

Mozambique - Impact Evaluation of the Sustainable Land and Water Resource Management Project 2016-2019

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Identification

SURVEY ID NUMBER

MOZ_2016-2019_SLWRMPIE_v01_M

TITLE

Impact Evaluation of the Sustainable Land and Water Resource Management Project 2016-2019

COUNTRY/ECONOMY

Name	Country code
Mozambique	MOZ

ABSTRACT

The main objective of this activity is to shed light on the transformative potential of smallholder irrigation in Mozambique. Irrigation is critical in ensuring sustainable livelihoods for farmers in the face of increasing climate uncertainty. Irrigation access allows farmers to cultivate crops outside of the main rainy season, potentially doubling farm incomes by allowing for the cultivation of two crop cycles instead of one. However, it is grossly underutilized in Sub-Saharan Africa, particularly in Mozambique where only 8 percent of all farmers have access to irrigation. Despite the transformative potential of irrigation, there are gaps in our understanding of how-to best plan and manage irrigation infrastructure programs. First, because irrigation infrastructure is never placed at random, the true impact of these investments on farmers' welfare is not well known. Second, irrigation equipment is often not well managed and degrades easily over time from lack of maintenance. This impact evaluation proposes a novel strategy for simultaneously measuring a rigorous estimate of the returns to irrigation investments, as well as providing insight on how to choose participants of an irrigation infrastructure program such that the impact and sustainability of the irrigation infrastructure is maximized.

UNIT OF ANALYSIS

Household and Community

Version

VERSION DESCRIPTION

V01 - Edited, anonymized dataset for public distribution

VERSION DATE

2023-08-15

Scope

NOTES

This dataset comprises the baseline, midline, and endline data collected under the SLWRMP impact evaluation by DIME in Gaza province in Mozambique.

Coverage

GEOGRAPHIC COVERAGE

Gaza province. Districts of Guija, Mabalane, Chicualacuala, Massangena

Producers and sponsors

PRIMARY INVESTIGATORS

Name	Affiliation
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Paul Christian

DIME1, World Bank

Sampling

SAMPLING PROCEDURE

The Sustainable Land Water Resource Management Project (SLWRMP) provides 55 small-scale irrigation kits in the southern province of Gaza, Bali. The project is implemented by the provincial agriculture offices in four districts along the Limpopo River and Save River, chosen for their elevated climate risk and suitability for irrigation infrastructure.

The primary intervention is the provision of small-scale irrigation kits, each covering 5 or 10 hectares of land. The beneficiaries are designated a maximum of 0.5 hectares of land inside the kit, allowing 10 or 20 farmers to benefit, depending on the kit size. In addition to the physical infrastructure, the project provides training and monthly visits from district extension agents.

The sampling design involves two steps: 1) selecting suitable areas for irrigation based on technical considerations, and 2) identifying participants within these areas. The selection process is randomized at community level, with some communities using the Smallholder Priority Protocol (PMT) and others using a Decentralized Community Meeting approach.

Under the PMT, farmers are selected according to a fixed set of criteria for placing the schemes and priority is given to the smaller farmers in the community (between 0.5 and 1 hectare). In the Decentralized Community Meeting approach, communities have the freedom to decide on beneficiaries using subjective criteria provided by the project. Both groups were stratified at the district level, and the size of the kit was also taken into account to achieve equal representation in the four districts.

RESPONSE RATE

Household survey response rate of initial round sample:

Baseline: 74%

Midline: 89%

Endline: 86%

(replacements from the same sampling group were performed in each survey round)

Data Collection

DATES OF DATA COLLECTION

Start	End	Cycle
2016-07-19	2016-09-16	Household Baseline
2016-05-31	2016-07-23	Community Baseline
2018-10-29	2018-11-30	Household Midline
2018-09-29	2018-10-10	Community Midline
2019-10-31	2019-12-17	Household Endline
2019-11-05	2019-12-18	Community Endline
2018-09-29	2018-10-10	Kit Midline
2019-11-01	2019-12-16	Kit Endline

DATA COLLECTION MODE

Computer Assisted Personal Interview [capi]

Access policy

CONTACTS

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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:

Paul Christian (DIME1, World Bank). Mozambique - Impact Evaluation of the Sustainable Land and Water Resource Management Project 2016-2019 (SLWRMP 2016-2019). Ref: MOZ_2016-2019_SLWRMPIE_v01_M. Downloaded from [uri] on [date].

ACCESS AUTHORITY

Name	Affiliation
Development Impact (DIME)	World Bank
Steven Glover	DIME

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Metadata production

DDI DOCUMENT ID

DDI_MOZ_2016-2019_SLWRMPIE_v01_M_WB

PRODUCERS

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

DATE OF METADATA PRODUCTION

2023-10-03

DDI DOCUMENT VERSION

Version 01 (2023-10-03)

Data Dictionary

Data file	Cases	Variables
com_baseline Community Baseline dataset	55	1479
hh_baseline Household Baseline dataset	1387	7502
com_midline Community Midline dataset	52	878
hh_midline Household Midline dataset	1359	8192
kit_midline Kit Midline dataset	55	118
com_endline Community Endline dataset	52	903
hh_endline Household Endline dataset	1503	14161
kit_endline Kit Endline dataset	49	63