

## **Mozambique**

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### **Artisanal Fisheries Promotion Project**

### **Project Completion Report**

### **Main report and appendices**

Document Date: 07/08/2020  
Project No. 1100001517  
Report No. 5478-MZ  
Loan ID 2000000351

East and Southern Africa Division  
Programme Management Department

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## Map of the Project Area

No map available

Please contact [gis\\_team@ifad.org](mailto:gis_team@ifad.org) or request a map at:

<https://xdesk.ifad.org/sites/opr/Pages/Map request form.aspx>

## Currency Equivalents

Currency Unit = Mozambique Metical (MZN)

USD1.0 = 60.0

## Weights and measures

1 Kilogram	=	1000 g
1 000 kg	=	2.204 lb.
1 kilometre (km)	=	0.62 mile
1 metre	=	1.09 yards
1 square metre	=	10.76 square feet
1 acre	=	0.405 hectare
1 hectare	=	2.47 acres

## **Abbreviations and Acronyms**

<b>ADNAP</b>	<b>National Fisheries Administration</b>
<b>ANE</b>	<b>National Road Administration</b>
<b>DPMAIPs</b>	<b>Provincial Directorates of Sea, Inland Waters and Fisheries</b>
<b>EDM</b>	<b>Electricity of Mozambique</b>
<b>EP</b>	<b>Fisheries School</b>
<b>EU</b>	<b>European Union</b>
<b>FARE</b>	<b>Economic Rehabilitation Support Fund</b>
<b>FE</b>	<b>Road Fund</b>
<b>FFP</b>	<b>Fishing Promotion Fund</b>
<b>FUNAE</b>	<b>National Energy Fund</b>
<b>IDEPA</b>	<b>National Institute for Fisheries and Aquaculture Development</b>
<b>IDPPE</b>	<b>Small-Scale Fisheries Development Institute</b>
<b>IFAD</b>	<b>International Fund for Agricultural Development</b>
<b>IIP</b>	<b>Fisheries Research Institute</b>
<b>INIP</b>	<b>National Institute of Fishing Inspection</b>
<b>MIMAIP</b>	<b>Ministry of the Sea, Inland Waters and Fisheries</b>
<b>OFID</b>	<b>OPEP Fund for International Development</b>
<b>ONG</b>	<b>Non-governmental organizations</b>
<b>PCR</b>	<b>Savings and Revolving Credit</b>
<b>PCU</b>	<b>Project Coordination Unit</b>
<b>PDP-II</b>	<b>Fisheries Master Plan II</b>
<b>PESPA</b>	<b>Strategic Plan for the Artisanal Fisheries Subsector</b>
<b>PPABAS</b>	<b>Artisanal Fishing Project at Sofala Bank</b>
<b>ProAQUA</b>	<b>Small Scale Aquaculture Promotion Project</b>
<b>ProDIRPA</b>	<b>Project to Strengthen Access Rights to Fishery Resources</b>
<b>ProPESCA</b>	<b>Artisanal Fisheries Promotion Project</b>
<b>SDAE</b>	<b>District Services of Economic Activities</b>

## Project at a glance

<b>Region</b> East and Southern Africa Division	<b>Project at Risk Status</b> Not at risk
<b>Country</b> Mozambique	<b>Environmental and Social Category</b> B
<b>Project Name</b> Artisanal Fisheries Promotion Project	<b>Climate Risk Classification</b> not available yet
<b>Project ID</b> 1100001517	
<b>Project Sector</b> Agricultural Development	
<b>CPM</b> Robson Mutandi	
<b>Project Area</b>	

### Key Dates

IFAD Approval	Signing	Entry into Force	Mid-Term Review	Original Completion	Actual Completion
15/12/2010	24/03/2011	24/03/2011	22/06/2015	31/03/2018	30/06/2019
		<b>Original Financial Closure</b>	<b>Actual Financial Closure</b>		
		not available yet	not available yet		
<b>Date of Last SIS Mission</b>	<b>Number of SIS Missions</b>	<b>Number of extensions</b>	<b>Effectiveness lag</b>		
01/03/2019	15	2	3 months		

