DECEMBER 2021
WORLD BANK GROUP- DIME MOZAMBIQUE

DIME MOZAMBIQUE CASHEW FARMER BASELINE SURVEY

FINAL FIELD REPORT

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CONTENTS

1 Introduction

This is the Final Field Report of the DIME Mozambique Cashew Farmer Baseline Survey that describes the activities performed by the fieldwork team during the data collection process and explains the data management work carried out and the main challenges faced during the data collection work, as well as the mitigation measures applied to carry out the surveys for both Farmers and Sprayers. The baseline aims to carry out a total of 833 farmer interviews and 34 interviews with sprayers.

The Final Report on Data Collection is composed by five chapters, as follows:

- Chapter 1 Introduction: the present chapter, that briefly presents the aim of the baseline study and the structure of the final fieldwork report;
- Chapter 2 Preparation of Data collection: explains the preparatory activities undertaken for the data collection fieldwork, including sample design, programming of the data collection applications, the recruitment and training of the data collection team and the piloting of the instruments carried out by the trainees.
- Chapter 3 Data collection: presents the data collection strategy and the results of the data collection work;
- Chapter 4 Data management: presents the main tasks done during and after data collection to manage the collected data; and,
- Chapter 5: Challenges faced in data collection and mitigation measures applied: summarizes the main challenges faced in the data collection work so far and the mitigation measures applied to overcome it.

2 Preparation of Data Collection

2.1 Survey instruments and Sample

The survey instruments were designed and programmed by DIME. COWI provided feedback on both survey instruments (Farmers and Sprayers). The Survey Sample was provided by DIME and was distributed among the selected districts as illustrated in the table below.

Table 1: Sample distribution

#	District	Locality	Groups	
			Sprayers	Farmers
1	Angoche	Namaponda	20	464
2	Mogovolas	Nanhupo Rio	6	137
3		Nametil	8	232
Total			34	833

2.2 Field and COVID-19 Protocols

COWI designed the field procedure plan, that includes details on the field logistics, supervision and quality control protocols, which explains the entire quality control process and as well the project team members that are responsible for it, and data collection schedule. COWI also designed the training manual, as well as the enumerators and supervisors training agendas and tools for the training sessions.

A COVID-19 Protocol was designed and a COVID-19 prevention kit for individual (masks and alcohol-based gel) and for the team (alcohol-based gel and thermometers) were secured for the training and the fieldwork phases. This included surgical facial masks (2 per person per day and 2 cloth masks), a bottle (500ml) of alcohol-based gel (1 per person per week) and one thermometer per field team (2 in total). During the training and data collection a daily measurement of body temperature of all training attendants (COWI trainers and Technoserve representative included) and of the field team members was held.

2.3 Recruitment and Training of the Field team

2.3.1 Recruitment

Before the commencement of the data collection process, COWI recruited 16 field team candidates for the enumerators position. The number of recruited

persons for enumerators position was higher than needed for the fieldwork (2 more enumerators than needed). This was done to i) allow to select the best performing trainees and ii) have trained back-up enumerators to use in case of need. The recruited supervisors, quality controllers and enumerators were recruited under COWI's network of data collectors, with whom COWI had worked previously in farmer' surveys. They were fluent in Emakua, Coti and Portuguese and had experience with the usage of tablets and smartphones, for data collection, as well as Survey CTO.

2.3.2 Training

The training was separated in two sessions one for the enumerators and the other at the end of each enumerator´s training day, addressed to the supervisors and quality controllers. The training session took place in Nampula City from November 1st to 7th, for a total duration of seven (7) days of which six (6) in-class and one pilot exercise day. Training was facilitated by the Survey Coordinator with support of the Field Coordinator in Nampula City, COWI Data Management Expert and DIME representatives (remotely via Teams).

The enumerators training session focused on the Farmer's survey instrument while the Supervisors and Quality controllers' training sessions focused on the Sprayers instrument.

