

Mozambique - eVoucher and Farmer Field School Impact Evaluation 2021

Florence Kondylis, John Loeser, Paul Christian, Astrid Zwager

Report generated on: August 8, 2024

Visit our data catalog at: <https://microdata.worldbank.org/index.php>

Identification

SURVEY ID NUMBER

MOZ_2021_FFSEVIE-BL_v01_M

TITLE

eVoucher and Farmer Field School Impact Evaluation 2021

SUBTITLE

Baseline Survey Round

COUNTRY/ECONOMY

Name	Country code
Mozambique	MOZ

STUDY TYPE

1-2-3 Survey, phase 1 [hh/123-1]

SERIES INFORMATION

This is the Baseline Round of the DIME eVoucher and FFS impact evaluations in Mozambique.

ABSTRACT

Despite strong and sustained economic growth over the last two decades, poverty in Mozambique has remained high, particularly in rural areas. With over 80% of the population deriving its livelihood primarily from agricultural activities, the rural development and structural transformation agenda is central to poverty alleviation in Mozambique. In this context the European Union Delegation to Mozambique launched the PROMOVE Agribiz program, which aims to improve food security and the resilience of smallholder producers as well as boost rural competitiveness. The program is implemented across 10 districts in the rural areas of Nampula and Zambezia provinces.

As part of the PROMOVE Agribiz program, FAO will roll-out its FFS and eVoucher interventions to increase access to extension services with the aim of increasing local awareness of sustainable land management practices and boost access and adoption of modern agricultural inputs. To shed light on different constraints to adoption, FAO and DIME coordinated the FFS and eVoucher intervention roll-out in such a way that it allows for the identification of the impact of the individual interventions as well as their complementarities, providing for a richer understanding of constraints to adoption more broadly. Intervention impacts are identified by comparing communities and households that are randomized into one of four groups: i) Receiving an FFS, ii) receiving eVouchers, iii) receiving both, and iv) receiving neither – the control group. The complete experimental sample includes 388 communities and 4630 households.

Treatment assignment variables are embargoed until the study is complete.

KIND OF DATA

Sample survey data [ssd]

UNIT OF ANALYSIS

Household, individual

Version

VERSION DATE

2023-04-07

Scope

NOTES

The experimental sample includes 388 communities and 4630 households.

Coverage

GEOGRAPHIC COVERAGE

The data collection took place in the Mozambican provinces of Nampula and Zambezia.

Producers and sponsors

PRIMARY INVESTIGATORS

Name	Affiliation
Florence Kondylis	World Bank, DIME
John Loeser	World Bank, DIME
Paul Christian	World Bank, DIME
Astrid Zwager	World Bank, DIME

FUNDING AGENCY/SPONSOR

Name	Abbreviation	Role
European Union Delegation to Mozambique	EUD	Funder

Sampling

SAMPLING PROCEDURE

The sampling procedure for the program impact evaluation includes four steps:

Step 1 – Identification of possible intervention communities.

At the beginning of the program, the research team asked FAO to provide a list of extension agents (EAs) who would be responsible for identifying communities for intervention, and established the catchment for each EA. From this list, the research team assigned each EA, by random lottery, a pipeline of communities in which to establish a FFS or register farmers for eVouchers. Working with a total of 102 EAs, the team identified 799 potential intervention communities.

Step 2 – Community level randomization.

From the long-list of communities in each EA's catchment, four communities were randomly assigned to compose the experimental sample. Each of these communities was then assigned to one of the following four groups receiving either:

1. Farmer Field School
2. eVoucher
3. Farmer Field School + eVoucher
4. Control group

At that time, only 56 of the 97 EAs had all 4 experimental sample communities within range of an agrodealer participating in the FAO eVoucher program. In areas where there is no eVoucher coverage, the EA is assigned two FFS and two control communities. In total, the evaluation sample includes 388 communities. 15 EAs were later dropped from the IE due to performance issues.

Step 3 – Within community identification of FFS interested participants.

Participation in the FFS is voluntary and based on farmers expressing interest. This means that farmers who choose to participate are likely not representative of the average farmer in the community. To allow for identification of likely FFS participants in a similar way in both the FFS treatment and control groups, each of the EAs visited their four experimental communities to list community members interested in participating in a FFS group prior to the roll-out of the interventions. During the listing, communities were asked to also identify two likely FFS facilitators of each group. On average 29.3 members per community were listed as FFS interested participants.

Step 4 – Within community farmer randomization of eVouchers.

