Photo: WFP/Déborah Nguyen

Climate Services Needs Assessment Mozambique

An understanding of existing services and dissemination channels and needs for the design of climate services for agriculture for an Integrated Climate Risk Management package.

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Method Overview

To design an appropriate climate service package, it is important to consult farmers as the principle and final users of the information, understanding their current and preferred use of information is necessary part of this assessment.

This aims to understand the available climate information reaching farmers, the type of information they deem important, information lead time, the preferred format and channel of delivery as well as the scale and usage of information. These factors are disaggregated in this assessment based on the assignment of Control and Target Groups as well as Sex of the head of household.

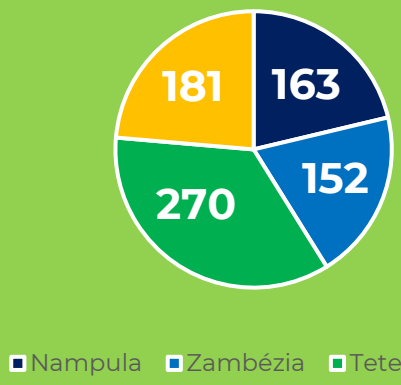
To successfully role out this needs assessment a clear methodology is presented which touches base on the logical framework from which the project will deliver the expected change in the communities which will receive these services, and lays ground for the operational plan which will guide the execution of this exercise.

Following the model used to survey farmer households in the climate needs assessment done in Tanzania and Malawi (Coulibaly, Kundhlande, Tall, Kaur, & Hansen, 2015), this needs assessment which will be done for Mozambique will adapt this model to fit the Mozambican context.

Demographics

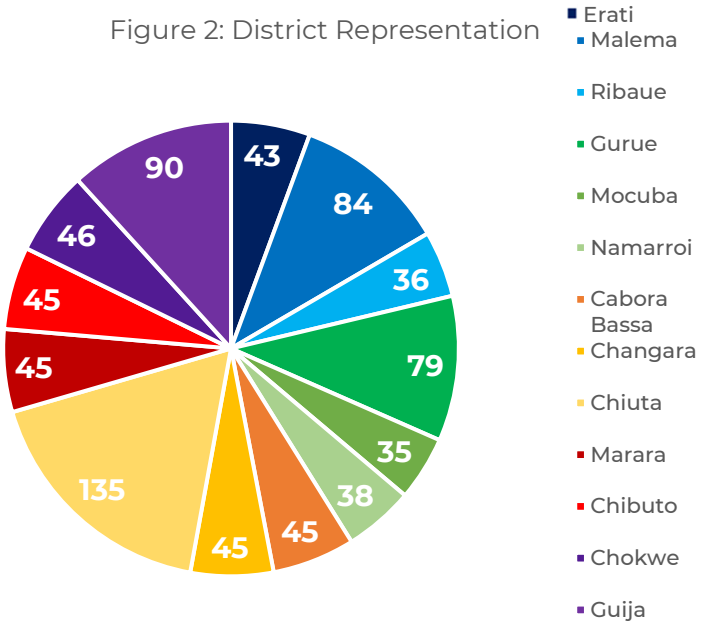
The Climate Needs Assessment Survey was conducted in March 2020, with 766 participants throughout four provinces in Mozambique. As shown in the figure below Participation was evenly divided throughout these provinces, with slightly more participants appearing from Tete (270) than Gaza (181), Nampula (163) and Zambézia (152). The study was made to capture a 95% Statistical significance of global results for the population of 5,179,842 living under the livelihood and agroecological zones considered for this study.

