

# Lesotho 2010 - Agricultural censuses metadata

## 1. Historical Outline

Lesotho has been participating in the FAO programmes for the World Census of Agriculture since 1950. The 1<sup>st</sup> census was held in 1949/50 agricultural year, followed by 1959/60, both under the Ministry of Agriculture. The agricultural censuses of 1969/70, 1979/80, 1989/90, 1999/2000 and the current 2009/2010 were conducted by the Bureau of Statistics.

## 2. Legal Basis and Organization

Lesotho Statistical Act 2001 and Proclamation (LEGAL NOTICE NO OF 2009). Responsible agency is the Bureau of Statistics and the committees were as follows:

- Senior Management Team
- Survey Committee
- Technical Committee
- Logistics Team
- Data Processing team
- Analysis Team

International collaboration/assistance:

- FAO Experts

Number of staff involved in the census operation

- 12 Data Processing personnel
- 120 enumerators
- 45 Supervisors

## 3. Reference Period or Date

Households listing and selection for both livestock and crops: From 15<sup>th</sup> April to 3<sup>rd</sup> June.

Crops: 1<sup>st</sup> August to February - winter production; February to 31<sup>st</sup> July – summer production

Livestock: 1<sup>st</sup> August - number of livestock; 1<sup>st</sup> February – stock change; 31<sup>st</sup> August – closing stock

## 4. Enumeration Period

1<sup>st</sup> August to 31<sup>st</sup> July (Agricultural year)

## 5. Definition of the Statistical Unit

Statistical unit – household

## 6. Geographic Coverage

Conducted in the whole country (Rural and Urban area)

## 7. Methodology

### **FAO Modular Approach**

Core module: Sampled Agriculture Census

Supplementary module: Community-level data

### **Frame**

2006 Population and Housing Census and listing to up-date the existing records

### **Complete or Sample Enumeration Methods**

Sample enumeration method

### **Sample Design**

Sampling design, sample selection, inference (weighting) and sampling proportions:

Variance was minimized by increasing the coverage of the agricultural census from that of the annual Agricultural Production Survey (APS) by 50%.

A Stratified multi-stage sampling was adopted for the selection of the sample for the census. In the first stage, Primary Sampling Units were selected from an area of enumeration areas (EAs), which were demarcated by Cartography and Survey Methodology Division during the 2006 population census. Construction of PSU sample frame was done by merging two or more adjacent enumeration areas. PSUs

were selected with probability proportion to size (PPS), where the number of farming/agricultural households in the PSUs was considered as the measure of size (MOS). About 120 PSUs in the rural areas that covered 2292 households were selected. Individual agricultural holdings (farming households) constituted Secondary Sampling Units (SSU) for estimation of land use, crop areas and livestock population. Prior to the selection of ultimate units (agricultural holdings) a list frame consisting of all holdings in the selected PSUs were stratified as follows:

- Those with fields and livestock
- Those with fields only
- Those with livestock only
- Those without fields and livestock

### ***Collection Method***

Interview methods: PAPI and GPS

### ***Questionnaire(s)***

**Form AC-1;** Listed all agricultural holders in each selected PSU. The main purpose for listing households was to enable second stage of sampling.

**Form AC-2(i&ii);** Information was on demographic characteristics of the sampled holders.

**FormAC-3;** It was used for recording actual field measurements, the crops planted on each field and field sketch.

**FormAC-4;** Used to prepare a frame of fields planted to each crops.

**FormAC-5(i, ii&iii);** The form was used for collecting data on inputs and operation cost.

**FormAC-6;** Recorded information on complete crop failure or pre-harvest loss.

**FormAC-7;** Recorded plot cutting for yield estimation.

**FormAC-8;** It was used to estimate the entire field production.

**Form AC-9;** Availability and Utilization of cereals in the household.

**FormAC-10;** It was used for livestock ownership.

**FormAC-11;** Estimated farm assets

### ***Controls to Minimize Non-Sampling Errors***

- Intensive training of enumerators
- Sensitization of respondents

### ***Innovative Methodologies***

Field checks:

- Spot check
- Post check

## **8. Data Entry, Edits, Imputation and Tabulation**

Data capture and processing methods used:

- manual data entry

Programs used for analysis and tabulations:

- SPSS

## **9. Data Dissemination and Use**

Data storage:

- micro-data archiving in place

Dissemination methods:

- websites, printed publication; dissemination workshops/seminars;

Lowest geographical level:

- Community council level

## **10. Census data quality**

Estimation of sampling errors: standard errors (SE), coefficient of variation (CV), confidence interval (CI) and design effect (DEFF) for the estimates were calculated using WesVar.

## **11. Data Sources**

The results from the census were presented in five volumes:

- Volume I: RURAL HOUSEHOLDS AND CROPS STATISTICS
- Volume II: RURAL LIVESTOCK STATISTICS
- Volume III: URBAN CROPS AND LIVESTOCK STATISTICS
- Volume IV : COMMUNITY PROFILE
- Volume V: TECHNICAL REPORT

## **12. Contact**

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