



**Report of:**

**SOCIOECONOMIC BASELINE ASSESSMENT OF  
BUILDING A BLUE FUTURE FOR ECOSYSTEMS  
AND PEOPLE ON THE EAST AFRICAN COAST  
PROJECT**

**Final**

Conducted by:



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**List of acronyms**

- ADPP Aid for the Development of People for People
- AMA Associação do Meio Ambiente
- CCP Conselho Comunitário de Pesca (Community Fishing Councils)



FGD	Focus Group Discussion
GAM	Gender Analysis Matrix
GBV	Gender Based Violence
KII	Key Interview informants
MPA	Marine Protected Area
NGOs	Non-governmental organizations
UEM	Universidade Eduardo Mondlane
WCS	Wildlife Conservation Society



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# I. Executive Summary

## (i) Objectives and Methods

The purpose of the socio-economic baseline study was to measure socioeconomic impact and outcome level indicators of the program's Logical framework and other qualitative relevant information to inform the status of the communities subject to the program's intervention. The socio-economic baseline survey followed a quasi-experimental design for measurement of socioeconomic indicators in the zone of influence, in districts of Memba, Mossuril and Nacala-Velha and in a reference site associated to communities of Nacala-Velha outside the intervention area. Data was collected using combined methods, desk review, household surveys (1,599 respondents), key informant interviews (28) and focus group discussions (309 respondents, 151 male, 158 female). Ethical principles were observed, including prior consent, full explanation, free participation, privacy, anonymity.

## (ii) Main Findings

Perception about Natural Resources Governance Bodies: Asked about which decision-making bodies on access, use and management of coastal and marine resources exist in the community, about 57.1% said CCP, 12.9% said Capitania, 4.7% mentioned combination of two or more among CCP, Capitania, Marine Policy, IDEPA, Community Leaders, SDAE. About 16% said there is none. About 41.1% respondents said they don't have information about legislation and policies regulating natural and fisheries or marine resources.

Indicator G2: More People in The Project Intervention Areas Benefit from Improved Ecosystem Services Supporting Adaptation to Climate Change: Results reveal that most interventions are isolated and of short durations. Few respondents, 11.3% among intervention sites and 16.7% for reference, reported a package of interventions comprising protection of seagrasses, mangroves and coral reefs. More specifically:

- ✓ Only 19.7% claim that their community has benefitted from a seagrass protection project/program and the responses are consistent among intervention and control area;
- ✓ About 21.6% of respondents stated that their communities have benefitted from protection of coral reefs project, 18.8% in reference sites and 22.5% in intervention sites;
- ✓ Almost half (49.8%) respondents declared that their community has benefitted from an intervention in mangrove conservation.

Livelihood conditions of affected households in project intervention areas: Respondents estimated their current monthly incomes, averaging 4,349.1Mt and a median of 3,200.0Mt. The main livelihood mentioned by respondents are: farming (93.8% in intervention and 96.2% in control area); fishing (83.3% in intervention and 77.4% in control area); collection of marine resources (55.0% in intervention and 63.8% in control area); fish seller/trader/processor (57.0% in intervention and 54.5% in control area);





Benefits from Interventions of Livelihoods: More than half (71.7%) respondents either were not aware or not sure about any projects in their community focused on improving livelihoods in the last years. Only 28.3% over all respondents declared that there are such project in their communities. Only 14.9% stated that there were projects implemented which have contributed to an increased income or availability of food, with higher frequency in 24.7% in Memba.

Access to loans: Only 36 (6.8%) respondents affirmed that their household has access to loans. The few (36) respondents who claimed to have had loans got it mainly from neighbors, friends or relatives.

Indicator G4: at the end of the project, substantially more households affected in project intervention areas have a positive attitude towards marine biodiversity, restoration and protection of mangroves, seagrass and coral reefs

Respondents were asked about their attitude towards the establishment of sanctuaries and restricted areas for fishing. Counting respondents who consistently provided positive attitudes towards each of the following conservation measures: (i) establishment of sanctuaries and restricted areas for fishing; (ii) seasonal close of certain fishing areas; (iii) restricting people from walking in certain areas; (iv) habitat restauration measures; (v) restrictions in catches and collection of certain species; (vi) restrictions from catching some size of fishes; (vii) limit in number of people authorized for fishing per fishing zone; overall, 46.45 provided positive response to all conservation measures (45.8% for intervention and 48.5% in the reference site). Presumably some respondents might have provided response in favor of conservation measurements, knowing what the project objectives are, even not necessarily supporting due to potential restrictions in use of resources it might imply, because they expect benefits. They will be checking if their expectations are met or not. It is also possible that they were not fully aware of potential restrictions.

Indicator O1.2: villages are more resilient to climate change: FGD participants regarded the months of January, February and March as ones in which they experience challenges in having enough food. Respondents mentioned following effects of climate changes causing decline of their livelihoods condition: Increased frequency and intensity of cyclones/strong winds (66.9%), Decrease or disappearance of fish species (54.5%), Degradation of fish habitat (53.2%) and about a quarter said Fish migration (28.6%), Soil erosion and impoverishment due (24.2%), Increased pests and diseases in plants and animals (24.2%). Only 25% of respondents have ever have access to training in coastal marine resource management and adaptation to climate change, with 17% among women.

Indicator 2.3.3b: # males and females benefiting from improved water security: Slightly more than half respondents (57.7%) affirmed that their communities have access to water for drinking, domestic use and for farming, with lowest percentage in intervention communities of Nacala-a-Velha (39.0%).



**Basic Necessities Survey (BNS):** The overall BNS was 34%, which is equivalent to the average percentage of people who own the listed basic necessities. Households headed by women and by youth had a lower rate compared to ones headed by male and adults, respectively.

**Land Tenure and Conflicts:** More than half (52.5%) are insecure about community land tenure, because they allegedly have lost portions of their community land or they fear future threats that may result in losing lands (table 35). Asked about the source of threats they perceive which lead to loss of community land, they mentioned: government decisions, investors, community leaders. About more than half (65.0%) stated that they are worried to some extent on the land tenure of their families. In fact, about 27.8% of respondents stated that they have experienced land conflicts and out of 155 conflicts reported, 39 had not been resolved until the date of the survey.

Asked how they characterize women's current level of influence in community land decision-making over community land issues, about 40.8% said women have no influence, other 43.5% stated that women had some, but limited influence compared to man.

About 38.3% said women have no influence in decision-making on family land, 47.7% said women have less influence compared to men. About 49.3% of female respondents stated that women have no influence and 34.9% said women has limited influence compared to men.

**Vulnerability Matrix:** The feedback shows that the most important hazards are floods, droughts, strong winds/cyclones, erosion, sea level changes, salinization of boreholes water.

**Historical Timeline of Climate Hazards Events:** Participants of FGD of Memba, Mossuril and Nacala-Velha, were asked to recall historical events in the past decades, and record climate hazards per year. The analysis of historical occurrences of extreme weather events in the three districts covered by the study shows that these communities have been affected by frequent heavy rains and strong winds/cyclones are followed by drought/irregular rains.

**Resource & Hazard Mapping:** These climatic events have a great impact on the main economic activities, such as fishing, farming, marine and forest resources use, as well as on the availability of water for consumption.

**Seasonal Calendar:** Participants in the FGD sessions reported a series of changes they have observed over the last few decades, most of which were related to climate change. These included: delayed and shorter rainy season from November-February to January-February and reduced amount of rainwater; longer period of higher temperatures, throughout the year. The hot season lasts longer without rain. Lately, the tides invade the shores, taking with them some fish placed to dry along the beaches.

**Perceived Trends in Catches and Current Management of Fisheries:** Fishermen have observed a decrease in the abundance of fishing resources in the sea, namely: shrimp, horse mackerel, billfish, sardines, swordfish, stone fish and grouper are disappearing. For example: the total catch of artisanal fishing vessels in Lunga was 20tons/day. In recent years it has reduced to 100kg/day (CCP



Lunga). Average yields are around 30Kg/fisherman/day for artisanal fishing using trawl, gillnet and seine gear (CCP Namapiri).

Feedback from FGD and Key informants in the districts of Memba, Mossuril and Nacala-a-Velha reveals that, in general, there are no plans for establishing/managing conservation areas for mangroves, seagrasses and corals (eg. Mossuril – Lunga, Namapiri). There have been few community initiatives led by CCPs and support from OIKOS, whereby they voluntarily create marine protection zones, such as: In Lunga (Terene and Namuco), Namapiri (Nikula, Nkiva/Giva and Eponta).

Challenges Experienced by CCPs: Limited equipment to carry out enforcement, including chasing offenders with more powerful vessels, CCPs not officially registered, lack of monthly remuneration/incentives, lack of transport to go to the most distant fishing areas and carry out inspections; perceived bribes practices.

### (iii) Recommendations

Attitude towards marine biodiversity, restoration and protection of mangroves, seagrass and coral reefs:

- Raise awareness among bodies responsible for designing laws and/or developing marine and coastal resource management plans and the community in general for greater involvement of women in designing laws and/or developing marine and coastal resource management plans;
- Training or giving lectures on legislation and regulatory policies and management of marine and coastal resources;
- Create a partnership with community radios to create a program with the aim of disseminating legislation and regulatory policies and management of marine and coastal resources.

### Fishery Management

- Support/train CCPs in designing a fisheries and coastal resources management plan;
- Support the CCPs with means of transport and boats to carry out inspections;
- Raise awareness among CCPs to discourage the practice of bribes to facilitate illegal fishing;
- Support law enforcement by providing patrol boats to cover the entire areas of the district;
- Construction of infrastructure for CCP headquarters, supply of identification material such as vests;
- Create a market for selling fish, create connections with good buyers; For example, create fairs selling fish or seafood; Help organize the market, to stipulate price lists for all fishermen.

### Livelihood conditions:

- Financing of alternative livelihood activities, for example cake business, production and sale of juice.



- Make partnerships with financial institutions to facilitate access to credit for project beneficiaries;
- Train project beneficiaries in developing business plans and managing finances;
- Support creation of saving groups;
- Finance businesses specifically for women such as selling cookies, meals, encourage women to sell their products at fairs;
- Support women business in commercialization of fish, provide means of fish conservation, such as cold systems, production of ice for sale, coolers for transporting and handling fish during sale;
- Other business suggested sale of clothing, stalls selling food and nonfood items (biscuits, soap, oil, fuel)
- Implement agriculture projects (market oriented and climate smart approach), which will increase access to inputs, tools and technical assistance;
- Advocate or assist local community members to access jobs; Prioritize local community members in jobs that will emerge in the conservation area;
- Create conditions to have electricity (solar panel) for everyone in the community;
- Support initiatives to establish farmers association.

#### Resilience to climate change:

- Raise awareness among beneficiaries to intensify the combination of fishing with the production of different crops and other sources of income to guarantee food security throughout the year;
- Train project beneficiaries in measures to prevent, adapt and reduce the effects of climate change;
- Create a link between project beneficiaries and sellers of fishing tools and agricultural inputs
- Improved water security
- Support the government in expanding drinking water sources and creating community water management committees.



## Land Tenure

- Train the community in the prevention and management of land conflicts;
- Create a partnership with the government to facilitate the assignment of DUATs to the community;
- Hold lectures to publicize land conflict resolution bodies;
- Raise awareness among communities about the importance of women having access to land and other natural resources.



## 2. Introduction and Background

The shorelines of Mozambique contain some of the most biodiverse marine systems in the world—mangroves, seagrasses, and coral reefs—that support the livelihoods of millions of people and are increasingly in need of protection and sustainable management in response to impacts from human activity and climate change. The Blue Future Project aims to support the Mozambican Oceanographic Institute (InOM) to develop and submit to the Mozambican Government a proposal and create a new, sustainable-use MPA in the coastal area of the Districts of Momba and Mossuril—covering an area of at least 1,000 km<sup>2</sup> and potentially much larger—that includes a network of well-operated community-managed fishing areas.

The project will also focus in enhancing priority ecosystem services through ecosystem-based adaptations that reduce vulnerability and increase resilience of local communities to climate change impacts, aid coastal protection and support resource-based livelihoods, especially fisheries, contributing to national climate and conservation targets. Specific project outcomes include: (1) improved resilience of climate relevant ecosystems through increased protection and management; and (2) improved resilience and enhanced livelihoods of the most vulnerable communities.

## 3. Objectives

The purpose of the socio-economic baseline study was to measure socioeconomic impact and outcome level indicators of the program's logical framework and other qualitative relevant information to inform the current status of the communities subject to the program's interventions, and assess, in last year of the project, which impacts these interventions had on the local communities.



## 4. Baseline Design and Methods

The socio-economic baseline survey followed a quasi-experimental design, which involved measurement of socioeconomic indicators in the zone of influence. The fieldwork was carried out between April 19 and May 5, 2023 being 19 to 27 of April in the district of Mossuril, 27th to 30th in the district of Memba and 2nd to 5th of May in the district of Nacala-a-Velha. A total of 16 days of research was carried out in the study area by 7 male and 7 female respondents.

The fieldwork methods used were: household surveys, focus group discussion and questionnaire to key informants. These methods are described in the subsections below and each is designed to inform the indicators that were included in the project logframe.

### 4.1 Household Survey

The survey questionnaire (attachment 1) included close-ended questions that are quantitative in nature. It was split in two queries to measure (i) socioeconomic indicators and (ii) BNS, (iii) land tenure, and (iv) climate change. All queries had common general socio-demographic questions, including livelihood activities. Close-ended questions helped measure tangible variables, while a few open-ended questions helped to gather explanatory information behind specific occurrences. The survey was performed on Android tablets, using an application known as KOBO TOOLBOX.

The sampling for household's survey followed three main stages:

- I) Total sample size determination: The survey was split into three queries, namely Indicators Query, Gender query and BNS & Land Tenure. Sample size was calculated for each query, considering 95% of confidence and error margin of 5%, and then the total sample was a combination of samples of each query. The minimal sample size for each query was 383, thus a total of 1,149 samples was conducted. In addition, a comparison group was assigned with equal sample size of each of the questions mentioned above, thus 383 samples. In total, the planned sample, combining intervention area and comparison one, was comprised of 1,502 samples.
- II) Sampling of village per district: First, the number of communities to be interviewed was proportional to the total number of communities within intervention area per district. Thus, 21 communities were randomly selected out of 61 communities within the intervention area and five communities were selected for comparison. A sample was allocated proportionally to number of communities per district (table 1).

- III) Selection of communities and allocation of sampling size: the number of communities calculated per district, as explained above, was selected randomly based on a systematic random sampling, by selecting names of communities from a list, based on fixed interval, starting from a random number, between one and sampling interval. Then, the sample size was allocated to each community, totalizing the sample size allocated per district.

Table 1: Number of communities per district

Districts	List of sampled communities	Sample Size Allocated
Memba	Baixo Pinda, Fungo, Mauco, Mitembe, Mutare, Namata, Napila	417
Mossuril	Anduce, Cabaceira Grande, Cabaceira Pequena, Chikoma, Holoca, Krussi, Lapuela, Muanangone, Munhohola, Rathane, São João	659
Nacala-a-Velha	Mujo, Mussenqua, Pangane	125
Total Sample for Intervention Area		1201
Sample for Intervention Area (Nacala-a-Velha )	Nampazo, Cachiche, Massigirine, Nachiropa, Naculue, Naphela	398
Overall Total Combined Sample Size		1599

- IV) Selection of survey respondents

Respondents were recruited in each of the sampled villages, for the two domains, intervention vs comparison areas, based on inclusion criteria, as shown in table 2 below.

Table 2: Criteria for the selection of respondents

Domains	Inclusion Criteria
Zone of Intervention	<ul style="list-style-type: none"> <li>✓ Be resident in communities within project implementation of Memba, Mossuril and Nacala-a-Velha at least during last 12 months;</li> <li>✓ Be user of coastal and marine resources.</li> </ul>
Comparison zone	<ul style="list-style-type: none"> <li>✓ Be resident of Nacala-a-Velha district, in communities out of intervention at least during last 12 months;</li> <li>✓ Be user of coastal and marine resources</li> </ul>

Efforts were made to identify female and male respondents, in both communities within areas of intervention and those for comparison.





## 4.2 Focus Group Discussions

A combination of participatory tools was adapted to conduct Focus Group Discussions (FGD) namely: resource & hazard mapping, seasonal calendar, historical climate hazard timeline, vulnerability matrix and Harvard gender analysis framework (table 3).

Table 3: Topics Discussed in FGD

<b>1) Likelihood activities</b>	Participants discussed about their livelihood, including alternatives to fishing
<b>2) Resource &amp; hazard mapping</b>	Participants created a map of local habitats and livelihood resources as a basis for discussion about climate hazards affecting each.
<b>3) Seasonal calendar</b>	Participants created a seasonal calendar of farming, fishing and other activities as a basis for discussion about how they are affected by extreme dry season or wet season weather events, and perceptions of change around seasonal climate.
<b>4) Historical timeline</b>	Participants (elders) created a timeline of major national and local events as a basis for discussing historic climate events (e.g. cyclones, droughts), how they affected the community and how people coped or adapted.
<b>5) Vulnerability matrix</b>	Participants inserted (i) main livelihood activities and (ii) the greatest hazards to each, into a matrix, and rate the hazards on a semi-q scale. This helps to contextualize climate hazards amongst other hazards.
<b>6) Harvard gender analysis framework</b>	Participants answered questions about: <ul style="list-style-type: none"> <li>✓ men and women roles,</li> <li>✓ occupation in 24 hours,</li> <li>✓ seasonal calendar, and how they are affected by climate change and natural hazards.</li> </ul>

A total of 309 people (151 male, 158 female) participated in 27 sessions of focus group discussion in the districts of Mossuril, Memba and Nacala-a-Velha. The FGD was facilitated by four team members, in two groups of two males that worked with male groups and one of two females that worked with female groups.



Figure 1: Photos of focus group discussion sessions

Numbers of FGD held per district, community, sex and thematic area are shown in table 4.

Table 4: FGD Participants

District	Sex	Participants Per Topic			
		Vulnerability and capacity analysis	Gender roles in access, use and management of resources, vulnerability	2) Seasonal calendar and historical timeline	2) Seasonal calendar and vulnerability matrix
Mossuril	Male	26	24	12	12
	Female	25	25	12	12
Membra	Male	24	12	20	9
	Female	12	24	12	12
Nacala-a-Velha	Male	0	0	0	12
	Female	0	12	12	0
Number of Sessions		7	8	6	5
Number of participants		87	97	68	57



### 4.3 Key Informant’s Interviews

A total of 28 key informants were interviewed, including the SDAE (3), CCP (10), SDPI (2) environment department and community leaders (13) in the districts of Mossuril, Memba and Nacala-a-Velha (table 5). Key informants’ interviews were based on a guide with open questions, which helped exploring opinions from experts, authorities and people with knowledge about local consent about: (a) livelihoods, (b) access to, use and management of marine and costal resources for men and women, (c) climate change effects and resilience efforts, (d) attitudes about creation of marine conservation area..

Table 5: Key Informants Interviewed

District	Memba	Mossuril	Nacala-a-Velha	Total
Government officials SDAE	1	2		3
Government officials SDPI	1	1		2
Community leaders	4	6	3	13
Leaders of CCP/ fishers’ organizations	4	5	1	10
Total Key Informants	10	14	4	28

### 4.4 Data Quality Assurance

An inception report, developed in English was discussed and approved by ADPP. A research protocol was developed, submitted and approved by WCS’s Internal Review Board (IRB) for ethical considerations. All team members were trained in Social Safeguards & Social Sciences by the senior consultants who attended the two-week training on Blue Future project’s social and environmental safeguards and on socio-economic surveys Including in the BNS and the Natural Resource Government Tool (NRGT) provided by WCS senior staff in November 2022 in Nacala-Porto

Data collection was supervised by senior consultants with adequate and complementary expertise and experience. Twelve (12) enumerators (6 male, 6 female) with relevant education and experience were hired and trained. The training was provided in two days (April 13 and 15) at ADPP Office in Nacala Porto and covered: briefing on Blue Future project, objectives of the study, familiarization with tools, discussion and interpretation of questions in local language (Makua), interview practice in pairs, data record into the tablets using Kobo Toolbox and submission to the cloud-based database.



The team adopted the following strategies of data quality control:

- Surveys conducted with tablets, with control mechanism to reduce data omission and inconsistency and restrict data access to uploaded data;
- A pilot survey was conducted on April 17 in Mossuril, community of Chocas Mar;
- Supervisors assisted and oversaw enumerators throughout the entire survey activity;
- Supervisors performed daily meetings, regular data checks, discussed and synthesized feedback notes from focus groups discussions and key informant interviews;
- End day meetings with the whole team to check completed household interview, submit data in the cloud, verify notes from FGD's and key informants and;
- Team leader and supervisors downloaded a partial database to check data completion, structure and trends to spot issues that might need immediate correction in the field.

## 4.5 Ethical Considerations

Prior to data collection the assessment team members attended a one-hour training on ethical/social safeguards that should be considered during surveys. The training was facilitated by WCS and Moz Target officials who attended the previous training on Social and Environmental safeguards and socio-economic surveys, by WCS in November 2022. A credential letter was issued by WCS, explaining the objective of the assignment and providing a list of team members. This letter was presented to the district government and community leader prior data collection.

The ethical norms to be observed included:

- ✓ The household interviews and FGDs were held in local language (Makua), whereby two male team members conducted male FGDs and two female team members conducted female FGDs;
- ✓ Free participation (right of accepting or refusing) participating in the assessment. Full information on the research was provided to participants and they were given the opportunity to accept or refuse to participate;
- ✓ Privacy (non-disclosure of contacts): it was made sure that personal details would not be disclosed to any person, besides the survey team;
- ✓ Confidentiality (non-disclosure of content out of research team): during data collection no names were registered. All information reported by community members was used only for the baseline purpose.

## 4.6 Data Analysis



At the end of the data collection, a household survey database was generated from KoboCollect application and converted to Microsoft Excel where the data cleaning was carried out (removal of outliers). Statistical applications such as SPSS Version 26, STATA Version 17, and Excel were used to calculate the indicators, generate frequencies and averages. The statistical analysis included: descriptive statistics, calculations of simple frequencies and cross tabulation to provide values of indicators with specific disaggregation such as per sex, age, geographic location. Data from different sources was triangulated, namely survey, focus group discussion, key informants, secondary data and the present report was written.

## 4.7 Study Limitations and Challenges

The main challenges found during the fieldwork were the following:

- At the time of data collection, the Lunga administrative post did not yet have an ADPP/WCS technician on site to facilitate the identification of the villages selected for data collection. To resolve this difficulty, the strategy of working with a SDAE technician was adopted;
- Two villages (Yahaha in Memba and Napazo in Nacala-Velha) randomly selected for data collection are no longer inhabited, making interviews in these villages impossible. As a solution, other villages that are also part of the project's intervention area were selected to replace them. The settlement of Yahaha was replaced by Mutare and the settlement of Napazo was replaced by the settlement of Massingirine.



## 5. Baseline Findings

### 5.1 General Socio-Demographic Characteristics

#### 5.1.1 Population of Project Intervention Area

Blue Action project covers three districts Memba, Mossuril and Nacal-Velha. This subsection provides a brief description of geographic location as well as general population demographics.

Memba is located in the extreme north of the province of Nampula, with a surface area of 5,250 Km<sup>2</sup> which corresponds to 6.4% of the surface of the Province with a population density of 41.5h/km<sup>2</sup>. According to the 2017 General Population Census, Memba district has about 328,460 inhabitants (381,014 in 2023 assuming a growth rate of 16%) of which 52% are women. The young population and the majority being 51% population aged 0-14 years, 8% aged 15-19, 32% aged 20-49 and 9% aged 50 and above.

Mossuril has an area of 3,463km<sup>2</sup> and an estimated population of 174,641 in 2017 (202,584 in 2023 assuming a growth rate of 16%) of which 52% are women. The young population and the majority being 48% population aged 0-14 years, 9% aged 15-19, 32% aged 20-49 and 11% aged 50 and above.

The district of Nacala is located on the coast, 210 km from Nampula, bounded to the south by the district of Mossuril, to the east by the Indian Ocean, to the north by the district of Memba and to the west by the districts of Erato and Monapo, with an area of 1,169 km<sup>2</sup>. It has an estimated population of 121,726 in 2017 (141,202 in 2023 assuming a growth rate of 16%) of which 52% are women. The young population and the majority being 49% population aged 0-14 years, 9% aged 15-19, 32% aged 20-49 and 10% aged 50 and above.

The Blue Action project covers a total of 55 coastal communities, located in 6 administrative posts in the districts of Memba, Mossuril and Nacala Velha. Data collected from the villages authorities in August 2023, indicate that the population within the Blue Action intervention area comprises: 44,296 households, 147,553 people and the total number of fishers were estimated at 37,857 (table 6).