### IFAD Financing as at the time of PCR submission

<b>Loan</b>	<b>XDR Million</b>	13.9 Million	<b>% disbursed</b>	100.0
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### Actual Costs and Financing (USD '000) as at the time of PCR submission

Component	IFAD	Cofinancing	Beneficiaries	GOVT	Total
	Actual	Actual	Actual	Actual	Actual
Institutional Strength, Policy Initiatives & Mngmnt	0	0	0	0	0
Improving Economic Infrastructure	0	0	0	0	0
Supporting Dev. of Higher Value Fish	0	0	0	0	0
Nutrition Promotion	0	0	0	0	0
Developing Financial Services	0	0	0	0	0
Total	0	0	0	0	0
<b>Remarks</b>					

### Outreach

<b>Direct Beneficiaries</b>	
Number of HH members	Number of persons receiving services

Estimated total: <b>273 075</b>	Total: <b>48 898</b>
	Males: <b>26 315</b>
	Females: <b>22 583</b>

### Project Objectives

#### Agri. Tech. and Prod. Services

the project goal is to improve the incomes and livelihoods of poor households involved in artisanal fisheries in the selected growth poles. Its development objective is to increase the returns from fish sales for artisanal fishers and small market operators on a sustainable basis. Policy and institutional objectives The project will continue the process started by PPABAS of building government capacity, and in particular the capacity of IDPPE and associated fisheries institutions, to develop the artisanal fisheries sector and create a supportive policy and regulatory environment for it.

### Country Partners

Executing Institution	not available yet
Implementing Institutions	not available yet

## Project Completion Ratings Matrix

<b>COUNTRY:</b> Mozambique	
<b>PROJECT NAME:</b> Artisanal Fisheries Promotion Project	
<b>PROJECT ID:</b> 1100001517	
<b>BOARD APPROVAL DATE:</b> 15/12/2010	
<b>ENTRY INTO FORCE:</b> 24/03/2011	
<b>PROJECT COMPLETION DATE:</b> 30/06/2019	
<b>LOAN CLOSING DATE:</b> 30/09/2019	
<b>IFAD LOAN AND GRANT (USD MILLION):</b> \$21,098,368	
<b>TOTAL PROJECT FINANCING:</b> \$60,331,736	
<b>IMPLEMENTING AGENCY:</b> not available yet	
<b>Criterion</b>	<b>PCR Rating</b>
<b>Project performance</b>	
- Relevance	5
- Effectiveness	4
- Efficiency	4
- Sustainability	5
<b>Rural poverty impact</b>	<b>5</b>
- Households' incomes and assets	5
- Human and social capital	4
- Food security	4
- Agricultural productivity	5
- Institutions and policies	4
<b>Additional evaluation criteria</b>	
- Gender equality and women's empowerment	5
- Innovation	4
- Scaling up	5
- Environment and natural resource management	4
- Adaptation to climate change	4
- Targeting and outreach	5
- Access to markets	5
<b>Partners performance</b>	
- IFAD's performance	5
- Government performance	5
<b>Overall project achievement</b>	<b>5</b>



## Executive Summary

The National Institute for the Development of Fisheries and Aquaculture, designed and implemented, from 2011 to 2019, the Project to promote Artisanal Fisheries (ProPESCA), in 30 development poles of the entire coastal zone of Mozambique, integrated in 24 Districts. ProPESCA was implemented in collaboration with other sectors: ADNAP, IIP, Fishing School, FFP, ANE, Roads Fund and FUNAE.

The Project was co-financed by several institutions such as IFAD, OFID, EU and GoM. IFAD was the main funder of the project, with a total value of 21,131, followed by the EU 18,975, OFID with 13,530, and the GoM with 4,161 USD, with a total value of 57,798,000.00 and a readjusted, disbursed and executed value of 54,386,464.00.

This document is the Final Report on the implementation of the Project, covering the period from 2012 to June 2019. The methodology of its elaboration included a comprehensive literature review, exhaustive mapping in all its implementation sites and focus group interviews at local level with the relevant actors of the project, as well as open and semi-structured interviews with those responsible and technicians that were involved in the implementation, at central level.

