

# Tanzania - CGAP Financial Diaries with Smallholder Households 2014-2015

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# Sampling

## Sampling Procedure

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The methodology and sample size of the Smallholder Diaries was designed to generate a rich pool of detailed information and insights on a targeted population. The Smallholder Diaries are not intended to be statistically representative of smallholder families in participating countries.

Total number of households in sample: 93 (Mozambique); 86 (Tanzania); 94 (Pakistan). The sample came was drawn from 3 villages in Mozambique, 2 villages in Tanzania, and 2 villages in Pakistan. Villages were selected based on their involvement in agriculture, and convenience in reaching them.

The research teams used a screening process to help identify a range of families with 5 acres of land or less, diverse income sources, access to agricultural inputs, wealth levels, and crops to participate in the research. In Tanzania, these eligible households were identified using a participatory rural appraisal wealth-ranking technique. Working with committees of village representatives, the research teams conducted wealth-ranking exercises to assess the relative wealth of households in village hamlets or subareas.

## Response Rate

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The sample initially included 286 households in all three countries, and the study ended with 273 households in total – an attrition rate similar to what has been observed in the past in similar Financial Diaries exercises. Households left the study due to moving from the study villages, seasonal migration, and occasionally by the prompting of the research team due to concerns about the household's willingness to be forthcoming about important sources of income.

# Questionnaires

## Overview

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Interviewers visited each household and conducted three initial questionnaires. They 1) collected a household roster and demographic information about household members; 2) captured a register of physical assets and income sources for each household member and 3) registered the unique financial instruments used by each household member. This baseline information was then used to generate a custom cash flows questionnaire for each household, built to collect income, expenditure, and financial transactions for each individual. This customized cash flows questionnaire was then used for the collection of cash flows data. During regular visits about every two weeks, interviewers captured a complete set of daily, individual transactions from the preceding two-week period. Households were asked only about transactions using financial instruments and income sources that they actually have, rather than going through a generic list of questions. However, the cash flows questionnaire was continuously updated as new members joined the household, members acquired new financial instruments or income sources, or as the interviewers became aware of previously undisclosed ones.

## Data Collection

### Data Collection Dates

Start	End	Cycle
2014-06	2015-06	N/A

### Data Collection Mode

Face-to-face [f2f]

#### DATA COLLECTION NOTES

Field enumerators went through a training process. Interviews were conducted about every two weeks and lasted for about an hour each time. Interviews were conducted in the local languages in each village, but recorded in the database as follows: English for the Tanzania data.

All data, including the initial questionnaires, were collected between April 2014 and June 2015. Data collection on household cash flows started in June 2014 and ended in June 2015. The timeframes for observations are not exactly the same for every sample and household. In some areas and with some households, the Smallholder Diaries started slightly earlier than others.

### Data Collectors

Name	Abbreviation	Affiliation
Bankable Frontier Associates	BFA	

#### SUPERVISION

Each county research team was organized as follows: A Country Project Manager from BFA directly supervised a Research Manager from the in-country teams. The Research Manager in turn supervised a data analyst and three to five field interviewers.

CGAP retained the services of Bankable Frontier Associates (BFA) to manage the Smallholder Diaries. For in-country data collection, BFA worked with International Capital Corporation in Mozambique, Digital Divide Data in Tanzania, and RCons in Pakistan. The core team included a Project Manager from BFA to manage the overall study; a Country Project Manager from BFA for each specific country. The in-country data collection teams consisted of a Research Manager, Data Analyst, and field interviewers. The main responsibility of the research manager was to manage the Field Researchers and the Data Analyst in order to ensure high data quality throughout the course of the Smallholder Diaries project.

