

United Republic of Tanzania - Smallholder Household Survey - CGAP, 2016

Jamie Anderson

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Identification

SURVEY ID NUMBER

TZA_2016_SHS_v01_EN_M_v01_A_OCS

TITLE

Smallholder Household Survey - CGAP, 2016

COUNTRY

| Name | Country code |
|-----------------------------|--------------|
| United Republic of Tanzania | TZA |

STUDY TYPE

Other Household Survey [hh/oth]

SERIES INFORMATION

Advancing its earlier global segmentation framework (Christen and Anderson 2013), CGAP has been working to build the evidence base on the financial and agricultural lives of smallholder households. This nationally-representative survey of smallholder households collected information on household demographics, poverty status, agricultural activities, income sources and expenses, mobile phones, and informal and formal financial services. The data was used to detail a national picture of the smallholder sector and identify the characteristics of its key segments in a segmentation analysis. To date, CGAP has smallholder household surveys completed or underway in Mozambique, Uganda, Tanzania, Cote d'Ivoire, and Bangladesh.

ABSTRACT

The objectives of the Smallholder Household Survey in Tanzania were to:

- Generate a clear picture of the smallholder sector at the national level, including household demographics, agricultural profile, and poverty status and market relationships
- Segment smallholder households in Tanzania according to the most compelling variables that emerge
- Characterize the demand for financial services in each segment, focusing on customer needs, attitudes and perceptions related to both agricultural and financial services
- Detail how the financial needs of each segment are currently met, with both informal and formal services, and where there may be promising opportunities to add value

KIND OF DATA

Sample survey data [ssd]

UNIT OF ANALYSIS

Households

Scope

NOTES

The CGAP national surveys of smallholder households used three questionnaires:

1. HOUSEHOLD QUESTIONNAIRE

Respondent: Head of the household, their spouse, or a knowledgeable adult

Content:

- Basic information on all household members (e.g. age, gender, education attainment, schooling status)
- Information about household assets and dwelling characteristics in order to derive poverty status.

2. MULTIPLE RESPONDENT QUESTIONNAIRE

Respondents: All household members over 15 years old who contributed to the household income and/or participated in its agricultural activities

Content:

- Demographics (e.g. land size, crop and livestock, decision-making, associations and markets, financial behaviours)
- Agricultural activities (e.g. selling, trading, consuming crops, livestock, suppliers)

- Household economics (e.g., employment, income sources, expenses, shocks, borrowing, saving habits, investments)

3. SINGLE RESPONDENT QUESTIONNAIRE

Respondent: One randomly-selected adult in the household

Content:

- Agricultural activities (e.g. market relationships, storage, risk mitigation)
- Household economics (e.g. expense prioritization, insurance, financial outlook)
- Mobile phones (e.g., usage, access, ownership, desire and importance)
- Formal and informal financial tools (e.g. ownership, usage, access, importance, attitudes toward financial service providers)

TOPICS

| Topic | Vocabulary |
|--|------------|
| Agriculture & Rural Development | FAO |
| Food (production, crisis) | FAO |
| Land (policy, resource management) | FAO |
| Financial Sector | FAO |
| Access to Finance | FAO |
| Payment Systems | FAO |
| Information & Communication Technologies | FAO |
| Trade | FAO |

Coverage

GEOGRAPHIC COVERAGE

National

UNIVERSE

The universe for the survey consists of smallholder households defined as households with the following criteria:

- 1) Household with up to 5 hectares OR farmers who have less than 50 heads of cattle, 100 goats/sheep/pigs, or 1,000 chickens
- 2) Agriculture provides a meaningful contribution to the household livelihood, income, or consumption.

Producers and sponsors

PRIMARY INVESTIGATORS

| Name | Affiliation |
|----------------|--|
| Jamie Anderson | Consultative Group to Assist the Poor (CGAP) |

PRODUCERS

| Name | Affiliation | Role |
|----------------|-----------------------------|----------------------|
| Colleen Learch | InterMedia Survey Institute | Technical assistance |

Sampling

SAMPLING PROCEDURE

(a) SAMPLING FRAME

The smallholder household survey in Tanzania is a nationally representative survey with a target sample size of 3,000 smallholder households. The sample was designed to provide reliable survey estimates at the national level. The sampling

frame is the list of enumeration areas (EAs) containing agricultural households. These EAs were created in preparation for the 2012 population and housing census. The census questionnaire included a question on whether any household member operated any land for agricultural purposes during the 2011-2012 agricultural year. The information collected helped to identify agricultural households during the census.

(b) SAMPLE ALLOCATION AND SELECTION.

