Ugandan Census of Agriculture 2008/09

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by

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- Past Censuses of Agriculture
- The UCA 2008/09
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- Uganda is a land-locked country in East Africa

➢ with a total surface area of 241,550.7 square kilometres (sq. km) of which 199,807.4 sq km is land and 41,743.2 sq km are open water and swamps,

➢ The altitude above sea level ranges from 620 metres to 5,111 metres

➢ Temperatures range from 15 to 31 degrees celsius

➢ Rainfall is between 735 to 1863 millimetres per year.

- The total population of the country is 35million (2013 mid-year estimate based on the 2002 Population and Housing Census). The next Population and Housing Census (PHC) is slated for 2014.

- Agriculture is the dominant sector of Uganda's economy.

- This sector contributes about 21.5% to total Gross Domestic Product (GDP) and over 90% to total export earnings. It provides 80% of employment and most industries and services in the country are based on this sector. About 85% of the population live in rural areas of the country where they derive their livelihood from agriculture.

- Much of the agricultural production in Uganda takes place at household level essentially using household labour. Currently, there are about 4.2 million holders who carry rain-fed agriculture and who on the average cultivate less than 2.0 hectares mainly using hand-hoes, pangas and ploughs. It has been estimated that 80 percent and 60 percent of women and men respectively are employed in agriculture as their main activity.

- First Census of Agriculture: 1963/65;
- GoU was assisted by FAO and UK financially and technically;
- Second Census of Agriculture called the National Census of Agriculture and Livestock (NCAL): 1990/91;
- Funded by the UNDP and executed by FAO.
- The UCA 2008/09

- **Objectives**
- The long-term objective was to establish a Food and Agricultural System (FAS) system and the UCA 2008/09
- **Specific Objectives of UCA**
- Provision of data on the social and economic factors of Uganda's agricultural structure by inter-relating various characteristics of holdings e.g. size of a holding by type of holding and factors such as:

❖ fragmentation,
❖ land tenure,
❖ land utilization,
❖ crop patterns,
❖ use of fertilizers and agro-chemicals,
❖ use of farm implements and machinery,
❖ farm population and labour force;

- Provision of detailed agricultural data such as:

❖ number of holdings,
❖ total area of holdings,
❖ basic pattern of land utilization,
❖ area under crops and production and
❖ extent of irrigation;

- Provision of a benchmark for improving the reliability of current agricultural statistics from annual surveys and administrative sources and for assessing future agricultural development, and,
- Creation and strengthening of the national capacity in agricultural censuses and surveys taking.

- The UCA 2008/09 covered all the 80 districts in the country as of July 2007

- A district was planned to be the domain of study i.e. census data was planned to be disaggregated at district level.

- The UCA 2008/09 is collecting information on 6 modules:

➢ 1. Listing Module
➢ 2. Agricultural Household and Holding Module
➢ 3. Community Module
➢ 4. Crop Area Module
➢ 5. Crop Production Module
➢ 6. Private Large Scale and Institutional Farms (PLS&IFs)

- The sample design for the UCA 2008/09 consisted of a dual frame design with:

❖ A List Frame for the Private Large Scale and Institutional Farms (PLS&IFs) and

❖ An Area Frame for the small and medium scale household-based holdings.

- The List Frame was enumerated on a 100 percent basis and
- A sample of households was selected from the Area Frame using a two-stage sample design with:

❖ Sampling of Enumeration Areas (EAs) at the 1st stage and

❖ Sampling of households from the selected EAs at the 2nd stage.

- The sample for the Area Frame covered 3,606 EAs and then a sample of 10 agricultural households (holdings) from each selected EA resulting in a total sample of 36,060 holdings.
- The EAs were stratified by district and ranged from 23 in the smallest district to 70 EAs in the largest district.

1) Agric Module in the PHC 2002
2) Pilot Census of Agriculture (PCA) 2003 conducted in 10 Districts
3) UCA Project document was prepared and finalized.
4) Pre-test Conducted in Mityana in May-June 2008
5) UCA budget was prepared and finalized (*a summary provided on next slide*).

YEAR	2007/08	2008/09	2009/10	2010/2011	2011/12	TOTAL
Amount committed by Government (Bn UGX)	5.8	5.8	2.4	1.673	0.089	15.762
Amount committed by Government (million USD)	3.4	3.4	1.4	0.98	0.0524	9.271

- **Personnel, Equipment**
- Chief Administrative Officers (CAOs) to identified senior officers from the District Local Governments who would work as UCA District Supervisors (DSs). This was also to ensure UCA ownership by the districts.