Table 6: Population Size of Project Target Area

District	Administration post	Village / Fishing Center	Nr of Households	N° of Inhabitants	Nr. Of Fishers	
Mossuril	Mossuril Sede	Namiripi (inclui São João)	679	3,470	2,262	
		Cabaceira Grande	701	7,026	1,090	
		Chocas Mar	12,021	14,664	4,300	
		Cabaceira Pequena	582	3,820	1,220	
		Mingurine	4,000	10,081	87	
		Quissanga	522	5,010	100	
		Nanthoa	301	2,809	67	
		Saua saua	709	6,258	53	
		Rathane	298	3,000	102	
		Namalaza I & II	171	921	680	
	Lunga	Namuco	470	973	786	
		Olutuni	160	821	680	
		Lapuela	460	969	780	
		Khiulane	780	3,200	3,150	
		Ampita_Macumano	230	780	565	
		Muanangone	589	1,692	1,585	
		Mutomonho	330	1,780	783	
		Muitiquiti - Nandja	1,090	2,310	1,970	
		Muaconi	523	2,200	800	
		Holoca	700	1,100	500	
		Lagua	255	1,273	550	
		Matibane	Chikoma	1,443	10,146	5,342
	Nifukeniculo/Metacane		1,700	3,700	1,000	
	Anduce		569	2,786	1,550	
	Namalungu/lwia		260	14,470	205	
	Munhohola		823	14,449	950	
	Mugigavava		280	1,158	904	
	Krussi		606	2,864	2,000	
	Sub total Mossuril			31,252	123,730	34,061



District	Administration post	Village / Fishing Center	Nr of Households	Nº of Inhabitants	Nr. Of Fishers
Membra	Membra Sede	Fungo	1,020	4,378	310
		Nathaca	360	2,318	55
		Naminambo	330	995	95
		Mauco	210	912	40
		Mitequereque	220	1,769	60
		Nanqueca	560	2,636	130
		Mitembe	121	1,768	95
		Namare	75	150	19
	Niaca - Geba and Baixo Pinda	Nacapa	653	3,266	2.054
		Napila	496	2.480	1.700
		Tuco	594	2.970	1.840
		Mutare	309	2.060	1.260
		Yahaha	607	2.216	1.216
		Geba	3,481	17.406	10.327
		Micolene	446	2.234	1.234
		Baixo Pinda	1,132	5.661	3.483
		Megane	-	-	-
		Farrol	-	-	-
		Namata	675	3.375	2.270
		Wepane	492	2.464	1.246
Fica	222	1.113	548		
Sub total Memba			12,003	18,192	1,352
Nacala-a-Velha	Nacala-Velha	Mussenqua	197	684	509
		Pangane	199	1,456	422
		Racine	205	1,213	607
		Mussambine	176	901	399
		Mujo	153	790	206
		Chalau	111	587	301
	Sub total Nacala-a-Velha			1,041	5,631
Grand Total for the Whole Intervention Area			44,296	147,553	37,857



## 5.1.2 Characteristics of the Survey Respondents

From the 1,599 respondents, 781 were female (48.8%) and 818 were male (51.2%). Among the survey respondents, 58.0% are young people aged between 18-35 and the remaining 42.0% are adults over 30 years old (table 7)

Table 7: Respondents per district, sex, in intervention and comparison domains

Disagregation District	Sex of repondents				Total	% among Beneficiaries
	Female		Male			
General	781	48.8%	818	51.2%	1599	
Memba	198	25.4%	219	26.8%	417	34.7%
Mossuril	323	41.4%	336	41.1%	659	54.8%
Nacala-a-Velha	61	7.8%	64	7.8%	125	10.4%
Nacala-a-Velha (Reference)	199	25.5%	199	24.3%	398	
Age Rages	Sex of respondents				Total	
	Female		Male			
Adults (35+)	298	38.2%	373	45.6%	671	42.0%
Youth (18-35)	483	61.8%	445	54.4%	928	58.0%

A total of 1,599 people were interviewed, of which 1,201 within area of intervention of Mossuril, Memba and Nacala-a-Velha, and 398 in the selected reference sites in Nacala-a-Velha. The respondents age ranged between 18 and 88, with an average of 35 years old. About 59.7% of the respondents were the heads of their respective households, whereas the remaining were mainly spouses.

About 87.7% of surveyed households are headed by males. Concerning education of head of households, the findings were (figure 2): Among the heads of households 29.5% did not go to school (19.7% female, 80.3% male); About 37.1% attended but not completed primary school (6.9% female, 93.1% male); Heads of households who completed primary education are 22.1% (14.7% female, 85.3% male); Heads of HH who attended secondary school are 8.9% (12.3% female, 87.7% male).

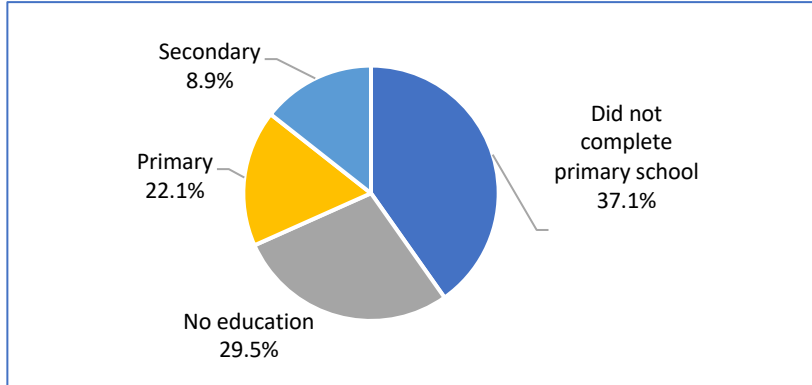


Figure 2: Education of Head of HH

### 5.1.3 Characteristics of the Households

About 60.6% of the total household members are children aged between 0-17 years, 38.8% between 18 and 64 years and 0.7% aged over 64 years (table 8).

Table 8: Proportion of total number of children, adults and elderly people

Ages	Total HH members	Districts							
		Memba		Mossuril		Nacala-Velha		Nacala-a-Velha (reference)	
		Sum	%	Sum	%	Sum	%	Sum	%
Children and youth aged 0 to 17 years - male	2791	754	31.9%	1158	28.7%	183	29.1%	696	30.7%
Children and youth aged 0 to 17 years - female	2605	676	28.6%	1118	27.7%	180	28.6%	631	27.8%
Adults, 18-64 years, male	1912	454	19.2%	872	21.6%	128	20.3%	458	20.2%
Adults, 18-64 years, female	1858	461	19.5%	811	20.1%	130	20.7%	456	20.1%
Elderly ≥ 65 years +, Male	61	9	0.4%	34	0.8%	4	0.6%	14	0.6%
Elderly ≥ 65 years +, Female	58	7	0.3%	36	0.9%	4	0.6%	11	0.5%
<b>Total</b>	<b>9,285</b>	<b>2,361</b>		<b>4,029</b>		<b>629</b>		<b>2,266</b>	

### 5.1.4 Perception about Natural Resources Governance Bodies

Asked about decision-making bodies on access, use and management of coastal and marine resources that exist in the community, about 57.1% said CCP, 12.9% said Capitania, 4.7% mentioned a combination of two or more among CCP, Capitania, Marine Policy, IDEPA, Community Leaders, SDAE. About 16% said there is none.

The fisheries sector is responsible for creating the Fisheries Co-Management Committees (CCGP) designated as a consultative body at the local level of the participatory management system where all interest groups are represented. Tourist resorts and shipowners may be invited according to the relevant matters on the agenda. The CCGP hold regular meetings twice a year, once in the first quarter (March/April/May) and once in the second semester (August/September/October). These forums meet at provincial and district level.

About 59.2% of respondents stated that women are not involved in the design of the law or development of the marine resources management plans at local/district or provincial levels.

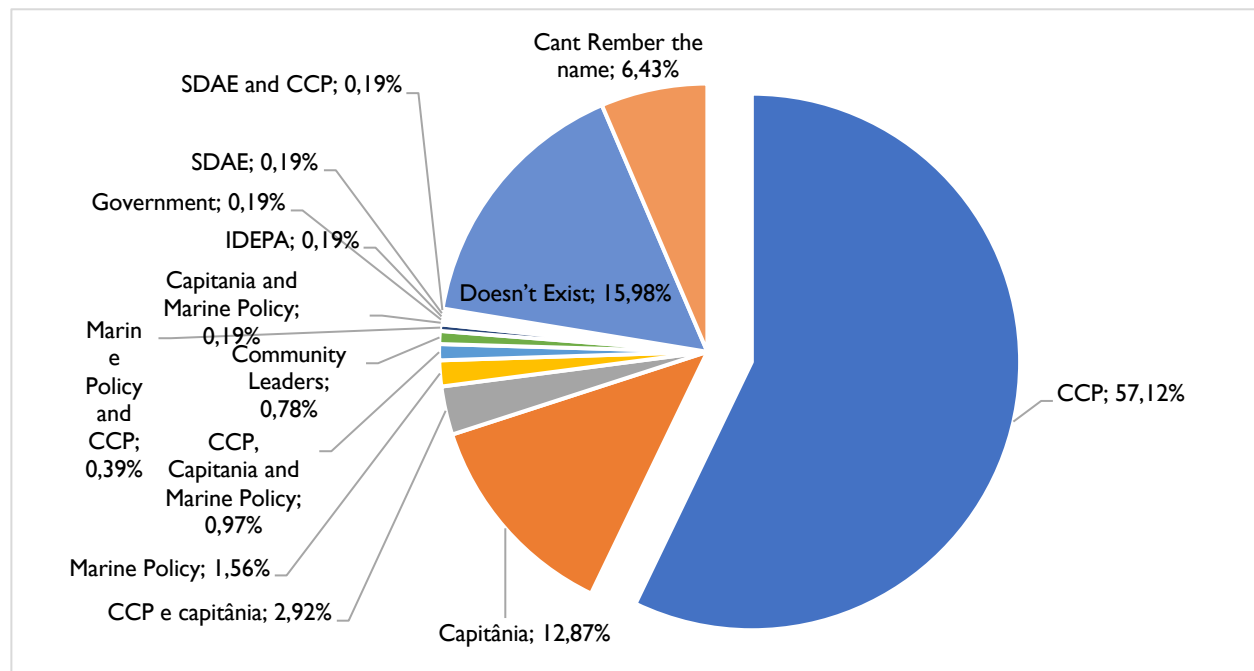


Figure 3: Perception of who decides on access, use and management of coastal and marine resources

About 58.9% of respondents said they have fairly information about legislation and policies regulating natural and fisheries or marine resources, 41.1% said they do not have it.

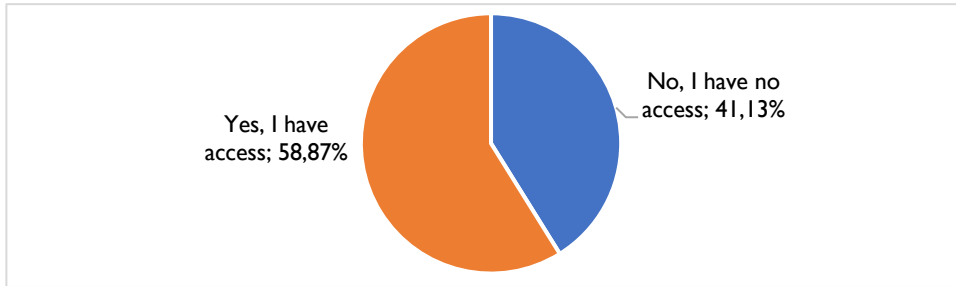


Figure 4: Access to information about legislation, policies regulating on marine resources

Asked the extent to which they had difficulties finding the information, 27.7% said they had no difficulties, 24% stated that they had difficulties and nearly half (48.7%) never searched for it.

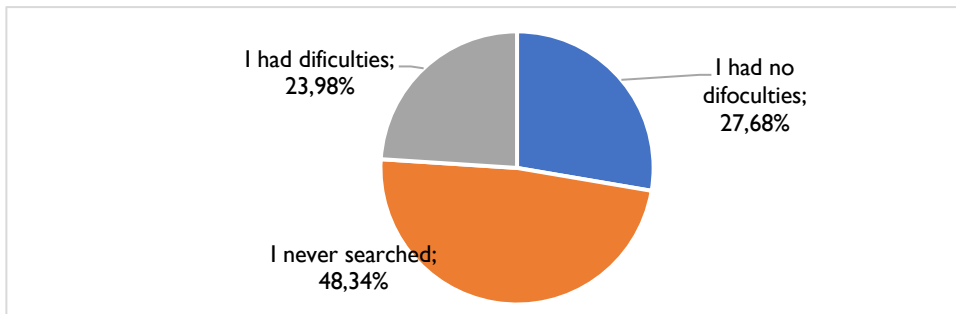


Figure 5: Perceived Difficulties Accessing information about legislation, policies regulating on marine resources



## 5.2 Socio-Economic Indicators

### 5.2.1 Indicator G2: More People in The Project Intervention Areas Benefit from Improved Ecosystem Services Supporting Adaptation to Climate Change.

#### Benefits from Interventions of Conservation

The respondents of the survey as well as participants of focus group discussion and key informants were asked about past conservation interventions in their communities. The respondents mentioned interventions such as:

- ✓ Mussuril, Lunga community: Nkango (community conservation area with fence);
- ✓ Mossuril Headquarters: Nkonjo and Nivula Nkiva/Giva, was created in collaboration with community-monitored Oikos;
- ✓ Memba sede: Large gourd (closed from Nov to Jan).

Results reveal that most interventions are isolated and of short durations. Few respondents, 11.3% among intervention sites and 16.7% for reference, reported a package of interventions comprising protection of seagrasses, mangroves and coral reefs.

Table 9: Respondents reporting benefits from interventions comprising protection of seagrasses, mangroves and coral reefs

<b>Disaggregation</b>	<b>Yes</b>	<b>Total (N)</b>
General	12,6%	532
Intervention vs reference		
Reference	16,7%	132
Intervention	11,3%	400
District		
Memba	9,3%	140
Mossuril	12,8%	219
Nacala-a-Velha	9,8%	41
Nacala-Velha (Reference)	16,7%	132



More specifically:

- ✓ Only 19.7% claim that their community has benefitted from a seagrass protection project/program and the responses are consistent among intervention and control area, as well as across districts (table 9).
- ✓ About 21.6% of respondents stated that their communities have benefitted from protection of coral reefs project, 18.8% in reference sites and 22.5% in intervention sites, (table 10).
- ✓ Almost half (49.8%) respondents declared that their community has benefitted from an intervention in mangrove conservation. Apparently there has been an intervention in Nacala-a-Velha control sites with 84.1% of respondents reporting this type of intervention, compared to an average of 38.5% within intervention districts and communities (43.8% in Mossuril, 32.9% in Memba, 29.3% in Nacala-a-Velha intervention sites).

Low enforcement (patrolling) has been a major challenge, with most CCPs reporting lack of means, such as vessel, uniforms.

### **5.2.2 Indicator G3: At the end of the project, livelihood conditions of affected households in project intervention areas are improved**

Respondents were asked if they think their lives have changed in recent years. More than half (65.2%) claim that life has improved, while 13.7% said it worsened and 21.1% perceive that there was no change. Responses among districts are seemingly consistent, with close percentage for each response. Apparently more female respondents are optimistic, with about 75.4% claiming positive changes compared to male with 55.4% with same perception.

Only 5% of female respondents argued that life has changed to worse compared to 22% of male who made this statement. There were more youth who reported life has changed to the better (83.1%) compared to adults with the same opinion (66.2%), as shown in (table 10).



Table 10: Perception of respondents about change in life conditions

Disaggregation	No change		To the better		Much better		Much Worse		Worse		Total
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	
<b>General</b>											
District	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	N
Memba	70	16.8%	218	52.3%	69	16.5%	7	1.7%	53	12.7%	417
Mossuril	140	21.2%	323	48.9%	102	15.5%	13	2.0%	81	12.3%	659
Nacala-a-Velha	28	22.4%	65	52.0%	18	14.4%	0	0.0%	14	11.2%	125
Nacala-a-Velha (Reference)	100	25.1%	199	50.0%	48	12.1%	3	0.8%	48	12.1%	398
Total	338	21.1%	805	50.3%	237	14.8%	23	1.4%	196	12.3%	1599
<b>Sex</b>											
Female	153	19.6%	467	59.7%	122	15.6%	5	0.6%	34	4.3%	781
Male	185	22.6%	338	41.3%	115	14.1%	18	2.2%	162	19.8%	818
Total	338	21.1%	805	50.3%	237	14.8%	23	1.4%	196	12.3%	1599
<b>Age group</b>											
Adults (35+)	130	19.4%	355	52.9%	89	13.3%	11	1.6%	86	12.8%	671
Youngs (18-35)	208	22.4%	450	67.1%	148	15.9%	12	1.3%	110	11.8%	928
Total	338	21.1%	805	120.0%	237	14.8%	23	1.4%	196	12.3%	1599

Respondents were asked to declare if any of the household member did each of the livelihood activities listed. The responses were consistent for both intervention areas and the control, showing that the population essentially relies on farming and fishing value chain. More specifically, the four main activities reported are (figure 3):

- ✓ Farming (reported by 93.8% in the intervention and 96.2% in the control areas);
- ✓ Fishing (83.3% in the intervention and 77.4% in the control areas);
- ✓ Collection of marine resources (55.0% in the intervention and 63.8% in the control areas);
- ✓ Fish seller/trader/processor (57.0% in the intervention and 54.5% in the control areas);

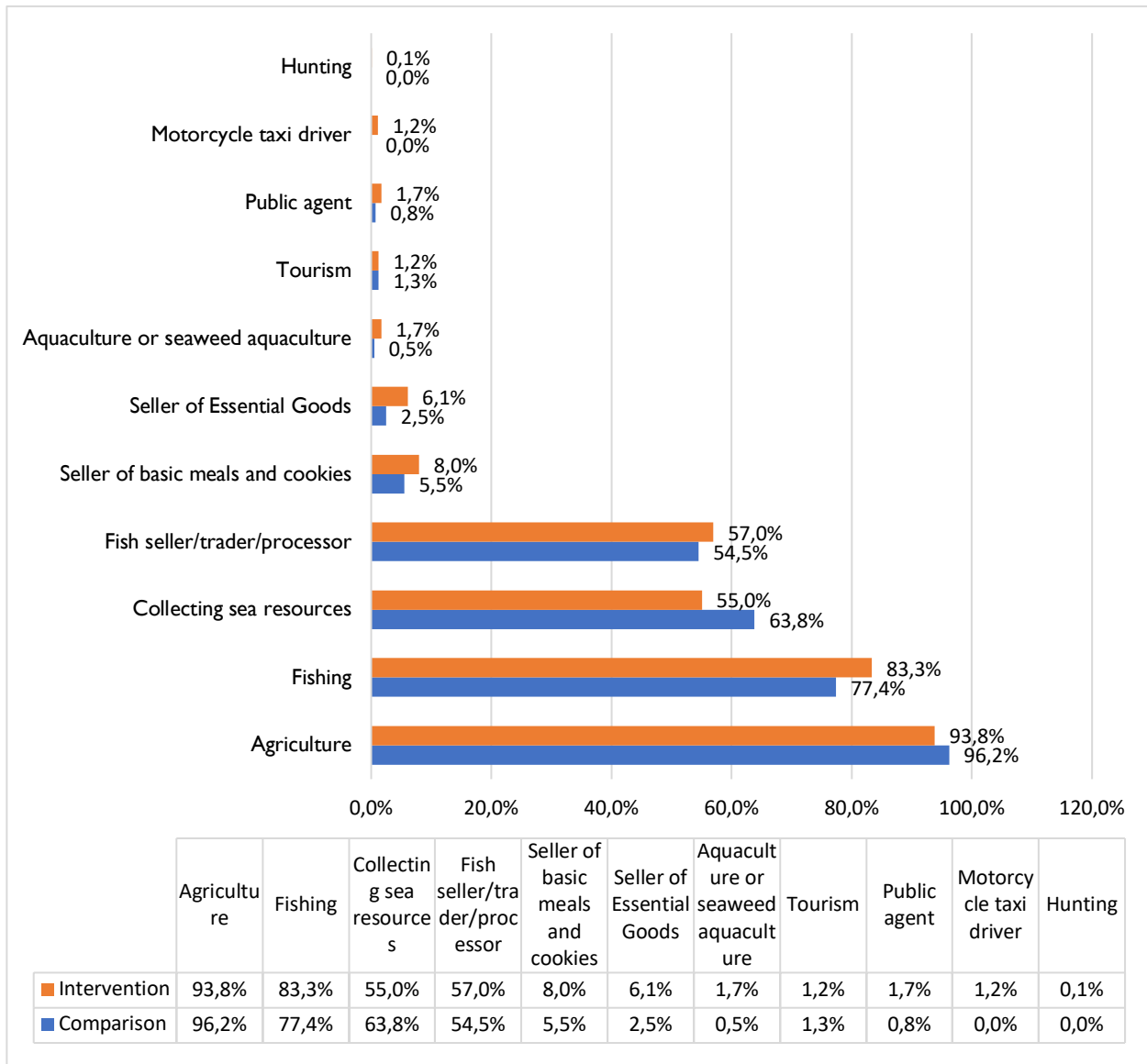


Figure 6: Percentage of HH with at least one member doing each activity



Mossuril SDAE representative estimates that around 80-90% of households are engaged in fishing. Furthermore, he said men usually practice deep sea fishing while women are engaged in fish processing, trade and collection of invertebrates and sometimes help their partners to pull the nets.

An exploratory socioeconomic study<sup>1</sup>, conducted by WCS in 2022, in Memba and Mossuril, found that:

- ✓ The primary source of income of households in these districts is fishing. Fishing constitutes the basis of survival and income for most families. It is mainly assured by the family sector, which makes its practice traditional, that is, the predominant use of artisanal techniques, such as the trawl net and canoes and sailing boats.
- ✓ According to data from the fishing sector (Statistical Bulletin 2021), an increasing trend is observed for the districts of Memba and Mossuril, with only the District of Nacala Velha being the district where a reduction in catches is observed. Taking into account the price of fish, these data reveal that the community of Memba has more income from fishing.

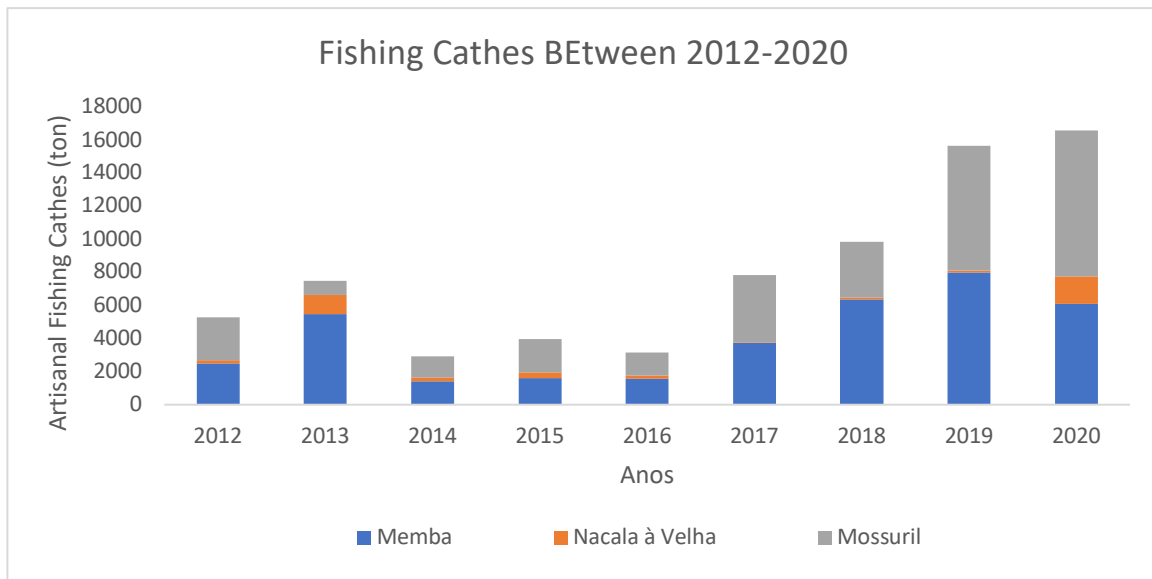


Figure 7: Trends in Catches of Artisanal Fishing Between 2012-2020

<sup>1</sup> Relatório do trabalho de campo sócio-económico para desenvolver a proposta completa do BAF: Construindo um Futuro Azul para Ecossistemas e Pessoas na Costa Leste Africana, Distritos de Memba, Nacala-Porto e Mossuril, WCS, 2020.



- ✓ In general, the production of artisanal fishing in the three analyzed districts has suffered fluctuations over the last few years, with the district of Memba being the most productive, followed by Mossuril and finally Nacala Velha.
- ✓ Mostly artisanal fishing involves a great diversity of fishing gear with different levels of complexity, both for its materialization as well as for its effective use. Men, develop the ability to perform fishing activities of greater effort, risk and duration, being responsible for fishing in high air. While the woman dedicates herself to fishing for coastal invertebrates that inhabit sandy, rocky, coral substrates as well as seagrass beds, fish processing and trade. The main fishing technique is catching, which is carried out by hand, as well as sticks, irons and other blunt objects, also using small fishing nets measuring 2-5m. In sheltered areas, fishing is also carried out using scraps of mosquito netting involving a workforce of two people, this last art is responsible for capturing juveniles from a large part of the marine resources accessible to artisanal fishing. Sometimes they fish with conventional trawl gear (300m) where the men stretch the net in the sea and the women just pull the net from the shore (exclusive practice of Memba sede).
- ✓ Report from Macuio, J. & Marques da Silva, I. (2021), indicates that fishing is developed by men, while women, children and older people do the gleaning or shellfish gathering. The reports say women were observed pulling mosquito nets, mainly in Mecuta and Namoro in Memba and Lumbo and Ilha-Sede in Mozambique Island. These findings are consistent with the data from the surveys, pointing to less effortful activities to be developed by women in the coastal zone, which includes the collection of invertebrates;
- ✓ Other sources are consistent with the above finding, in reporting that women use the mosquito nets for the capture of smaller fish, known as Quinia (Hoguane, A.M.,2007; Governo do Distrito de Memba, Ilha de Moçambique, 2015). The pressure to secure daily food leads women to practice this destructive technique, which is responsible for inestimable losses of juveniles of various species of fish.
- ✓ In terms of vulnerability, children, single women and widows and the elderly over 55 are the most vulnerable. Women are also more vulnerable because culture influences whether they have access to education.

## Benefits from Interventions of Livelihoods

More than half (71.7%) respondents either were not aware or not sure about any projects in their community focused on improving livelihoods in the last years. Only 28.3% over all respondents declared that there were such project in their communities.

In Memba there were relatively higher frequency of respondents (41.7%) who claimed to be unaware or unsure about any project in their community focused on improving livelihoods in recent years, compared to other districts (16.8% in Nacala-a-Velha, 24.1% in Mossuril and 24.9% in comparison sites of Nacala-a-Velha) (table 11).

Table 11: Respondents aware of any livelihoods project implemented in their communities

Disaggregation	No		Don't now		Refused		Yes		Total
	Freq	%	Freq	%	Freq	%	Freq	%	
Intervention/Control									
Reference	243	61.1%	53	13.3%	3	0.8%	99	24.9%	398
Intervention	649	54.0%	188	15.6%	10	0.8%	354	29.5%	1201
Total	892	55.8%	241	15.1%	13	0.8%	453	28.3%	1599
District									
Memba	180	43.2%	60	14.4%	3	0.7%	174	41.7%	417
Mossuril	380	57.7%	115	17.4%	5	0.8%	159	24.1%	659
Nacala-a-Velha	89	10.0%	13	10.4%	2	1.6%	21	16.8%	125
Nacala-a-Velha (Reference)	243	61.1%	53	13.3%	3	0.8%	99	24.9%	398
Total	892	55.8%	241	15.1%	13	3.3%	453	28.3%	1599

Respondents mentioned name of the project or the implementing organization (table 12).