The data analyst's primary role was to manage the Smallholder Diaries database, including set-up and quality control through the data collection process. This included:

- Testing the database on tablet computers
- Helping to train field researchers on how to input data on the tablets
- Checking and verifying data throughout the project
- Downloading data from the database and analyzing it, either in Excel, Stata, or another program
- Supporting field researchers when they have questions about data entry
- Providing feedback and solving problems to enable the work of the researchers

The primary responsibilities of the field interviewers (three to five per country) was to interview households about their spending, income, and financial behaviors approximately every two weeks over the course of 12 months. Beyond simply conducting the interview, the researchers needed to manage relationships with these households, whom they saw on a regular basis. The interviewers were responsible for entering data into tablet computers and verifying that data is accurate. Specific duties included:

- Attending three trainings on the Financial Diaries methodology
- Helping to recruit smallholder families to participate in the year-long study.
- Carrying out three initial questionnaires with the selected households
- Visiting the households approximately every 14 days to carry out a 45-75 min survey about the cash flows of the household
- Inputting data into the database through the tablet computer.
- Syncing data to be stored to the database server daily.
- Carefully checking and verifying data and work with the data analyst and making corrections.

- Encouraging households to continue to participate in the research for the duration of the project.
- Discretely administering monetary gifts that will be given to the households.
- Treating the households with respect and empathy, while not intervening in ways that would change their financial behaviors.
- Participating in regular team calls to share experiences and update on findings.

## Data Processing

### Data Editing

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All data editing was done manually.

### Other Processing

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The data was collected through face to face interviews, using a computer tablet preloaded with the data collection software and all previously recorded data. The tablets were synchronized each day so that all collected data was uploaded to the server and the tablet would receive the latest version of the database.

# Data Appraisal

No content available

## File Description

# Variable List

**CGAP Smallholder Diaries\_Data Set TAN Cash Flows\_18 Feb 16**

Content	Cash Flows
Cases	71016
Variable(s)	15
Structure	Type: Keys: ()
Version	
Producer	
Missing Data	

**Variables**

ID	Name	Label	Type	Format	Question
V27	household_code	Household code	discrete	character	
V28	id_member	Member ID	contin	numeric	
V29	interview_datetime	Interview date and time	discrete	character	
V30	cashflow_date	Cash flow date	discrete	character	
V31	account_name	Account name	discrete	character	
V32	root_category	Root category	discrete	character	
V33	cf_category	Cash flow category	discrete	character	
V34	cf_type	Cash flow type	discrete	character	
V35	cf_direction	Cash flow direction	discrete	character	
V36	cf_bsheets_direction	Balance sheet direction	discrete	character	
V37	agrprodtype	Agricultural production type	discrete	character	
V38	value	Transaction value	contin	numeric	
V39	cashflow_mode	Cash flow mode	discrete	character	
V40	unitsgoodservice	Units of good or service if in kind	discrete	character	
V41	valueifinkind	Transaction value if in kind	discrete	character	

**CGAP Smallholder Diaries\_Data Set TAN Member Data\_18 Feb 16**

Content	Member Data
Cases	420
Variable(s)	11
Structure	Type: Keys: ()
Version	
Producer	
Missing Data	

**Variables**

ID	Name	Label	Type	Format	Question
V42	id_member	Member ID	contin	numeric	
V43	household_code	Household code	discrete	character	
V44	M1age	Member age	contin	numeric	
V45	M1gender	Member gender	discrete	numeric	
V46	M1maritalstatus	Marital status	discrete	numeric	
V47	M1enrolled	Currently enrolled in school	discrete	numeric	
V48	M1level	Level of school where currently enrolled	discrete	numeric	
V49	M1highesteduc	Highest educational attainment	discrete	numeric	
V50	M1language	Native language	discrete	numeric	
V51	M1read	Can read	discrete	numeric	
V52	M1write	Can write	discrete	numeric	

**CGAP Smallholder Diaries\_Data Set TAN Crop Tracker\_02 Jun 17**

Content Crop Tracker Data  
 Cases 3572  
 Variable(s) 7  
 Structure Type:  
 Keys: ()  
 Version  
 Producer  
 Missing Data

