



# The Agricultural Integrated Survey (AGRIS)

**Producing cost-efficient data on farms  
for policymaking**



## AGRIS: A response to current data needs

**Better data, to track progress towards development goals and improve policies in the agricultural and rural sector**

Major international initiatives, such as the Sustainable Development Goals (SDGs) define frameworks for mutual accountability and associated targets and indicators. This emphasizes the importance of strong national statistical systems, capable of generating the data required to monitor progress towards these targets. At present, however, the SDG data requirements far exceed the current capacities of national systems.

The supplementary data required by the SDGs add to the (already considerable) gaps in the production of even basic agricultural data. Over the past 15 years, a majority of IDA countries has failed to conduct an agricultural survey, even where the agricultural sector contributes to a substantial portion of GDP and rural employment. This has a negative impact on the agricultural sector and on development policies.

The Agricultural Integrated Survey (AGRIS) is a response to the need for better, cost-effective and timely statistical data in the agricultural and rural sector. The data generated will inform policy design and implementation, as well as improve market efficiency and support research.

### AGRIS questionnaires will provide basic data for monitoring the following five SDG indicators






2.3.1	Volume of production per labour unit by classes of farming/pastoral/forestry enterprise size
2.3.2	Average income of small-scale food producers, by sex and indigenous status
2.4.1	Proportion of agricultural area under productive and sustainable agriculture
5.4.1	Proportion of time spent on unpaid domestic and care work, by sex, age and location
5.a.1	(a) Proportion of total agricultural population with ownership or secure rights over agricultural land, by sex; (b) Share of women among owners or rights-bearers of agricultural land, by type of tenure

# What is AGRIS?

## More relevant and timely agricultural data

AGRIS is a farm-based modular 10-year survey programme designed as a cost-effective tool for national statistical agencies to accelerate the production of quality disaggregated data on the technical, economic, environmental and social dimensions of farms, including smallholder farms.

AGRIS is a new and cost-effective approach to agricultural data collection in developing countries that will help to build comprehensive rural information systems. It consists of a core module, which is surveyed every year, and four additional rotating modules devoted to specific themes.

AGRIS		Years	1	2	3	4	5	6	7	8	9	10
 <b>CORE MODULE</b>	Holding roster	•	•	•	•	•	•	•	•	•	•	•
	Crop/Livestock production	•	•	•	•	•	•	•	•	•	•	•
	Key holding characteristics	•	•	•	•	•	•	•	•	•	•	•
 <b>Rotating Module 1</b>	Economy	•		•		•		•		•		
 <b>Rotating Module 2</b>	Labour		•				•					
 <b>Rotating Module 3</b>	Machinery, equipment, assets and decisions					•						
 <b>Rotating Module 4</b>	Production methods and environment				•				•			



AGRIS's flexible and modular nature makes it easy to modify the proposed setting, thereby boosting its potential for national relevance and cost-effectiveness.



## What is new?



### What is new for **DATA USERS** ?

- ▶ **AGRIS will generate a regular flow of relevant and up-to-date farm data:**
  - On agricultural inputs, processes and outputs
  - To identify challenges in production, productivity and resilience
  - Sex-disaggregated basis
- ▶ **Anonymized microdata will be made available in a web-based catalogue**



### What is new for **DATA PRODUCERS** ?

- ▶ **Up-to-date statistical and technical guidelines on:**
  - CAPI technology, to increase data quality and increase data timeliness
  - Various sampling strategies, to accommodate different country situations
  - Standard definitions, concepts and classifications
- ▶ **Technical assistance to build capacity to run AGRIS independently**
- ▶ **Financial support**

**Policy-relevant:  
AGRIS generates  
data on  
smallholder farms**

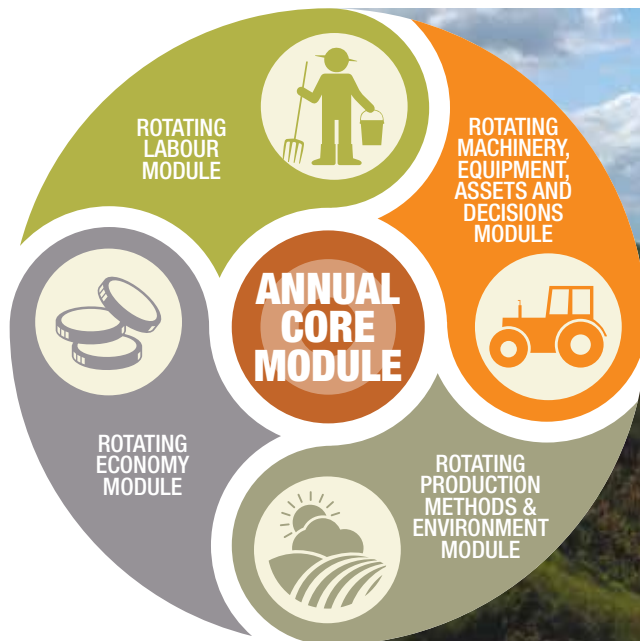
# The Core Module



AGRIS relies on an annual **Core Module** – a production questionnaire that remains largely the same each year. With this approach, it is possible to monitor a set of key indicators on an annual basis, thus enabling the identification of trends and changes in a timely manner. The collected data are also useful to predict future scenarios and farmers' expectations.

In addition to collecting essential structural data on holdings and households, the Core Module mainly addresses crop and livestock production and their seasonality, farm productivity, shocks and coping mechanisms, and access to markets and information.