Table 12: Name of Projects or Implementation Organization

<b>Memba</b>	<b>Mossuril</b>	<b>Nacala-a-Velha</b>	<b>Nacala-Velha Reference</b>
<b>Associação dos Camponeses</b>	Protecção marinha ( PM)	World Vision	USAID
<b>Capitania</b>	Proteção e conservação pesqueira	Sustenta	CEPA
<b>Care</b>	CCP	USAID, Terra	IDE
<b>Reserve</b>	Saúde e bem-estar	nossa.	Sustenta
<b>IOM</b>	Associação dos Camponeses	Save the	ODUNGO PAMOJA (Distribuição de
<b>CCP</b>	Projeto de produção de Horticultas ,	Children	motores de embarcação)
<b>PMA</b>	PMA	Kulima	CPP
<b>Agriculture</b>	Coral Lodge	CCP	JFS (distribuição de insumos agrícolas)
<b>World Vision</b>	Sustenta	Care	Care
<b>Coral Lodge</b>	Proteção costeira	INGD	CLN
<b>Kulima</b>	OIKOS, terra nossa, Kulima		VALE
<b>Capitânia</b>	Governo		IDE
<b>CUP (educação ambiental)</b>	Projecto ligado a pesca, gestão de calamidade		OPHAVELA (Do vale)
<b>Terra nossa.</b>	Projeto de produção de Gergelim!		Preservação do Mangal
<b>Grupo 15</b>	Projecto Equibal		SNV
<b>Destruição de enxadas</b>	ADPP		Assomat
<b>IDE (Agriculture) and Vodacom (Jobs)</b>	FAO		Save the Children
	Care, World Vision		

Only 14.9% declared that the projects implemented have contributed to increase income or availability of food in their households, with higher frequency in 24.7% in Memba (table 13).

Table 13: Have the projects contributed to increase income or availability of food?

Responses	Memba		Mossuril		Nacala-a-Velha		Nacala-a-Velha (Reference)		Total	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
No project	243	58.3%	500	43.6%	104	83.2%	299	75.1%	1146	71.7%
Increased	103	24.7%	64	9.7%	13	10.4%	59	14.8%	239	14.9%
Decreased	1	0.2%	8	1.2%	1	0.8%	0	0.0%	10	0.6%
Don't know/Refused	2	0.5%	19	2.9%	1	0.8%	5	1.3%	27	1.7%
No change	68	16.3%	68	10.3%	6	4.8%	35	8.8%	177	11.1%
<b>Total</b>	<b>417</b>	<b>100.0%</b>	<b>659</b>	<b>100.0%</b>	<b>125</b>	<b>100.0%</b>	<b>398</b>	<b>100.0%</b>	<b>1599</b>	<b>100.0%</b>

Respondents estimated their current monthly incomes, ranging between 160.00Mt and 16,800.00Mt with an average 4,349.1Mt and median of 3,200.0Mt (table 14). According to the National Statistics Institute (INE) enquire on family budget (IOF) report (2022), the average per capita monthly expenditure on food products and non-alcoholic beverages alone is 3,358.00Mt/Month. The expenditures are proxy indicators of the household incomes. The IOF household expenditure (3,358.00Mt/Month) is closer to the median income found in the baseline survey (3,200.0Mt/month).

Table 14: Households Average Monthly Incomes

Disaggregation	Average	Median	Mode	St Dev	Mini	Max
General	4,349.1	3,200.0	2,800.0	3,603.1	160.0	16,800.0
Tipo de area						
Intervention	4,349.1	3,200.0	2,800.0	3,603.1	160.0	16,800.0
Reference	4,456.7	3,430.0	2,800.0	3,756.0	160.0	16,800.0
Districts						
Memba	4,587.3	3,700.0	6,000.0	3,805.2	160.0	16,800.0
Mossuril	4,603.7	3,500.0	1,200.0	4,259.2	180.0	16,800.0
Nacala-a-Velha	4,456.7	3,430.0	2,800.0	3,756.0	160.0	16,800.0
Nacala-a-Velha (Reference)	4,349.1	3,200.0	2,800.0	3,603.1	160.0	16,800.0
Sex						
Female	4,339.4	3,200.0	2,800.0	3,638.0	160.0	16,800.0
Masculino	4,349.1	3,200.0	2,800.0	3,603.1	160.0	16,800.0
Age ranges						



18 - 35	4,349.1	3,200.0	2,800.0	3,603.1	160.0	16,800.0
>35	4,351.8	3,200.0	2,800.0	3,611.2	160.0	16,800.0

Those respondents who fish, were asked what they do with most of their catches, and 77.4% declared that they sell, and 22.6% say they consume (table 15).

Table 15: Use of the fish they catch

Disaggregation	Sale	Offer	Not capture	Household consumption	N
General	87.4%	24.8%	6.4%	93.2%	532
Domain					
Reference	83.3%	18.9%	11.4%	88.6%	132
Intervention	88.8%	26.8%	4.8%	94.8%	400
District					
Memba	93.6%	19.3%	0.0%	100.0%	140
Mossuril	85.4%	32.9%	7.8%	91.3%	219
Nacala-a-Velha	90.2%	19.5%	4.9%	95.1%	41
Nacala-a-Velha (Reference)	83.3%	18.9%	11.4%	88.6%	132
Sex					
Female	79.7%	6.8%	9.4%	90.2%	266
Male	95.1%	42.9%	3.4%	96.2%	266
Age group					
18 - 35	88.5%	23.3%	7.7%	91.7%	313
>35	85.8%	26.9%	4.6%	95.4%	219

\*Note that the question allowed multiple answers, thus the total exceed 100%.

Fishers were asked what they do with the invertebrates they catch, and they affirmed that they eat the most, but they also sell and offer friends and relatives (table 16). The collection of invertebrates is a subsistence activity, where normally their catches are intended for immediate consumption. This is why women and children are associated with this activity. The most captured group of invertebrates are molluscs (gastropods and bivalves) however resources such as octopus have gained more and more importance in this province due to the proliferation of processing rooms (Fernando et al., 2021), this invertebrate is mainly captured in Memba, compared to the districts of Mossuril and old Nacala. The octopus is caught by women and children on the coastline and by men on the islands adjacent to fishing, the first group uses the catches for immediate consumption, while the second group uses the octopus for trade because they are larger (Fernando et al., 2021)

Table 16: What do you do with the invertebrates you catch?

Disaggregation	Eat	Sale	Offer	Don't Catch	N
General	71.4%	23.7%	2.8%	26.7%	532
Domain					
Reference	72.0%	15.2%	2.3%	28.0%	132
Intervention	71.3%	26.5%	3.0%	26.3%	400
District					
Memba	70.0%	29.3%	2.9%	25.7%	140
Mossuril	71.2%	21.5%	2.7%	26.9%	219
Nacala-a-Velha	75.6%	43.9%	4.9%	24.4%	41
Nacala-a-Velha (Reference)	72.0%	15.2%	2.3%	28.0%	132
Sex					
Female	89.1%	25.6%	0.4%	9.4%	266
Male	53.8%	21.8%	5.3%	44.0%	266
Age group					
18 - 35	70.9%	25.9%	3.5%	26.8%	313
>35	72.1%	20.5%	1.8%	26.5%	219

\*Note that the question allowed multiple answers, thus the total exceed 100%.





Out of 532 respondents, only 36 (6.8%) respondents affirmed that their household has access to loans. The response to this question is consistent, 6.8% equally to intervention and control sites and little variation among districts (Memba 7.9%, Mossuril 5.5%, Nacala-a-Velha 9.8%, Nacala-a-Velha reference) (6.8%). About 71% declared that they have always needed loans but never got it (table 17).

Table 17: Do any member of your HH have access to loans?

Disaggregation	No	Yes	Total
General	93.2%	6.8%	532
Domain			
Reference	93.2%	6.8%	132
Intervention	93.3%	6.8%	400
District			
Memba	92.1%	7.9%	140
Mossuril	94.5%	5.5%	219
Nacala-a-Velha	90.2%	9.8%	41
Nacala-Velha (Reference)	93.2%	6.8%	132
Sex			
Female	92.5%	7.5%	266
Male	94.0%	6.0%	266
Sex of head of household			
Female	93.5%	6.5%	248
Male	93.0%	7.0%	284
Age group			
18 - 35	92.0%	8.0%	313
>35	95.0%	5.0%	219

The 36 respondents who claimed to have had loans were then asked to declare the source of loans they got. Most of them (18) said they got from neighbors, friends or relatives (table 20).

Table 18: Source of loans

Disaggregation	Neighbor/friends /Relatives	Saving Groups	Cooperative/ Association	NGO	Bank	Total
General	26	5	3	2	1	36
Domain	0					
Reference	6	2	0	0	1	9
Intervention	20	3	3	2	0	27
District	0					
Momba	8	2	1	0	0	11
Mossuril	10	1	1	0	0	12
Nacala-a-Velha	2	0	1	2	0	4
Nacala-a-Velha (Reference)	6	2	0	0	1	9
Sex	0					
Female	14	5	0	0	1	20
Male	12	0	3	2	0	16
Sex of head of household						
Female	5	5	0	0	0	20
Male	15	0	3	2	1	16
Age group	0					
18 - 35	21	2	1	0	1	25
>35	5	3	2	2	0	11

The respondents were asked to recall the number of times they got loans during last 12 months and what they did with the money. Some respondents got loans multiple times in a year, and the sum of accumulative number of times the 36 respondents got loans was 41. They used the loans for: investing in alternative livelihoods to fishing (16), purchase food and other basic needs (13), improve fishing gears (10), medicines (1) and ceremonies (1).



### 5.2.3 Indicator G4: at the end of the project, substantially more households affected in project intervention areas have a positive attitude towards marine biodiversity, restoration and protection of mangroves, seagrass and coral reefs

Respondents were asked about their attitude towards the establishment of sanctuaries and restricted areas for fishing. Counting respondents who consistently provided positive attitudes towards each of the following conservation measures:

- ✓ Establishment of sanctuaries and restricted areas for fishing;
- ✓ Seasonal close of certain fishing areas;
- ✓ Restricting people from walking in certain areas;
- ✓ Habitat restoration measures;
- ✓ Restrictions in catches and collection of certain species;
- ✓ Restrictions from catching some size of fishes;
- ✓ Limit in number of people authorized for fishing per fishing zone;

Overall, 46.45 provided positive response to all conservation measures (45.8% for intervention and 48.5% in the reference site). (table 19).

Table 19: Attitude towards conservation measures

Disaggregation	Respondents with a positive Attitude	Total
General	46.4%	532
Domain		
Reference	48.5%	132
Intervention	45.8%	400
District		
Memba	48.6%	140
Mossuril	41.1%	219
Nacala-a-Velha	61.0%	41
Nacala-a-Velha (Reference)	48.5%	132
Sex		
Female	40.2%	266
Male	52.6%	266
Age group		
18 – 35	43.5%	313
>35	50.7%	219



Participants of FGD were asked about their opinion regarding the establishment of a conservation area. The participants expressed mixed feelings, in favor of the potential benefits but also fearing negative impact on their livelihoods. In general, the feedback reveals that community members are aware of the potential benefits, and they mentioned some, such as: it will enforce laws to reduce catch of juvenile fish, reduce destruction of mangroves, allow species to reproduce so they can catch fishes of bigger sizes, it can prevent resources to deplete. On the other hand they fear about the effects in their incomes and sources of food. Fishing is the main activity for male, the main source of income and food for most households.

These are some quotes from the FGD:

- ✓ *If fishing is closed, man will not be able to provide resources for their households;*
- ✓ *....when our husbands don't have anything or money to buy food, we go there and collect resources to feed our families and help our husbands. ....*
- ✓ *We fear that they will be restricted from using the marine resources with no alternative source of income or food.*
- ✓ *If we are restricted to fish, income will drop and we have no way to get food, pay for children education.*
- ✓ *We fear that those people who will be assigned for law enforcement will prevent us from fishing while they allow their friends to fish.*
- ✓ *In the past we experienced closing fishing activity for species reproduction but we didn't see the benefits; Maritime entities, prevented local fishers from fishing, however other fishers came from the Island of Mozambique and Chembesse, and invaded our fishing zones, and when fishing is open for all they don't experience no improved catches.*



## 5.2.4 Indicator O1.2: villages are more resilient to climate change (water and food security, community structures for sustainable fisheries management).

In focus group discussions, community members from Memba, Mossuril and Nacala-a-Velha regarded the months of January, February and March as ones in which they experience challenges in having enough food, as shown in table 20).

Table 20: Period of Year Communities Experience Challenges in Food Security

Months	Agricultural products	Sea food
December, January, February and March	<p>Period in which the previous year's reserves were depleted, awaiting new harvests.</p> <p>In February, March, April, the crops are in flowering period and the tubers like cassava, peanuts are not ready yet.</p>	<p>In January and February there are heavy rains, the sea water becomes cloudy, sometimes it mixes with fresh water, the fish move away from the coast and towards the bottom, reducing catches</p> <p>Sometimes in the period of January, February and March there is a ban on fishing;</p> <p>In January generally food prices have been high;</p>
April to August	<p>There is availability of agricultural products, especially in years of good harvests of cereals and beans, and it is also vegetables season.</p>	<p>During this period, fish are scarce, resulting from the reduction in both catches and fishing effort, given precarious navigability conditions, as an effect of strong winds and consequently violent waves</p>

Respondents mentioned following effects of climate change that they regard as responsible for declining their livelihoods condition: Increased frequency and intensity of cyclones/strong winds (66.9%), Decrease or disappearance of fish species (54.5%), Degradation of fish habitat (53.2%) and about a quarter said Fish migration (28.6%), Soil erosion and impoverishment due (24.2%), Increased pests and diseases in plants and animals (24.2%) (tables 21, 22).

Table 21: Effects of Climate Changes that respondents are aware of

What effects or phenomena associated with climate change do you know	Domain				Districts			Sex		Ages	
	Geral	Reference	Intervention	Memba	Mossuril	Nacala-a-Velha	Nacala-Velha (Reference)	Female	Male	<35	>35
Increased frequency and intensity of cyclones	74.1%	83.3%	71.0%	82.1%	61.2%	85.4%	83.3%	82.0%	66.2%	72.2%	76.7%
Increased temperature and number of hot days	30.1%	31.8%	29.5%	32.1%	27.4%	31.7%	31.8%	47.0%	13.2%	33.5%	25.1%
Reduced rainfall causing droughts	25.9%	32.6%	23.8%	32.9%	16.0%	34.1%	32.6%	25.9%	25.9%	26.2%	25.6%
Variation of the rainfall calendar	25.4%	30.3%	23.8%	33.6%	16.9%	26.8%	30.3%	38.0%	12.8%	28.4%	21.0%
Soil erosion and impoverishment due to the intensity of rainfall during the peak	25.0%	32.6%	22.5%	23.6%	20.1%	31.7%	32.6%	44.0%	6.0%	28.1%	20.5%
Decrease or disappearance of some fish species	24.4%	22.0%	25.3%	18.6%	29.2%	26.8%	22.0%	46.6%	2.3%	27.2%	20.5%
Degradation of fish habitat	23.3%	28.0%	21.8%	23.6%	19.2%	29.3%	28.0%	40.6%	6.0%	23.6%	22.8%
Increased amount of rainfall at short peak times, resulting in flooding	22.2%	43.9%	15.0%	16.4%	12.8%	22.0%	43.9%	25.6%	18.8%	22.4%	21.9%
Increased pests and diseases in plants and animals	14.3%	15.9%	13.8%	14.3%	11.9%	22.0%	15.9%	26.3%	2.3%	14.1%	14.6%
fish migration	3.8%	1.5%	4.5%	3.6%	5.0%	4.9%	1.5%	1.1%	6.4%	3.8%	3.7%
Increased water temperature and changes in species reproduction	3.2%	6.8%	2.0%	3.6%	0.5%	4.9%	6.8%	5.6%	0.8%	3.2%	3.2%
Reduction in the flow of rivers	0.8%	1.5%	0.5%	1.4%	0.0%	0.0%	1.5%	1.5%	0.0%	1.3%	0.0%
Pollution of rivers, due to farming in riverside areas	0.8%	0.0%	1.0%	2.9%	0.0%	0.0%	0.0%	1.5%	0.0%	0.6%	0.9%
I have no idea	7.3%	7.6%	7.3%	3.6%	9.1%	9.8%	7.6%	1.1%	13.5%	7.3%	7.3%
Number of respondents (N)	532	132	400	140	219	41	132	266	266	313	219

Table 22: Effects of Climate Changes affecting livelihoods in districts of Memba, Mossuril and Nacala-Velha

Effects	Memba				Mossuril				Nacala-a-Velha			Nacala-a-Velha (Reference)		
	General	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	
Increased frequency and intensity of cyclones/strong winds	66.9%	74.3%	91.4%	57.1%	56.2%	70.6%	41.8%	70.7%	100.0%	40.0%	75.8%	100.0%	51.5%	
Decrease or disappearance of fish species	54.5%	52.1%	92.9%	11.4%	54.3%	89.9%	19.1%	63.4%	95.2%	30.0%	54.5%	89.4%	19.7%	
Degradation of fish habitat	53.2%	55.7%	84.3%	27.1%	46.1%	72.5%	20.0%	65.9%	95.2%	35.0%	58.3%	86.4%	30.3%	
Fish migration	28.6%	24.3%	8.6%	40.0%	30.1%	11.0%	49.1%	36.6%	19.0%	55.0%	28.0%	10.6%	45.5%	
Soil erosion and impoverishment due to the intensity of rainfall during the peak	27.3%	28.6%	57.1%	0.0%	25.1%	49.5%	0.9%	31.7%	57.1%	5.0%	28.0%	54.5%	1.5%	
Increased pests and diseases in plants and animals	24.2%	30.7%	61.4%	0.0%	16.9%	33.0%	0.9%	39.0%	66.7%	10.0%	25.0%	50.0%	0.0%	
Variation of the rainfall calendar	17.5%	25.0%	41.4%	8.6%	9.6%	14.7%	4.5%	24.4%	47.6%	0.0%	20.5%	36.4%	4.5%	
Increased temperature and number of hot days	17.3%	17.9%	31.4%	4.3%	11.9%	22.0%	1.8%	24.4%	47.6%	0.0%	23.5%	45.5%	1.5%	
Increased amount of rainfall at short peak times, resulting in flooding	16.2%	9.3%	10.0%	8.6%	7.3%	8.3%	6.4%	17.1%	33.3%	0.0%	37.9%	75.8%	0.0%	
Reduced rainfall causing droughts	9.6%	12.9%	22.9%	2.9%	3.2%	4.6%	1.8%	24.4%	47.6%	0.0%	12.1%	24.2%	0.0%	
Pollution of rivers, due to exploitation of riverside areas for agriculture	5.1%	7.1%	14.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12.9%	25.8%	0.0%	
Increased water temperature and changes in species reproduction	5.1%	2.1%	2.9%	1.4%	0.5%	0.0%	0.9%	9.8%	19.0%	0.0%	14.4%	27.3%	1.5%	
Reduction in creation capacity and inventory	0.6%	0.0%	0.0%	0.0%	0.5%	0.9%	0.0%	2.4%	0.0%	5.0%	0.8%	0.0%	1.5%	
Number of respondents (N)	532	140	70	70	219	109	110	41	21	20	132	66	66	

Asked about measures they know to reduce effects of climate change, 10% said have no idea, then more than half of respondents (68.0%) said Improving house building techniques to withstand cyclones, followed by rainwater collection and storage (25.4%), bank terraces to reduce erosion (22.6%), use varieties adapted to climate change (19.2%). Other measures were mentioned by lower than 10% of respondents (table 23).

Table 23: Measures to Minimize Effects of Climate Changes that Respondents are Aware of

Measures	Geral	Memba			Mossuril			Nacala-a-Velha			Nacala-a-Velha (Reference)		
		Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male
Improving house building techniques to withstand cyclones	68.0%	80.7%	87.1%	74.3%	58.4%	59.6%	57.3%	75.6%	71.4%	80.0%	68.2%	59.1%	77.3%
Rainwater collection and storage	25.4%	31.4%	54.3%	8.6%	19.6%	35.8%	3.6%	26.8%	52.4%	0.0%	28.0%	50.0%	6.1%
Bank terraces to reduce erosion	22.6%	22.1%	2.9%	41.4%	16.0%	4.6%	27.3%	41.5%	38.1%	45.0%	28.0%	13.6%	42.4%
Use of varieties adapted to climate change	19.2%	18.6%	25.7%	11.4%	17.8%	34.9%	0.9%	14.6%	19.0%	10.0%	23.5%	31.8%	15.2%
Access to better markets	8.5%	5.7%	11.4%	0.0%	2.3%	4.6%	0.0%	14.6%	28.6%	0.0%	19.7%	39.4%	0.0%
Avoid building houses in areas prone to flooding	6.0%	0.7%	0.0%	1.4%	5.9%	5.5%	6.4%	14.6%	9.5%	20.0%	9.1%	9.1%	9.1%
Agricultural techniques for water conservation and soil fertility	4.7%	5.0%	7.1%	2.9%	0.0%	0.0%	0.0%	17.1%	33.3%	0.0%	8.3%	16.7%	0.0%
Reduce fishing costs/improve efficiency to increase earnings	4.7%	4.3%	8.6%	0.0%	3.2%	6.4%	0.0%	17.1%	33.3%	0.0%	3.8%	7.6%	0.0%
Reduce fish losses along the value chain	3.8%	5.0%	10.0%	0.0%	4.6%	9.2%	0.0%	2.4%	4.8%	0.0%	1.5%	3.0%	0.0%
Fertilization to mitigate soil nutrient loss	2.6%	2.1%	4.3%	0.0%	0.5%	0.9%	0.0%	4.9%	9.5%	0.0%	6.1%	6.1%	6.1%
Establish catch limits and avoid harmful equipment	1.7%	1.4%	2.9%	0.0%	3.2%	6.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
I don't know / I have no idea	16.7%	12.1%	5.7%	18.6%	25.1%	15.6%	34.5%	7.3%	0.0%	15.0%	10.6%	6.1%	15.2%
Number of respondents (N)	532	140	70	70	219	109	110	41	21	20	132	66	66



As a follow up question, respondents were asked which measures they have implemented in their regular activities, such as fisheries, agriculture, infrastructure. In general, the frequency of those who adopted any kind of measures is to some extent lower than the claimed awareness (table 24).

Table 24: Measures Applied to Minimize Effects of Climate Changes

Measures	General	Memba			Mossuril			Nacala-a-Velha			Nacala-a-Velha (Reference)		
		Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male
Improving house building techniques to withstand cyclones	58.8%	73.6%	84.3%	62.9%	47.0%	50.5%	43.6%	68.3%	71.4%	65.0%	59.8%	51.5%	68.2%
Bank terraces to reduce erosion	21.4%	19.3%	2.9%	35.7%	15.5%	5.5%	25.5%	41.5%	38.1%	45.0%	27.3%	13.6%	40.9%
crop diversification	18.6%	16.4%	24.3%	8.6%	18.3%	36.7%	0.0%	9.8%	14.3%	5.0%	24.2%	34.8%	13.6%
Rainwater collection and storage	18.6%	22.9%	42.9%	2.9%	12.3%	23.9%	0.9%	26.8%	52.4%	0.0%	22.0%	40.9%	3.0%
Avoid building houses in areas prone to flooding	4.3%	0.0%	0.0%	0.0%	5.5%	7.3%	3.6%	9.8%	9.5%	10.0%	5.3%	6.1%	4.5%
Reduce fishing costs/improve efficiency to increase earnings	3.2%	4.3%	8.6%	0.0%	3.7%	7.3%	0.0%	4.9%	9.5%	0.0%	0.8%	1.5%	0.0%
Agricultural techniques for water conservation and soil fertility	2.1%	4.3%	5.7%	2.9%	0.5%	0.0%	0.9%	7.3%	14.3%	0.0%	0.8%	1.5%	0.0%
Fertilization to mitigate soil nutrient loss	1.1%	0.7%	1.4%	0.0%	0.9%	1.8%	0.0%	2.4%	4.8%	0.0%	1.5%	0.0%	3.0%
Reduce fish losses along the value chain	1.7%	2.1%	4.3%	0.0%	1.8%	3.7%	0.0%	2.4%	4.8%	0.0%	0.8%	1.5%	0.0%
Access to better markets and increase fish value/yield	1.7%	1.4%	2.9%	0.0%	2.3%	4.6%	0.0%	0.0%	0.0%	0.0%	1.5%	3.0%	0.0%
Sustainable fishing practices (establish catch limits and avoid harmful equipment)	0.9%	1.4%	2.9%	0.0%	1.4%	2.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Irrigation to reduce dependence on rain	0.2%	0.0%	0.0%	0.0%	0.5%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
I don't know / I have no idea	19.9%	13.6%	10.0%	17.1%	29.7%	25.7%	33.6%	7.3%	0.0%	15.0%	14.4%	13.6%	15.2%
Number of respondents (N)	532	140	70	70	219	109	110	41	21	20	132	66	66

Respondents were asked to mention the major challenges they face in farming activities and the most reported ones are: poor access to seeds/seedlings, high incidence of pests \insects, limited access to fishing and farming tools, drought, floods and unpredictable weather (table 25).

Table 25: Main challenges faced by the households in the districts of Memba, Mossuril and Nacala-Velha

Challenges	Memba				Mossuril			Nacala-a-Velha			Nacala-a-Velha (Reference)		
	General	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male
Poor access to seeds/seedlings	36.8%	37.1%	34.3%	40.0%	35.2%	42.2%	28.2%	34.1%	33.3%	35.0%	40.2%	28.8%	51.5%
Insects	71.4%	73.6%	98.6%	48.6%	73.5%	93.6%	53.6%	63.4%	95.2%	30.0%	68.2%	92.4%	43.9%
Lack of farming tools	23.7%	25.7%	15.7%	35.7%	19.2%	19.3%	19.1%	43.9%	9.5%	80.0%	22.7%	1.5%	43.9%
Dry	25.4%	24.3%	15.7%	32.9%	23.3%	26.6%	20.0%	24.4%	14.3%	35.0%	30.3%	27.3%	33.3%
Floods	25.9%	14.3%	12.9%	15.7%	19.2%	23.9%	14.5%	24.4%	38.1%	10.0%	50.0%	72.7%	27.3%
Unpredictable weather	3.4%	5.0%	0.0%	10.0%	3.7%	0.0%	7.3%	0.0%	0.0%	0.0%	2.3%	0.0%	4.5%
lack of market	2.1%	0.0%	0.0%	0.0%	2.7%	5.5%	0.0%	7.3%	14.3%	0.0%	1.5%	3.0%	0.0%
Lack of Insecticides	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	1.5%	0.0%
I don't know	2.6%	1.4%	0.0%	2.9%	5.0%	0.0%	10.0%	2.4%	0.0%	5.0%	0.0%	0.0%	0.0%
Number of respondents (N)	532	140	70	70	219	109	110	41	21	20	132	66	66



More than half respondents (52.4%) have observed a situation of degradation of biodiversity in their community and 44.4% said it resulted in reduction of household income (table 26). Other consequences are navigation accidents due to storms, soil degradation, higher incidence of pests, perceived lower fish stocks.