Figure 1: Provincial Representation

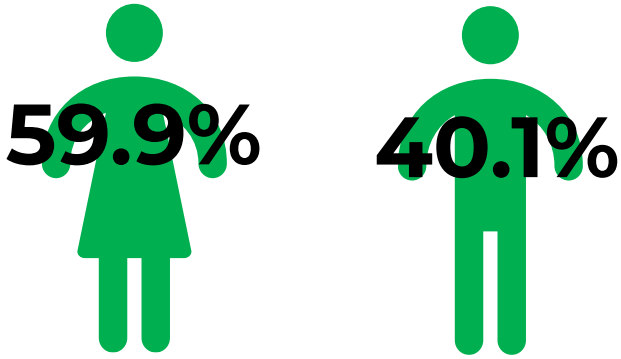


When further sub-classified by district, as seen in the figure below, participants were mostly from the Chiuta district (17.6%), followed by Guija (11.7%) and Malema (10.9%).

Figure 2: District Representation



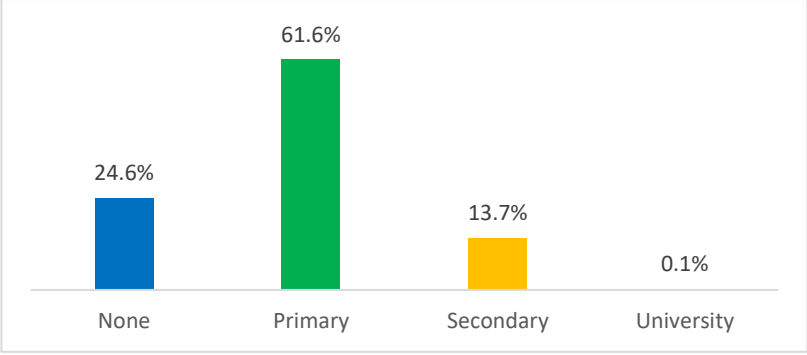
More female headed households appeared in the sample than male headed households as with the graphic below.



A significant majority (92.2%) of the participants were engaged in Farming as their primary livelihood activity. Out of the remaining group: 5.4% are engaged in Informal Work, 1.2% are engaged in Home & Family Care, 1.0% are engaged in Formal Work and 0.3% (or just two participants) are engaged in Livestock Management.

As with Figure 3 below, the majority of the participants highest academic level is primary school (61.6%), followed by None (24.6%), Secondary School (13.7%), University (0.1%) and none attended Technical School.

Figure 3 Highest Academic level



Target Districts

As with the study design, districts were assigned to either Target or Control groups with those assigned to the Target group receiving direct climate services information whilst the Control group will not. This analysis aims to provide insight into the Climate Services Needs of the groups prior to the intervention. The table below outline how districts were assigned. At the time of this assessment It Is Important to state that Changara, Chokwe and Chibuto were already receiving climate services through the R4 programme with Participatory Integrated Climate Services for Agriculture and the dissemination of meteorological and agro-meteorological bulletins., through private and public extension support, so some bias could be attributed to the delivery of this service.

