculture statistics

- The Strategy unanimously endorsed at the 41st Session of UNSC in February 2010
- Inclusive and consultative process including all key stakeholders and both National Statistical Offices and Ministries of Agriculture (FAO Governing bodies)
- Prepared by World Bank and FAO with substantial input from all key partners
The global strategy aims to make better data available for users and covers data needed at all levels of the results frame.

Provides a framework for countries and international organisation to produce the data needed for agriculture investment.

Three Pillars of Strategy:

1. Establish a minimum set of core data that countries will provide
2. Integrate agriculture into national statistical systems
3. Ensure sustainability of the agricultural statistics system through governance and statistical capacity building.

THE GLOBAL STRATEGY
Pillar One: Minimum set of Core Data

- Minimum set of core data items
  - 15 commodities—95 percent of world production
  - Key economic, environmental, social indicators
  - Beginning point to implement global strategy

_set of core data items_
THE GLOBAL STRATEGY
Second pillar: Integration into national system
Statistics current status: -The Dilemma – who does what

- National Statistics Offices
- Ministry – Departments of Agriculture
- Land Management/Natural Resources Agencies
- Marketing Boards/Commissions
- Health, education agencies
- Development efforts by donors, WB

Each Collects data for own use with results that do not always agree – and limited ability to share data
THE GLOBAL STRATEGY
Second pillar: Integration into national system

- Coordinate data collections across sectors for agriculture, rural households, etc.
  - Eliminate duplication of work, conflicting estimates

- To achieve integration:
  - Develop Master Sample Frame for agriculture
  - Implement Integrated Survey Framework
  - Provide data management system for census, survey, administrative, and other data
THE GLOBAL STRATEGY
Second pillar: Integration into national system

- Master Sample Frame Farms and households Geo-referenced to land cover/use
- Integrated Survey framework
- Indicators

Data Management System

Data Analysis

Data dissemination
THE GLOBAL STRATEGY
Third Pillar: Sustainability through governance and capacity building

- Establish governance structure to coordinate national statistical systems
- Formalize global, regional, national coordination
- Form national statistics council to:
  - Determine national set of core data
  - Develop master sample frame
  - Coordinate integrated survey system
- Coordinate data management activities
Implementation plan of the Global Strategy: Comprehensive Statistical Capacity Building Programme

- Substantial improvement of agricultural statistics in the next decade, particularly in developing countries.
- Regional approach adopted:
  - Allows flexibility as regions have differing levels of statistical development. Tailored programme needed to provide the data required by users
  - Ensures ownership by regional institutions for sustainability of data production

- **Global Plan**: global frameworks, standards, methods and tools
- **Regional Plans**: adaptation to regional level and support to countries.

- Statistical Capacity Building Programme:
  - Comprehensive Country Assessment
  - Technical assistance programme
  - Articulated training programme
  - Targeted research agenda
Implementation plan of the Global Strategy: Comprehensive Statistical Capacity Building Programme

**Assessment of countries capacity**
- A framework and guidelines: to assess country statistical capacity, level of data available, and ability to improve statistics through Global Strategy
- Assessment Results: used to determine countries ability to produce the minimum set of core data regularly and areas needing development
- Areas for development to be:
  - Integrated into National Statistical Development Strategy: allows for comprehensive M&E systems
  - Determine technical assistance and training needed

**Training**
- Increased capacity of producers of national statistical to understand user needs, produce statistics and disseminate in form suitable for users
- Build capacity of national statistical producers through key competencies of staff in statistics methods and management
- Increase capacity of regional/subregional training centres to deliver and sustain statistical training
- Will encourage sustainability in supply of data
Implementation plan of the Global Strategy: Comprehensive Statistical Capacity Building Programme

- **Technical Assistance**
  - Countries have differing needs for TA
  - This to be based on results of country assessments

- **Research**
  - Improve agricultural data collection and management by preparing technical guidelines and handbooks on advanced methodologies, standards and tools related to the pillars of the Global Strategy.

- **Governance mechanism: Global, Regional, country level**
  - Governance framework at the global, regional and national levels
  - To manage implementation plans and monitor progress, avoid duplication of efforts and ensure the international comparability of the resulting outputs
  - Ensures data required by users will be available over time and comparable
Implementation plan of the Global Strategy: Relevance to monitoring results of investment in agriculture

- Increasing importance of results indicators following recent international resolutions such as the *Paris Declaration on Aid Effectiveness* in 2005 and the *Monterrey Consensus on Financing for Development* in 2002.