**Variables**

ID	Name	Label	Type	Format	Question
V67	household_code	Household Code	discrete	character	
V68	interview_date	Interview Date	discrete	character	
V69	id	Crop name	discrete	character	
V70	crop	Crop type	discrete	numeric	
V71	trans	Type of transaction	discrete	numeric	
V72	quantity	Quantity	contin	numeric	
V73	value	Value	contin	numeric	



## Household code (household\_code)

File: CGAP Smallholder Diaries\_Data Set TAN Cash Flows\_18 Feb 16

**Overview**

Type: Discrete	Valid cases: 71016
Format: character	Invalid: 0
Width: 8	

## Member ID (id\_member)

File: CGAP Smallholder Diaries\_Data Set TAN Cash Flows\_18 Feb 16

**Overview**

Type: Continuous	Valid cases: 66266
Format: numeric	Invalid: 4750
Width: 3	Minimum: 2
Decimals: 0	Maximum: 420
Range: 2-420	

## Interview date and time (interview\_datetime)

File: CGAP Smallholder Diaries\_Data Set TAN Cash Flows\_18 Feb 16

**Overview**

Type: Discrete	Valid cases: 71016
Format: character	Invalid: 0
Width: 16	

## Cash flow date (cashflow\_date)

File: CGAP Smallholder Diaries\_Data Set TAN Cash Flows\_18 Feb 16

**Overview**

Type: Discrete	Valid cases: 71016
Format: character	Invalid: 0
Width: 10	

## Account name (account\_name)

File: CGAP Smallholder Diaries\_Data Set TAN Cash Flows\_18 Feb 16

**Overview**

Type: Discrete	Valid cases: 37365
Format: character	Invalid: 0
Width: 9	

## Root category (root\_category)

File: CGAP Smallholder Diaries\_Data Set TAN Cash Flows\_18 Feb 16

### Overview

Type: Discrete	Valid cases: 71016
Format: character	Invalid: 0
Width: 20	

## Cash flow category (cf\_category)

File: CGAP Smallholder Diaries\_Data Set TAN Cash Flows\_18 Feb 16

### Overview

Type: Discrete	Valid cases: 71016
Format: character	Invalid: 0
Width: 79	

## Cash flow type (cf\_type)

File: CGAP Smallholder Diaries\_Data Set TAN Cash Flows\_18 Feb 16

### Overview

Type: Discrete	Valid cases: 71016
Format: character	Invalid: 0
Width: 45	

## Cash flow direction (cf\_direction)

File: CGAP Smallholder Diaries\_Data Set TAN Cash Flows\_18 Feb 16

### Overview

Type: Discrete	Valid cases: 68329
Format: character	Invalid: 0
Width: 18	

## Balance sheet direction (cf\_bsheet\_direction)

File: CGAP Smallholder Diaries\_Data Set TAN Cash Flows\_18 Feb 16

### Overview

Type: Discrete	Valid cases: 23953
Format: character	Invalid: 0
Width: 8	

## Agricultural production type (agrprodtype)

File: CGAP Smallholder Diaries\_Data Set TAN Cash Flows\_18 Feb 16

**Overview**

Type: Discrete	Valid cases: 2131
Format: character	Invalid: 0
Width: 69	

## Transaction value (value)

File: CGAP Smallholder Diaries\_Data Set TAN Cash Flows\_18 Feb 16

**Overview**

Type: Continuous	Valid cases: 71016
Format: numeric	Invalid: 0
Width: 7	Minimum: -76000
Decimals: 0	Maximum: 3470000
Range: -76000-3470000	