Table 26: Observed a situation of degradation of biodiversity in their community

	Disaggregation		Reduced HH income		Boat accidents due to bad weather		Soil degradation, high rates of pests and lack of fish		Total
<b>General</b>		228	44.4%	1	0.2%	1	0.2%	513	
<b>Domain</b>									
<b>Reference</b>	60	45.1%	0	0.0%	1	0.8%	133		
<b>Intervention</b>	168	44.2%	1	0.3%	0	0.0%	380		
<b>District</b>									
<b>Memba</b>	67	53.6%	0	0.0%	0	0.0%	125		
<b>Mossuril</b>	79	36.7%	1	0.5%	0	0.0%	215		
<b>Nacala-a-Velha</b>	22	55.0%	0	0.0%	0	0.0%	40		
<b>Nacala-a-Velha (Reference)</b>	60	45.1%	0	0.0%	1	0.8%	133		
<b>Sex</b>	101	41.9%	0	0.0%	1	0.4%	241		
<b>Female</b>	127	46.7%	1	0.4%	0	0.0%	272		
<b>Male</b>									
<b>Age groups</b>	88	44.7%	0	0.0%	1	0.5%	197		
<b>Adults (35+)</b>	140	44.3%	1	0.3%	0	0.0%	316		
<b>Youth (18-35)</b>	228	44.4%	1	0.2%	1	0.2%	513		



Only 25% of respondents have had access to training in coastal marine resource management and adaptation to climate change, with 17% among women (table 27).

Table 27: access to training in coastal marine resource management and adaptation to climate change

Disaggregation	Have you had any training in coastal marine resource management and adaptation to climate change?				Total
	No		Yes		
<b>General</b>	385	75.05%	128	24.95%	513
<b>Domain</b>					
<b>Reference</b>	100	75.19%	33	24.81%	133
<b>Intervention</b>	285	75.00%	95	25.00%	380
<b>District</b>					
<b>Memba</b>	92	73.60%	33	26.40%	125
<b>Mossuril</b>	160	74.42%	55	25.58%	215
<b>Nacala-a-Velha</b>	33	82.50%	7	17.50%	40
<b>Nacala-a-Velha (Reference)</b>	100	75.19%	33	24.81%	133
<b>Sex</b>					
<b>Female</b>	199	82.57%	42	17.43%	241
<b>Male</b>	186	68.38%	86	31.62%	272
<b>Age groups</b>					
<b>Adults (35+)</b>	150	76.14%	47	23.86%	197
<b>Youth (18-35)</b>	235	74.37%	81	25.63%	316



## 5.2.5 Indicator 2.3.3b: # males and females benefiting from improved water security

In general, slightly more than half respondents (57.7%) affirmed that their communities have access to water for drinking, domestic use and for farming, with lowest percentage in intervention communities of Nacala-a-Velha (39.0%), as shown in table 28.

Table 28: Consistent access to water for drinking, domestic use and for farming

Disaggregation	No	I'm not sure	Yes	Total
General	42.1%	0.2%	57.7%	532
Domain				
Reference	25.0%	0.0%	75.0%	132
Intervention	47.8%	0.3%	52.0%	400
Distrito				
Memba	52.1%	0.0%	47.9%	140
Mossuril	42.5%	0.5%	57.1%	219
Nacala-a-Velha	61.0%	0.0%	39.0%	41
Nacala-a-Velha (Reference)	25.0%	0.0%	75.0%	132

About 82.3% of respondents claim to have enough food for each of the daily meals (3) and 17.7% said they don't. The results seem consistent across the districts with differences not exceeding 10% percent, and the same is true when comparing young and adult respondents. The surprising result is that 100% of female respondents said yes and 64.7% male respondents said no. It could be that female respondents said yes, because women normally do anything to have food on the table, especially for children, however these responses may not have considered quality of meals (table 29).

Table 29: Respondents claiming to have enough food for each of the daily meals

Disaggregation	No	Yes	Total
General	17.7%	82.3%	532
Domain			
Reference	18.2%	81.8%	132
Intervention	17.5%	82.5%	400
Distrito			
Memba	16.4%	83.6%	140
Mossuril	19.6%	80.4%	219
Nacala-a-Velha	9.8%	90.2%	41
Nacala-a-Velha (Ref.)	18.2%	81.8%	132
Sex			
Female	0.0%	100.0%	266
Male	35.3%	64.7%	266
Age groups			
18 - 35	18.5%	81.5%	313
>35	16.4%	83.6%	219

## 5.3 BASIC NECESSITIES SURVEY (BNS)

The BNS (Basic Necessities Survey) is a way to assess family wellbeing. It is based on the premise that some families lack basic necessities, and families themselves are best able to decide what is or is not a basic necessity. By asking communities to define what goods and services are necessary for a family to meet their basic needs, it measures changes in wellbeing in a fast, easy replicable, and most importantly locally meaningful way. The BNS was conducted in two phases, namely: (i) Listing the goods and services regarded by communities as of basic needs, then (ii) actual survey of sampled population to assess percentage of ownership of goods and services regarded as of basic needs.

### 5.3.1 Listing Basic Goods of Services

The consultants visited twelve (12) communities of which four (4) in Memba, six (6) in Mossuril and two (2) in Nacala-Velha. The number of communities were allocated proportionally to the number of communities within intervention area per district (table 30). The communities visited were chosen purposely to represent most and less developed zones, based on noticeable conditions such as road access, proximity with greater markets, economic activities. In each administrative posts one community developed and one less developed were chosen, with assistance of ADPP and WCS team members.

Table 30: Villages Sampled for Listing of Basic Needs Goods and Services

Districts	Administrative posts	Communities
Memba	Memba-sede	Fungo
		Nathaca
	Niaca	Geba
		Napila
Mossuril	Mossuril-sede	São João
		Cabaceira grande
	Lunga	Lapuela
		Mutomonho
	Matibane	Anduce
		Krussi
Nacala-a-Velha	Nacala-a-Velha	Mussenqua
		Pangane



The listing exercise was conducted through 12 sessions of focus group discussions, with the following steps:

- 1) Participants were split in smaller groups of 6-8 people, namely: (i) group of young women, (ii) adult women, (iii) young men, (iv) adult men.
- 2) The facilitator provided the participants with flipcharts and stickers, of different colors for the four subgroups, and asked them to individually write the goods and service they perceive as of basic needs and stick on the flipchart.
- 3) When every group had finished listing the basic goods and services, then all participants were brought together and grouped all strikers of the four colors, from the different subgroups, young women, adult women, young men, adult men. The strikers were laid on the table and the participants discussed in plenary, to classify the goods and services in five categories, shown below (table 31).

Table 31: BNS Goods and Services Categories

N°	Criteria definition
Category 1	Items everyone thinks are basic necessities and everyone has (or has access to).
Category 2	Items everyone thinks are basic necessities, around half of all people have, but everyone will get as they become richer and services improve.
Category 3	Items everyone thinks are basic necessities, but only some people have, and many may get as they become richer and services improve.
Category 4	Items some people thought were basic necessities, which may increase in importance in the future. These are items people in wealthier towns might consider basic necessities.
Category 5	Items almost no one thought were basic necessities, and only some people in big towns cite as basic necessities.

- 4) Compilation of the final list of 32 most reported goods and services. The final list of 32 most reported goods and services was compiled out of lists from all twelve visited communities. The frequencies were calculated in SPSS, the goods and services were laid in order from most to less frequent. Then six were picked from category 1, 2 and 3, then seven were picked from each of the other criteria, as shown in the table below (table 32).

Table 32: Compilation of Final List of 33 Goods and Services

Category 1	Category 2	Category 3	Category 4	Category 5
Save drinking water within a 15-minute walk	Access to tailoring	Fishing net	block house	Private pharmacy
Hoe	machete	Freezer / Fridge	Motorboat	police station
Health services	Ax	access to school	Plasma	Fan
Miller within the community	Farming land	TV	Bicycle	wooden bed
Mosque within the town	Telephone	Electrical energy	Job	Clock
Market within the locality	zinc coating	Improved/slab latrine	motorbike	Goats
			Kindergarden	oxen

### 5.3.2 BNS Survey and Findings

The compiled list of 32 BNS goods and services, were included in the BNS survey along with a question if the respondent considered each of them of basic need. A total of 554 people (278 female and 276 male) responded to the BNS query. Data analysis and calculation of the well-being index, as per following steps:

- ✓ First, the weight of each item was calculated, that is, the percentage of people who declared that whether the items really constituted a basic need.
- ✓ All 32 goods and services had a weight > 50% of respondents who regarded as ones of basic needs, thus the list of 32 items were validated for the calculation of the well-being index.
- ✓ For each of the 32 items, the frequency of answer to the question “has/has access” was multiplied “By the weight”, mentioned above. The sum of this multiplication generated the household welfare score. Then, the maximum score was calculated, which is the sum of the weights of all items on the list.
- ✓ Finally, the well-being score was divided by the maximum score, thus giving the household well-being index. This calculation was performed automatically by the online database, using Excel.

More details, on BNS calculation, can be found in the [Guide 2.0 To The Modified Basic Necessities Survey, \(WCS 2018\)](#), available at [Guide 2.0 to the Modified Basic Necessities Survey: Why and How to Conduct Digital-Based BNS in Conservation Landscapes - Detoeuf, D.; Wieland, M.; Wilkie, D. \(wcs.org\)](#).



Table 33: Frequency of ownership or access to basic goods and services

Number	Basic Necessities	Overall BNS				Well-being score (own it * weighting)
		Have now Yes = 1, No = 0		Weighting (% of necessity votes)		
1	Access to drinking water within a 15-minute walk?	412	0,744	554	1,000	0,744
2	Hoe	512	0,924	548	0,989	0,914
3	Access to health services in the community	263	0,475	547	0,987	0,469
4	Access to milling services within the community	147	0,265	543	0,980	0,260
5	Access to the mosque within the community	523	0,944	540	0,975	0,920
6	Market access within the community	292	0,527	550	0,993	0,523
7	Access to tailoring services within the community	421	0,760	531	0,958	0,728
8	Machete	363	0,655	532	0,960	0,629
9	Ax	187	0,338	526	0,949	0,320
10	Farming land	539	0,973	549	0,991	0,964
11	Zinc coating	166	0,300	530	0,957	0,287
12	Fishing net	147	0,265	496	0,895	0,238
13	Freezer or Fridge	25	0,045	487	0,879	0,040
14	Access to school	372	0,671	508	0,917	0,616
15	TV	64	0,116	499	0,901	0,104
16	Telephone	343	0,619	527	0,951	0,589
17	Electrical energy	211	0,381	544	0,982	0,374
18	Improved/slab latrine	113	0,204	543	0,980	0,200
19	Block house	48	0,087	527	0,951	0,082
20	Motorboat	18	0,032	467	0,843	0,027
21	Plasma	25	0,045	415	0,749	0,034
22	Bicycle	33	0,060	476	0,859	0,051
23	Job	15	0,027	533	0,962	0,026
24	Motorbike	76	0,137	516	0,931	0,128
25	Access to Kindergarden	48	0,087	457	0,825	0,071
26	Access to private Pharmacy within your locality	50	0,090	533	0,962	0,087
27	Access to police station	92	0,166	522	0,942	0,156
28	Fan	15	0,027	424	0,765	0,021
29	wooden bed	168	0,303	529	0,955	0,290
30	Wall clock	12	0,022	428	0,773	0,017
31	Goat	53	0,096	503	0,908	0,087
32	Oxen	11	0,020	413	0,745	0,015
Number of respondents (N)		554				
Maximum score = Sum(C2:C33)					<b>29,417</b>	
Household's Well-being score= Sum(CD:D33)						<b>10,011</b>
Household's Well-being index (=Household's Score / Maximum Score)						<b>34,03%</b>

Number	Basic Necessities	Intervention area					Comparison area				
		Have now Yes = 1, No = 0		Weighting (% of necessity votes)		Well-being score (own it * weighting)	Have now Yes = 1, No = 0		Weighting (% of necessity votes)		Well-being score (own it *)
1	Access to drinking water within a 15-minute walk?	320	0,760	421	1,000	0,760	92	0,692	133	1,000	0,692
2	Hoe	396	0,941	418	0,993	0,934	116	0,872	130	0,977	0,853
3	Access to health services in the community	198	0,470	416	0,988	0,465	65	0,489	131	0,985	0,481
4	Access to milling services within the community	113	0,268	417	0,990	0,266	34	0,256	126	0,947	0,242
5	Access to the mosque within the community	400	0,950	411	0,976	0,928	123	0,925	129	0,970	0,897
6	Market access within the community	257	0,610	419	0,995	0,608	35	0,263	131	0,985	0,259
7	Access to tailoring services within the community	360	0,855	413	0,981	0,839	61	0,459	118	0,887	0,407
8	Machete	282	0,670	414	0,983	0,659	81	0,609	118	0,887	0,540
9	Ax	150	0,356	407	0,967	0,344	37	0,278	119	0,895	0,249
10	Farming land	413	0,981	418	0,993	0,974	126	0,947	131	0,985	0,933
11	Zinc coating	123	0,292	412	0,979	0,286	43	0,323	118	0,887	0,287
12	Fishing net	111	0,264	374	0,888	0,234	36	0,271	122	0,917	0,248
13	Freezer or Fridge	17	0,040	377	0,895	0,036	8	0,060	110	0,827	0,050
14	Access to school	273	0,648	379	0,900	0,584	99	0,744	129	0,970	0,722
15	TV	39	0,093	387	0,919	0,085	25	0,188	112	0,842	0,158
16	Telephone	254	0,603	408	0,969	0,585	89	0,669	119	0,895	0,599
17	Electrical energy	152	0,361	416	0,988	0,357	59	0,444	128	0,962	0,427
18	Improved/slab latrine	77	0,183	415	0,986	0,180	36	0,271	128	0,962	0,261
19	Block house	29	0,069	409	0,971	0,067	19	0,143	118	0,887	0,127
20	Motorboat	15	0,036	359	0,853	0,030	3	0,023	108	0,812	0,018
21	Plasma	20	0,048	305	0,724	0,034	5	0,038	110	0,827	0,031
22	Bicycle	28	0,067	366	0,869	0,058	5	0,038	110	0,827	0,031
23	Job	13	0,031	407	0,967	0,030	2	0,015	126	0,947	0,014
24	Motorbike	61	0,145	401	0,952	0,138	15	0,113	115	0,865	0,098
25	Acess to Kindergarden	45	0,107	337	0,800	0,086	3	0,023	120	0,902	0,020
26	Access to private Pharmacy within your locality	37	0,088	403	0,957	0,084	13	0,098	130	0,977	0,096
27	Access to police station	72	0,171	397	0,943	0,161	20	0,150	125	0,940	0,141
28	Fan	11	0,026	317	0,753	0,020	4	0,030	107	0,805	0,024
29	wooden bed	125	0,297	414	0,983	0,292	43	0,323	115	0,865	0,280
30	Wall clock	11	0,026	324	0,770	0,020	1	0,008	104	0,782	0,006
31	Goat	50	0,119	388	0,922	0,109	3	0,023	115	0,865	0,020
32	Oxen	9	0,021	310	0,736	0,016	2	0,015	103	0,774	0,012
Number of de respondents (N)		421					133				
Maximum score = Sum(C2:C33)				<b>29,594</b>					<b>28,857</b>		
Household's Well-being score= Sum(CD:D33)						<b>10,268</b>					<b>9,222</b>
Household's Well-being index (=Household's Score / Maximum Score)						<b>34,70%</b>					<b>31,96%</b>



The overall BNS was 34%, the maximum score 29.42 and the household welfare score 10. It was noted that there was a slight difference between the comparison and intervention zones. Between these two zones, there was a difference of 2.74% in the BNS, being the intervention zone with the highest index (table 34).

Table 34: BNS - Social Welfare Index

Disaggregation	Maximum score	Score of Household Welfare	Household Well-Being Index	Total respondents (N)
General	29.417	10.011	34.03%	554
Zone Type				
Intervention Zone	29.594	10.268	34.70%	421
Reference	28.857	9.222	31.96%	133
Districts				
Memba	29.612	9.782	33.03%	152
Mossuril	29.676	10.822	36.47%	225
Nacala-a-Velha	29.114	9.150	31.43%	44
Nacala-a-Velha (Reference)	28.857	9.222	31.96%	133
Gender (respondent)				
Women	29.371	9.880	33.64%	278
Men	29.464	10.153	34.46%	276
Gender (Head of AF)				
Women	28.762	8.708	30.28%	84
Men	29.534	10.254	34.72%	470
Age group				
Adults (35+)	29.482	10.517	35.67%	255
Young people (18-35)	29.361	9.583	32.64%	299

Female respondents and households headed by women had a lower rate than men, and in fact, according to data from focus groups and informants, men are more engaged in economic activities in relation to women, which allows them to have greater purchasing power for some goods and have access to essential services. As for age, young people had a low rate (32.6%) compared to adults (35.7%). This can be associated with the fact that this layer is still in a phase of instability, it was noted that adults have more economic power in relation to adults and for the most part they are the ones who control the most resources, which allows them greater access to essential services and goods. The district of Mossuril had the highest index (36.5%), followed by Memba (33.0%), the intervention area in Nacala-a-Velha had the lowest index (31.4%). Apparently, the district with the highest index (Mossuril) is more developed in socioeconomic terms, of the 3 districts under study (table 42).

## 5.4 LAND TENURE

Conflict over land is a common issue in development or implementation of conservation projects. Respondents were asked how they perceive security in access to community land in their villages, especially community ownership of land that have not yet been allocated or entitled to specific people or households. More than half (52.5%) are insecure about community land tenure, because they allegedly have lost portions of their community land or they fear future threats that may result in losing lands (table 35). Asked about the source of threats they perceive which lead to loss of community land, they mentioned: government decisions, investors, community leaders.

Table 35: Respondents who report insecurity about ownership of community land

Disaggregation	Frequency of Respondents who feel insecure	Total
General	52.5%	554
Domain		
Reference	61.7%	133
Intervention	49.6%	421
District		
Memba	44.7%	152
Mossuril	52.9%	225
Nacala-a-Velha	50.0%	44
Nacala-a-Velha (Reference)	61.7%	133
Sex		
Female	46.8%	278
Male	58.3%	276
Age groups		
18 - 35	61.2%	255
>35	45.2%	299



Further on, the interviewees were asked about their perception of security in relation to their family's land tenure. The same way respondents perceive threats under community land, about more than half (65.0%) stated that they are worried to some extent on the land tenure of their families (table 36).

Table 36: Respondents reporting insecurity about family land tenure

Disaggregation	Frequency of Respondents who feel insecure	Total
General	65.0%	554
Domain		
Refrence	69.9%	133
Intervention	63.4%	421
District		
Memba	63.8%	152
Mossuril	64.9%	225
Nacala-a-Velha	54.5%	44
Nacala-a-Velha (Reference)	69.9%	133
Sex		
Female	50.0%	278
Male	80.1%	276
Age groups		
18 - 35	70.2%	255
>35	60.5%	299

Respondents were asked to state how they reach about the following statement: "Women should have the same access as men to social, economic and political resources and opportunities". In general, 81% agree and 13% disagree, 6% are not sure. Results across districts are consistent between 11-13% of disagreement, except for Nacala-a-Velha where about 25% respondents said they disagree with the above statement of equal rights for women and men. Close look on the data, reveal that those who disagree are mostly males (25% males and 1% female), equally shared by young and adults (table 37).

Table 37: Respondents perception about equal right of access for women and man

Disaggregation	Fully agree	Agree	Neutral	Disagree	Totally disagree	Total
General	49.3%	32.1%	7.9%	5.1%	5.6%	554
Domain						
Reference	53.4%	33.1%	6.8%	6.0%	0.8%	133
Intervention	48.0%	31.8%	8.3%	4.8%	7.1%	421
District						
Memba	53.9%	29.6%	9.2%	2.0%	5.3%	152
Mossuril	44.9%	34.2%	6.2%	5.8%	8.9%	225
Nacala-a-Velha	43.2%	27.3%	15.9%	9.1%	4.5%	44
Nacala-a-Velha (Reference)	53.4%	33.1%	6.8%	6.0%	0.8%	133
Sex						
Female	43.9%	50.0%	1.4%	0.0%	4.7%	278
Male	54.7%	14.1%	14.5%	10.1%	6.5%	276
Age groups						
18 - 35	51.4%	31.0%	8.6%	3.9%	5.1%	255
>35	47.5%	33.1%	7.4%	6.0%	6.0%	299



A follow up question was asked to respondents, to state their reaction to the following statement: "Women should be able to own and control land and resources in their own name". About 81% stated that they agree, 14% disagree and 5% are unsure. Among intervention areas, Nacala-a-Velha intervention area had the higher percentage of respondents who disagreed (23%), followed by Mossuril (13%) and Memba (10%). Almost all those who disagreed were male respondents (26% compared to 1% female) and also those who were unsure are mainly male (7% compared to 3% of female). The opinion against women's right of land entitlement was shared by both young males (14% disagreed and 6% are unsure) and adult males (13% disagreed and 4% are unsure) (table 38).

Table 38: Respondents perception about women's right of land entitlement and control

Disaggregation	Fully agree	Agree	Neutral	Disagree	Totally disagree	Total
General	37%	45%	5%	7%	7%	554
Domain						
Reference	34%	50%	1%	8%	8%	133
Intervention	38%	43%	6%	7%	6%	421
District						
Memba	38%	43%	9%	6%	4%	152
Mossuril	39%	43%	4%	6%	8%	225
Nacala-a-Velha	30%	43%	5%	16%	7%	44
Nacala-a-Velha (Reference)	34%	50%	1%	8%	8%	133
Sex						
Female	64%	33%	3%	1%	0%	278
Male	9%	57%	7%	13%	13%	276
Age groups						
18 - 35	35%	49%	4%	7%	6%	255
>35	38%	41%	6%	7%	7%	299

About 27.8% of respondents stated that they have experienced land conflicts (some respondents shared more than one conflict), such as over limits/boundaries (19%), entitlement (6%) and right of use of land (5%), as shown in table 39. To mention some examples: (i) In Lunga, there are reportedly conflicts over access to the fishing zone; (ii) In Mossuril, land conflicts over the area of the beach of Chocas Mar, were reported, where allegedly the owner sold to two buyers; (iii) There are also conflicts related to the invasion of goats in someone else's territory (machambas), in these cases the SDAE meets with the parties to enter into agreements and refund the damages.

Table 39: Frequency of Land Conflict Ever Experienced by Respondents

Disaggregation	Experienced Conflicts?		Cause of Dispute?			Total de respondents (N)
	No	Yes	Limits	Entitlement	Right of Use	
General	72.2%	27.8%	19%	6%	5%	554
Domain						
Reference	55.6%	44.4%	32.3%	3.8%	10.5%	133
Intervention	77.4%	22.6%	14.7%	6.2%	3.3%	421
District						
Membra	80.9%	19.1%	14.5%	3.3%	2.0%	152
Mossuril	79.6%	20.4%	13.3%	7.1%	1.8%	225
Nacala-a-Velha	54.5%	45.5%	22.7%	11.4%	15.9%	44
Nacala-a-Velha (Reference)	55.6%	44.4%	32.3%	3.8%	10.5%	133
Sex						
Female	87.8%	12.2%	7.9%	3.6%	1.8%	278
Male	56.5%	43.5%	30.1%	7.6%	8.3%	276
Age groups						
18 – 35	68.2%	31.8%	21.6%	7.1%	4.7%	255
>35	75.6%	24.4%	16.7%	4.3%	5.4%	299

The 154 respondents who reported experiences of land conflicts were asked how the dispute was resolved. Nearly half (48.1%) said that the number of conflicts are resolved among the parties involved with help of friends, neighbors or relatives, then follows resolution among parties in dispute with no intervention or other (36.4%).





Just 19.5% of reported land conflicts were resolved with assistance/mediation of local leaders and few (8.4%) with government intervention. These may be opening space for continued conflicts or even systematic violation of the law, in favor of people with power over other members of the community. In fact, 39 out of 155 conflicts shared respondents, had not been resolved until the date of the survey. This is critical, in a context where most people have no formal land entitlement and 85.8% of respondents said they believe that communities have capacity to resolve land conflicts its own (table 40). This could also indicate lack of information of existing institutions and more secure procedures for land conflict resolution.

In Lunga, there are reportedly conflicts over access to the fishing zone. In Mossuril, land conflicts are observed on the beach of Chos Mar, where the owner sells to two buyers, however, it is up to the SDPI (District Infrastructure Services) to manage this type of conflict. With regard to land, there are also conflicts related to the invasion of goats in someone else's territory (machambas), in these cases the SDAE meets with the parties to enter into agreements and refund the damages.

Table 40: How Land Conflict Were Resolved

Disaggregation	Helped by friends, relatives)	Between the parties involved (no mediation)	Local authorities intervened	Government intervened	Total respondents (N)
General	48.1%	36.4%	19.5%	8.4%	154
Domain					
Reference	54.2%	39.0%	6.8%	5.1%	59
Intervention	44.2%	34.7%	27.4%	10.5%	95
District					
Memba	34.5%	27.6%	48.3%	10.3%	29
Mossuril	39.1%	41.3%	26.1%	10.9%	46
Nacala-a-Velha	70.0%	30.0%	0.0%	10.0%	20
Nacala-a-Velha (Reference)	54.2%	39.0%	6.8%	5.1%	59
Sex					
Female	35.3%	26.5%	38.2%	5.9%	34
Male	51.7%	39.2%	14.2%	9.2%	120
Age groups					
18 - 35	49.4%	34.6%	19.8%	9.9%	81
>35	46.6%	38.4%	19.2%	6.8%	73

Note: Some respondents reported on more than one conflict and so the resolution, thus the total might exceed 100% in some cases.



Asked how they characterize women's current level of influence in community land decision-making over community land issues, about 40.8% said women have no influence, other 43.5% stated that women had some, but limited influence compared to men. Among female respondents more than half (54.3%) stated that women have no influence and 30.6% said women have less influence is decision making about community land (table 41).