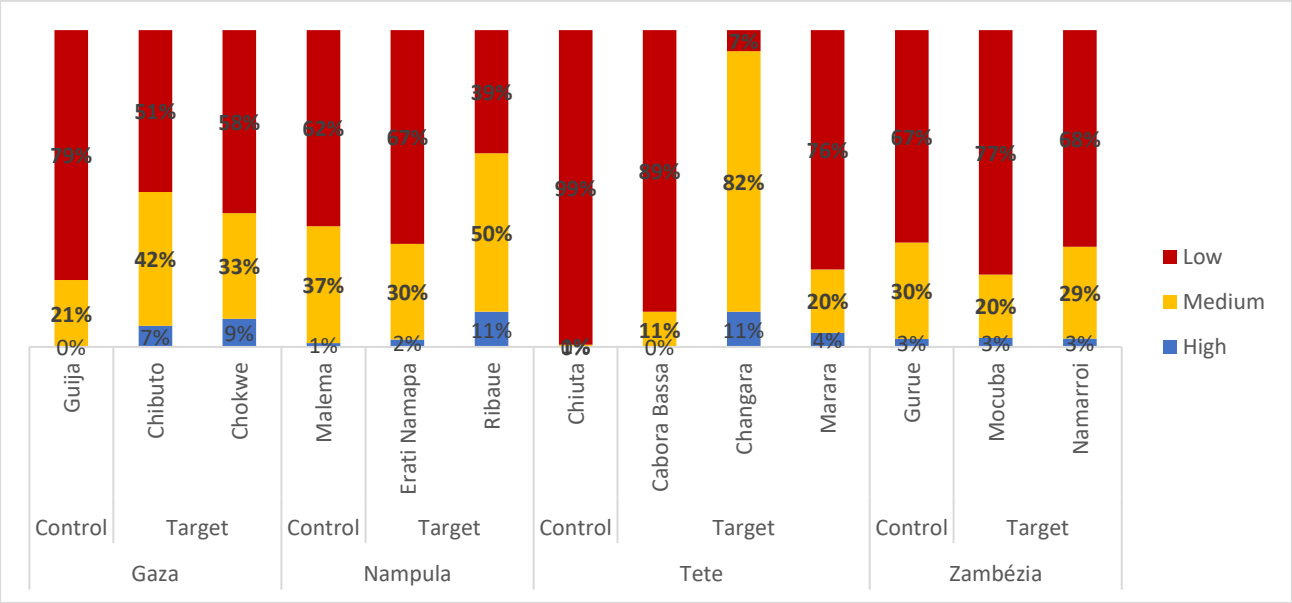
Province	District	Category
Nampula	Erati	Target
	Ribaue	Target
	Malema	Control
Zambezia	Namarroi	Target
	Mocuba	Target
	Gurue	Control
Tete	Cahora bassa	Target
	Marara	Target
	Changara	Target
	Chiuta	Control
Gaza	Chokwe	Target
	Chibuto	Target
	Guija	Control

Table 1: Target Districts

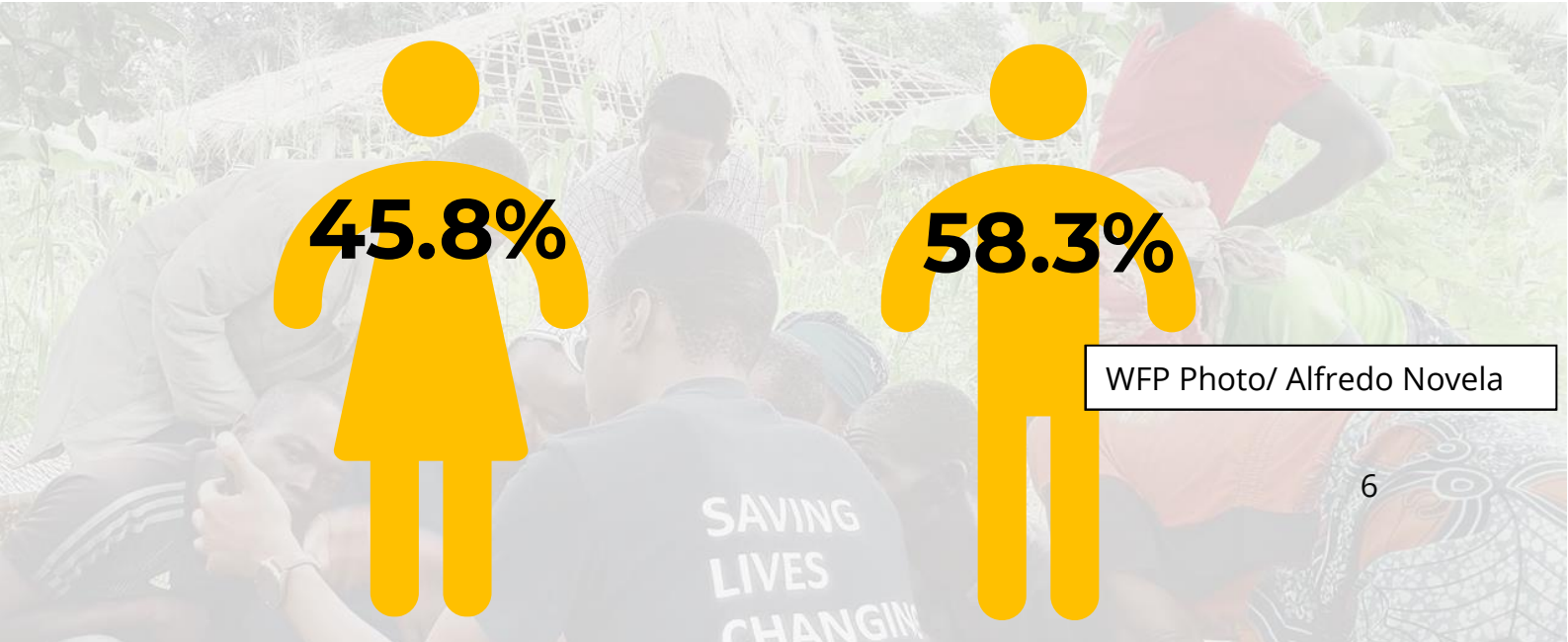
Awareness of Available Climate Information