- In total, there were about 130 UCA DSs in the whole country with one or two in each district depending on the size of the district.

- A total of 936 Enumerators were recruited for the UCA countrywide.

- An Enumerator was on average assigned 4 EAs to ensure equal workload and each enumerator was equipped with a GPS for purposes of area measurement.

- These included the following:
- **Software:** This was constituted by:
  - Census and Survey Processing (CsPro) application which was used for data capture and management of the information within a batch and data editing.
  - Ms Access and Visual Basic which were used for the general data management
  - STATA that was used for data editing and analysis
  - Excel that was used for presentation of results from the analysis
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- **Hardware:** This was constituted by:
  - Fifty three (53) desktop computers that were fully dedicated to data entry.

- Total number of Ag HHs is 4 million
- Area and production of 17 major crops
  - Total Farm Population in Uganda was estimated to be 19.3 million.
  - About 5 percent of the Ag HH population were members of a farmers' group.
  - 680,000 Agric Households (19.0%) reported having been visited by an Extension Worker
  - Radio and "farmer to farmer" were the most important sources through which most Ag HHs received information on agriculture.

- The biggest proportion of Ag HHs that got information on weather (85%), farm machinery (43.8%) and credit facility (50.2%) received it over the “radio”
- The highest %age of Ag HHs that got information on crop variety (43%), new agricultural practices (39.5%), plant diseases and pests (45.4%) and marketing (50.7%) received it through “farmer to farmer”.
- Ten (10) percent of the Ag HHs countrywide accessed credit in the five years preceding the reference period
- The major means of transportation used by Ag HHs were Head loading (88.0%) followed by bicycles (63.6%).
- Further, results revealed that 63.4 percent, 42.5 percent and 54.7 percent of the Ag HHs could not access car/pick, motorcycle and a wheel barrow respectively
- 55.3 percent of all Ag HHs had Storage Facilities (SF).

- Out of the 3.6 million Ag HHs that responded, 3.3 million (91.7%) reported use of local seeds while 31.1 percent reported use of improved seeds
- Out of the 3.6 million Ag HHs that responded, 31, 400 (0.9%) reported presence of irrigation of various types during the reference period.
- Data was collected on 22 types of agricultural equipment. The four (4) most widely used were: Hoes, Pangas, Axes and Slashers reported by 95.8, 85.5, 71and 36.5 percent respectively of the 3.6 million Ag HHs that responded
- Thirty (30) percent of the 3.6 million Ag Ag HHs that practiced other economic production activities other than agricultural production
- The national average holding size was 1.1 Ha

1. Agricultural planning and policy-making

2. Monitoring the Millennium Development Goals

3. Food security monitoring and analysis

4. Measuring the role of women in agriculture

5. Improving current agricultural statistics

6. Provision of data for the private sector

- Lack of seriousness on the part of District Supervisors (DSs)
- Mixed cropping, continuous planting and/or harvesting and incompletely harvested crops
- Lack of Comprehensive data on conversion factors
- Using the GPS tool to measure very small areas
- A number of experiments have been carried out in Uganda using the Geographical
- No Harmonized standard for classification of agricultural households
- Use of open or closed segments concepts

- **Other challenges included:**
- Under-listing due to split/created villages,
- Concept of HH not well understood by some Enumerators,
- Sampled EAs with holding but without HHs,
- Delayed payment of UCA Field Staff, High and varying fuel prices,
- some maps had problems arising out of sub division of Enumeration Areas, attrition e.t.c.

- There is need to sign memoranda of understanding (MoUs) between the agency responsible for the census and the domain of study (districts in the case of Uganda) to commit themselves release their staff for a period of time that the Census is being undertaken.

- The best way to handle the practice of continuous planting would be to have multi round surveys to enable the enumerator record the different conditions of the plot in terms of what is grown on it. But this exercise would be quite expensive and may require a permanent field team to enable proper follow up.

- Likewise enumerators need to go to the field as often as possible so that it can be ascertained whether incomplete harvesting is a significant feature of our type of agriculture by giving some estimate on proportion of the crop or area un harvested. It should however also be noted that a good number of the crops are root crops and this worsens the problem.

- There is also need for comprehensive data on conversion factors and this information should be updated before and during Census undertaking.

- More studies should be done concerning the variability and consistency of the GPS equipment especially for very small areas and where tree cover/or hilly areas introduce shadow and projection problems

- Thank you!