Table 41: Women Influence of Community Decision Making Over Community Land

Disaggregation	Have more influence than men	Have the same level of influence as men	Not sure	Have less influence than men	Have no influence	Total
General	2.2%	8.3%	5.2%	43.5%	40.8%	554
Domain						
Reference	1.5%	5.3%	3.0%	39.1%	51.1%	133
Intervention	2.4%	9.3%	5.9%	44.9%	37.5%	421
District						
Memba	1.3%	11.2%	2.0%	47.4%	38.2%	152
Mossuril	3.1%	8.9%	8.0%	44.0%	36.0%	225
Nacala-a-Velha	2.3%	4.5%	9.1%	40.9%	43.2%	44
Nacala-a-Velha (Reference)	1.5%	5.3%	3.0%	39.1%	51.1%	133
Sex						
Female	1.4%	7.6%	6.1%	30.6%	54.3%	278
Male	2.9%	9.1%	4.3%	56.5%	27.2%	276
Age groups						
18 - 35	2.0%	11.4%	6.7%	42.4%	37.6%	255
>35	2.3%	5.7%	4.0%	44.5%	43.5%	299



Concerning current level of influence of women in decision-making on family lands, the responses were like those regarding community lands. About 38.3% said women have no influence, 47.7% said women have less influence compared to men. About 49.3% of female respondents stated that women have no influence and 34.9% said women has limited influence compared to men. Again, this is critical, especially because 85.8% of respondents still believe that communities have capacity to resolve land conflicts on their own (table 42). This might be playing a critical role in perpetuating gender imbalance in decision making over access and use of land, both at community and family level.

Table 42: Women Influence of Community Decision Making Over Family Land

Disaggregation	Have more influence than men	Have the same level of influence as men	Not sure	Have less influence than men	Have no influence	Total
General	3.2%	7.9%	2.9%	47.7%	38.3%	554
Domain						
Reference	0.8%	7.5%	0.8%	42.9%	48.1%	133
Intervention	4.0%	8.1%	3.6%	49.2%	35.2%	421
District						
Memba	1.3%	7.2%	1.3%	57.9%	32.2%	152
Mossuril	5.8%	8.9%	4.9%	44.4%	36.0%	225
Nacala-a-Velha	4.5%	6.8%	4.5%	43.2%	40.9%	44
Nacala-a-Velha (Reference)	0.8%	7.5%	0.8%	42.9%	48.1%	133
Sex						
Female	5.0%	8.3%	2.5%	34.9%	49.3%	278
Male	1.4%	7.6%	3.3%	60.5%	27.2%	276
Age groups						
18 - 35	2.7%	9.0%	4.7%	46.3%	37.3%	255
>35	3.7%	7.0%	1.3%	48.8%	39.1%	299

## 5.5 VULNERABILITY MATRIX

Participants in the FGD in Memba, Mossuril, and Nacala-a-Velha mentioned the main livelihood activities they rely on and identified the hazards each one is exposed to, by scoring 1 (none), 2 (low), 3 (medium), 4 (high) and 5 (very high), as shown in table 43). The feedback shows that the most important hazards are floods, droughts, strong winds / cyclones, erosion, sea level changes, salinization of boreholes water.

Table 43: Livelihoods and Climate Hazards

Livelihood activities	Floods	Drought	Strong winds/cyclones	Erosion	Sea level changes	Salinization of boreholes water
Fishing	5.0	4.7	5.0	2	4.7	1
Collection of marine species	5.0	5.0	5.0	2	4.0	1
Agriculture						1
Cereals	5.0	5.0	5.0	3	1.3	1
Vegetables	5.0	5.0	5.0	3	1.3	2.0
Vegetables	5.0	5.0	5.0	3	1.3	2.3
Fruits	5.0	5.0	5.0	3	1.5	2.5
Business	5.0	3.0	5.0	1	1.0	1
Firewood/coal cutting	5.0	1.0	5.0	1	1.0	1
Animal child	5.0	5.0	3.5	1	1.0	2
Forests – building materials/handicrafts	5.0	3.5	4.5	3	1.0	1
Craft	5.0	1	3.0	1	1.0	1

Impacts: 1. None, 2. Low, 3. Medium, 4. High, 5. Very High

## 5.6 HISTORICAL TIMELINE OF CLIMATE HAZARDS EVENTS

Participants of FGD of Memba, Mossuril and Nacala-a-Velha , were asked to recall historical events in the past decades, and record climate hazards per year. The analysis of historical occurrences of extreme weather events in the three districts covered by the study shows that these communities have been affected by frequent heavy rains and strong winds/cyclones are followed by drought/irregular rains (table 44).

Table 44: Historical timeline of climate hazards events

Mossuril		Memba		Nacala-a-Velha	
2023	Heavy rains	2023	Pests, Cyclones, heavy rains	2023	Heavy rains
2022	Cyclone, floods	2021 e 2022	Covid-19. War	2022	Hunger, heavy rains and winds
2020	Dry	2020	Flooded, dry		
2019	Wildfires	2018	Cyclone and heavy rains	2018	Rains
2016	Dry				
2015	Earthquake	2015	Dry		
1994 e 2008	Hurricane	1999	Strong winds	1994	Hurricane
1986	Wars	1994	Cyclone and heavy rains		Heavy rains

## 5.7 RESOURCE & HAZARD MAPPING

These climatic events have a great impact on the main economic activities, such as fishing, farming, marine and forest resources use, as well as on the availability of water for consumption. The table 45 below shows how climate hazards impact the habitats or natural resources, that are important for communities' livelihoods.

Table 45: Effect of Hazards in Habitats or Resources Communities Rely on

Main natural resources/habitats	Climate hazards	How is each of the habitats/recourses affected by climate disasters?
Sea	Increased temperature of sea water	Fish take refuge in cold waters far away;
	Heavy rainfall, erosion, sediment transport to the sea, reduced salinity and increased water turbidity and poor visibility	Those who collect, notice that some species disappear
	Fresh water from rivers flows into the sea	Warming creates the death of marine species and species tend to move to cold areas or zones or move to the bottom of the sea Reduction of salinity on the coast water
	Drought	The species go to the bottom and far away from the coast, they die, the seagrass dies or is completely burned, causing the species not to reproduce, the seagrass becomes withered and the species end up taking refuge or living in inappropriate places.
Agriculture	Strong winds/cyclones/discharging electrics	The strong winds destroy the fields, the crops are all destroyed and the plants uprooted and the fruits lying on the ground.
	Droughts	They cause erosion and in cases of drought crops are burned;

Main natural resources/habitats	Climate hazards	How is each of the habitats/recourses affected by climate disasters?
	Pests (insects, lizards and wild animals)	Electrical discharges cause trees to fall and crops to burn
	High temperatures	Droughts meant that there was no production in the fields, but also changes in heavy rains meant that the fish moved to great depths;
Drinking water	Rising temperatures and droughts	Total loss or low yield
	Droughts	Low germination, growth and production Water depth increases, most water holes tend to dry up, especially in September, October, November and a little in December. Water pump malfunctions
	Heavy rains	Water pumps/boreholes sedimentation or colapse
Forests (firewood, charcoal, building materials)	Strong winds	Strong winds destroy the furnaces, causing the charcoal to ignite more or too much and turn to ash.
	Thunderstorms	People cannot stay in the forests or in the woods, in times of thunderstorms and strong winds.
Salt	Heavy rain/floods	Rainy seasons - people completely run out of salt in the salt pans, due to the intense and heavy rains.
Raising animals (raising poultry and goats)	High temperatures, Droughts	Death of poultry, because of excess sun has had an epidemic called theme.
	Heavy rains and cyclones	Animal deaths due to severe cold or strong wind

## 5.8 SEASONAL CALENDAR

FGD participants create a seasonal calendar of their main productive activities throughout the year, correlating the seasons of the year, based on rainfall, temperature and wind factors. Then it was discussed to what extent this seasons calendar has changed over the last few decades, as well as how this have been affecting the calendar of productive activities (table 46).

Table 46: Seasonal Calenda

Livelihood activities	Janary	Febr	March	Abril	May	June	July	Aug	Sept	Oct	Nov	Dec
Seasons												
Rains	4.5	5.0	3.3	2.5	1.8	1.3	1.3	1.0	1.3	1.3	1.8	4.0
Strong winds	1.0	1.5	5.0	4.0	3.0	4.0	3.5	2.5	2.5	1.0	1.0	1.0
Temperature	4.8	4.8	4.3	2.5	2.0	2.0	2.3	2.8	3.3	4.5	4.5	5.0
Fishing	5.0	3.5	3.5	3.0	3.0	2.5	2.0	2.0	2.5	3.5	3.5	4.5
Agriculture	4.8	4.8	4.0	4.0	4.0	4.0	2.8	2.3	2.3	2.5	3.8	4.8
Collection of marine species	2.0	2.0	2.0	3.5	3.5	3.5	3.0	3.0	2.5	2.5	2.5	2.5
Business	2.0	2.0	2.3	3.0	3.5	4.0	4.0	3.3	3.7	3.8	4.0	3.8
Firewood/coal cutting	2	2	2	2	3	3	4	5	5	5	5	4

1.None, 2. Low, 3. Medium, 4. High, 5. Very High





Participants in the FGD sessions reported a series of changes they have observed over the last few decades, most of which were related to climate change. They also described other changes in the exploitation of resources associated with the increasing demand and commercialization of marine resources. The following are the major changes reported:

- ✓ In the past, the rains fell in November and December, lasting until January and February and they harvested earlier (January and February), being able to skip the second sowing and still harvest. Now the rain starts later and falls for a shorter period (January-February).
- ✓ Before they had very cold months, but lately they have a longer period of the year. The hot season lasts longer without rain.
- ✓ The agricultural calendar has changed a lot...they already have to wait and sow in December or January to February. And sometimes the rain hasn't been enough because now it rains very little and the crops don't grow as they should.
- ✓ Now agricultural production is very threatened by pests and diseases that affect their products in the fields. High temperatures burn plants and lower production, and cyclones are more frequent.
- ✓ There is a lot of deforestation in the woods now... too much and no replacement of trees... in the past this phenomenon was safeguarded with replacement of trees... lately everyone has a license to sell charcoal.
- ✓ Before there was no excessive cutting of the mangrove and the natural replacement of the mangrove trees always took place.
- ✓ Lately, the tides invade the shores, taking with them some species that they put to dry even far from the beaches.
- ✓ Before the number of fishermen was smaller than today and they used simple techniques and they managed to obtain normal catches throughout the year, now in addition to climate changes, the number of fishermen has also increased, with motorized boats, with increasingly diversified techniques (some harmful) and as a result, there are months when catches are very low.
- ✓ The business of selling fish has changed a lot in recent years... even those who live close to the sea also buy fish, but in the old days they all had a lot of opportunity to eat fish.
- ✓ They are about to live the end of the world, nowadays God is sending the storms just as man is born and plants die too.
- ✓ Before, the business of selling crackers, sugar, rice, etc. it was made by very powerful people, but now there are conditions for everyone, and they can all do it themselves.
- ✓ The tinsmith/ironwork business has changed... in the past there were many things made of tin and people, as soon as they got damaged, sent them to tinsmiths, now everyone uses things made of glass.

## 5.9 Effects of Climate Change/Extreme Events in Livelihoods and Response

After identifying habitats and hazards, participants were engaged in discussions about impacts of hazards in livelihoods and the responses provided (table 47).

Table 47: Effects of Climate Change/Extreme Events in Livelihoods and Responses

Activity	Impacts on Livelihood	Responses
In fishing:	<p>Fish tend to be scarce in periods of heavy rain, strong winds/cyclones and very high temperatures, given that:</p> <ul style="list-style-type: none"> <li>✓ Marine species move away from the coastal zone to more distant and deeper areas;</li> <li>✓ Fishermen do not have properly equipped vessels to reach the high seas;</li> <li>✓ Fishermen are limited to fishing on days with high waves, given the danger of navigation and the risk of destroying their vessels.</li> </ul>	<ul style="list-style-type: none"> <li>✓ The small species are left. They are forced to fish with nets of coarse mesh; do not catch small-sized fish; avoid surface trawling so as not to drag growing species including eggs; not to use mosquito nets for fishing; do not remove the sea weeds because they are areas where the species reproduce. They avoid using surface trawling such as mosquito nets, which carry very small species that are in the reproduction phase.</li> <li>✓ These species are not captured during reproduction times and opt for hook fishing. They preserve the rocks where the species reproduce. They use 2" to 3" (inch) nets, but also opt for bottom fishing with fishing guns, only killing larger or larger species.</li> <li>✓ The small quantities they catch as soon as they have no buyers are put out to dry.</li> <li>✓ They comply with the ban period;</li> <li>✓ They advise not to cut mangrove trees, because they serve as a place where fish to reproduce eggs, and the disappearance of mangroves can create serious environmental problems and decline.</li> <li>✓ Go fishing at night;</li> <li>✓ They do fishing with traps in times of strong winds;</li> <li>✓ They resort to other types of activities, agriculture and they do small businesses, they</li> </ul>

Activity	Impacts on Livelihood	Responses
		<p>make cookies for their subsistence in their homes.</p> <ul style="list-style-type: none"> <li>✓ Men are going to do odd jobs.</li> </ul>
<p>In agriculture and food</p>	<p>Systematic losses of crops by:            Poor germination or growth due to irregularity or insufficient rainfall;            Pests and diseases;</p> <ul style="list-style-type: none"> <li>✓ Destruction by cyclones;</li> <li>✓ Destruction by floods;</li> </ul>	<ul style="list-style-type: none"> <li>✓ Conservation agriculture;</li> <li>✓ Seed selection of climate-adapted varieties;</li> <li>✓ In agriculture: they separate the seeds in conditions to guarantee the following season; they fertilize the soil with grass and must always turn it over to ensure its fertility;</li> <li>✓ Some products conserve in granaries.</li> <li>✓ Cultivate in minimally high zones;</li> <li>✓ Bet on some cultures in the low rivers like rice;</li> <li>✓ Sow or plant small grass on the shores of the beaches</li> <li>✓ Make paths for the drainage of water;</li> <li>✓ Create barriers with sandbags so as not to directly affect the fields;</li> <li>✓ Instead of fish like curry, they adapt eating leaves of sweet potato leaves, cassava and other;</li> <li>✓ They had to buy food, which they should produce</li> <li>✓ Offer of food by family members.</li> <li>✓ They resort to odd jobs in the farms, paid for food</li> </ul>
<p>Raising animals (raising poultry and goats)</p>	<p>Death of animals, due to excessive heat, epidemics, flooding, winds</p>	<ul style="list-style-type: none"> <li>✓ They wait until the epidemy incidence is low, so they can go back to creating again.</li> <li>✓ To avoid loss of animals in hot and sunny seasons, here in the community there is someone who vaccinates the birds and they can pay 10 mts,</li> </ul>
<p>Forests, cutting firewood, burning coal</p>	<p>Low production of firewood and charcoal</p>	<ul style="list-style-type: none"> <li>✓ Use already destroyed/fallen/old trees, not the fresh or green trees.</li> <li>✓ They build the kilns in high regions with water diversions.</li> <li>✓ They avoid building kilns in windy times or months.</li> <li>✓ Looking for alternative activities</li> </ul>

Activity	Impacts on Livelihood	Responses
Infrastructures	<p>The strong winds/ciclones destroy houses, schools, health centers, stalls;</p> <p>Sea water invade spaces for water holes;</p> <p>The rains create soil erosion, degrading roads and houses;</p>	<ul style="list-style-type: none"> <li>✓ Use plastic and grass roofing</li> <li>✓ Place sandbags on top of roof material</li> </ul>
Drinking water	<p>Water shortages, especially in September, October, November and a little in December.</p> <p>Frequent breakdowns of water pumps given pressure or intensive use;</p>	<ul style="list-style-type: none"> <li>✓ Conserve rainwater in tanks made by the settlers or in plastic reservoirs, as iron reservoirs do not take long to be affected by rust due to salt;</li> <li>✓ Lack ways to conserve water for a long period, since there is no money to buy containers or build concrete or cement tanks, much less plastic tanks.</li> </ul>

Note:

Cyclone of 2008 in Mossuril caused the destruction of housing, deaths of 37 people, loss of property, destruction of schools.

## 5.10 Government Interventions

### Climate Change Adaptation Strategy

The following are the government's strategic actions to promote resilience:

- ✓ Design of a local climate change adaptation plan (in Mossuril);
- ✓ Creation of a local disaster risk reduction and management committee (CLGRRD), with members of the community (9 men and 9 women). This committee is trained in matters of early warning management (following the radio and alerting the community) and rescue.
- ✓ Preparation of the climate change plan which has now been submitted to the district government for approval (Mossuril)
- ✓ Promotion of training of technicians in matters of climate change

### Government Actions in water infrastructure

Construction of water holes, however there are areas where the water table is contaminated with salt water (Yahaia) and other areas such as Baixo Pinda where there are several holes in need of rehabilitation.

### Government Actions in Agriculture and Nutrition

The SDAEs have developed some interventions in order to keep communities more resilient, such as promoting the involvement of extension workers in monitoring agricultural activity in order to ensure the dissemination of good practices and resilience techniques to climate change. There are also some projects brought by the government such as Sustenta which has benefited the community with tractors, however this support is not comprehensive, and there are communities that do not have access to this type of opportunity with regard to the availability of tractors and agricultural inputs.

The SDAE has in its staff extensionists who have the role of disseminating good practices in agriculture as well as distributing agricultural inputs such as seeds and fertilizers. The impacts of this practice are observed in the improvement of community conditions, guarantee of food security and consequent reduction of malnutrition.

### Government Actions in Fisheries

Support awareness raising, through working with CCPs, SDAEs and local leaders, to discourage the cutting of mangroves and destruction of corals. SDAE promotes the conservation of Biodiversity through the training of CCPs and their involvement in co-management meetings, raise awareness against the use of harmful arts. And on days of bad weather, they cannot go out to sea, opting for alternative activities. Support mechanisms for



an improved monitoring of tourism activities and collection of the percentage of revenue to be reverted to community.

### Government Actions in Nutrition

With regard to malnutrition, there is an entity called Transformation Nutrition (TN) that works in partnership with ADPP and the government to disseminate good practices in food preparation.

## **6. Trends in Catches and Management of Fisheries**

### **6.1 Perceived Trends in Catches and Current Management of Fisheries**

Fishermen have observed a decrease in the abundance of fishing resources in the sea, namely: shrimp, horse mackerel, billfish, sardines, swordfish, stone fish and grouper are disappearing. For example: the total catch of artisanal fishing vessels in Lunga was 20 tons/day. In recent years it has reduced to 100 kg/day (CCP Lunga). Average yields are around 30 kg/fisherman/day for artisanal fishing using trawl, gillnet and seine gear (CCP Namapiri)

Feedback from FGD and Key informants in the districts of Memba, Mossuril and Nacala-a-Velha reveals that, in general, there are no plans for management or creation of conservation areas for mangroves, seagrasses and corals (eg. Mossuril – Lunga, Namapiri). There are reportedly areas where mangroves are cut and corals are exposed (eg Calancia, Namapiri). There have been some community initiatives led by CCPs and support from OIKOS whereby they voluntarily create marine protection zones, such as: In Lunga (Terene and Namuco), Namapiri (Nikula, Nkiva/Giva and Eponta). In some communities, such as Lunga, there are indeed co-management committees that meet 3 times a year, comprising SDAE, fisheries technicians, OIKOS, and the Director of SDAE. Other initiatives are the creation of associations of fishermen, as is the example of Mossuril - localities of Mancombe (10 members) and Koloca (12 members). Those have great potential to be enhanced and replicated in most of the communities.

## 6.2 Challenges Experienced by CCPs

Challenges reported by CCPs are as follows:

- ✓ Limited equipment to carry out enforcement, including chasing offenders with more powerful vessels; In the district of Mossuril there are 5 CCP's (3 in the headquarters, 1 Matibane and 1 in Lunga), all of them have infrastructure, but only the CCP of Mossuril headquarters has a boat for inspection where it tries to support all CCPs, but it's not enough.
- ✓ The CCPs are not officially registered;
- ✓ Lack of monthly remuneration (salary), receiving only 15% of the amount related to the payment of fishing licenses, motorboat, motorcycle and uniform.
- ✓ Lack of transport to go to the most distant fishing areas and carry out inspections.
- ✓ Communities are suspicious that some CCP members have accepted bribes to allow illegal weighing to take place, and that the same person has shared CCP information to facilitate the escape.

## 7. Conclusions and recommendations for Blue Future activities

### 7.1 Conclusions

The table below contains the baseline values found for each indicator.

Table 48: Baseline Values

Indicators		General Baseline Value for The Intervention Area	Baseline Values Per Districts and Reference Site			
			Memba	Mossuril	Nacala-a-velha	Nacala-a-velha (reference)
Indicator G2: More People in The Project Intervention Areas Benefit from Improved Ecosystem Services Supporting Adaptation to Climate Change.	Combined interventions that address seagrass, mangroves and coral reefs conservation or restauration	11.3%	9.3%	12.8%	9.8%	16.7%
Indicator G3: At the end of the project, livelihood conditions of affected households in project intervention areas are improved	Households Average Monthly Incomes (MT)	4,349.10				4,456.7
Indicator G4: at the end of the project, substantially more households affected in project intervention areas have a positive attitude towards marine biodiversity,	Attitude towards protection and restoration of mangroves, seagrass and coral reefs	45.8%	48.6%	41.1%	61.0%	48.5%



Indicators		General Baseline Value for The Intervention Area	Baseline Values Per Districts and Reference Site			
			Memba	Mossuril	Nacala-a-velha	Nacala-a-velha (reference)
restoration and protection of mangroves, seagrass and coral reefs						
Indicator O1.2: villages are more resilient to climate change (water and food security, community structures for sustainable fisheries management).	Increased frequency and intensity of cyclones/strong winds	67.07%	74.30%	56.20%	70.70%	75.80%
	Decrease or disappearance of fish species	56.60%	52.10%	54.30%	63.40%	54.50%
	Degradation of fish habitat	55.90%	55.70%	46.10%	65.90%	58.30%
	Fish migration	30.33%	24.30%	30.10%	36.60%	28.00%
	Soil erosion and impoverishment due to the intensity of rainfall during the peak	28.47%	28.60%	25.10%	31.70%	28.00%
	Increased pests and diseases in plants and animals	28.87%	30.70%	16.90%	39.00%	25.00%
	Variation of the rainfall calendar	19.67%	25.00%	9.60%	24.40%	20.50%
	Increased temperature and number of hot days	18.07%	17.90%	11.90%	24.40%	23.50%
	Increased amount of rainfall at short peak times, resulting in flooding	11.23%	9.30%	7.30%	17.10%	37.90%
	Reduced rainfall causing droughts	13.50%	12.90%	3.20%	24.40%	12.10%

Indicators	General Baseline Value for The Intervention Area	Baseline Values Per Districts and Reference Site				
		Memba	Mossuril	Nacala-a-velha	Nacala-a-velha (reference)	
Pollution of rivers, due to exploitation of riverside areas for agriculture	2.37%	7.10%	0.00%	0.00%	12.90%	
Increased water temperature and changes in species reproduction	4.13%	2.10%	0.50%	9.80%	14.40%	
Reduction in creation capacity and inventory	0.97%	0.00%	0.50%	2.40%	0.80%	
Indicator 2.3.3b: # males and females benefiting from improved water security	Consistent access to water for drinking, domestic use and for farming	51.87%	52.10%	42.50%	61.00%	25.00%
Basic Necessities Survey (BNS)	BNS - Social Welfare Index (maximum score)	2946.73	29.612	29.676	29.114	28.857
Land Tenure	Respondents reporting insecurity about ownership of community land	49.6%	44.7%	52.9%	50.0%	61.7%
	Respondents reporting insecurity about ownership of family land	63.4%	63.8%	64.9%	54.5%	69.9%

## 7.1.2. Recommendations

In light of the findings, recommendations were drawn for each indicator and area of key result, as presented below.

### Indicator G4: Households affected have a positive attitude towards marine biodiversity, restoration and protection of mangroves, seagrass and coral reefs

- ✓ Raise awareness and provide technical assistance to the relevant bodies responsible for designing laws and/or developing marine and coastal resource management plans and the community in general for greater involvement of women in designing laws and/or developing marine and coastal resource management plans;
- ✓ Training or giving lectures on legislation and regulatory policies and management of marine and coastal resources;
- ✓ Create a partnership with community radios to create a program with the aim of disseminating legislation and regulatory policies and management of marine and coastal resources.

### Fisheries Management

- ✓ Support/train CCPs in designing a fisheries and coastal resources management plans;
- ✓ Support the CCPs with means of transport and boats to carry out inspections;
- ✓ Raise awareness for CCPs to discourage bribes to facilitate illegal fishing;
- ✓ Support law enforcement by providing patrol boats to cover the entire areas of the district;
- ✓ Construction of infrastructure for CCP headquarters, supply of identification material such as vests;
- ✓ Create a market for selling fish, create connections with good buyers; For example, create fairs selling fish or seafood; Help organize the market, to stipulate price lists for all fishermen.

### Indicator G3: Livelihood conditions improved

- ✓ Financing of alternative livelihood activities, for example quarrying, firewood and charcoal exploration business, cake business, production and sale of juice.
- ✓ Make partnerships with financial institutions to facilitate access to credit for project beneficiaries;
- ✓ Train project beneficiaries in developing business plans and managing finances;
- ✓ Support creation of saving groups;
- ✓ Finance businesses specifically for women such as selling cookies, meals, encourage women to sell their products at fairs;
- ✓ Support women business in commercialization of fish, provide means of fish conservation, such as cold systems, production of ice for sale, coolers for transporting and handling fish during sale;
- ✓ Other business suggested sale of clothing, stalls selling food and nonfood items (biscuits, soap, oil, fuel);



- ✓ Implement agriculture projects (market oriented and climate smart approach), which will increase access to inputs, tools and technical assistance;
- ✓ Advocate or assist local community members to access jobs; Prioritize local community members in jobs that will emerge in the conservation area;
- ✓ Create conditions to have electricity (solar panel) for everyone in the community; Support initiatives to establish farmers association.

Indicator O1.2: villages are more resilient to climate change (water and food security, community structures for sustainable fisheries management).

- ✓ Raise awareness among beneficiaries to intensify the combination of fishing with the production of different crops and other sources of income to guarantee food security throughout the year;
- ✓ Train project beneficiaries in measures to prevent, adapt and reduce the effects of climate change;
- ✓ Create a link between project beneficiaries and sellers of fishing tools and agricultural inputs.

Indicator 2.3.3b: Improved water security

- ✓ Support the government in expanding drinking water sources and creating community water management committees;

BNS

- ✓ Raise awareness among community in general about the importance of women's participation in economic activities;
- ✓ Deliver vocational trainings (example: cutting, sewing, hairdressing, poultry, fishing and others) mainly for women to increase their purchasing power.