The training session was followed by a pilot exercise on November 6th, 2021 (day 6 of the field team training session) as part of the training. The objective of the pilot exercise was twofold: testing the efficacy of the strategy, tools and team composition for the Farmer and Sprayers surveys, and the preparedness of the trainees to undertake fieldwork. It was performed by the 22 training participants and supervised by the Survey coordinator and the Field coordinator, with support from the two supervisors and the two quality controllers. In total it was conducted 30 farmers' completed questionnaires and 2 incompletes, and two sprayers were interviewed. No back check questionnaire was conducted at this stage.

For final enumerators' selection to integrate the field team, an evaluation was carried out through two written exams, one performed before the pilot exercise and the other after the pilot exercise. The final selection of the enumerators was based on the following:

- the scores achieved by the trainees during the second written exam (performed after the pilot exercise).
- the performance demonstrated by each trainee during the presentation of the Informed Consent in local language (considered as oral exam).
- the overall analyses of the enumerator's participation along classes and exercise (continuous evaluation) and assiduity along the seven (7) days of training. The assiduity was verified through a presence list, signed by the training participants.

3 Data Collection

The data collection process started on 9 November and ended on 10 December, totalizing 30 days of data collection. The data was collected through smartphones provided by DIME.

Two teams, each of them composed by one supervisor, one quality controller and seven enumerators were formed (see appendix A). Each team worked independently, visiting two communities per day (see appendix B), and the data was collected with farmers and sprayers simultaneously. From the middle of week two the data collection was performed by 13 enumerators (six enumerators in one team and 7 in other team) because one of the enumerators had a misconduct (filled the answers in the questionnaire by himself, without the respondent) and was suspended from the field team. In the middle of week three, other enumerator left the team because he had another job opportunity offer, and the field data was collected by 12 enumerators from this week onwards. The enumerators that left the team were not replaced because the two backup enumerators had bad performance during the training session.

1.1 Main accomplishments of data collection

The Field team managed to conducted interviews with approximately 729 farmers (87.51% of the target) and with a total of 34 sprayers (100% accomplishment). It was not possible to complete 104 (12.48%) Farmers interviews. It is worth mentioning that the farmers were first spotted and identified during a pilot study carried out by TechnoServe. The tracing of the same farmers was an exhaustive exercise that prolonged the expected duration of the fieldwork. The reasons for the 12.5% attrition rate are mentioned below:

- not recognized (5,6 %)
- traveling during the field visit, (1,8 %)
- duplicated IDs, (1,7 %)
- farmers moved to other communities, (1,6 %)
- Under 18 years old, (0,24 %)
- Without cashew trees (0,24 %)
- One farmer passed away (0,12 %)

To reduce the attrition, the field team followed below described strategy:

- try to contact the unavailable farmers in three different times, as follow: the first visit was at the first day of work in the community; the second visit was held at the same day in a different period (afternoon/different hour or on the following day); the third visit was at the day scheduled to perform the back check that could be on the second or third day of work in the community and in the days that the field team returned to communities to

located farmers in order to reduce attrition. Apart from the three visits, the field team also tried to locate the farmers by phone.

- return to the communities with unknown farmers and try to locate them through enquiring local authorities and residents, the team also contacted the providers and the Technoserve students. Some farmers were located from the contact of the Technoserve students, however, there were some differences in the names from the student list and the sample list. Because of that, some farmers were not recognized by the students. The differences were noticed after we listed the names of the farmers belonging to a provider and the student recognizes some of the names but did not recognized others. Also, the other way was performed, with the students listing the farmers name according to their list, but it resulted that those names listed were not included in the sample list.

- ask sprayers for farmers nicknames, as farmers were listed using their formal names, but they are known by their nicknames, or any additional information on farmers the sprayers might have from their first meeting. This kind of information might help track down farmers if the names in the lists were not the names the farmers use in the community.

- in case of farmers that moved to other communities, the field team tried to track those farmers, but it was always difficult to find the farmers in the new communities, because most of them were not well known there. It was possible to reach them by phone or if they returned to the community. In total four farmers that moved to other communities were located.