The Core Module also collects key data on inputs, production methods, labour and the overall income sources of the holding – all topics that are further investigated in the rotating modules.





The Economy Module will provide the necessary data to measure farm income, production costs and profitability for different production systems and farm types.

## The Economy Module



The purpose of the **Economy Module** is to gather information on the farm holding's income through an inquiry upon its revenues and expenses.

### Topics covered:

- Commodity transformation
- Wages earned by household members outside the holding
- Farmers' selling practices
- Share of total production sold
- Ability to delay selling to wait for better market conditions
- Data on farm revenues and costs to compile policy-relevant indicators, such as farmers' margins and input productivity

### FARM PRODUCTIVITY

Farm productivity is the ratio of its outputs to its inputs. Productivity can also be measured for each input, e.g. labour productivity or land productivity (yields). Outputs and inputs can be measured in physical quantities or monetary units. For outputs, other units may be used.

AGRIS collects the information that is required to compute productivity measures for several inputs, such as labour, land or fertilizers.



# The Production Methods and Environment Module



The **Production Methods and Environment Module**, together with the Economy Module, gathers data that will be used in an analysis of the cost of production for different types of agricultural production methods. This data shall enable calculation of the costs and benefits of switching from one production method to another, with the ultimate objective of improving farm productivity.

## Topics covered:

- Land use
- Tillage practices and soil management
- Energy resources
- Irrigation systems
- Crop production systems
- Livestock production systems and use of pastures
- Organic farming
- Manure management
- Adaptation to climate change

The data collected by this module can be used as an input in the compilation of indicators to measure the sustainability of farms, environmental impacts or GHG emissions.





The Labour Module aims to measure labour force, including own-consumption work and services for the household, categories in which women are particularly overrepresented.

## The Labour Module



Although key questions on labour are included in the core module to understand its impact on the holding and estimate labour productivity, a specific module is required to measure labour inputs in agriculture and capture rural transformations.

### Topics covered:

- Volume of labour input in agricultural holdings
- Organization of labour on the farm
- Identification of age- and sex-specific roles
- Household members' participation in all forms of work

## The Machinery, Equipment, Assets and Decisions Module



The purpose of this module is to provide information on different structural characteristics of holdings and to improve knowledge on responsibilities and roles within the holding.

### Topics covered:

- Quantities, types, value and ownership of the equipment and machinery used on the holding
- Assets (for the holdings of the household sector)
- Decision making on the holding with a special focus on gender disaggregation





## Cross-cutting themes

### GENDER

Statistics on women's role in and contribution to agriculture are scarce and often incomparable. The AGRIS methodology recognizes the value of gender indicators and sex-disaggregated data, and strives to enhance their availability.

To the extent possible, data are disaggregated by sex. Special attention is placed on gender-relevant issues, such as decision making within the holding, the specific roles of men and women, and ownership and rights over land (SDG indicator 5.a.1).

### SUSTAINABILITY

The module on Production Methods and Environment, in combination with other AGRIS questionnaires, gathers a range of information that may be used to assess the impact of agricultural activities on the environmental, social and economic sustainability of farming practices and agricultural activities.

### RESILIENCE

The information provided by AGRIS will improve the assessment of agricultural households' capacity to absorb shocks of economic, climatic or environmental nature and understand their strategies to limit adverse effects on their livelihoods. A specific section of the annual Core Module will be devoted to gathering data on shocks and resilience.



# Implementing AGRIS at country level

## A country-owned process

- Implemented by national official statistical agencies
- Carried out in accordance with the Statistical Law and the existing Strategic Plans
- With a clear governance structure and results-based annual work programmes
- Engaging data users in a timely manner to ensure national policy relevance

## Improving technical capacity

- Improves and complements current survey systems and builds on previous efforts
- Relies on standardized survey methodologies
- Ensures that AGRIS Toolkit includes resources that countries may customize to their specific needs
- Contributes to strengthening statistical capacity in countries

## Ensuring sustainable funding

- The annualized budget for a developing country is within the range of US\$1 – 1.5 million
- The financial and human resources required to implement AGRIS are relatively stable over the 10-year cycle, making it a viable set-up for a data-producing agency
- Additional support from development partners may be necessary during the early years, to initiate a virtuous cycle of larger national investments

# The GRAInS Partnership: A joint initiative to support AGRIS

The GRAInS Partnership is being established by FAO, the World Bank and other partners to facilitate the governance and implementation of agricultural surveys (such as AGRIS) and integrated household surveys (such as the LSMS-ISA).

- Advocate for greater efforts to ensure that quality agricultural data is collected in developing countries
- Implement integrated household surveys and agricultural surveys, and provide the necessary technical and financial support
- Conduct methodological research to reduce the cost of data collection through methodological and technical innovations
- Promote the usability and relevance of survey data with other data sources

## AGRIS KICKS OFF IN GHANA

As a result of the collaboration between the Global Office of the Global Strategy and the Ghana Statistical Service (GSS), Ghana is the first country to test and adopt the methodology. In 2016 and 2017, the questionnaires and methodology will be field-tested in Ghana, and field experiments will be conducted to identify accurate measurement approaches.

## Where do we stand?

- The AGRIS methodology is being finalized in the context of the Global Strategy to improve Agricultural and Rural Statistics, including large-scale field tests in Ghana.
- The United States Agency for International Development (USAID) and FAO have recently signed a US\$15 million agreement to implement AGRIS in four priority countries. Other projects are being designed to provide tailored support to interested countries.



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September 2016

