Global Strategy
IMPROVING AG-STATISTICS
ASIA PACIFIC REGION

Pillar 2. Integrating Agriculture into the National Statistical System

What's the fuss?

- So many data collection systems
  - Across different sectors: separate data collection activities but usually with some common data items and information
  - Within agricultural sector: commodity-level data collection
    - Different systems for administrative records
    - Various surveys

What's the fuss?

- So many data collection systems
  - Duplication of efforts across survey series
  - Duplication of efforts across different government statistical organizations and units
  - Much time on operations; less time on data quality
- So many data collection systems
  - Respondent burden
  - Enumerator/recorder burden

What's the fuss?

- So many data collection systems but not enough information for in-depth analysis
  - e.g., crop and livestock production are often drawn from separate collections. This provides no basis for analyzing characteristics of farms that produce both crops and livestock, or for comparing them to farms that specialize in one or the other
  - e.g., income & expenditure surveys linked to labour force survey linked to farm households surveys

What's the fuss?

- So many data collection systems
  - Different organizations produce statistics for the same items, with different results
  - Confuse the data users
  - Sometimes, leads to distrust of statistics

Integration will …

- Avoid duplication of effort
- Prevent the release of conflicting statistics
- Ensure the *best use* of resources, technically and operationally
- Reduce the burden of response
- Reduce the burden of statistical reporters/enumerators
- Produce coherent and comparable data

“Integration” of Agriculture …

- … into the National Statistical System
  - Agriculture is part of the overall statistics collection process
  - Data collection is coordinated
- … of the data collection processes
- … at dissemination phase

INTEGRATION INTO THE NSS

National Statistical System

- Many government agencies produce agricultural data
  - NSO for agriculture census, economic data, social data
  - Ministry of agriculture for crop and livestock surveys
  - Ministry of fisheries for fishery and aquaculture surveys
  - Ministry of forestry for forestry related surveys
  - Various agencies for environmental and geospatial data
- Sometimes there is cooperation and use of common standards, etc, but sometimes, not!

National Statistical System

- Integration of agriculture into the National Statistical System will require a high level of cooperation and commitment by a range of agencies
- Cooperation and commitment at the institutional level– *not enough at the personal level*
- *Coordination* mechanisms

MORE ON COORDINATION (IPD)

INTEGRATED SURVEY FRAMEWORK

Approaches

- *Ex Post* – try to link existing data from different surveys
- *Ex Ante* – plan relevant surveys so that linking variables are well defined

Approach: Ex Post

Ex Post – try to link data from different surveys

- Example: *link household data from Population Census to holding data from Agricultural Census*
  - Very difficult if not planned in advance
    - One-to- many mapping
    - Many-to-one mapping)

Approach: Ex Ante

Ex Ante – plan relevant surveys so that linking variables are well defined

- Example: *identify households/holdings in Population Census to give a frame for household selection of Agriculture Census*
  - Update this frame periodically to serve as master sample frame
  - All agriculture surveys are based on this frame
  - Business Register to serve as institutional section of agricultural census
  - Use of pre-defined multi-stage sampling reduces the need for fieldwork for updating the frame

INTEGRATED SURVEY FRAMEWORK

Integrated Survey Framework

- *Objectives*
  - Provide an annual work programme that is consistent from year to year
  - Minimize the required scope of censuses
  - Recognize that some data need to be collected more often than annually because of the seasonal nature of agriculture and the crop and livestock production cycles
  - Take into account the additional data sources that need to be included in the overall framework
    - Administrative data, remotely sensed data, community surveys