4 Data Management

DIME was responsible for the data management, and COWI was responsible to solve the inconsistencies highlighted by DIME. In general, the inconsistencies for both survey group were related to:

Farmers

- Duplicated submissions,
- Voucher's possession and use,
- Estimated quantity of cashew's yields without spraying or in case of first spraying, second or third spraying,
- number of sprayed trees,
- number of cashew trees owned by the farmers,
- willingness to pay (exchange of first, second and third spraying for an amount in metical),
- cashew yields versus number of owned trees.

Sprayers

- number of cashew trees owned by the sprayers,
- quantity of chemicals received by the sprayers,
- total number of farmers that the sprayers work with,
- quantity of chemicals left during 2020 season,
- total number of farmers in the sprayer's lists,
- number of trees sprayed by the sprayers, per farmer.

The following approach on solving those inconsistencies was followed:

- verification of the information registered in the enumerator's notebook,
- in case that the information registered in the enumerator's notebook was not complete or did not clarify the inconsistency, contact the respondents (sprayers and farmers) by phone to clarify the questions that were not clear. Contacts with farmers without a telephone were made via the provider, operator or another nearby farmer. From there, it was possible to schedule the interviews.
- in case of network failure, return to community to locate the farmer or sprayer.

For the inconsistencies related to voucher ownership or use, the field team verified the registered information on their notebook, contacted the respondents by phone or by visiting them (photographed the vouchers number, also asked

questions to confirm where the farmers live and where their plots are located, how, when and who gave them the voucher).

5 Major challenges faced and mitigation measure

During the data collection process, the field team faced some challenges as reported in the table below that impacted the fieldwork pace. The corresponding mitigation measures held, are also highlighted in the below table.

Table 2: Challenge, impact, and mitigation measure re

Challenge	Impact	Mitigation measure
Unavailability of the sprayer due to visit of two institutions, at the same day of the field team visit	additional time to work with the sprayer/in the sprayer's community	› contact the provider and schedule the interviews for the following day.
Unavailability of Provider because he was sick		
Farmers do not live in the same area as the sprayers		› contact the farmers and schedule the interviews for the following day. Contacts with farmers without a telephone were made via the provider, operator or another nearby farmer. From there, it was possible to schedule the interviews. › use motorcycle to access the farmers
Farmers that are not recognized by the sprayers		› ask the local leaders or other farmers if they recognize the farmer › try to reach/contact the Technoserve (TNS) students that conducted the Pilot, to help locate the farmers and reduce attrition

Challenge	Impact	Mitigation measure
Long distance between the farmer's households		› where possible, use cars, in case the road it is not passable by car and depending on the availability, use motorcycle to reduce the distance
Constraints in access to farmer's households due to lack of appropriate roads for vehicles circulation		› the enumerators had to alternatively walk approximately 2 km (40 min) by foot (because the road was not passable by car and no motorcycle were available) to reach the farmer's household
Farmers with more than one ID	reduced the number of expected interviews in the area	› the enumerators were instructed to conduct one interview and use one ID
Household with more than 2 farmers (husband and wife)		› interview one farmer including the information of the couple (owned threes and other aspects) within the household
Unavailability of farmers due to travel/ illness/ change to other community		› return other day to check if the farmers returned; › track the farmers, although not easily found in new communities It was also possible to reach them by phone or if they returned to the community.

6 Recommendations

We suggest the following procedures:

- Ensuring the attrition rate is the lowest possible
  - mobilize the communities and respondents in advance of one week before the commencement of the fieldwork in that specific community.
  - With the help of the sprayers, farmers and local leaders update farmers address and telephone contacts.

- On how to minimize the flags
  - continue with daily meetings explaining the objective of each question and clarifying doubts held during the data collection,
  - include the conversation table (meters to hectare) in the field procedure plan,
  - include voucher picture in the field procedure plan,

- Ensuring the flags don't delay the field work
  - use three hours per day to solve flags,
  - continue sharing normal and back check flags daily,
  - create folders for the solved and unsolved flags.

- To avoid fraudulent cases
  - during the training sessions, sensitize the candidates to avoid this practice and include severe penalties such as, no longer working with COWI as result of these practices.