To allow for measurement of spillovers of eVouchers within communities, a second randomization was done to select treatment and control farmers within communities. This is done among both FFS likely participants and among other

members of the community. To obtain a list of all members in the experimental communities, an extensive household listing was performed in October and November 2020. The identification of treatment and control eVoucher households within communities is done for all evaluation communities, not just those assigned to receive eVouchers. This permits the identification of the equivalent households in both treatment and control groups.

The baseline survey sample is composed of all 388 evaluation communities. Within each community, 12 households are sampled from the following groups:

1. FFS interested + eVoucher treatment (6 households)
2. FFF interested + eVoucher control (3 households)
3. Not FFS interested + eVoucher treatment (2 households)
4. Not FFS interested + eVoucher control (1 household)

Both likely facilitators from the FFS listing were prioritized to be included in the survey sample. Sampling weights are applied when translating our sample averages to community wide average or other combinations of groups with different sampling probabilities.

DEVIATIONS FROM THE SAMPLE DESIGN

The research team could not obtain listing from two communities and one community only had 10 households.

RESPONSE RATE

Replacements were made whenever a household in the original sample could not be interviewed after three unsuccessfully attempts by the enumerators. Replacements were impact evaluation sample group specific, i.e., a household on the FFS interested list would be replaced by a household of that same status from the replacement list in that same community, maintaining the sample structure wherever possible. Replacement rate was around 6% of the original randomized sample.

Data collection

DATES OF DATA COLLECTION

Start	End	Cycle
2021-07-09	2022-02-18	Baseline

DATA COLLECTION MODE

Computer Assisted Personal Interview [capi]

DATA COLLECTION NOTES

Quality control Data quality was assured through DIME's rigorous data quality protocols. Surveys were performed on tablet devices running SurveyCTO Collect data collection software. During the interview data consistency and quality is managed through a series of hard checks (e.g., all relevant questions must have an answer, age cannot be more than 120) and soft checks (e.g., enumerators receive a flag for unlikely but not impossible answers such reporting of plot areas larger than 5 ha). The DIME team performed immediate daily quality checks and inconsistencies are then sent back to the field teams for final verification. Each survey was recorded and randomly audited for each enumerator at several points throughout the data collection. Finally a short verification survey (backcheck) was applied to a random sample of 15% of household surveys. Cases in which fundamental responses were not aligned (such as the number of plots) were re-interviewed. These stringent data quality checks enabled DIME to identify that the first round of household data collection had not been collected properly, and terminated this phase in May 2021. The DIME team identified widespread cases of falsified data from a sample of enumerator audits and these cases invalidated the data collected until that point. The team of enumerators was replaced and a second round of data collection commenced from July 2021.

Questionnaires

QUESTIONNAIRES

The survey was conducted in Portuguese. The questionnaire is available for download.

Access policy

CONTACTS

Name	Affiliation	Email
Astrid Zwager	World Bank DIME	azwager@worldbank.org
Steven Glover	World Bank DIME	sglover1@worldbank.org

CONFIDENTIALITY

CITATION REQUIREMENTS

Use of the dataset must be acknowledged using a citation which would include:

- the Identification of the Primary Investigator
- the title of the survey (including country, acronym and year of implementation)
- the survey reference number
- the source and date of download

Example:

Florence Kondylis (World Bank, DIME), John Loeser (World Bank, DIME), Paul Christian (World Bank, DIME), Astrid Zwager (World Bank, DIME). Mozambique - eVoucher and Farmer Field School Impact Evaluation 2021, Baseline Survey Round (). Ref: MOZ_2021_FFSEVIE-BL_v01_M. Downloaded from [uri] on [date].

ACCESS AUTHORITY

Name	Affiliation
Astrid Zwager	World Bank DIME
Steven Glover	World Bank DIME

Disclaimer and copyrights

DISCLAIMER

The user of the data acknowledges that the original collector of the data, the authorized distributor of the data, and the relevant funding agency bear no responsibility for use of the data or for interpretations or inferences based upon such uses.

Metadata production

DDI DOCUMENT ID

DDI_MOZ_2021_FFSEVIE-BL_v01_M_WB

PRODUCERS

Name	Abbreviation	Affiliation	Role
Development Data Group	DECDG	World Bank	Documentation of the study

DATE OF METADATA PRODUCTION

2024-08-08

DDI DOCUMENT VERSION

Version 01 (2024-08-08)

Data Dictionary

Data file	Cases	Variables
promove_household_baseline Household Baseline Survey Data	4630	22757
promove_community_leader_baseline Community Leader Baseline Survey Data	373	1612
promove_extension_agent_baseline Extension Agent Baseline Survey Data	92	4069
promove_retailer_baseline Retailer Baseline Survey Data	41	5477