LAND TENURE

- ✓ Train the community in the prevention and management of land conflicts;
- ✓ Create a partnership with the government to facilitate the assignment of DUATs to the community;
- ✓ Hold lectures to publicize land conflict resolution bodies;
- ✓ Raise awareness among community about the importance of women having access to land and other natural resources.



## 8. References

BNS in Conservation Landscapes, Detoef, D.; Wieland, M.; Wilkie, D. (2018); Guide 2.0 to the Modified Basic Necessities Survey: Why and How to Conduct Digital-Based Climate Change and Resilience Platform (CCRP). Climate Vulnerability and Capacity Analysis Handbook Version 2.0, CARE (2019)

Hogwane, A.M., 2007; Governo do Distrito de Memba, Ilha de Moçambique, 2015

Macuio, J. & Marques da Silva, I.. (2021),

Relatório do trabalho de campo sócio-económico para desenvolver a proposta completa do BAF: Construindo um Futuro Azul para Ecossistemas e Pessoas na Costa Leste Africana, Distritos de Memba, Nacala-Porto e Mossuril, WCS, 2020.

## 9. Attachments

### Data Collection Tools

- 1) Household Survey Queries:
  - ✓ Survey1\_ Individual Interview\_ Indicator Socioeconomic and KAPs Study
  - ✓ Survey2\_ Individual Interview\_ Gender Socioeconomic and Gender Study
  - ✓ Survey3\_ individual Interview\_ BNS and Land Tenure Assessment
- 2) Focus Group Discussion Guides with sections:
  - ✓ Papéis e relações de género influenciam o acesso, uso, manejo e conservação da biodiversidade
  - ✓ Vulnerabilidade Climática e Análise de Capacidades
  - ✓ Mapeamento de recursos e perigos
  - ✓ Linha do tempo de eventos históricos
  - ✓ Calendário sazonal
  - ✓ Matriz de vulnerabilidade
- 3) Key informants interview guide

### Team Members

### Enumerators Training Program



## QueryI\_ Individual Interview \_Indicator\_ Socioeconomic and KAPs Study Ferramentas de coleta de dados para estudo socioeconômico e de gênero

### Questionário para Entrevista Individual I

#### Estudo Socioeconómico e de Género - Projecto “Building a Blue Future for Ecosystems and People on the East African Coast - Blue Future (BF)”

##### Perguntas para SS/Pescadores/Usuários

#### APRESENTAÇÃO E PEDIDO DE CONSENTIMENTO

Bom dia/Boa tarde Senhor(a), meu nome é....

Convidamo-lo(a) a participar no estudo denominado Avaliação Socioeconómica das partes interessadas para desenvolver a proposta do MPA, a ser conduzida pela ADPP Moçambique e Moz Target, e liderada pela Wildlife Conservation Society (WCS) através do projeto Futuro Azul (Blue Future), financiado pela Blue Action Fund.

Sua participação neste estudo é voluntária e a mesma será conduzida através de inquérito individual, usando tablets com o aplicativo KOBO Toolbox.

Os resultados deste estudo definirão adequadamente os objetivos junto às comunidades e fornecerão informações da situação actual, buscando definir com elas o melhor caminho a seguir para a proteção dos recursos naturais dos quais as comunidades dependem, garantindo melhores oportunidades de subsistência na pesca e meios de subsistência alternativos para as comunidades.

O inquérito poderá levar de 20 à 45 minutos e o participante tem o direito e a liberdade de retirar o seu consentimento em qualquer momento, seja antes ou depois do inquérito, independentemente do motivo e sem nenhum prejuízo para sua pessoa.

A participação não trará prejuízos ao inquirido, não acarretará quaisquer despesas e você não receberá nenhuma remuneração referente a este estudo. Os resultados deste estudo serão analisados e publicados, mas a identidade do(a) senhor(a) não será revelada pois, será mantida em sigilo.

Para qualquer outra informação, poderá contactar Carlos Meirinhos (Investigador Primário), através do seguinte contacto +258 842283371.

## SEÇÃO A: INFORMAÇÕES DEMOGRÁFICAS

PARA I	Coordenadas geográficas	[automático]
A2	Província	
A2.1	Distrito	<input type="checkbox"/> Momba <input type="checkbox"/> Mossuril
A2.3.	Localidade	
A2.3.1	Outra localidade	
A2.4	Comunidade/povoado	
A2.4.1	Outra comunidade	
Informações do respondente		
A3	Qual é a sua idade?	
A4	sexo	<input type="checkbox"/> Masculino <input type="checkbox"/> Feminino
A5	Estado Civil	<input type="checkbox"/> Casada/o <input type="checkbox"/> Casada/a (polígamo) <input type="checkbox"/> Solteiro/a <input type="checkbox"/> Viúvo/a <input type="checkbox"/> Divorciada/o
A6	Quantos membros tem o seu AF, incluindo a si?	<input type="checkbox"/> Crianças e jovens dos 0 aos 17 anos (Homens e Mulheres)  <input type="checkbox"/> Adultos, de 18 aos 64 anos (Homens e Mulheres)  <input type="checkbox"/> Idosos, de 65 anos ou mais (Homens e Mulheres)

A7	Nível de escolaridade?	<input type="checkbox"/> Não concluiu o Primário <input type="checkbox"/> Primário <input type="checkbox"/> Secundário <input type="checkbox"/> Nível superior  <input type="checkbox"/> Nenhum
A7	Você é o chefe da família?	<input type="checkbox"/> Sim <input type="checkbox"/> Não
A7.1	Se você <b>não</b> é o chefe da família, qual é o gênero do chefe da família?	<input type="checkbox"/> Masculino <input type="checkbox"/> Feminino
A7.2	Se você <b>não</b> é o chefe da família, qual é o nível de escolaridade do chefe da família? ( marcar apenas <b>uma</b> opção)	<input type="checkbox"/> Não concluiu o Primário <input type="checkbox"/> Primário <input type="checkbox"/> Secundário <input type="checkbox"/> Formação pós-secundária <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder

## SEÇÃO B: PERGUNTAS PRINCIPAIS GERAIS

B.1.	Gostaria de saber mais sobre como se sente sobre sua vida nesta comunidade. Considerando tudo, sua satisfação com sua vida, sente que as coisas mudaram nos últimos 2 anos?	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> não sei <input type="checkbox"/> optou por não responder
B.1.1	Se sim, como?	<input type="checkbox"/> Muito pior



		<input type="checkbox"/> Pior <input type="checkbox"/> Melhor <input type="checkbox"/> Muito melhor																														
B.2.	Vou ler uma lista de atividades, diga sim se você ou alguém da sua família fizer a atividade	<input type="checkbox"/> Pesca <input type="checkbox"/> Vendedor/comerciante/processador de peixe <input type="checkbox"/> caça <input type="checkbox"/> Recolhendo <input type="checkbox"/> Turismo <input type="checkbox"/> Cultivo de algas ou aquicultura <input type="checkbox"/> Agricultura <input type="checkbox"/> Fornecedor de bens essenciais <input type="checkbox"/> Vendedor de refeições básicas e biscoitos <input type="checkbox"/> Mototaxista <input type="checkbox"/> Agente público <input type="checkbox"/> Optou por não responder <input type="checkbox"/> outros																														
B.3.	Quais são as 3 principais atividades que sustentam sua família?																															
	<table border="1"> <thead> <tr> <th rowspan="2">Atividade de subsistência</th> <th rowspan="2">Classificação da importância para o AGREGADO FAMILIAR</th> <th colspan="2"># de pessoas no DOMICÍLIO envolvidas na atividade</th> </tr> <tr> <th>Mulheres</th> <th>Homens</th> </tr> </thead> <tbody> <tr> <td>Pesca e coleta</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Comércio/venda de peixe</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Cultivo de algas ou Aquicultura</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Caça</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Agricultura (inclui hortas domésticas, gado)</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Emprego assalariado (por exemplo, professor, enfermeiro)</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Atividade de subsistência	Classificação da importância para o AGREGADO FAMILIAR	# de pessoas no DOMICÍLIO envolvidas na atividade		Mulheres	Homens	Pesca e coleta				Comércio/venda de peixe				Cultivo de algas ou Aquicultura				Caça				Agricultura (inclui hortas domésticas, gado)				Emprego assalariado (por exemplo, professor, enfermeiro)				
Atividade de subsistência	Classificação da importância para o AGREGADO FAMILIAR			# de pessoas no DOMICÍLIO envolvidas na atividade																												
		Mulheres	Homens																													
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Caça																																
Agricultura (inclui hortas domésticas, gado)																																
Emprego assalariado (por exemplo, professor, enfermeiro)																																

	Turismo			
	Pequenos negócios / Atividades econômicas informais			
	remessas			
	Previdência social governamental			
	Outro:			
	Nenhuma			
B.4.	Houve algum projeto em sua comunidade focado na melhoria dos meios de subsistência nos últimos anos?	<input type="checkbox"/> SIM <input type="checkbox"/> NÃO <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder		
B.4.1	Se sim, cite os projetos que você conhece: _____			
B.4.2	Se sim, os projetos introduzidos ou apoiados aumentaram a renda familiar ou a disponibilidade de alimentos para sua família? ( marcar apenas <b>uma</b> opção)	<input type="checkbox"/> Aumentado <input type="checkbox"/> Sem alteração <input type="checkbox"/> Diminuiu <input type="checkbox"/> Escolha não responder <input type="checkbox"/> Não sei		

### SEÇÃO C:

**INDICADOR G2:** NO FINAL DO PROJETO, MUITO MAIS PESSOAS NAS ÁREAS DE INTERVENÇÃO DO PROJETO BENEFICIAM DE MELHORES SERVIÇOS DE ECOSISTEMA QUE APOIAM A ADAPTAÇÃO ÀS MUDANÇAS CLIMÁTICAS.

C.1.	A sua comunidade beneficia de um projecto/programa de proteção das ervas marinhas?	<input type="checkbox"/> SIM <input type="checkbox"/> NÃO <input type="checkbox"/> não sei <input type="checkbox"/> optou por não responder
C.1.1.	Se sim, qual é/foi o impacto deste programa/projecto de proteção das ervas marinhas para a comunidade? as que se aplicam)	<input type="checkbox"/> Financeiro <input type="checkbox"/> Proteção contra tempestades <input type="checkbox"/> Pesca <input type="checkbox"/> Bens/materiais <input type="checkbox"/> Subsistência não pesqueira <input type="checkbox"/> Patrimônio/valor intrínseco <input type="checkbox"/> Outro (especifique): _____ <input type="checkbox"/> Não sei <input type="checkbox"/> Escolha não responder

C.2.	Sua comunidade se beneficia de um projecto/programa de proteção dos mangais?	<input type="checkbox"/> SIM <input type="checkbox"/> NÃO <input type="checkbox"/> não sei <input type="checkbox"/> Nenhum <input type="checkbox"/> optou por não responder
C.2.1.	Se a resposta for sim, qual é/foi o impacto deste programa/projecto de proteção dos mangais para a comunidade? (Pergunte primeiro como uma pergunta aberta e, se não houver respostas, forneça as opções) ( <b>marque</b> todas as que se aplicam)	<input type="checkbox"/> Financeiro <input type="checkbox"/> Proteção contra tempestades <input type="checkbox"/> Pesca <input type="checkbox"/> Bens/materiais <input type="checkbox"/> Subsistência não pesqueira <input type="checkbox"/> Patrimônio/valor intrínseco <input type="checkbox"/> Outro (especifique): _____ <input type="checkbox"/> Não sei <input type="checkbox"/> Nenhum <input type="checkbox"/> Escolha não responder
C.3.	Sua comunidade de um projecto/programa de proteção dos recifes de corais? (marque apenas uma opção)	<input type="checkbox"/> SIM <input type="checkbox"/> NÃO <input type="checkbox"/> não sei <input type="checkbox"/> optou por não responder
C.3.1.	C3.1. Se sim, qual é/foi o impacto deste programa/projecto de proteção dos recifes de corais para a comunidade?	<input type="checkbox"/> Financeiro <input type="checkbox"/> Proteção contra tempestades <input type="checkbox"/> Pesca <input type="checkbox"/> Bens/materiais <input type="checkbox"/> Subsistência não pesqueira <input type="checkbox"/> Patrimônio/valor intrínseco <input type="checkbox"/> Outro (especifique): _____ <input type="checkbox"/> Não sei <input type="checkbox"/> Escolha não responder

**SECÇÃO D:**

**INDICADOR G3: AO FINAL DO PROJETO, MELHORAM AS CONDIÇÕES DE MEIO DE VIDA DOS AGREGADOS AFETADOS NAS ÁREAS DE INTERVENÇÃO DO PROJETO**

D.1	A gestão das suas zonas de pesca alterou o montante dos rendimentos auferidos no seu agregado familiar (dia/semana/mês)?	<input type="checkbox"/> Não <input type="checkbox"/> Sim <input type="checkbox"/> Não sei' <input type="checkbox"/> Recusou
D.2	Quanto você normalmente ganha em um (dia/semana/mês)? _____ *a frequência depende do contexto – a ser determinado pela equipe de pesquisa.	
D2.1	Este é o valor que ganha sozinho ou com a sua família? (tick one option only)	<input type="checkbox"/> Person <input type="checkbox"/> Family <input type="checkbox"/> Don't know
D2.1.1	Existe mais um membro do seu AF que trabalha?	<input type="checkbox"/> sim <input type="checkbox"/> Nao
D2.2	O sr./a ode estimar o rendimento mensal da sua familia ou AF _____ *frequency depends on context – to be determined by research team.	<input type="checkbox"/> YES (if yes insert the amount _____) <input type="checkbox"/> NO
D.3	O que você faz com o peixe que pesca? ( assinale <b>tudo</b> o que se aplica)	<input type="checkbox"/> Comer <input type="checkbox"/> Vender <input type="checkbox"/> Doar <input type="checkbox"/> Não captura
D.4	Qual é a coisa mais comum que você faz com o peixe	<input type="checkbox"/> Comer <input type="checkbox"/> Vender <input type="checkbox"/> Doar <input type="checkbox"/> Não sei

		<input type="checkbox"/> Escolha não responder
D.5	O que você faz com os invertebrados da pesca	<input type="checkbox"/> Comer <input type="checkbox"/> Vender <input type="checkbox"/> Doar <input type="checkbox"/> Não pega
D.6	Alguém no seu agregado familiar tem acesso a empréstimos ou microcrédito?	<input type="checkbox"/> SIM <input type="checkbox"/> NÃO <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
D.6.1	Se não, o seu agregado familiar alguma vez sentiu a necessidade de um empréstimo ou microcrédito? (marque apenas uma opção)	<input type="checkbox"/> SIM <input type="checkbox"/> NÃO <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
D.6.2	Se sim, qual foi a fonte do empréstimo ou microcrédito? (marcar <b>tudo</b> o que se aplica)	<input type="checkbox"/> Banco <input type="checkbox"/> Grupo social <input type="checkbox"/> ONG/OSC <input type="checkbox"/> Outro (especifique): _____ <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
D.6.3	D6.3. Para que fins foi utilizado o empréstimo ou microcrédito?	<input type="checkbox"/> Melhorar a pesca <input type="checkbox"/> Substitua as artes de pesca destrutivas <input type="checkbox"/> Meios de subsistência alternativos <input type="checkbox"/> Outro (especifique): ____ <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder

## SEÇÃO E:

**INDICADOR G4:** AO FINAL DO PROJETO, MUITO MAIS FAMÍLIAS AFETADAS NAS ÁREAS DE INTERVENÇÃO DO PROJETO TÊM UMA ATITUDE POSITIVA EM RELAÇÃO À BIODIVERSIDADE MARINHA, RESTAURAÇÃO E PROTEÇÃO DE MANGUES, ERVAS MARINHAS E RECIFES DE CORAL

E. I	Para cada uma das seguintes medidas de gestão marinha, você se opõe ou apoia isso em sua comunidade?	
E. I.1	Zonas ou santuários proibidos	<input type="checkbox"/> Apoio forte <input type="checkbox"/> Um pouco de apoio <input type="checkbox"/> Não suporta <input type="checkbox"/> Fortemente contra <input type="checkbox"/> opte por não responder
E. I.2	Encerramentos sazonais para pesca em algumas áreas	<input type="checkbox"/> Apoio forte <input type="checkbox"/> Um pouco de suporte <input type="checkbox"/> Não suporta <input type="checkbox"/> Fortemente contra <input type="checkbox"/> opte por não responder
E. I.3	Restrições de marcha em algumas áreas	<input type="checkbox"/> Apoio forte <input type="checkbox"/> Um pouco de apoio <input type="checkbox"/> Não suporta <input type="checkbox"/> Fortemente contra <input type="checkbox"/> opte por não responder
E. I.4	restauração de habitat	<input type="checkbox"/> Apoio forte <input type="checkbox"/> Um pouco de apoio <input type="checkbox"/> Não suporta <input type="checkbox"/> Fortemente contra <input type="checkbox"/> opte por não responder
E. I.5	Restrições à captura/colheita de algumas espécies	<input type="checkbox"/> Apoio forte <input type="checkbox"/> Um pouco de apoio <input type="checkbox"/> Não suporta <input type="checkbox"/> Fortemente contra <input type="checkbox"/> opte por não responder

E.1.6	Restrições ao tamanho dos peixes ou outras espécies capturadas	<input type="checkbox"/> Apoio forte <input type="checkbox"/> Um pouco de apoio <input type="checkbox"/> Não suporta <input type="checkbox"/> Fortemente contra <input type="checkbox"/> opte por não responder
E.1.7	Restrições ao número de pessoas autorizadas a pescar/colheita em uma área marinha	<input type="checkbox"/> Apoio forte <input type="checkbox"/> Um pouco de apoio <input type="checkbox"/> Não suporta <input type="checkbox"/> Fortemente contra <input type="checkbox"/> opte por não responder

**SEÇÃO F:**

**INDICADOR OI.2:** ALDEIAS SÃO MAIS RESILIENTES ÀS MUDANÇAS CLIMÁTICAS (ÁGUA E SEGURANÇA ALIMENTAR, ESTRUTURAS COMUNITÁRIAS PARA GESTÃO SUSTENTÁVEL DAS PESCAS). &

**INDICADOR 2.3.3B:** NÚMERO DE HOMENS E MULHERES QUE SE BENEFICIAM DA MELHOR SEGURANÇA DA ÁGUA

F.1	Sua comunidade tem acesso consistente a água potável ( tanto para agricultura quanto para uso doméstico)?	<input type="checkbox"/> SIM <input type="checkbox"/> NÃO <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
F.2	Você tem comida suficiente para alimentar os membros da sua família em cada refeição?	<input type="checkbox"/> SIM <input type="checkbox"/> NÃO <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
F.3	Quantas refeições sua família faz por dia?	
F.4	Quais são os desafios que você enfrenta no cultivo de alimentos (agricultura)?	<input type="checkbox"/> Seca <input type="checkbox"/> Enchentes <input type="checkbox"/> Insetos <input type="checkbox"/> Falta de mercado <input type="checkbox"/> Disponibilidade de sementes/mudas

		<input type="checkbox"/> Clima inconsistente <input type="checkbox"/> Falta de equipamento <input type="checkbox"/> Outro (especificar): _____ <input type="checkbox"/> Não sei <input type="checkbox"/> Optei por não responder
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## SEÇÃO F\_A: PERGUNTAS CVCA

F5	Que efeitos ou fenômenos associados às mudanças climáticas você conhece/já ouviu falar?	<input type="checkbox"/> Aumento da temperatura e número de dias quentes <input type="checkbox"/> Variação do calendário/padrões de chuva <input type="checkbox"/> Chuvas reduzidas causando secas <input type="checkbox"/> Aumento da quantidade de chuvas em horários de pico curtos, resultando em inundações <input type="checkbox"/> Erosão e empobrecimento do solo devido à intensidade das chuvas durante o pico <input type="checkbox"/> Aumento da frequência e intensidade de ciclones/ventos fortes <input type="checkbox"/> Aumento de pragas e doenças em plantas e animais <input type="checkbox"/> Aumento da temperatura da água e mudanças na reprodução das espécies <input type="checkbox"/> Redução/aumento da vazão dos rios <input type="checkbox"/> Redução ou desaparecimento de algumas espécies de peixes <input type="checkbox"/> não sei / não faço ideia <input type="checkbox"/> Mudanças nos níveis da maré alta <input type="checkbox"/> Mudanças nos padrões/estações do vento que afetam a pesca
F6	Quais são os efeitos ou fenômenos associados às mudanças climáticas que têm afetado a atividade pesqueira e a subsistência dos pescadores e suas famílias?	<input type="checkbox"/> Aumento da temperatura e número de dias quentes <input type="checkbox"/> Variação do calendário de chuva <input type="checkbox"/> Chuvas reduzidas causando secas <input type="checkbox"/> Aumento da quantidade de chuvas em horários de pico curtos, resultando em inundações <input type="checkbox"/> Erosão e empobrecimento do solo devido à intensidade das chuvas durante o pico <input type="checkbox"/> Aumento da frequência e intensidade de ciclones/ventos fortes <input type="checkbox"/> Aumento de pragas e doenças em plantas e animais <input type="checkbox"/> Aumento da temperatura da água e mudanças na reprodução das espécies <input type="checkbox"/> Poluição dos rios, devido à exploração das áreas ribeirinhas para a agricultura <input type="checkbox"/> Redução da vazão dos rios <input type="checkbox"/> Degradação do habitat dos peixes <input type="checkbox"/> migração de peixes <input type="checkbox"/> Redução ou desaparecimento de algumas espécies de peixes <input type="checkbox"/> Redução da capacidade de reprodução e do estoque <input type="checkbox"/> não sei / não faço ideia
F7	Que medidas e soluções conhece para	<input type="checkbox"/> Cogestão de recursos aquáticos/água, incluindo peixes <input type="checkbox"/> Acesse melhores mercados e aumente o valor/ rendimento do pescado



	<p>reduzir os efeitos negativos das alterações climáticas (pescas, agricultura, infraestruturas)?</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Reduzir os custos de pesca/melhorar a eficiência para aumentar os ganhos</li> <li><input type="checkbox"/> Reduzir as perdas de peixe ao longo da cadeia de valor</li> <li><input type="checkbox"/> Captação e armazenamento de água da chuva</li> <li><input type="checkbox"/> Irrigação para reduzir a dependência da chuva</li> <li><input type="checkbox"/> diversificação de culturas</li> <li><input type="checkbox"/> Uso de variedades adaptadas às mudanças climáticas (temperaturas, água, pragas)</li> <li><input type="checkbox"/> Técnicas agrícolas para conservação de água e fertilidade do solo</li> <li><input type="checkbox"/> Adubação para mitigar a perda de nutrientes no solo</li> <li><input type="checkbox"/> Terraços de bancos para reduzir a erosão</li> <li><input type="checkbox"/> Melhorando as técnicas de construção de casas para resistir a ciclones</li> <li><input type="checkbox"/> Evite construir casas em áreas propensas a inundações</li> <li><input type="checkbox"/> não sei / não faço ideia</li> </ul>
<p>F8</p>	<p>Que medidas ou soluções para reduzir os efeitos das alterações climáticas tem aplicado nas suas atividades (pescas, agricultura, infraestruturas)?</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> práticas de aquicultura</li> <li><input type="checkbox"/> Práticas de pesca sustentáveis (estabelecer limites de captura e evitar artes prejudiciais)</li> <li><input type="checkbox"/> Cogestão de recursos aquáticos/água, incluindo peixes</li> <li><input type="checkbox"/> Acesse melhores mercados e aumente o valor/ rendimento do pescado</li> <li><input type="checkbox"/> Reduzir os custos de pesca/melhorar a eficiência para aumentar os ganhos</li> <li><input type="checkbox"/> Reduzir as perdas de peixe ao longo da cadeia de valor</li> <li><input type="checkbox"/> Captação e armazenamento de água da chuva</li> <li><input type="checkbox"/> Irrigação para reduzir a dependência da chuva</li> <li><input type="checkbox"/> diversificação de culturas</li> <li><input type="checkbox"/> Uso de variedades adaptadas às mudanças climáticas (temperaturas, água, pragas)</li> <li><input type="checkbox"/> Técnicas agrícolas para conservação de água e fertilidade do solo</li> <li><input type="checkbox"/> Adubação para mitigar a perda de nutrientes no solo</li> <li><input type="checkbox"/> Terraços de bancos para reduzir a erosão</li> <li><input type="checkbox"/> Melhorando as técnicas de construção de casas para resistir a ciclones</li> <li><input type="checkbox"/> Evite construir casas em áreas propensas a inundações</li> <li><input type="checkbox"/> não sei / não faço ideia</li> </ul>

## Query 2\_Individual Interview\_Socioeconomic and Gender Study

### Ferramentas de coleta de dados para estudo socioeconômico e de gênero

#### Questionário para Entrevista Individual I



## Estudo Socioeconómico e de Género - Projecto “Building a Blue Future for Ecosystems and People on the East African Coast - Blue Future (BF)”

### Perguntas para SS/Pescadores/Usuários

#### APRESENTAÇÃO E PEDIDO DE CONSENTIMENTO

Bom dia/Boa tarde Senhor(a), o meu nome é....

Convido-lhe para participar no estudo denominado Avaliação Socioeconómica das partes interessadas para desenvolver a proposta do MPA, a ser conduzida pela ADPP Moçambique e Moz Target, e liderada pela Wildlife Conservation Society (WCS) através do projeto Futuro Azul (Blue Future), financiado pela Blue Action Fund. Sua participação neste estudo é voluntária e a mesma será conduzida através de inquérito individual, usando tablets com o aplicativo KOBO Toolbox.

Os resultados deste estudo definirão adequadamente os objetivos junto às comunidades e fornecerão informações da situação actual, buscando definir com elas o melhor caminho a seguir para a proteção dos recursos naturais dos quais as comunidades dependem, garantindo melhores oportunidades de subsistência na pesca e meios de subsistência alternativos para as comunidades.

O inquérito poderá levar de 20 à 45 minutos e o participante tem o direito e a liberdade de retirar o seu consentimento em qualquer momento, seja antes ou depois do inquérito, independentemente do motivo e sem nenhum prejuízo para sua pessoa.

A participação não trará prejuízos ao inquirido, não acarretará quaisquer despesas e você não receberá nenhuma remuneração referente a este estudo. Os resultados deste estudo serão analisados e publicados, mas a identidade do(a) senhor(a) não será revelada pois, será mantida em sigilo.

Para qualquer outra informação, poderá contactar Carlos Meirinhos (Investigador Primário), através do seguinte contacto +258 842283371.