Appendix A Field Team

Field team			
#	**Team**	**Name**	**Position**
1	1	Jairezinho Orlando Álvaro Calisto	Supervisor
2		Ernesto Jose Antonio	Quality controller
3		Fátima Mussa Amade Momade Assuate	Enumerator
4		Juleca Ismael Sacuri	Enumerator
5		Ana Angelina Calieque	Enumerator
6		Quenito Antonio Inxala	Enumerator
7		Jordão Jose Geremias	Enumerator
8		Natacha Juma Henriques	Enumerator
9		Elias Agostinho	Enumerator
1	2	Nordino Arlindo Armando	Supervisor
2		Rui Pompilio	Quality controller
3		Cristina Amaral	Enumerator
4		Almentina Valeria Elias Muanica	Enumerator
5		Fatucha Jojo Jorge Jessenao	Enumerator
6		Páscoa Manuel Joaquim	Enumerator
7		Filomena Francisco	Enumerator
8		Manuel Ali Age	Enumerator
9		Ozias Floritos H. Ievassa	Enumerator

Appendix B Itinerary

Angoche

District	Administrative post	Community	Total of interviews	Starting date	Ending day	Team (supervisor)
Angoche	Namapondo	Namaponda-Sede	24	9.11.2021	10.11.2021	Nordino
		Namaponda-Sede	24	9.11.2021	10.11.2021	Jaerzinho
		Napuala	24	10.11.2021	11.11.2021	Jaerzinho
		Napuala	20	11.11.2021	12.11.2021	Jaerzinho
		Napuala	20	12.11.2021	13.11.2021	Jaerzinho
		Marrocane	65	13.11.2021	16.11.2021	Jaerzinho
		Marrocane	54	16.11.2021	18.11.2021	Jaerzinho
		Nakuzupa	12	19.11.2021	20.11.2021	Jaerzinho
		Mupaheia	4	19.11.2021	20.11.2021	Jaerzinho
		Mupaheia	11	19.11.2021	20.11.2021	Jaerzinho
		Comba	10	10.11.2021	11.11.2021	Nordino
		Comba	11	16.11.2021	17.11.2021	Nordino
		Comba	21	11.11.2021	12.11.2021	Nordino
		Comba	43	12.11.2021	14.11.2021	Nordino
		Comba	30	15.11.2021	16.11.2021	Nordino
		Nicuncune	4	21.11.2021	21.11.2021	Jaerzinho
		Nacore	14	21.11.2021	21.11.2021	Nordino
		Namazoco	8	20.11.2021	20.11.2021	Nordino
		Mavilika	41	17.11.2021	18.11.2021	Nordino
		Mavilika	32	19.11.2021	20.11.2021	Nordino

District	Administrative post	Community	Total of interviews	Starting date	Ending day	Team (supervisor)
General total			**424**			

Mogovolas

District	Administrative post	Community	Total of interviews	Starting date	Ending day	Team (supervisor)
Mogovolas	**Nametil**	Mwatavira	61	22.11.2021	24.11.2021	Nordino
		Mutharica	72	22.11.2021	24.11.2021	Jairezinho
		Mecutamala	15	25.11.2021	26.11.2021	Nordino
		Mulewa	10	25.11.2021	26.11.2021	Nordino
		Mulewa	25	25.11.2021	26.11.2021	Jairezinho
		Mulewa	27	26.11.2021	27.11.2021	Nordino
		Mabucos	10	26.11.2021	27.11.2021	Jairezinho
		Armazen 50	15	26.11.2021	27.11.2021	Jairezinho
	Subtotal		**235**			
	Nanhupo Rio	Nanhurio- Rio Sede	20	29.11.2021	30.11.2021	Nordino
		Nanhupo- Rio Sede	20	29.11.2021	30.11.2021	Jairezinho
		Nanhupo- Rio Sede	28	30.11.2021	01.12.2021	Nordino
		Nanhupo- Rio Sede	36	30.11.2021	02.12.2021	Jairezinho
		Nanhupo- Rio Sede	2	30.11.2021	02.12.2021	Jairezinho
			31	01.12.2021	02.12.2021	Nordino and Jairezinho
	Subtotal		**137**			
	General total		**372**			