Awareness of Climate Information for Agriculture differed across the Target and Control groups. As seen in Figure 4, more participants in the Control group were self-described as having Low awareness.

Figure 41Awareness of Available Climate Services



More participants in the Target groups were self-described as having a Medium or High awareness when compared to the Control. Importantly, this trend still shows that 69.5% of the total sample describe their Climate Information Awareness as Low. The Target and Control groups were asymmetrical for Receiving Climate Information. 65.6% of the Target Group received Climate Information whereas only 36.3% of the Control Group currently receive Climate Information. When disaggregated by sex, more Male headed households receive Climate Information than Female headed households seen in the graphic below.



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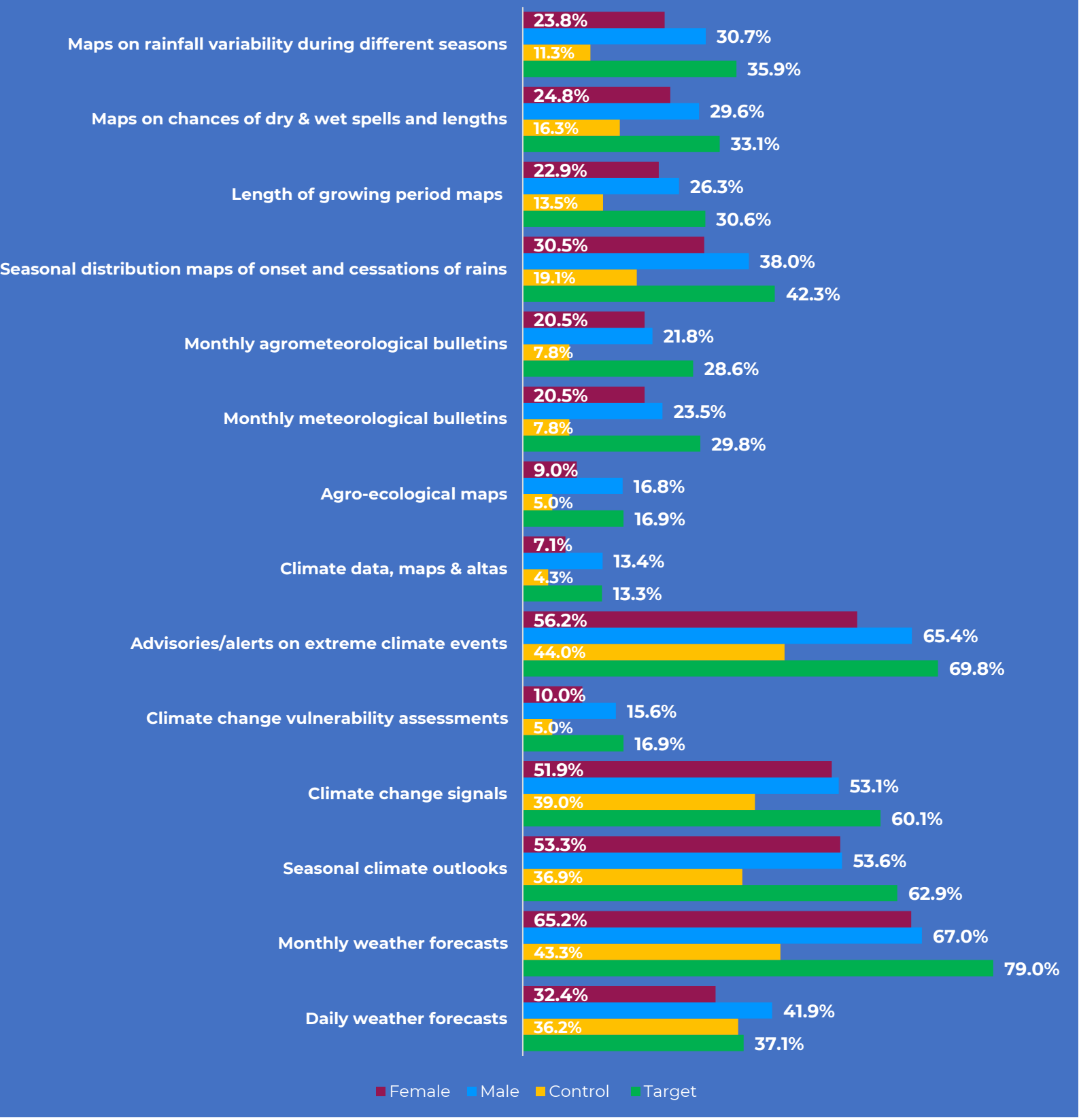
Climate Information