- Emphasis on aid effectiveness and results-based development ➔ need to demonstrate the impacts of projects and programs ➔ shifted the focus of M&E from inputs and outputs to outcomes and impacts.

- To measure outcomes and impacts imply the use of indicators that are based on reliable data, and on the capacity to systematically collect and analyze that information.

- In most developing countries the stock and flow of timely information are irregular and unreliable and statistical capacity is weak.

- Strengthening capacity for M&E begins at the national and sub-national levels, where addressing the weaknesses of national statistical systems is a common priority.
MONITORING RESULTS OF INVESTMENT IN AGRICULTURE
Framework and Frequency of various Indicators

Impact Indicators
(Ultimate goal)
Medium to Long Run (maybe 5 years by the time surveys are carried out)

Outcome Indicators
(behavioral change)
Medium Term - Ideally annually – maybe every 2 – 3 years

Output Indicators
(Goods and Services)
Short – Medium Term - Ideally more than once a year or annually

Input Indicators
(Material, financial, human)
Short Term - Ideally every three months or annually

Issues – Cost and Capacity
## Monitoring Results of Investment in Agriculture

### Data Framework: Sources of Data

<table>
<thead>
<tr>
<th></th>
<th>Inputs</th>
<th>Outputs</th>
<th>Outcomes</th>
<th>Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative information systems</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Survey Programme of the CSO or MoA (Population census, Agricultural census, LSMS, DHS..)</td>
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<tr>
<td>Participatory Poverty Assessments</td>
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<tr>
<td>Financial Management Tools</td>
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</tbody>
</table>
DATA FRAMEWORK: TOOLS

Surveys vs. non-formal appraisal methods

- Direct measurement
  - Household budget survey
- Questionnaire (quantitative)
- Questionnaire (Qualitative)
- LSMS
  - Structured interview
- Windscreen survey
- Small prob. sample
- Large prob. sample
- Census
  - Census
- Censuses
- CWIQ
- Community Surveys
- Conversations
- Subjective assessments
- Open meetings
- Quota sampling
  - Beneficiary assessment
- Purposive selection
  - Case study
- P.P.A
- Participant observation
- Sentinel site surveillance
- Data framework
  - TOOLS
- Surveys vs. non-formal appraisal methods
## DATA FRAMEWORK

### Comparison of key features of different surveys

<table>
<thead>
<tr>
<th>Survey Type</th>
<th>Sample Size</th>
<th>Duration</th>
<th>Visits to household</th>
<th>Questionnaire size</th>
<th>Cost ($m)</th>
<th>Time series</th>
<th>Sub-national</th>
<th>Counter-factual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population census</td>
<td>Full coverage</td>
<td>3-6 months</td>
<td>1</td>
<td>4-8</td>
<td>15-25</td>
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<tr>
<td>Agricultural census</td>
<td>20 000-50 000</td>
<td>1-1.5 years</td>
<td>2-4</td>
<td>5-12</td>
<td>5-10</td>
<td>×</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>LSMS/integrated survey</td>
<td>5 000-10 000</td>
<td>1-1.5 years</td>
<td>2</td>
<td>40+</td>
<td>1-2</td>
<td>×</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Household budget survey</td>
<td>4 000-10 000</td>
<td>1-1.5 years</td>
<td>15-25</td>
<td>15-20</td>
<td>1-2</td>
<td>×</td>
<td>×</td>
<td>✓</td>
</tr>
<tr>
<td>Community survey</td>
<td>100-500</td>
<td>4-6 months</td>
<td>1</td>
<td>4-6</td>
<td>0.2-0.4</td>
<td>✓</td>
<td>✓</td>
<td>×</td>
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<tr>
<td>Service delivery survey (CWIQ)</td>
<td>10 000-15 000</td>
<td>2-3 months</td>
<td>1</td>
<td>8</td>
<td>0.2-0.4</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Focus group interviews</td>
<td>40-50</td>
<td>2-3 months</td>
<td>1-3</td>
<td>-</td>
<td>0.05-0.1</td>
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<td>×</td>
<td>✓</td>
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<tr>
<td>Windscreen survey</td>
<td>10-20</td>
<td>2-3 weeks</td>
<td>0</td>
<td></td>
<td>0.01</td>
<td>✓</td>
<td>×</td>
<td>×</td>
</tr>
</tbody>
</table>

× = not suitable
✓ = adequate
✓✓ = good
APPLYING DATA COLLECTION TOOLS FOR M&E

- Comparisons over time
  - Baseline surveys
  - Panel surveys
- Comparisons over space
- Counterfactual comparisons (with and without)
Thank You!