#### SEÇÃO A: INFORMAÇÕES DEMOGRÁFICAS

PARA I	Coordenadas geográficas	[automático]
A2	Província	
A2.1	Distrito	<input type="checkbox"/> Momba <input type="checkbox"/> mossuril
A2.3	Localidade	
A2.3.1	Outra localidade	
A2.4	Comunidade/ Povoado	

Informações do respondente		
A 3	Qual é a sua idade?	
A4	sexo	<input type="checkbox"/> Masculino <input type="checkbox"/> Feminino
A5	Estado Civil	<input type="checkbox"/> Casado <input type="checkbox"/> Casado(poligamo) <input type="checkbox"/> Solteiro <input type="checkbox"/> Viúvo <input type="checkbox"/> Divorciado
A6	A6. Quantos membros tem o seu AF, incluindo a si?	<input type="checkbox"/> Crianças e jovens dos 0 aos 17 anos (Homens) <input type="checkbox"/> Crianças e jovens dos 0 aos 17 anos (Mulheres) <input type="checkbox"/> Adultos, de 18 aos 64 anos (Homens) <input type="checkbox"/> Adultos, de 18 aos 64 anos (Mulheres) Idosos, de 65 anos ou mais (Homens) Idosos, de 65 anos ou mais (Mulheres)
A7.	Nível de escolaridade	<input type="checkbox"/> Não concluiu o Primário <input type="checkbox"/> Primário <input type="checkbox"/> Secundário <input type="checkbox"/> Nível superior <input type="checkbox"/> Nenhum
A8	Você é o chefe da família?	<input type="checkbox"/> Sim <input type="checkbox"/> Não
A8.1	Se não é o chefe do agregado familiar, qual é o sexo do chefe do agregado familiar?	<input type="checkbox"/> Masculino <input type="checkbox"/> Feminino

## SEÇÃO B: PERGUNTAS PRINCIPAIS GERAIS

B.1.	Gostaria de saber mais sobre como se sente sobre sua vida nesta comunidade. Considerando tudo, sua satisfação com sua vida, sente que as coisas mudaram nos últimos anos?	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> não sei <input type="checkbox"/> optou por não responder
B.1.1	Se sim, como ?	<input type="checkbox"/> Muito pior

		<input type="checkbox"/> Pior <input type="checkbox"/> Melhor <input type="checkbox"/> Muito melhor																																										
B.2.	Vou ler uma lista de atividades, diga sim se você ou alguém da sua família fizer a atividade	<input type="checkbox"/> Pesca <input type="checkbox"/> Vendedor/comerciante/processador de peixe <input type="checkbox"/> Recolhendo <input type="checkbox"/> caça <input type="checkbox"/> Turismo <input type="checkbox"/> Cultivo de algas ou aquicultura <input type="checkbox"/> Agricultura <input type="checkbox"/> Fornecedor de bens essenciais <input type="checkbox"/> Vendedor de refeições básicas e biscoitos <input type="checkbox"/> Mototaxista <input type="checkbox"/> Agente público <input type="checkbox"/> Optou por não responder <input type="checkbox"/> outros																																										
B.3.	Quais são as 3 principais atividades que sustentam sua família?	<table border="1"> <thead> <tr> <th rowspan="2">Atividade de subsistência</th> <th rowspan="2">Classificação da importância para o AGREGADO FAMILIAR</th> <th colspan="2"># de pessoas no DOMICÍLIO envolvidas na atividade</th> </tr> <tr> <th>Mulheres</th> <th>Homens</th> </tr> </thead> <tbody> <tr> <td>Pesca e coleta</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Comércio/venda de peixe</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Cultivo de algas ou Aquicultura</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Caça</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Agricultura (inclui hortas domésticas, gado)</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Emprego assalariado (por exemplo, professor, enfermeiro)</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Turismo</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Pequenos negócios / Atividades econômicas informais</td> <td></td> <td></td> <td></td> </tr> <tr> <td>remessas</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Atividade de subsistência	Classificação da importância para o AGREGADO FAMILIAR	# de pessoas no DOMICÍLIO envolvidas na atividade		Mulheres	Homens	Pesca e coleta				Comércio/venda de peixe				Cultivo de algas ou Aquicultura				Caça				Agricultura (inclui hortas domésticas, gado)				Emprego assalariado (por exemplo, professor, enfermeiro)				Turismo				Pequenos negócios / Atividades econômicas informais				remessas			
Atividade de subsistência	Classificação da importância para o AGREGADO FAMILIAR	# de pessoas no DOMICÍLIO envolvidas na atividade																																										
		Mulheres	Homens																																									
Pesca e coleta																																												
Comércio/venda de peixe																																												
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Emprego assalariado (por exemplo, professor, enfermeiro)																																												
Turismo																																												
Pequenos negócios / Atividades econômicas informais																																												
remessas																																												

	Previdência social governamental			
	Outro:			
	Nenhuma			
B.4.	Houve algum projeto em sua comunidade focado na melhoria dos meios de subsistência nos últimos anos?	<input type="checkbox"/> SIM <input type="checkbox"/> NÃO <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder		
B.4.1	Se sim, cite os projetos que você conhece: _____			
B.4.2	Se sim, esses projetos aumentaram a renda familiar ou a disponibilidade de alimentos para sua família?	<input type="checkbox"/> Aumentou <input type="checkbox"/> Sem alteração <input type="checkbox"/> Diminuiu <input type="checkbox"/> Optou por não responder <input type="checkbox"/> Não sei		

### SECTION C: GENDER QUESTIONS

C1.	No seu agregado familiar, qual é o sexo da pessoa responsável por:	
	<ul style="list-style-type: none"> <li>Tarefas domésticas, como: Limpezas, buscar lenha, buscar água, preparar comida, cuidar das crianças/idosos, lavar roupa.</li> </ul>	<input type="checkbox"/> Homem <input type="checkbox"/> Mulher <input type="checkbox"/> Ambos
	<ul style="list-style-type: none"> <li>Tarefas produtivas: Preparação do solo/terra, gestão da cultura no campo, colheita/pós-colheita e venda; pesca, transporte, processamento e venda de peixe.</li> </ul>	<input type="checkbox"/> Homem <input type="checkbox"/> Mulher <input type="checkbox"/> Ambos
	<ul style="list-style-type: none"> <li>compra de equipamentos; pagar pela ajuda na captura/colheita; vendendo produtos; usando o rendimento gerado pela colheita/produção ou venda de produtos do mar?</li> </ul>	<input type="checkbox"/> Homem <input type="checkbox"/> Mulher <input type="checkbox"/> Ambos
	<ul style="list-style-type: none"> <li>Quem no seu AF é responsável por tomar decisões sobre a compra de matéria/equipamentos de pesca, insumos agrários e outros bens produtivos?</li> </ul>	<input type="checkbox"/> Homem <input type="checkbox"/> Mulher <input type="checkbox"/> Ambos
	<ul style="list-style-type: none"> <li>Quem no seu agregado familiar é responsável pela compra de utensílios domésticos?</li> </ul>	<input type="checkbox"/> Homem <input type="checkbox"/> Mulher <input type="checkbox"/> Ambos
	<ul style="list-style-type: none"> <li>Quem no seu AF é responsável por tomar decisões sobre o uso do dinheiro?</li> </ul>	<input type="checkbox"/> Homem <input type="checkbox"/> Mulher <input type="checkbox"/> Ambos
C2.	Acredita que homens e mulheres tem as mesmas responsabilidades no seio familiar?	0 = Não 1 = Sim

C3.	No seu agregado familiar quem tem maior acesso/controla aos insumos de pesca?	<input type="checkbox"/> Homem <input type="checkbox"/> Mulher <input type="checkbox"/> Ambos
C4.	Já foi vítima da violência baseado no género?	0 = Não 1 = Sim
C4.1	Se sim, qual foi a sua atitude face a violência?	
C5.	Teve algum apoio da família? Da comunidade	0 = Não 1 = Sim
C6.	Na sua comunidade existem instituições de apoio a vítimas de violência baseada no género?	0 = Não 1 = Sim
C6.1	Se sim, quais?	
C7.	Existem costumes e práticas tradicionais ou direitos de uso que afetem o acesso de mulheres ou homens e controle sobre os recursos marinhos e costeiros?	0 = Não 1 = Sim
C8.	Você possui conhecimento e experiência tradicionais, que podem ser construídos para o desenvolvimento sustentável dos recursos marinhos?	0 = Não 1 = Sim
C9.	Existem incentivos familiares que promovem a busca de financiamento por parte da mulher para actividade pesqueira, acesso ao mercado e outras actividades alternativas?	0 = Não 1 = Sim
C9.1	Se sim, quais?	
C10.	Já se beneficiou de algum financiamento?	0 = Não 1 = Sim
C11.	Quem tem mais facilidade de acesso ao financiamento?	<input type="checkbox"/> Homem <input type="checkbox"/> Mulher <input type="checkbox"/> Ambos
C12.1	Explique porquê? (aplicável se seleccionar homem ou mulher)	<input type="checkbox"/> Confiam mais nos homens <input type="checkbox"/> Confiam mais nas mulheres <input type="checkbox"/> As mulheres têm mais capacidade de pagar o empréstimo

		<input type="checkbox"/> Os homens têm mais capacidade de pagar o empréstimo <input type="checkbox"/> Outros
C13.	Quais os órgãos de tomada de decisão sobre acesso, uso e gestão de recursos costeiros e marinhos, existentes na comunidade?	<input type="checkbox"/> CCP <input type="checkbox"/> IDEPA <input type="checkbox"/> Não existe <input type="checkbox"/> Outro (especifique)
C14.	Conte-nos qual é o nível de envolvimento/participação das mulheres na concepção da lei ou desenvolvimento do plano de gestão dos recursos marinhos a nível local/distrito ou nível provincial.	<input type="checkbox"/> Muito envolvida <input type="checkbox"/> Envolvida <input type="checkbox"/> Pouco envolvida <input type="checkbox"/> Não esta envolvida
C15.	Você tem alguma informação sobre legislação e políticas que regulam os recursos naturais e pesqueiros/marinhos?	0 = Não 1 = Sim
C15.1.	Quais?	
C16.	Já teve dificuldades para obter informações sobre legislação e políticas que regulam os recursos naturais e pesqueiros/marinhos?	0 = Não 1 = Sim
C17.	Sente que as mulheres tem sido envolvidas nos processos de disseminação de leis?	0 = Não 1 = Sim
C18.	Como você classificaria a tendência de acesso à educação formal entre as mulheres?	<input type="checkbox"/> Aumentou <input type="checkbox"/> Mantem <input type="checkbox"/> Reduziu <input type="checkbox"/> Não sei
C19.	A sua comunidade já vivenciou uma situação de degradação da biodiversidade marinha/costeira?	0 = Não 1 = Sim
C20.	Isso afectou ao seu agregado familiar?	0 = Não 1 = Sim
C20.1	De que forma?	
C21.	Já teve alguma formação/treinamento em gestão de recursos marinhos costeiros e adaptação às mudanças climáticas?	0 = Não 1 = Sim

Terminamos aqui com a entrevista, muito obrigado pela atenção dispensada!







## Query3\_individual\_Interview\_BNS and Land Tenure Assessment

### Estudo Socioeconómico e de Género - Projecto “Building a Blue Future for Ecosystems and People on the East African Coast - Blue Future (BF)”

#### Perguntas para HH\_BNS e Avaliação de Posse de Terra

#### APRESENTAÇÃO E PEDIDO DE CONSENTIMENTO

Bom dia/Boa tarde Senhor(a), o meu nome é...  
 Convido-lhe para participar no estudo denominado Avaliação Socioeconómica das partes interessadas para desenvolver a proposta do MPA, a ser conduzida pela ADPP Moçambique e Moz Target, e liderada pela Wildlife Conservation Society (WCS) através do projeto Futuro Azul (Blue Future), financiado pela Blue Action Fund. Sua participação neste estudo é voluntária e a mesma será conduzida através de inquérito individual, usando tablets com o aplicativo KOBO Toolbox.

Os resultados deste estudo definirão adequadamente os objetivos junto às comunidades e fornecerão informações da situação atual, buscando definir com elas o melhor caminho a seguir para a proteção dos recursos naturais dos quais as comunidades dependem, garantindo melhores oportunidades de subsistência na pesca e meios de subsistência alternativos para as comunidades.

O inquérito poderá levar de 20 à 45 minutos e o participante tem o direito e a liberdade de retirar o seu consentimento em qualquer momento, seja antes ou depois do inquérito, independentemente do motivo e sem nenhum prejuízo para sua pessoa.

A participação não trará prejuízos ao inquirido, não acarretará quaisquer despesas e você não receberá nenhuma remuneração referente a este estudo. Os resultados deste estudo serão analisados e publicados, mas a identidade do(a) senhor(a) não será revelada pois, será mantida em sigilo.

Para qualquer outra informação, poderá contactar Carlos Meirinhos (Investigador Primário), através do seguinte contacto +258 842283371.

#### SEÇÃO A: INFORMAÇÕES DEMOGRÁFICAS

PAR A 1	Coordenadas geográficas	[automático]
A2	Província	
A2. 1	Distrito	<input type="checkbox"/> Memba <input type="checkbox"/> mossuril
A2. 3	Localidade	

A2. 4	Comunidade/ Povoado	
Informações do respondente		
A3	Qual é a sua idade?	
A4	Sexo?	<input type="checkbox"/> Masculino <input type="checkbox"/> Feminino
A5	Estado civil?	<input type="checkbox"/> Solteiro <input type="checkbox"/> União de fatos <input type="checkbox"/> Casado <input type="checkbox"/> Divorciado <input type="checkbox"/> Viúva
A6	A6. Quantos membros tem o seu AF, incluindo a si?	<input type="checkbox"/> Crianças e jovens dos 0 aos 17 anos (Homens) <input type="checkbox"/> Crianças e jovens dos 0 aos 17 anos (Mulheres) <input type="checkbox"/> Adultos, de 18 aos 64 anos (Homens) <input type="checkbox"/> Adultos, de 18 aos 64 anos (Mulheres) <input type="checkbox"/> Idosos, de 65 anos ou mais (Homens) <input type="checkbox"/> Idosos, de 65 anos ou mais (Mulheres)
A7.	Nível de escolaridade	<input type="checkbox"/> Não concluiu o Primário <input type="checkbox"/> Primário <input type="checkbox"/> Secundário <input type="checkbox"/> Nível superior <input type="checkbox"/> Nenhum
A8	Você é o chefe da família?	<input type="checkbox"/> Sim <input type="checkbox"/> Não
A8. I	Se não é o chefe do agregado familiar, qual é o sexo do chefe do agregado familiar?	<input type="checkbox"/> Masculino <input type="checkbox"/> Feminino
A6	A6. Quantos membros tem o seu AF, incluindo a si?	<input type="checkbox"/> Crianças e jovens dos 0 aos 17 anos (Homens) <input type="checkbox"/> Crianças e jovens dos 0 aos 17 anos (Mulheres) <input type="checkbox"/> Adultos, de 18 aos 64 anos (Homens) <input type="checkbox"/> Adultos, de 18 aos 64 anos (Mulheres)

		Idosos, de 65 anos ou mais (Homens) Idosos, de 65 anos ou mais (Mulheres)
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## SEÇÃO B: PERGUNTAS PRINCIPAIS GERAIS

B.1.	Gostaria de saber mais sobre como se sente sobre sua vida nesta comunidade. Considerando tudo, sua satisfação com sua vida, sente que as coisas mudaram nos últimos anos?	Sim Não não sei optou por não responder
B.1.1	Se sim, como ?	<input type="checkbox"/> Muito pior <input type="checkbox"/> Pior <input type="checkbox"/> Melhor <input type="checkbox"/> Muito melhor
B.2.	Vou ler uma lista de atividades, diga sim se você ou alguém da sua família fizer a atividade	<input type="checkbox"/> Pesca <input type="checkbox"/> Vendedor/comerciante/processador de peixe <input type="checkbox"/> Recolhendo <input type="checkbox"/> caça <input type="checkbox"/> Turismo <input type="checkbox"/> Cultivo de algas ou aquicultura <input type="checkbox"/> Agricultura <input type="checkbox"/> Fornecedor de bens essenciais <input type="checkbox"/> Vendedor de refeições básicas e biscoitos <input type="checkbox"/> Mototaxista <input type="checkbox"/> Agente público <input type="checkbox"/> Optou por não responder <input type="checkbox"/> outros
B.3.	Quais são as 3 principais atividades que sustentam sua família?	

	Atividade de subsistência	Classificação da importância para o AGREGADO FAMILIAR	# de pessoas no DOMICÍLIO envolvidas na atividade	
			Mulheres	Homens
	Pesca e coleta			
	Comércio/venda de peixe			
	Cultivo de algas ou Aquicultura			
	Caça			
	Agricultura (inclui hortas domésticas, gado)			
	Emprego assalariado (por exemplo, professor, enfermeiro)			
	Turismo			
	Pequenos negócios / Atividades econômicas informais			
	remessas			
	Previdência social governamental			
	Outro:			
	Nenhuma			
B.4.	Houve algum projeto em sua comunidade focado na melhoria dos meios de subsistência nos últimos anos?	<input type="checkbox"/> SIM <input type="checkbox"/> NÃO <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder		
B.4.1	Se sim, cite os projetos que você conhece:			
B.4.2	Se sim, esses projetos aumentaram a renda familiar ou a disponibilidade de alimentos para sua família?	<input type="checkbox"/> Aumentou <input type="checkbox"/> Sem alteração <input type="checkbox"/> Diminuiu <input type="checkbox"/> Optou por não responder <input type="checkbox"/> Não sei		

### SEÇÃO C: PESQUISA DE NECESSIDADES BÁSICAS

C.I	Tem acesso a água potável segura num raio de 15 minutos a pé	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.I.I.	Será realmente isto uma necessidade?	<input type="checkbox"/> Sim

		<input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.2	Na sua casa tem enxada	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.2.1.	Será realmente isto uma necessidade?	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.3	Tem acesso a serviços de Saúde dentro da comunidade	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.3.1.	Será realmente isto uma necessidade?	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.4.	Tem Acesso a Moageira dentro da comunidade	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.4.1.	Será realmente isto uma necessidade?	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.5	Tem Acesso a mesquita dentro da localidade	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.5.1.	Será realmente isto uma necessidade?	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.6.	Tem Acesso a mercado dentro da localidade	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.6.1.	Será realmente isto uma necessidade?	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.7.	Tem Acesso a serviços de alfaiataria dentro da localidade	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei

		<input type="checkbox"/> Optou por não responder
C.7.1.	Será realmente isto uma necessidade?	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.8.	Na sua casa tem ou alguém Catana	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.8.1.	Será realmente isto uma necessidade?	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.9.	Na sua casa tem Machado	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.9.1.	Será realmente isto uma necessidade?	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.10.	Tem Machamba	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.10.1.	Será realmente isto uma necessidade?	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.11	A casa tem cobertura de zinco	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.11.1.	Será realmente isto uma necessidade?	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.12.	Na sua casa alguém tem rede de pesca	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.12.1.	Será realmente isto uma necessidade?	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.13.	Tem Congelador ou Geleira	<input type="checkbox"/> Sim

		<input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.13.1.	Será realmente isto uma necessidade?	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.14.	As pessoas em idade escolar que vivem nesta casa tem acesso a escola	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.14.1.	Será realmente isto uma necessidade?	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.15.	Na sua casa tem TV	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.15.1.	Será realmente isto uma necessidade?	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.16.	Na sua casa alguém tem Telefone	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.16.1.	Será realmente isto uma necessidade?	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.17.	Na sua casa tem Energia	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.17.1.	Será realmente isto uma necessidade?	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.18.	Na sua casa tem Latrina melhorada/com laje	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.18.1.	Será realmente isto uma necessidade?	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei

		<input type="checkbox"/> Optou por não responder
C.19.	Tem Casa de bloco	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.19.I.	Será realmente isto uma necessidade?	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.20.	Tem Barco a motor	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.21.I.	Será realmente isto uma necessidade?	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.22.	Na sua casa Tem Plasma	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.22.I.	Será realmente isto uma necessidade?	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.23.	Na sua casa alguém tem Bicicleta	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.23.I.	Será realmente isto uma necessidade?	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.24.	Na sua casa alguém tem Emprego formal	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.24.I.	Será realmente isto uma necessidade?	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.25.	Na sua casa alguém tem Mota	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.25.I.	Será realmente isto uma necessidade?	<input type="checkbox"/> Sim



		<input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.26.	As suas crianças tem acesso a escolinha	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.26.I.	Será realmente isto uma necessidade?	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.27.	Tem acesso a Farmácia privada dentro da sua localidade	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.27.I.	Será realmente isto uma necessidade?	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.28.	Tem acesso a esquadra	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.28.I.	Será realmente isto uma necessidade?	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.29.	Na sua casa tem Ventoinha	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.29.I.	Será realmente isto uma necessidade?	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.30.	Na sua casa tem Cama de madeira	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.30.I.	Será realmente isto uma necessidade?	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.31.	Na sua casa tem Relógio de parede	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei

		<input type="checkbox"/> Optou por não responder
C.31.1.	Será realmente isto uma necessidade?	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.32.	Na sua casa tem Cabritos	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.32.1.	Será realmente isto uma necessidade?	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
C.33.	Na sua casa tem Bois	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder
33.1.	Será realmente isto uma necessidade?	<input type="checkbox"/> Sim <input type="checkbox"/> Não <input type="checkbox"/> Não sei <input type="checkbox"/> Optou por não responder

## SEÇÃO D: POSSE DE TERRA

D.1	Na sua opinião, como caracteriza o nível de segurança de posse da terra comunitária (ou seja, terra ainda não alocada para as famílias) dentro da comunidade?	<ol style="list-style-type: none"> <li>1. Estou muito seguro e não tenho preocupações com as terras comunitárias</li> <li>2. Não há ameaça imediata à terra da comunidade, mas estou um pouco preocupado com possíveis ameaças no futuro</li> <li>3. Não há ameaça imediata à terra comunitária, mas estou muito preocupado com possíveis ameaças</li> <li>4. Nossos direitos à terra da comunidade estão sendo ameaçados</li> <li>5. Já perdemos algumas terras comunitárias nos últimos dois anos</li> <li>6. Não sei responder</li> </ol>
D.2	D2. Qual é a fonte / fontes de ameaça, que você sente atualmente, que levam à perda de terras?	<input type="checkbox"/> De outros membros da minha comunidade <input type="checkbox"/> Dos meus líderes comunitários <input type="checkbox"/> De pessoas de outra comunidade <input type="checkbox"/> Do governo <input type="checkbox"/> De um investidor ou outro estranho <input type="checkbox"/> Outros
D.3	D3. Você pode explicar melhor o que aconteceu?	
D.4	Qual é a sua percepção de segurança em relação à	<input type="checkbox"/> Estou muito seguro e não tenho preocupações com a terra da minha família

	posse da terra de sua família?	<input type="checkbox"/> Não há ameaça imediata à minha terra, mas estou um pouco preocupado com possíveis ameaças no futuro. <input type="checkbox"/> Não há ameaça imediata à minha terra, mas estou muito preocupado com possíveis ameaças. <input type="checkbox"/> Meus direitos à terra estão sendo ameaçados <input type="checkbox"/> Já perdemos algumas terras familiares nos últimos dois anos. <input type="checkbox"/> eu não sei como responder
D.5	Como você se sente sobre a seguinte declaração: "As mulheres devem ter o mesmo acesso que os homens aos recursos e oportunidades sociais, econômicas e políticas"	<input type="checkbox"/> Discordo totalmente <input type="checkbox"/> Discordo <input type="checkbox"/> Neutro <input type="checkbox"/> Concordar <input type="checkbox"/> Concordo plenamente
D.6.	Como você se sente sobre a seguinte declaração: "As mulheres devem poder possuir e controlar a terra e os recursos em seu próprio nome"	<input type="checkbox"/> Discordo totalmente <input type="checkbox"/> Discordo <input type="checkbox"/> Neutro <input type="checkbox"/> Concordar <input type="checkbox"/> Concordo plenamente
D.7.	Você teve experiência pessoal de conflito de terra durante os últimos dois anos?	<input type="checkbox"/> Sim <input type="checkbox"/> Não
D.8	Qual era a natureza da disputa?	<input type="checkbox"/> Limites <input type="checkbox"/> Propriedade <input type="checkbox"/> Usar <input type="checkbox"/> Outro
D.9	O que foi feito para resolver a disputa?	<input type="checkbox"/> Discussão entre as partes envolvidas (sem ajuda externa) <input type="checkbox"/> Discussão entre as partes (com envolvimento de amigos e/ou familiares) <input type="checkbox"/> Submetidos às autoridades tradicionais para resolução <input type="checkbox"/> Submetido ao governo para resolução
D.10	Qual o estado atual do conflito?	<input type="checkbox"/> A disputa continua <input type="checkbox"/> Está em processo de resolução entre nós <input type="checkbox"/> Está em processo de resolução com ajuda das lideranças tradicionais <input type="checkbox"/> Está em processo de resolução com a ajuda do governo <input type="checkbox"/> A disputa foi resolvida
D.11	Na sua opinião, como você caracterizaria a capacidade da comunidade de	<input type="checkbox"/> A comunidade tem toda a capacidade necessária para gerir o acesso à terra

	administrar o acesso à terra dentro de sua área?	<input type="checkbox"/> A capacidade de gerir o acesso à terra dentro da comunidade é forte <input type="checkbox"/> A comunidade tem capacidade para gerir o acesso à terra, mas com algumas dificuldades <input type="checkbox"/> A capacidade de gerir o acesso à terra dentro da comunidade é fraca <input type="checkbox"/> Torna-se impossível para a comunidade gerir o acesso à terra
D.12	Na sua opinião, como você caracterizaria a capacidade da comunidade para resolver conflitos de terra?	<input type="checkbox"/> A comunidade tem toda a capacidade necessária para resolver conflitos <input type="checkbox"/> A capacidade da comunidade para resolver conflitos é forte <input type="checkbox"/> A comunidade tem capacidade de resolver conflitos, mas com algumas dificuldades <input type="checkbox"/> A capacidade da comunidade para resolver conflitos é fraca <input type="checkbox"/> Torna-se impossível para a comunidade resolver conflitos
D.13	Na sua opinião, como você caracterizaria o atual nível de influência das mulheres na tomada de decisões sobre terras comunitárias?	<input type="checkbox"/> Tem mais influência do que os homens <input type="checkbox"/> Tem o mesmo nível de influência que os homens <input type="checkbox"/> Tem menos influência que os homens <input type="checkbox"/> Não tem influência <input type="checkbox"/> não sei
D.14	Na sua opinião, como você caracterizaria o nível atual de influência das mulheres na tomada de decisões sobre terras familiares?	<input type="checkbox"/> Tem mais influência do que os homens <input type="checkbox"/> Tem o mesmo nível de influência que os homens <input type="checkbox"/> Tem menos influência que os homens <input type="checkbox"/> Não tem influência <input type="checkbox"/> Não sei



## Focus Group Discussion Guide

### Guia de Discussão de Grupo de Foco

**Estudo de Base - Projecto “Construindo um Futuro Azul para Ecossistemas e Pessoas na Costa Leste Africana - Futuro Azul (BF)”**

**Tema: PAPÉIS E RELAÇÕES DE GÉNERO INFLUENCIAM O ACESSO, USO, MANEJO E CONSERVAÇÃO DA BIODIVERSIDADE**

### INTRODUÇÃO E PEDIDO DE CONSENTIMENTO

Bom Dia boa tarde! O meu nome é... Fomos contratados pela ADPP que, em parceria com a WCS, com financiamento da Blue Action, está a implementar um projeto financiado denominado “Building a Blue Future for Ecosystems and People on the East African Coast - Blue Future (BF)”, nos distritos de Mossuril e Memba. Este projeto visa restaurar os sistemas ecológicos nas áreas dos dois distritos mencionados, principalmente manguezais, ervas marinhas e recifes de coral. Através deste projeto, a ADPP estabelecerá 33 clubes de subsistência onde aprenderão sobre agricultura de conservação; promoverá atividades alternativas de geração de renda e plantio de árvores.