For the sample allocation, regions were combined into the following zones:

- Border: Ruvuma, Iringa, Mbeya, Rukwa, and Kigoma
- Coastal: Tanga, Pwani, Dar es Salaam, Lindi, and Mtwara
- Inland: Dodoma, Arusha, Kilimanjaro, Morogoro, Singida, Tabora, Manyara, Njombe, and Katavi
- Lake: Shinyanga, Kagera, Mwanza, Mara, Simiyu, and Geita
- Zanzibar: all regions

To take nonresponse into account, the target sample size was increased to 3,158 households assuming a nonresponse rate of 5 percent observed in similar national household surveys. The total sample size was first allocated to the zones in proportion to the number of agricultural households in the sampling frame. Within each zone, the resulting sample was then distributed to urban and rural areas in proportion to number of agricultural households. Given that EAs were the primary sampling units and 15 households were selected in each EA, a total of 212 EAs were selected. The sample for the smallholder survey is a stratified multistage sample. Stratification was achieved by separating each zone into urban and rural areas. The urban/rural classification is based on the 2012 population census. Therefore, 10 strata were created, and the sample was selected independently in each stratum.

In the first stage, EAs were selected as primary sampling units with probability proportional to size, the size being the number of agricultural households in the EAs. A household listing operation was conducted in all selected EAs to identify smallholder households and to provide a frame for selecting smallholder households to be included in the sample. In the second stage, 15 smallholders were sampled in each EA with equal probability. In each sampled household, the household questionnaire was administered to the head of the household, the spouse, or any knowledgeable adult household member to collect information about household characteristics. The multiple respondent questionnaire was administered to all adult members in each sampled household to collect information on their agricultural activities, financial behaviours, and mobile money use. In addition, in each sampled household only one household member was selected using the Kish grid and was administered the single respondent questionnaire.

The full description of the sample design can be found in the user guide for this data set.

DEVIATIONS FROM THE SAMPLE DESIGN

The smallholder survey in Tanzania is the third survey in the series, following the surveys in Mozambique and Uganda. Fieldwork in those two countries experienced a lot of failed call backs where identified eligible households and household members could not be interviewed during the time allocated to fieldwork in each country. As a result, the final sample size fell slightly short of the target. For this reason, in Tanzania the number of households selected in each EA was increased from 15 to 17 following the household listing operation in all sampled EAs.

RESPONSE RATE

The study achieved a household response rate of 99.1 percent, 84.8 percent for the Multiple Respondent questionnaire and 93.4 percent for the Single Respondent questionnaire.

WEIGHTING

The sample for the smallholder household survey is not self-weighting, therefore sampling weights were calculated. The first component of the weights is the design weight based on the probability of selection for each stage of selection. The second component uses the response rates at both household and individual levels. The design weights for households were adjusted for nonresponse at the household level to produce adjusted household weights. Sampling weights for the multiple respondent data file were derived from adjusted household weights by applying to them non-response rates at the individual level. For the single respondent data file, the same process was applied after considering the subsampling done within the household. Finally, household and individual sampling weights were normalized separately at the national level, so the weighted number of cases equals the total sample size. The normalized sampling weights were attached to the different data files and used during analysis.

Data Collection

DATES OF DATA COLLECTION

| Start | End |
|------------|------------|
| 2016-02-06 | 2016-03-08 |

DATA COLLECTION MODE

Computer Assisted Personal Interview [capi]

Data Processing

DATA EDITING

The data files were checked for completeness, inconsistencies and errors by InterMedia and corrections were made as necessary and where possible. Following the finalization of questionnaires, a script was developed using Dooblo to support data collection on smart phones. The script was thoroughly tested and validated before its use in the field.

Data Appraisal

ESTIMATES OF SAMPLING ERROR

The sample design for the smallholder household survey was a complex sample design featuring clustering, stratification and unequal probabilities of selection. For key survey estimates, sampling errors considering the design features were produced using either the SPSS Complex Sample module or STATA based on the Taylor series approximation method.

Access policy

CONTACTS

| Name | Affiliation | Email |
|--|----------------|----------------------|
| Anna Nunan | GFMGP - CGAP | anunan@worldbank.org |
| Consultative Group to Assist the Poor (CGAP) | The World Bank | cgap@worldbank.org |

CONFIDENTIALITY

Before being granted access to the dataset, all users have to formally agree: 1. To make no copies of any files or portions of files to which s/he is granted access except those authorized by the data depositor 2. Not to use any technique in an attempt to learn the identity of any person, establishment, or sampling unit not identified on public use data files 3. To hold in strictest confidence the identification of any establishment or individual that may be inadvertently revealed in any documents or discussion, or analysis. Such inadvertent identification revealed in her/his analysis will be immediately brought to the attention of the data depositor

ACCESS CONDITIONS

Direct access.

CITATION REQUIREMENTS

Anderson, Jamie. 2016. National Survey and Segmentation of Smallholder Households in Tanzania: Household Level Data. Washington, D.C.: CGAP.

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CGAP Publications,
1818 H Street, NW,
MSN IS7-700,

Washington, DC
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e-mail: cgap@worldbank.org.

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PRODUCERS

| Name | Abbreviation | Affiliation | Role |
|----------------------------------|--------------|-----------------------------------|------------------------------|
| Office of Chief Statistician | OCS | Food and Agriculture Organization | Adoption of metadata for FAM |
| Development Economics Data Group | DECDG | The World Bank | Documentation of the DDI |

DDI DOCUMENT VERSION

TZA_2016_SHS_v01_EN_M_v01_A_OCS_v01

Data Dictionary

| Data file | Cases | Variables |
|-----------|-------|-----------|
|-----------|-------|-----------|