## Cash flow mode (cashflow\_mode)

File: CGAP Smallholder Diaries\_Data Set TAN Cash Flows\_18 Feb 16

**Overview**

Type: Discrete	Valid cases: 71016
Format: character	Invalid: 0
Width: 60	

## Units of good or service if in kind (unitsgoodservice)

File: CGAP Smallholder Diaries\_Data Set TAN Cash Flows\_18 Feb 16

**Overview**

Type: Discrete	Valid cases: 2504
Format: character	Invalid: 0
Width: 77	

## Transaction value if in kind (valueifinkind)

File: CGAP Smallholder Diaries\_Data Set TAN Cash Flows\_18 Feb 16

**Overview**

Type: Discrete	Valid cases: 2260
Format: character	Invalid: 0
Width: 8	



## Member ID (id\_member)

File: CGAP Smallholder Diaries\_Data Set TAN Member Data\_18  
Feb 16

**Overview**

Type: Continuous	Valid cases: 420
Format: numeric	Invalid: 0
Width: 3	Minimum: 1
Decimals: 0	Maximum: 420
Range: 1-420	

## Household code (household\_code)

File: CGAP Smallholder Diaries\_Data Set TAN Member Data\_18  
Feb 16

**Overview**

Type: Discrete	Valid cases: 420
Format: character	Invalid: 0
Width: 8	

## Member age (M1age)

File: CGAP Smallholder Diaries\_Data Set TAN Member Data\_18  
Feb 16

**Overview**

Type: Continuous	Valid cases: 420
Format: numeric	Invalid: 0
Width: 2	Minimum: 0
Decimals: 0	Maximum: 95
Range: 0-95	

## Member gender (M1gender)

File: CGAP Smallholder Diaries\_Data Set TAN Member Data\_18  
Feb 16

**Overview**

Type: Discrete	Valid cases: 420
Format: numeric	Invalid: 0
Width: 1	
Decimals: 0	
Range: 1-2	

