# Bangladesh - Smallholder Household Survey - CGAP, 2016

#### **Jamie Anderson**

Report generated on: November 3, 2020

Visit our data catalog at: <a href="https://microdata.fao.org/index.php">https://microdata.fao.org/index.php</a>

#### Overview

#### Identification

ID NUMBER BGD\_2016\_SHS\_v01\_EN\_M\_v01\_A\_OCS

#### Overview

#### **ABSTRACT**

The objectives of the Smallholder Household Survey in Bangladesh 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 Bangladesh 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]

UNITS 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	URI
Agriculture & Rural Development	FAO	
Food (production, crisis)	FAO	
Land (policy, resource management)	FAO	
Financial Sector	FAO	
Access to Finance	FAO	
Payment Systems	FAO	
Community Driven Development	FAO	
Social Development	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 INVESTIGATOR(S)

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

#### OTHER PRODUCER(S)

Name	Affiliation	Role
Colleen Learch	InterMedia Survey Institute	Technical assistance

# **Metadata Production**

#### METADATA PRODUCED BY

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
BGD\_2016\_SHS\_v01\_EN\_M\_v01\_A\_OCS\_v01

DDI DOCUMENT ID
DDI\_BGD\_2016\_SHS\_v01\_EN\_M\_v01\_A\_OCS\_FAO

# Sampling

### **Sampling Procedure**

#### (a) SAMPLING FRAME

The smallholder household survey in Bangladesh 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. Bangladesh is divided into 7 administrative divisions. Each division is divided into districts, sub-districts, wards (for urban areas) or unions (for rural areas). Each ward is further divided into mahallas while each union consists of mauzas. For the 2008 agricultural census, mauzas and mahallas were further divided into 153,945 enumeration areas (EAs). The Bangladesh Bureau of Statistics maintains a list of 64,314 mauzas/mahallas. Among these, 750 mauzas/mahallas (i.e., 1.2% of the total number) have missing information on the number of agricultural households they contained in 2008. In addition, 18,377 mauzas/mahallas had less than 80 agricultural households. These mauzas/mahallas contain about 4.8% of the total number of agricultural households. The sampling frame for the smallholder survey consisted of the list of EAs for mauzas/mahallas containing at least 80 agricultural households in 2008. While at the mauza/mahalla level the number of agricultural households was available, at the EA level only the estimated number of (general) households was available along with the urban-rural classification.

#### (b) SAMPLE ALLOCATION AND SELECTION

To take nonresponse into account, the target sample size was increased to 3,158 households assuming a nonresponse rate of five percent observed in similar national household surveys. The total sample size was first allocated to the divisions based on the number of agricultural households in the sampling frame. Within each division, 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 211 EAs were selected. The sample for the smallholder survey is a stratified multistage sample. Stratification was achieved by separating each division into urban and rural areas. The urban/rural classification is based on the 2008 agricultural census. Therefore, 14 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 households in the EAs. Prior to the selection, in each stratum, the list of EAs was sorted by district, sub-district, wards/unions, and mauzas/mahallas. 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 Sample Design**

The smallholder survey in Bangladesh is the fourth survey in the series, following the surveys in Mozambique, Uganda, and Tanzania. Fieldwork in those three countries has 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 Bangladesh 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**

100 percent for single respondent questionnare, 99.7 percent for household questionnaire and 96.4 percent for the Multiple 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. The second component uses the response rate 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 nonresponse 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.

# Questionnaires

No content available

# **Data Collection**

# **Data Collection Dates**

 Start
 End
 Cycle

 2016-03-17
 2016-04-21
 N/A

### **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 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.