AGRICULTURAL & RURAL DEVELOPMENT STATISTICS IN SIERRA LEONE

KEY ASPECTS OF INSTITUTIONAL ARRANGEMENTS & PERFORMANCE

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OBJECTIVES

- Identify agricultural issues and data needs in SL
- Describe current sources and arrangements for collecting agricultural & rural statistics
- Identify ways to improve the process

CONTEXT

- Agricultural policy developments
  - Poverty Reduction Strategy Papers (PRSP); to lower poverty and meet the Millennium Development Goals (MDGs).
  - Comprehensive Africa Agricultural Development Programme being promoted by the New Partnership for African Development (NEPAD).
  - Need to understand livelihood strategies and levels and sources of rural incomes to identify the drivers that will move households out of poverty.
- Many initiatives to build statistical capacity in Africa
  - National Statistical Development Strategies (NSDS)
  - Global Strategy to Improve Agricultural & Rural Statistics
  - Need to use both these initiatives to provide the impetus for much needed change

AGRICULTURE IN SIERRA LEONE

- SL is an LDC and classed by FAO as a food deficit country.
- Ranks 158 out of 169 countries on HDI.
- Popn 5.8m, 75% of the labour force works in agriculture with women predominant.
- GDP US$ 320 / capita. Around half of the popn lives on less than $1 a day (PPP) the majority in rural areas.
- Agriculture around 46% of GDP of which 75% crops, 20% fisheries - rest livestock (severely depleted during the conflict period) and forestry.
- Rice dominates the crop sector (grown mainly in upland or inland valley swamp areas); annual per capita consumption of rice is highest in sub-Saharan Africa; domestic production is about 60% of national requirement.
- Main export crops are coffee, cocoa, kola nut and oil palm.

SOURCES OF INFORMATION - I

- Main responsibility shared between Ministry of Agriculture Forestry & Food Security (MAFFS) and Statistics Sierra Leone (SSL)

  - SSL - statistically rigorous procedures; statistically qualified staff; professional management of data collection to international standards; training & robust supervision => more accurate & reliable data.
  - MAFFS – closer to users of the data; better able to respond to user needs; can use its extension officers as enumerators.
  - MAFFS - usually better placed for analysis done in collaboration with academia (Njala Univ) and research institutes (SL Agricultural Research Institute) as well as experts from donor agencies.

SOURCES OF INFORMATION - II

- In 2007 National Statistical System established, with SSL posting staff to key ministries including MAFFS.
  - *Responsible for compiling all agric data collected by MAFFS and sending to SSL.*
- Housing the responsibility for agricultural stats in SSL or MAFFS is not the key issue so much as how well functioning and well funded the chosen institution is;
  - *weakness is more a function of inadequate budgets than institutional organisation.*
- With collaboration becoming stronger, SSL and MAFFS (including SSL staff that have been assigned to MAFFS) work together to prepare plans to produce reliable and timely agricultural and rural stats;
  - *plans difficult to implement due to inadequate funding.*

DATA COLLECTION ACTIVITIES

- Efforts to collect household level data for analysis of policies and investments to enhance agricultural productivity, growth and poverty reduction in rural areas are limited.
- Most effort and resources go into data needed for food security and estimates of agricultural GDP for National Accounts.
- Major surveys show a diversity of organisational approaches, methods and responsibilities, including one-shot affairs covering limited or differently defined geographic areas
  - *Urban and rural classifications can be problematic. All districts centres may be classed as urban, no matter how significant, while peri-urban areas may be classed as rural if they lie outside official city boundaries.*

RECENT SURVEYS

Survey	Institutions	Year	Survey description (information collected, sample selection)
Sierra Leone Farm Production and Food Security (FPFS)	SSL MAFFS WFP FAO	2005 2007 2010	Household and plot-level production data, with additional information on land area and use, assets, inputs use, demographics, selected food security indicators, use of extension/services, income. Sample from 7000 to 9000 households.
Sierra Leone Population and Housing Census	SSL	1985 2004	Official national census which serves as sampling frame for other surveys. 2004 Census included agricultural module with questions on acreage of various food and cash crops; number of livestock; access to agricultural production resources.
Sierra Leone Integrated Household Survey (LSMS)	SSL	2003/4 2011	Collects data on population and socioeconomic characteristics of households, including income, consumption and expenditure The 2003/04 survey covered 3,720 households.
WFP Vulnerability Survey	WFP	2005 2007 2010	Provides information on local farm production, trading of food in rural areas, access of rural households to food, utilisation of food at the household level including nutrition and health aspects, and vulnerability of the rural population to food insecurity.
Core Welfare Indicators Questionnaire (CWIQ)	SSL	2007	A light monitoring survey collecting information on access use and satisfaction with service delivery with an agricultural module covering production, cultivation and marketing activities of major food and cash crops. Sample of 7,800 households.
Agricultural Tracking Survey including market survey (ATS)	SSL, MAFFS JPAL/IPA	2010	Focused on 8 'core' crops collecting information on revenue, access to seeds, adoption of 'commercial' farming practices, marketing, producer & consumer prices and transport costs. A total sample of 9,030 households.
NERICA (New Rice for Africa) in Sierra Leone	SSL,	2009	A monitoring survey to track access, adoption and results from NERICA seed varieties and planting materials.

STRENGTHS / WEAKNESSES - I

This has lead to a situation (not untypical in Sub-saharan Africa) where information is either limited -

  - *Over the last three years both rice production and imports seem to have increased; there is a lack of detailed information to explain this trend.*
  - *There is no panel data for longitudinal assessments of household incomes and livelihood strategies.*

Or data exists with doubts over accuracy and incompatible differences between estimates.

  - *Rice yield 1.9 Mt/ha; production 1m Mt (MAFFS)*
  - *Rice yield 0.5 Mt/ha; production 0.4m Mt (ATS)*

STRENGTHS / WEAKNESSES - II

- Incompatible differences in statistics arise from both methodological and funding issues
  - Sampling is not always understood.
  - Use of non-scientific methodologies e.g. dependence on purposive sampling methods for crop cutting and reporting by local officials & extension agents
  - Measurement errors not understood e.g. crop cutting v farmer's reports.
  - Crop forecasts being used as final production estimates
  - Funding has limited the collection of farm gate and market prices; there has not been an agricultural census for decades – one is needed to set a benchmarks to develop an integrated survey programme.
- Issues with the methods used and a shortfall in survey methodology to reach international standards leads to lack of harmonisation of statistics.

WAY FORWARD - I

1) Need for strong institutional coordination (need to overcome weaknesses in current committees and ensure better functioning).
2) *Need for a process to vet all statistical data and provide access through one central, transparent portal (MIS systems for key ministries have already been proposed).*
3) Need to recruit, train and maintain a strong professional capacity with the right mix of statistical and subject expertise.
4) *Need for more research into data collection methodologies and to resolve and improve sampling and weighting problems to raise confidence in results and respond to new demands to provide more disaggregated data e.g. small administrative districts).*

WAY FORWARD -II

5) Need for training for data users to understand sampling and the advantages and disadvantages of different data collection methods.

6) *Need for an Agricultural Census to benchmark a new programme of supplementary agricultural surveys.*

7) Need for more and more predictable donor support for agricultural and rural statistics.