

Namibia - Post Harvest Losses - Pilot Survey 2018

Global Strategy for improving Agricultural and Rural Statistics, Namibia Statistics Agency

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Overview

Identification

ID NUMBER

NAM_2018_PHL_v01_EN_M_v01_A_OCS

Overview

ABSTRACT

During 2018, the National Statistical Agency (NSA) of Namibia received technical assistance from the Global Strategy to Improve Agricultural and Rural Statistics hosted by FAO on the measurement of Post-Harvest Losses (PHL). In this regard, a pilot survey was conducted by NSA in the Kavango West region to compare estimations using subjective and objective methods. The main crops analyzed are millet and maize. Subjective measurement methods included farmer recall, while the objective methods chosen were implemented through crop cutting, and samples of harvested crop analyzed in a lab. Unfortunately, the project ended before the samples were received from the lab, so these data are not available.

The pilot survey was conducted in Kavango West region only and the Primary Sampling Units (PSUs) were derived from the 2013/14 Agricultural Census frame. Staff from the Ministry of Agriculture, Water and Forestry (MAWF), (agricultural technicians as enumerators and agricultural technician as team supervisors) carried out field activities. In total, a sample of 350 farms were enumerated. The data collection took place from May 2018 to August 2018 (30 working days) and included both the subjective and objective measure of the PHL.

KIND OF DATA

Sample survey data [ssd]

UNITS OF ANALYSIS

Households

Scope

NOTES

The scope of the survey include:

1. Household Identification
2. Household Socio-Demographic Characteristics
3. Household Agricultural Practices: Seeds, Fertilizers, Pesticides
4. On-farm Loss
5. Off-farm Loss
6. Storage & Storage Facilities
7. Post-Harvest Loss Prevention Strategies
8. Physical Measurements (Crop Cutting)
9. Source of Post-Harvest Management Information
10. Government Assistance

Coverage

GEOGRAPHIC COVERAGE

Regional Coverage

UNIVERSE

Agricultural households in the Kavango West region.

Producers and Sponsors

PRIMARY INVESTIGATOR(S)

Name	Affiliation
Global Strategy for improving Agricultural and Rural Statistics	Food and Agricultural Organization
Namibia Statistics Agency	Government of Namibia

OTHER PRODUCER(S)

Name	Affiliation	Role
Ministry of Agriculture, Water and Forestry		Collaborator
Agro-Marketing and Trade Agency		Collaborator
Global Strategy for improving Agricultural and Rural Statistics	FAO	Technical Assistance
African Development Bank		Technical Assistance

Metadata Production

METADATA PRODUCED BY

Name	Abbreviation	Affiliation	Role
Office of the Chief Statistician	OCS	Food and Agricultural Organization	Metadata Producer

DDI DOCUMENT VERSION

NAM_2018_PHL_v01_EN_M_v01_A_OCS_v01

DDI DOCUMENT ID

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Sampling

Sampling Procedure

The PHL pilot study mainly followed the National Census of Agriculture (NCA) 2013/14 methodology. The NCA 2013/14 used a stratified two stage cluster sample design. At the first stage, primary sampling units (PSUs) were selected with Probability Proportional to Size (PPS) from the sampling frame based on the Enumeration Areas of 2011 Population and Housing Census. The size measure of a PSU in the sampling frame was the number of agricultural households which was derived from the questions included in 2011 Population and Housing Census as per the FAO recommendations.

The list of agricultural households was prepared through the listing process within a selected PSU to compile the sampling frame for agricultural households which was selected systematically.

A third stage of sampling was also conducted to select plots which contained the two main crops, maize, and millet for objective measurement as described below.

A list of plots planted with maize or millet in each sampled PSU was created. Then, one plot was randomly selected from the two main crops of the holder. An area was then marked within the selected plot according to the FAO guidelines and the matured crop inside this marked area was cut and weighed when the crop was wet and dry.

Crop cutting enable estimation of the yield of a crop and the losses during harvesting, threshing/shelling, and cleaning/winnowing. This was done through processing the produce of sub-plots in selected fields. Interviewers did the crop cutting manually according to the techniques used by the farmer. After the manual harvesting was done, the second team of supervisors entered the field and collected all fallen ears/cobs, grains and weighed them after which the information was recorded. These figures are used to estimate the average yields of each of the crops.

Weighting

The weight was calculated based on the sampling design; with the application of a 2 stage sampling weight calculation.

Questionnaires

No content available

Data Collection

Data Collection Dates

Start	End	Cycle
2018-05-28	2018-08-30	N/A

Data Collection Mode

Computer Assisted Personal Interview [capi]

Data Processing

Data Editing

The dataset received by the Office of Chief Statistician (OCS) team was already cleaned by Aliou Mballo directly with NSA. During the cleaning process, all direct identifiers were removed. Furthermore, the declaration, physical measurement, and storage data for the second crops, were transposed from wide to long. So instead of the farmer declaration variables of the second crop captured by the variables titled from "D6" to "D10-6" in the questionnaire being in their own columns, there is a second row in the dataset containing data from sections C, D, E and G containing data for the second crop, spread across columns "crop_code" to "D5-6". The same logic applies to the physical measurements and storage data.

The sections CDEG dataset contains data for some crops which do not correspond to records in the Section C dataset on agricultural practices. This is due to a mistake amongst some enumerators which filled in directly Section D for some crops and skipped agricultural practices. This is especially prevalent for measurement data for maize. The data from the lab was not received in time for the project deadline. Accordingly, section "H_Storage_Lab" from the questionnaire was not available to be included in the dataset.

Other Processing

All direct identifiers have been removed from the dataset. Furthermore, age data for household member were recoded into 10 year age bands, and individuals aged 70 or more were top-coded. Marital status was recoded into 3 categories, and local suppression was applied to age and marital status resulting in 6 and 7 percent of suppressed records respectively. Finally, due to the analytical importance of only maize and millet, the other crops were quite rare, and recoded into one group, "other crops".

Data Appraisal

No content available