O objetivo deste estudo é entender a situação atual das comunidades e partes interessadas na redução e remoção de ameaças aos habitats de ervas marinhas e manguezais, aumentando sua resiliência às mudanças climáticas e restaurando manguezais em uma área de 50ha, abrangendo 5.000 famílias.

Sua participação neste grupo de discussão é voluntária. Nunca associaremos seu nome às respostas que você fornecer. Embora prometamos manter suas informações confidenciais e peçamos aos outros participantes que façam o mesmo, não podemos prometer que ninguém neste grupo focal não revelará nada do que disse. Por favor, tenha isso em mente se você fornecer suas respostas.

Você pode encerrar a participação a qualquer momento. Você está disposto a participar?

Se você tiver dúvidas sobre este trabalho, entre em contato com (Nome da pessoa apropriada e informações de contato)

Vamos começar com a primeira pergunta.

**Detalhes da entrevista (Facilitador: preencha esta informação antes da entrevista. Não pergunte aos participantes)**

Nome do inquiridor

Número/código da entrevista

Data da entrevista

Distrito

Província

Nome da comunidade

Número de participantes

## A. COMO OS PAPÉIS E RELAÇÕES DE GÉNERO INFLUENCIAM O ACESSO, USO, MANEJO E CONSERVAÇÃO DA BIODIVERSIDADE

### 1. Perfil da atividade

Falem-nos de como é feita a distribuição de tarefas/atividades nas vossas casas, com base, no género. Quando falo de género me refiro a mulheres, homens, raparigas e rapazes (No caso de actividades compartilhada, explorar quem faz mais)

- Tarefas domésticas, como: Limpezas, buscar lenha, buscar água, preparar comida, cuidar das crianças/idosos, lavar roupa.
- Tarefas produtivas: Preparação do solo/terra, gestão da cultura no campo, colheita/pós-colheita e venda; pesca, transporte, processamento e venda de peixe.

Explicar a razão da participação de homens e mulheres nestas actividades?

Quem e responsável por decidir divisão de tarefas produtivas? Porque?

### 2. RELÓGIO DE ACTIVIDADE DIÁRIA (CALENDÁRIO DIÁRIO DE 24 HORAS)

Como é a distribuição das tarefas que mencionaram ao longo do dia?

Tempo	Atividades diárias	
	Mulheres	Homens
05:00		
06:00		
07:00		
08:00		
09:00		
10:00		
11:00		
12:00		
13:00		
14:00		
15:00		
16:00		
17:00		
18:00		
19:00		
20:00		
21:00		
22:00		
23:00		
24:00		

### 3. CALENDÁRIO SAZONAL

Como é a distribuição das tarefas das atividades ao longo do ano? Queremos que nos digam, por ex, que No mês X as mulheres se ocupam com a actividade Y e os homens com actividade Z.

Atividade	Quem	Janeiro	Fevereiro	Março	Abril	Maió	Junho	Julho	Agosto	Setembro	Outubro	Novembro	Dezembro
	Homens												
	Mulheres												
	Homens												
	Mulheres												
	Homens												
	Mulheres												
	Homens												

4. **Como e feita (órgãos) a decisão sobre o acesso, uso e gestão de recursos costeiros e marinhos (mar, floresta) na vossa comunidade? Qual é o nível de envolvimento de homens e mulheres?**
  
5. **Será que existem algumas barreiras (práticas, costumes tradicionais) que fazem com que homens e mulheres tenham desigual aos recursos naturais? Porque?**
  
6. **Quais são os desafios no acesso, uso/exploração dos recursos marinhos e costeiros?**
  
7. **O que o projecto pode fazer para envolver mulheres na tomada de decisões, acesso e uso de recursos marinhos e costeiros para actividades produtivas?**



## Guia de Discussão de Grupo de Foco

### Estudo de Base - Projecto “Construindo um Futuro Azul para Ecossistemas e Pessoas na Costa Leste Africana - Futuro Azul (BF) ”

#### Tema: Vulnerabilidade Climática e Análise de Capacidades

## INTRODUÇÃO E PEDIDO DE CONSENTIMENTO

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O objetivo deste estudo é entender a situação atual das comunidades e partes interessadas na redução e remoção de ameaças aos habitats de ervas marinhas e manguezais, aumentando sua resiliência às mudanças climáticas e restaurando manguezais em uma área de 50ha, abrangendo 5.000 famílias.

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**Detalhes da entrevista (Facilitador: preencha esta informação antes da entrevista. Não pergunte aos participantes)**



Nome do inquiridor
Número/código da entrevista
Data da entrevista
Distrito
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Nome da comunidade
Número de participantes

## B. VULNERABILIDADE CLIMÁTICA E ANÁLISE DE CAPACIDADE

### BI. Questões Climáticas Questionário do Focus Group

<b>Indicador O1.2: As aldeias são mais resilientes às mudanças climáticas (segurança hídrica e alimentar, estruturas comunitárias para gestão sustentável da pesca).</b>	
1	De quais recursos naturais você mais depende?
2	Há períodos do ano em que há falta de alimentos na comunidade?
3	Quando e por quê?
4	Há períodos do ano em que falta água? Quando e por quê?
5	As mudanças climáticas contribuíram para a escassez desses recursos? Se assim for, de que maneira?
6	O que a comunidade tem feito para enfrentar a escassez desses recursos? E para evitar que eles se esgotem novamente?

<b>Indicador O2.1: Adoção de oportunidades diversificadas de meios de subsistência resilientes ao clima e melhoria das cadeias de valor pelos grupos-alvo do projeto.</b>	
1	Quais são as principais atividades de subsistência nesta comunidade? Para além destas atividades principais, que atividades secundárias tem desenvolvido para garantir o seu sustento? Em quais cadeias de valor a comunidade está mais envolvida? Por que?
2	Como as mudanças climáticas afetam suas atividades de subsistência?
3	O que a comunidade tem feito para minimizar os efeitos das mudanças climáticas em suas atividades de subsistência?
4	Você recebeu algum apoio para minimizar/mitigar os efeitos das mudanças climáticas em suas atividades de subsistência?

## Guia de Discussão de Grupo de Foco

### Estudo de Base - Projecto “Construindo um Futuro Azul para Ecossistemas e Pessoas na Costa Leste Africana - Futuro Azul (BF) ”

#### DISCUSSÕES DO GRUPO FOCAL

**Tema: Mapeamento de recursos e perigos e Linha do tempo de eventos históricos**

#### INTRODUÇÃO E PEDIDO DE CONSENTIMENTO

Bom Dia boa tarde! O meu nome é... Fomos contratados pela ADPP que, em parceria com a WCS, com financiamento da Blue Action, está a implementar um projeto financiado denominado “Building a Blue Future for Ecosystems and People on the East African Coast - Blue Future (BF)”, nos distritos de Mossuril e Memba. Este projeto visa restaurar os sistemas ecológicos nas áreas dos dois distritos mencionados, principalmente manguezais, ervas marinhas e recifes de coral. Através deste projeto, a ADPP estabelecerá 33 clubes de subsistência onde aprenderão sobre agricultura de conservação; promoverá atividades alternativas de geração de renda e plantio de árvores.

O objetivo deste estudo é entender a situação atual das comunidades e partes interessadas na redução e remoção de ameaças aos habitats de ervas marinhas e manguezais, aumentando sua resiliência às mudanças climáticas e restaurando manguezais em uma área de 50ha, abrangendo 5.000 famílias.

Sua participação neste grupo de discussão é voluntária. Nunca associaremos seu nome às respostas que você fornecer. Embora prometamos manter suas informações confidenciais e peçamos aos outros participantes que façam o mesmo, não podemos prometer que ninguém neste grupo focal não revelará nada do que disse. Por favor, tenha isso em mente se você fornecer suas respostas.

Você pode encerrar a participação a qualquer momento. Você está disposto a participar?

Se você tiver dúvidas sobre este trabalho, entre em contato com (Nome da pessoa apropriada e informações de contato)

Vamos começar com a primeira pergunta.

**Detalhes da entrevista (Facilitador: preencha esta informação antes da entrevista. Não pergunte aos participantes)**

Nome do inquiridor

Número/código da entrevista

Data da entrevista

Distrito

Província

Nome da comunidade

Número de participantes



## I) Mapeamento de recursos e perigos

Os participantes criam um mapa de habitats locais e recursos de subsistência como base para discussão sobre os perigos climáticos que afetam cada um.

Quais são os recursos naturais/habitats de que dependem nesta comunidade (Mar, Florestas, Machambas, Minas)?	Quais são os perigos climáticos a que cada um está exposto?	Como cada um dos habitats/recursos é afetado pelos choques?	Quais são as capacidades criadas/que a comunidade tem de adaptar?
Mar			
Rios			
Florestas – espécies florestais			
Fauna			
Machambas			



### 3) Linha do tempo de eventos históricos

Os participantes (anciãos) criam uma linha do tempo dos principais eventos nacionais e locais como base para discutir eventos climáticos históricos (por exemplo, ciclones, secas), como eles afetaram a comunidade e como as pessoas lidaram ou se adaptaram.

Eventos principais gerais: Podem se lembrar e mencionar principais eventos nacionais e locais que marcarão os tempos/anos/décadas (Independência, guerras, secas prolongadas, cheias fortes, ciclones, eleições)? Datas Aproximadas	Eventos climáticos que coincidem mais ou menos no mesmo tempo de eventos históricos gerais	Como estes eventos afetaram a comunidade?  Se o acesso a recursos variou entre os membros da comunidade (por exemplo, homens e mulheres) com o tempo?  Quem na comunidade sofreu mais (homens, mulheres, jovens etc, pessoas de grupos sociais específicos)?	Como as comunidades reagiram/lideraram/adaptaram com esses eventos?

Qual é a sua sensibilidade em relação ao estabelecimento de uma área de conservação?

Como uma zona de conservação pode afetar homens e mulheres?

Como minimizar esses impactos de criação de área de conservação?



## Guia de Discussão de Grupo de Foco

### Estudo de Base - Projecto “Construindo um Futuro Azul para Ecossistemas e Pessoas na Costa Leste Africana - Futuro Azul (BF) ”

#### DISCUSSÕES DO GRUPO FOCAL

Tema: Calendário sazonal e Matriz de vulnerabilidade

#### INTRODUÇÃO E PEDIDO DE CONSENTIMENTO

Bom Dia boa tarde! O meu nome é... Fomos contratados pela ADPP que, em parceria com a WCS, com financiamento da Blue Action, está a implementar um projeto financiado denominado “Building a Blue Future for Ecosystems and People on the East African Coast - Blue Future (BF) ”, nos distritos de Mossuril e Memba. Este projeto visa restaurar os sistemas ecológicos nas áreas dos dois distritos mencionados, principalmente manguezais, ervas marinhas e recifes de coral. Através deste projeto, a ADPP estabelecerá 33 clubes de subsistência onde aprenderão sobre agricultura de conservação; promoverá atividades alternativas de geração de renda e plantio de árvores.

O objetivo deste estudo é entender a situação atual das comunidades e partes interessadas na redução e remoção de ameaças aos habitats de ervas marinhas e manguezais, aumentando sua resiliência às mudanças climáticas e restaurando manguezais em uma área de 50ha, abrangendo 5.000 famílias.

Sua participação neste grupo de discussão é voluntária. Nunca associaremos seu nome às respostas que você fornecer. Embora prometamos manter suas informações confidenciais e peçaamos aos outros participantes que façam o mesmo, não podemos prometer que ninguém neste grupo focal não revelará nada do que disse. Por favor, tenha isso em mente se você fornecer suas respostas.

Você pode encerrar a participação a qualquer momento. Você está disposto a participar?

Se você tiver dúvidas sobre este trabalho, entre em contato com (Nome da pessoa apropriada e informações de contato)

Vamos começar com a primeira pergunta.

**Detalhes da entrevista (Facilitador: preencha esta informação antes da entrevista. Não pergunte aos participantes)**

Nome do inquiridor

Número/código da entrevista

Data da entrevista

Distrito

Província

Nome da comunidade

Número de participantes



## 2) Calendário sazonal

Os participantes criam um calendário sazonal de agricultura, pesca e outras atividades como base para discussão sobre como eles são afetados pela estação seca extrema ou eventos climáticos da estação chuvosa e percepções de mudança em torno do clima sazonal.

### 1) Calendario

Actividades de sustento (pode especificar actividades de homens e de mulheres)	Jan	Fev	Mar	Abr	Maio	Junho	Julh	Ag	Set	Out	Nov	Dez
Estacoes do ano												
Chuvas												
Ventos fortes												
Temperatura												
Pesca												
Agricultura												
<i>Cereais</i>												
<i>Legumes</i>												
<i>Hortícolas</i>												
<i>Frutas</i>												
Criacao de animais												
Pesca												
Corte de lenha/carvao												
Corte de material de construcao												
Caca												
Comercio												
Empregos												



I. Nenhum, 2. Baixa, 3. Medio, 4. Alto, 5. Muito Alto

- II) Será que os calendários sazonais de actividades mudaram ao longo do tempo e porquê?
- III) Os fatores relacionados ao clima desempenham um papel fundamental?
- IV) Como as mudanças nas estações do ano (chuvas, ventos, temperaturas) ao longo do tempo afetaram cada uma das actividades de sustento? Como afetam homens e mulheres?

a) Pesca

b) Agricultura

✓ Cereais

✓ Legumes

✓ Hortícolas

✓ Frutas

c) Criação de animais

d) Pesca

e) Corte de lenha/carvão

f) Colecta de recursos (xxxx)

#### 4) Matriz de vulnerabilidade

Os participantes inserem (i) as principais atividades de subsistência e (ii) os maiores perigos para cada uma, em uma matriz, e avaliam os perigos em uma escala semi-q.

Actividades de sustento	Cheias	Secas	Ventos fortes/cilones	Erosao	Mudancas dos niveis do mar	Salinizacao de aguas dos furos de agua
Pesca						
Agricultura						
<i>Cereais</i>						
<i>Legumes</i>						
<i>Hortícolas</i>						
<i>Frutas</i>						
Criacao de animais						
Pesca						
Florestas – materia de construcao/artezanato						
Corte de lenha/carvao						

Impactos: 1.Nenhum, 2. Baixo, 3. Medio, 4. Alto, 5.Muito Alto

Qual e a voss sencibilidade em relacao ao estabelecimento de uma area de conservacao?

Como uma zona de conservacao pode afectar homens e mulheres?

Como minimizar esses impactos de criacao de area de conservacao?





## Key informants interview guide

### Socio-economic study – Project “Building a Blue Future for Ecosystems and People on the East African Coast - Blue Future (BF)”

#### CCP interview guide

#### INTRODUCTION AND CONSENT REQUEST

Good Morning Good Afternoon! My name is... We were hired by ADPP which, in partnership with WCS, with funding from Blue Action, is implementing a project called “Building a Blue Future for Ecosystems and People on the East African Coast - Blue Future (BF)”, in the districts of Mossuril and Memba, financed. This project aims to restore the ecological systems in the areas of the two mentioned districts, mainly mangroves, seagrass and coral reefs. Through this project, ADPP will establish 33 livelihood clubs where they will learn about conservation agriculture; promote alternative income generation activities and tree planting. The aim of this study is to understand the current situation of communities and stakeholders in reducing and removing threats to seagrass and mangrove habitats, increasing their resilience to climate change and restoring mangroves in an area of 50ha, encompassing 5000 families.

Thank you very much for your time. I would like to ask your permission to interview you, this should take approximately 50 minutes. We invite you to participate because you are part of the residents of this community and were chosen at random. Please note that the answers given in this interview are for analysis purposes and the final results will be shared with the public. They will not be presented individually, ensuring the anonymity of the information you provide.

Your participation in this interview is voluntary. We will never associate your name with the answers you provide. We'll take notes, but it's just for me. Any information you give us will be preserved. If you don't want me to take notes or if you feel comfortable during the interview, we can stop at any time. If you have questions about this work, please contact (name of appropriate person and contact information) Are you willing to participate?

Before we start, can you introduce yourself?

#### Interview details (fill in this information before the interview. Do not ask the farmer)

Enquirer's name	
Interview number/code	
interview data	
District	
province	
Community name	
<b>General profile</b>	
respondent's name	
Office	
Years in the role	
marital status	
Contacts (email and mobile)	



1. How long has this CCP been in existence?
2. How many fishermen are there in this CCP? (Men/Women/Leadership members - male/female ratio)?
3. How are men and women involved in CCP activities?
4. What are the main attributions of this CCP and if they are being properly implemented. If not, why, what are the main challenges/obstacles?
5. How does CCP coordinate activities with the National Institute for the Development of Fisheries and Aquaculture?
6. Are there marine fenced areas in the area you manage? How were these areas created? Are these zones being respected? Explain how?
7. Do you think it is possible to create more protection zones? Will fishermen accept and respect? Explain?
8. Are fishermen aware of the importance of closed areas for the sustainability of fisheries?
9. Have fishermen observed a decrease in the abundance of fishery resources in recent years?
10. How has climate change affected the PCC and fishermen in general? What are the climate change adaptation activities that CCP has been developing?
11. What are the main fishing grounds in your region?
12. What are the conflict resolution mechanisms regarding access to marine resources?
13. Are there many conflicts related to marine resources? What type?
14. What are the main successes achieved by the CCP's actions so far?
15. What can be done to make the CCP even more active and effective?
16. What do you think of the creation of a conservation area for sustainable use in conjunction with ongoing projects in the region, in which communities are involved in the respective management and can benefit through employment and income from tourism, participation in and monitoring from mangrove and seagrass restoration activities, the carbon credit income generated by these restoration activities, and the creation of alternative livelihoods?

The interview ends here, thank you very much for your attention!



## Socio-Economic Study – Project “Building a Blue Future for Ecosystems and People on the East African Coast - Blue Future (BF)”

### Interview guide for SDAE, SDPI and Community Leaders

#### INTRODUCTION AND CONSENT REQUEST

Good Morning Good Afternoon! My name is... We were hired by ADPP which, in partnership with WCS, with funding from Blue Action, is implementing a project called “Building a Blue Future for Ecosystems and People on the East African Coast - Blue Future (BF)”, in the districts of Mossuril and Memba, financed. This project aims to restore the ecological systems in the areas of the two mentioned districts, mainly mangroves, seagrass and coral reefs. Through this project, ADPP will establish 33 livelihood clubs where they will learn about conservation agriculture; promote alternative income generation activities and tree planting.

The aim of this study is to understand the current situation of communities and stakeholders in reducing and removing threats to seagrass and mangrove habitats, increasing their resilience to climate change and restoring mangroves in an area of 50ha, encompassing 5000 families.

Thank you very much for your time. I would like to ask your permission to interview you, this should take approximately 50 minutes. We invite you to participate because you are part of the residents of this community and were chosen at random. Please note that the answers given in this interview are for analysis purposes and the final results will be shared with the public. They will not be presented individually, guaranteeing the anonymity of the information you provide.

Your participation in this interview is voluntary. We will never associate your name with the answers you provide. We'll take notes, but it's just for me. Any information you give us will be preserved. If you don't want me to take notes or if you feel comfortable during the interview, we can stop at any time. If you have questions about this work, please contact (Appropriate person name and contact information). Are you willing to participate?

Before we start, can you introduce yourself?

**Interview details (fill in this information before the interview. Do not ask the farmer)**

Enquirer's name	
Interview number/code	
interview data	
District	
province	
community name	
<b>General profile</b>	
Respondente's name	
Office	
Years in the role	
marital status	
Contacts (email and cell phone)	



1. What are the main sources of income in the community/district? Is there a preference for sources of income between men and women, young people and adults?
2. What are the challenges for men and women, adults and youth to diversify their sources of income?
3. Estimate the % of families that depend mainly on fishing?
4. What has been the involvement and role of men and women in different fishing activities?
5. What are the actions that the SDAE/Government/ has taken to make communities more resilient to climate change?
6. What are the actions that the SDAE/Government/ has carried out to promote good agricultural practices, in particular agriculture and climate-smart agriculture?
7. What were the trends and lessons about adopting these practices and what are the challenges? Will there be any difference between H/M, youth/adults?
8. Talk about the availability, access and use of water for different purposes in this district/community?
9. Tell us about the use, access and availability of sustainable stoves in the district/community?
10. What are the most produced crops in this District/community? What are the value chains with the greatest demand in the market? How has the involvement of men and women been in these value chains?
11. Tell us about the participation of women in economic activities in this District/community? What have been the challenges?
12. How has the participation of women in fishing activities been?
13. How does the District/community use the mangrove and other natural resources and for what purposes?
14. What are the actions that the SDAE/Government/ has carried out to promote the conservation/preservation of biodiversity?
15. Are there cultural, tourist, sacred, historic or religious sites in the area? What has been the SDAE/Government role in the use and conservation of these sites?
16. Are there conservation areas for mangroves, seagrasses and corals? Voluntary resource closures, no take zones?
17. Are there conflicts over access to marine resources? How are they usually resolved?
18. Tell us about Community Fisheries Councils (CCPs) (if they exist, how they work, challenges)?
19. What do the authorities think about creating a conservation area for sustainable use in coordination with the projects currently underway in the region, where communities are involved in its management and can benefit through employment and tourism revenue? , participating in and monitoring mangrove and seagrass restoration activities, the carbon credit income generated by these restoration activities, and the creation of alternative livelihoods?

The interview ends here, thank you very much for your attention!



## Team Members

### Consultants Core Team Members

Nome	Sex	Education
Sérgio Macuacua	Male	<ul style="list-style-type: none"> <li>• 2020 – PhD candidate in Management and Evaluation at Atlantic University, USA</li> <li>• 2019 – Master in Rural Development at Universidade Eduardo Mondlane, Mozambique</li> <li>• Training in Social Safeguards &amp; Conservation Social Sciences</li> </ul>
Issufo Omar	Male	<ul style="list-style-type: none"> <li>• Postgraduate (MDA) in Sustainable Development Project</li> <li>• Bachelor's degree in agriculture</li> <li>• Training in Social Safeguards &amp; Conservation Social Sciences</li> </ul>
Fátima Cumbane	Female	<ul style="list-style-type: none"> <li>• Graduate degree in Communication and Rural Extension</li> <li>• Training in Social Safeguards &amp; Conservation Social Sciences</li> </ul>
Stela Fernando	Female	<ul style="list-style-type: none"> <li>• Master in Aquatic Biology and Coastal Ecosystems</li> <li>• Training in Social Safeguards &amp; Conservation Social Sciences</li> </ul>

### Enumerators List and Profile

Nome	Sex	Education
Emília Caetano	Female	Master's Degree in Psycho-Pedagogy, Degree in Marine Biology
Fernandes Nobre	Male	Master in Development Management, Postgraduate in Development Management, Degree in Oceanography
Adélia Fazenda	Female	Degree in Sociology
Mariam Agerafe	Female	Degree in Marine Biology
Benfica Napaua	Male	Degree in Applied Biology
Belson Rareque	Male	Degree in Forestry Engineering, Social Guard Guards
Miro Eugénio	Male	Degree in Marine Chemistry
Ângelo Balança	Male	Degree in Marine Biology
Esménio Pio	Male	Degree in Agriculture
Zena Joaquim	Female	Degree in aquaculture
Clara Miteca	Female	Aquaculture Engineering
Aissa de Lurdes	Female	Degree in Environmental Management and Community Development



## Enumerators Training Program

Linha de Base do Projecto Futuro Azul - Mossuril, Memba e Nacala-Velha

### Programa de Formação aos Inquiridores

Conteúdo	Tempo
<b>DIA I</b>	
<b>Chegada e Registo de Participantes</b>	08.00-08.30
<b>Apresentação de Participantes</b>	08.30-09.00
<b>Introdução ao Projecto</b>	09.00-09.20
<b>Introdução ao Estudo de Base (Contexto e Metodologia)</b>	09.00-09.20
<b>Introdução ao questionário aos agregados familiares e tradução para emakua</b>	09.20-10.30
<b>Intervalo de café</b>	10.30-10.45
<b>Introdução ao questionário aos agregados familiares e tradução para emakua</b>	10.45-12.30
<b>Intervalo de almoço</b>	12.30-13.30
<b>Introdução ao questionário aos agregados familiares e tradução para emakua</b>	13.30-16.30
<b>DIA 2</b>	
<b>Continuação de Introdução ao questionário aos agregados familiares e tradução para emakua</b>	08.00-10.30
<b>Intervalo de café</b>	10.30-10.45
<b>Práctica com tablets</b>	10.30-10.45
<b>Intervalo de almoço</b>	12.30-13.30
<b>Práctica com tablets</b>	12.30-16.30
<b>Amostra, Itinerário</b>	16.00-16.30
<b>Dia 3</b>	
<b>Continuação de Práctica com tablets</b>	08.00-10.30
<b>Intervalo de café</b>	10.30-10.45
<b>Práctica com tablets</b>	10.30-10.45
<b>Intervalo de almoço</b>	12.30-13.30
<b>Práctica com tablets</b>	12.30-15.30
<b>Amostra, Itinerário</b>	15.30-16.00
<b>Considerações Finais, Logística, Horário, Regras de Disciplina</b>	16.00-16.30
<b>Dia 4</b>	
<b>Piloto</b>	07.30-12.00
<b>Comentários e sugestões</b>	12.00-13.30