



**Improving Statistics for Food Security, Sustainable
Agriculture and Rural Development – Action Plan for Africa**
Launching and Training Workshop on Country Assessment
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**THE RESEARCH COMPONENT OF THE
IMPLEMENTATION PLAN OF THE GLOBAL STRATEGY
TO IMPROVE AGRICULTURAL STATISTICS**

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Introduction



- **One of many reasons identified by the Global Strategy to explain the decline in the quantity and quality of agricultural and rural development statistics in most developing countries and particularly in Africa:**
 - > insufficient integration;
 - > Lack of adequate technical tools and infrastructures ;
 - > Lack of adequate statistical methodology;
 - > Lack of adequate survey framework to support data production efforts.



WHY RESEARCH?

- Contribute to a significant improvement of data quality
- By developing and disseminating sound and cost-effective methodologies and tools
- New opportunities:
 - technological advances (GIS, remote sensing, GPS, PDA, CAPI etc.)
 - Successful experiences in some countries

PURPOSE

- Purpose of research component
 - Comprehensive and integrated research program
 - Framework for coordinating efforts of experts from various regions to address methodological issues
 - Effective data collection, processing, dissemination
 - Data related to current and emerging statistical needs
- Research programme largely discussed
- Purpose of the presentation
 - Present and Discuss the research programme
 - Receive feedbacks
 - Relevance of proposed topics
 - Strategy for implementation



Thematic domains

Research topics

<p>Reference framework</p>	<ul style="list-style-type: none">• Creating an appropriate framework for development of an integrated agricultural statistics programme• Mainstreaming agriculture into NSDS• Implementing an Integrated Survey Framework
<p>Master frame for integrated survey</p>	<p>Using GPS, GIS and remote sensing for setting up master a sampling frame for integrated survey</p>
	<p>Identifying the most appropriate area frame for specific landscape types</p>
	<p>Research for improving methods for linking area frames with list frames</p>



Thematic domains

Research topics

Data collection methods

Estimating crop area, yield and production of:

- mixed crops
- repeated cropping
- continuous cropping
- root crops

Estimating post harvest loss and use of pesticides

Estimating the cost of production in developing countries

- enumerating nomadic livestock
- estimating livestock products

Adopting new technologies

Inland fishery and aquaculture

Irrigated area and use of water for irrigation



Thematic domains

Research topics

Food security	<ul style="list-style-type: none">● food security statistics● food stocks● edible forest products
	Use of Nutrition indicators for food security indicators
	Use of households surveys / LSMS for food security indicators
Market information	<ul style="list-style-type: none">● estimating farm gate prices● collecting data on agriculture, rural and border market prices● estimating informal cross border trade data● collecting data on factors and product markets affecting agricultural activities and impact of bio-fuel on the market



Thematic domains

Research topics

Data analysis	<ul style="list-style-type: none">● reconciliation of census data with survey data● determination of user's information needs for decision making● use of small area estimation methods for improving agricultural statistics● crop forecasting and early warning
Administrative data	Improving the quality of administrative data
	More efficient and robust methods to use administrative data for improving agricultural statistics
Gender related data and indicators	<ul style="list-style-type: none">● appropriate indicators● data to be collected and survey designs



Thematic domains

Research topics

Small scale fisheries	Frame and methods for appropriate data collection
	Estimation of self-consumption
Better integration of geographic information and statistics	Robust and statistically based methods for spatial disaggregation and for integrating various kinds of geographical information and geo-referenced survey data
	Spatial interpolation and presentation



Thematic domains

Research topics

Remote sensing	<p>More efficient and accurate methods for using remote sensing</p> <p>Evaluating cost efficiency of remote sensing in developing countries.</p> <p>Improving methods for using AFRICOVER or more detailed land use/cover data-bases</p>
Agri-environment	<p>Indicators to be adopted and consequently the guidelines on:</p> <ul style="list-style-type: none">• data to be collected,• most appropriate sample units and sample design,• interactions among the variables to be investigated, the precisions to be reached



Implementation partner :Global Office - FAO Statistics Division

- Undertake research where comparative advantage
- Identify possible partner institutions
- Promote, coordinate research and share resources
- Select experts for peer review and research results validation
- Facilitate contacts, exchange information
- Build synergies, avoid duplication
- Networking
- Living data base
- Inventory of best practices



Advisory Expert Groups

Lead implementation partners

- Advisory Expert Groups
 - Provide technical advice to the Global Office
 - Ensure best technical standards
- Lead implementation partners
 - Conduct research on a specific topic
 - Prepare relevant scientific publication, handbooks and guidelines
 - Under technical supervision of the Global Office
 - In close collaboration with the Advisory Expert Group



■ Thank you for your attention!