Across all groups of the sample who did receive Climate Information, these groups mostly made use of Monthly Weather Forecasts, Advisories/Alerts on Extreme Weather events, Seasonal Climate Outlooks and Climate Change Signals. As with Figure 6 below, Female headed households show a lower proportional uptake of Information compared to Male headed households.

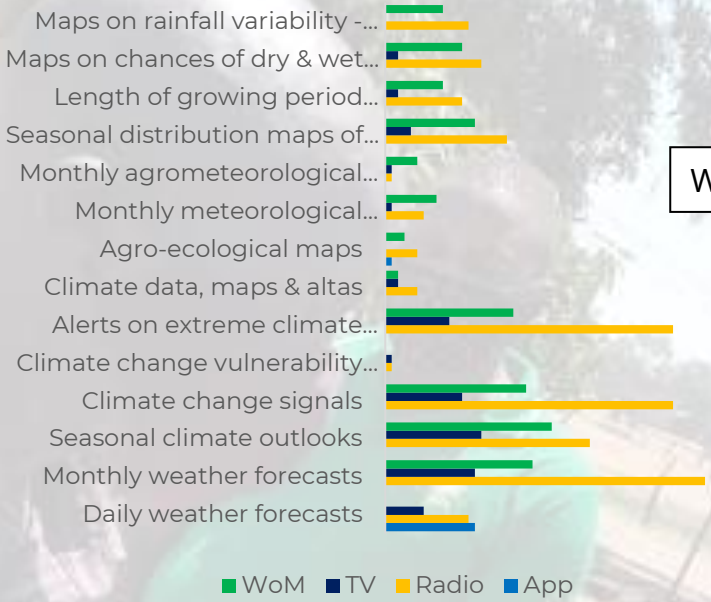
Figure 6: Current Information Received



Climate Sources

The main sources of Climate Information by group appear on the next page as figure 7 and 8. The main sources for the Target group, NGOs, Radio and Extension Agent Visits. By comparison, the Control group are reliant on the flow of information as Word of Mouth, Radio, TV and – in the unique case of Daily Weather Forecasts – the use of Apps.

Figure 7: Control Group Sources



WFP Photo/ Pedro Chilambe

Figure 8: Target Group Sources