## Marital status (M1maritalstatus)

File: CGAP Smallholder Diaries\_Data Set TAN Member Data\_18  
Feb 16

**Overview**

**Marital status (M1maritalstatus)**

File: CGAP Smallholder Diaries\_Data Set TAN Member Data\_18  
Feb 16

Type: Discrete  
Format: numeric  
Width: 1  
Decimals: 0  
Range: 1-5

Valid cases: 411  
Invalid: 9

**Currently enrolled in school (M1enrolled)**

File: CGAP Smallholder Diaries\_Data Set TAN Member Data\_18  
Feb 16

**Overview**

Type: Discrete  
Format: numeric  
Width: 1  
Decimals: 0  
Range: 0-1

Valid cases: 412  
Invalid: 8

**Level of school where currently enrolled (M1level)**

File: CGAP Smallholder Diaries\_Data Set TAN Member Data\_18  
Feb 16

**Overview**

Type: Discrete  
Format: numeric  
Width: 2  
Decimals: 0  
Range: 1-99

Valid cases: 117  
Invalid: 303

**Highest educational attainment (M1highesteduc)**

File: CGAP Smallholder Diaries\_Data Set TAN Member Data\_18  
Feb 16

**Overview**

Type: Discrete  
Format: numeric  
Width: 2  
Decimals: 0  
Range: 1-99

Valid cases: 412  
Invalid: 8

**Native language (M1language)**

File: CGAP Smallholder Diaries\_Data Set TAN Member Data\_18  
Feb 16

**Overview**

## Native language (M1language)

File: CGAP Smallholder Diaries\_Data Set TAN Member Data\_18  
Feb 16

Type: Discrete  
Format: numeric  
Width: 2  
Decimals: 0  
Range: 1-99

Valid cases: 409  
Invalid: 11

## Can read (M1read)

File: CGAP Smallholder Diaries\_Data Set TAN Member Data\_18  
Feb 16

**Overview**

Type: Discrete  
Format: numeric  
Width: 1  
Decimals: 0  
Range: 0-1

Valid cases: 410  
Invalid: 10

## Can write (M1write)

File: CGAP Smallholder Diaries\_Data Set TAN Member Data\_18  
Feb 16

**Overview**

Type: Discrete  
Format: numeric  
Width: 1  
Decimals: 0  
Range: 0-1

Valid cases: 410  
Invalid: 10

## Household Code (household\_code)

File: CGAP Smallholder Diaries\_Data Set TAN Crop Tracker\_02

Jun 17

**Overview**

Type: Discrete  
 Format: character  
 Width: 8

Valid cases: 3572  
 Invalid: 0

## Interview Date (interview\_date)

File: CGAP Smallholder Diaries\_Data Set TAN Crop Tracker\_02

Jun 17

**Overview**

Type: Discrete  
 Format: character  
 Width: 10

Valid cases: 3572  
 Minimum: NaN  
 Maximum: NaN

## Crop name (id)

File: CGAP Smallholder Diaries\_Data Set TAN Crop Tracker\_02

Jun 17

**Overview**

Type: Discrete  
 Format: character  
 Width: 35

Valid cases: 3572  
 Invalid: 0

## Crop type (crop)

File: CGAP Smallholder Diaries\_Data Set TAN Crop Tracker\_02

Jun 17

**Overview**

Type: Discrete  
 Format: numeric  
 Width: 2  
 Decimals: 0  
 Range: 1-13

Valid cases: 3572  
 Invalid: 0  
 Minimum: 1  
 Maximum: 13

## Type of transaction (trans)

File: CGAP Smallholder Diaries\_Data Set TAN Crop Tracker\_02

Jun 17

**Overview**

Type: Discrete  
 Format: numeric  
 Width: 1  
 Decimals: 0  
 Range: 1-6

Valid cases: 3572  
 Invalid: 0  
 Minimum: 1  
 Maximum: 6

## Quantity (quantity)

File: CGAP Smallholder Diaries\_Data Set TAN Crop Tracker\_02

Jun 17

**Overview**

Type: Continuous	Valid cases: 3571
Format: numeric	Invalid: 1
Width: 5	Minimum: 0.1
Decimals: 0	Maximum: 42000
Range: 0.05-42000	

## Value (value)

File: CGAP Smallholder Diaries\_Data Set TAN Crop Tracker\_02

Jun 17

**Overview**

Type: Continuous	Valid cases: 3572
Format: numeric	Invalid: 0
Width: 7	Minimum: 100
Decimals: 0	Maximum: 3500000
Range: 100-3500000	

## Related Materials

### Technical documents

#### Smallholder Financial Diaries Datasets User Guide (English)

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Title Smallholder Financial Diaries Datasets User Guide (English)  
 Author(s) CCAP  
 Date 2016-02-01  
 Language English  
 Filename cgap\_smallholder\_diaries\_user\_guide\_to\_the\_data\_sets\_19\_feb\_16.pdf

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#### Smallholder Financial Diaries Datasets User Guide (Portuguese)

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Title Smallholder Financial Diaries Datasets User Guide (Portuguese)  
 Author(s) CCAP  
 Date 2016-02-01  
 Language Portuguese  
 Filename CGAP Smallholder Diaries\_User Guide to the Data Sets\_POR\_19 Feb 16.pdf

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#### Crop Tracker Data User Guide

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Title Crop Tracker Data User Guide  
 Language English  
 Filename CGAP Smallholder Diaries\_CropTracker\_User Guide\_27 Jul 17.pdf

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### Other materials

#### Understanding Demand, Driving Innovation Smallholder Households and Financial Services (English)

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Title Understanding Demand, Driving Innovation Smallholder Households and Financial Services (English)  
 Author(s) Carlos E. Cuevas and Jamie Anderson  
 Date 2016-02-01  
 Language English  
 Filename cgap\_smallholder\_diaries\_working\_paper\_smallholder\_households\_and\_financial\_services\_feb\_16.pdf

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#### Understanding Demand, Driving Innovation Smallholder Households and Financial Services (Portuguese)

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Title Understanding Demand, Driving Innovation Smallholder Households and Financial Services (Portuguese)  
 Author(s) Carlos E. Cuevas and Jamie Anderson  
 Date 2016-02-01  
 Language Portuguese  
 Filename CGAP Smallholder Diaries\_Working Paper\_Smallholder Households and Financial Services\_POR\_Feb 16.pdf

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