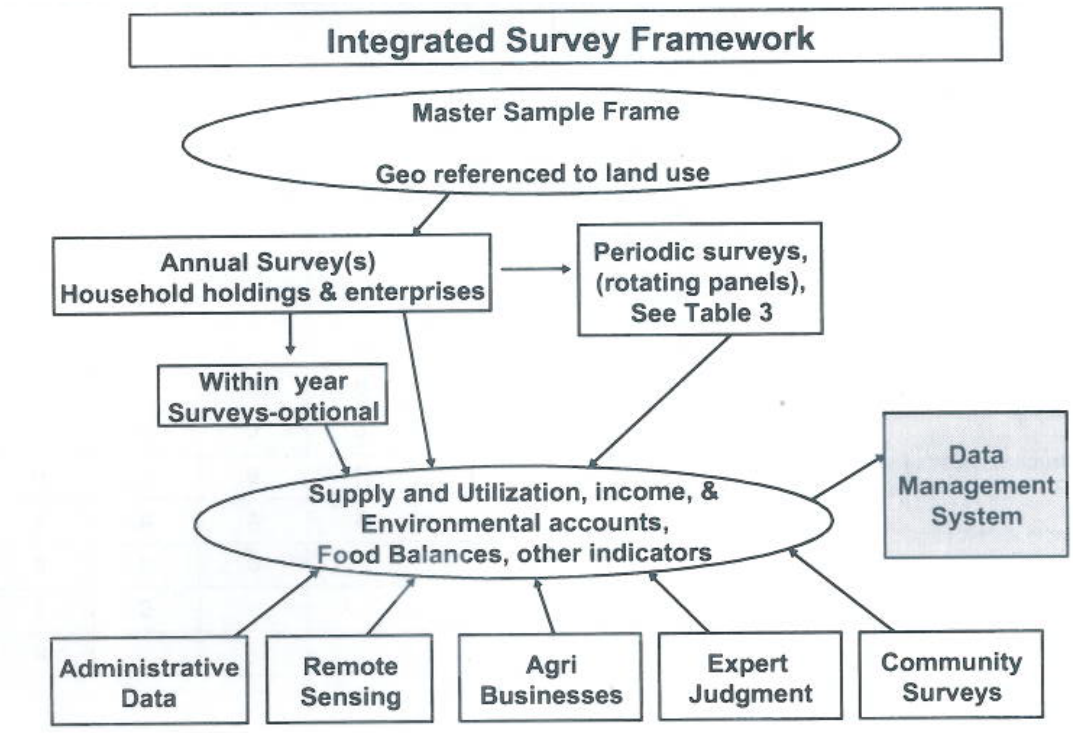


TABLE 3: Example of a replicated survey design with the use of an annual core questionnaire and rotating sets of supplemental questionnaires

YEAR \ REPLICATE	REP 1	REP 2	REP 3	REP 4	REP 5	REP 6	REP 7	REP 8	REP 9	REP 10	REP 11	REP 12
1	A	A	A	A	A							
2		B	B	B	B	B						
3			C	C	C	C	C					
4					D	D	D	D				
5					A	A	A	A	A			
6						B	B	B	B	B		
7							C	C	C	C	C	
8								D	D	D	D	D
9									A	A	A	A
10										B	B	B
11											C	C
12												D

Detailed Questionnaires for Rotating panel surveys

Every replicate receives the same core questionnaire every year for annual core data items plus obtains data for one following rotating panels:

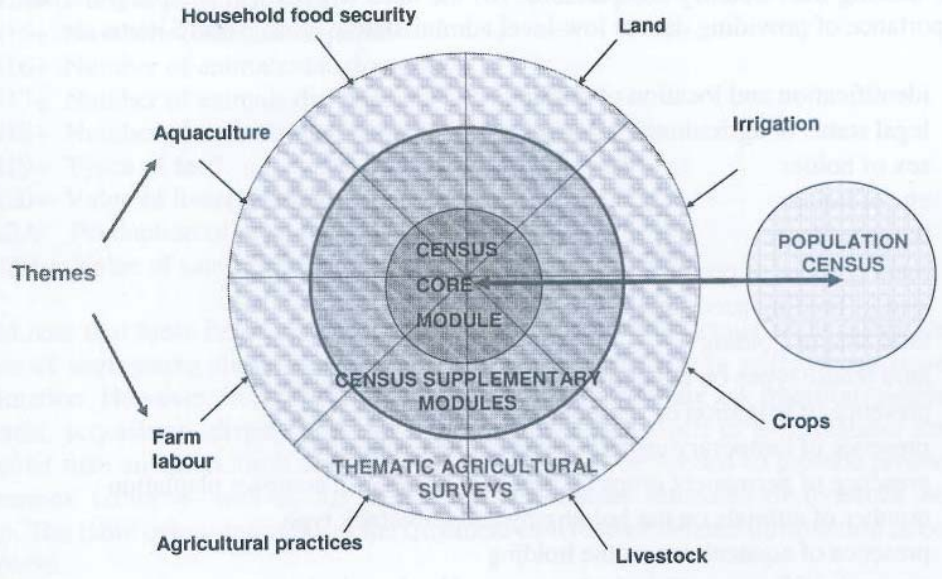
A. Economic items including Farm structure, expenditures, income

B. Environmental items including inputs, chemicals, tillage, water use, land use

C. HH income, consumption, employment

D. Items of national interest

Figure 1: Agricultural censuses in the framework of an integrated agricultural census/survey programme



MORE ON MASTER SAMPLES (IPD)

DISSEMINATION SYSTEM

Integrated Dissemination System

- A data management system that
  - Provides access to official statistics for dissemination purposes
    - Should also encompass a wide range of data sources
  - Enables the storage and retrieval of survey results
  - Provides access to farm, household and geo-referenced data for research
- CountrySTAT is an example
  - Web-based information system
  - Allows countries to better organize, harmonize and standardize statistical data from multiple sources
  - Easily accessible on-line

Summary

- Integration of agriculture into the National Statistical System will be achieved through
  - Implementation of a master sample frame
  - An integrated survey framework
  - An integrated database
- Countries will need to
  - Review their current governance arrangements
  - Make changes to meet the challenges of coordination
  - Ensure that the statistical system is sustainable