The project consisted of five components, evaluated on the basis of the official IFAD classifier. Based on this classifier, the evaluation of the Project is presented below:

**Component 1 - Support to the Development of the Highest Value Fish Value Chain**, having provided artisanal fishers with resources and capacities that have enabled them to increase the production and marketing of the highest value fish through the development of the value chain, from capture to final market (training, fishing as a business, improved and motor boats, open sea fishing, use of ice, transport and sales); Thus, the performance recorded in this component is **satisfactory**.

**Component 2 - Improvement of Economic Infrastructure**, where access roads to fishing centers and fishing villages have been improved, fishing villages and fish markets have been electrified, and alternative energy sources (photo-voltaic systems in fish markets) have been installed, which has improved access to fishing centers and increased the availability of electricity from the national grid alternative sources for the benefit of artisanal fisheries in ice making, cold storage and first sale markets, with a performance rated as **satisfactory**.

**Component 3 - Financial Services Development**, presents the performance in the promotion of formal and informal financial services based on fishing communities, highlighting the promotion of PCR groups, the facilitation of links with formal financial services, the implementation of financial education programs, establishment of specific financing packages, with emphasis on the risk mitigation fund, credit line, fund for the promotion of women entrepreneurs and fund for the promotion of emerging enterprises. From the analysis of the activities taken and the performance achieved in this component, it is considered that the performance is **moderately satisfactory**.

**Component 4 - Institutional Strengthening, Policy Initiatives and Project Management**, in which the institutional capacity of institutions responsible for artisanal fisheries has been strengthened, assistance to artisanal fishers has been guaranteed, and various studies have been carried out related to the fishing resource accessible to artisanal fisheries and influenced by fisheries management measures and its sustainable exploitation. The evaluation of this component is **satisfactory**.

**Component 5 - Nutrition Promotion**. In this component, leaderships, families and local communities were trained on food production and ways of cooking for a balanced diet. Families from the growth poles covered were mobilized to prevent and combat malnutrition and benefited from radio programs on nutrition in general, contributing to the reduction of periods of hunger and poverty in general. The performance of this component is rated **highly satisfactory**.

Based on these results, we conclude the following:

### Component 1

The results of this component, having been achieved above the established goals, presented a multiplier effect, through the training of artisanal naval carpenters in improved techniques of construction and demonstration of the use of motorized vessels appropriate for fishing in open sea, equipped with means of conservation of fish with ice during the days of permanence at sea, including modern instruments of navigation and detection. By mastering the different fishing gears, Fishermen were able to select and use the appropriate technique for the open sea, which is line and longline. The ice factories built have been improving the conservation and quality of fish in first sale markets and in the distribution to other markets outside the growth poles.

### Component 2

The construction and rehabilitation of roads and energy supply, although not achieving the goals, provided higher quality products and development of marketing, with substantive revenues, for the different actors of the value chain, in particular artisanal fishermen, traders, factory and ice store managers, dealers and transporters.

### Component 3

Most of the existing PCRs groups at the poles have been trained and currently better serve the needs of their members. For greater potentiation, the groups of PCRs were strengthened, resulting in a favorable environment for obtaining alternative credits (granted within the groups) to finance their activities. Although the credits are of smaller amounts, compared to those of the formal sectors, they are of great impact, since it involves a greater number of interested parties and their immediate conditions and specificities are adequate.

### Component 4

ProPESCA provided an opportunity to consolidate and create new capacities for IDEPA and DPMAIP technicians to promote the development of artisanal fisheries. These capacities ensured the involvement and ownership of the project activities and approaches by artisanal fishers and other target groups. With a higher level of knowledge and experience, the technicians were able to implement the established strategies and methodologies that ensured the achievement of the project objectives and mitigated the negative impacts registered in certain sub-components.

## Component 5

The objective of preventing and combating malnutrition by families and communities themselves was achieved, as a result of training and practical demonstrations. The project effectively and efficiently provided to the communities theoretical and practical knowledge on food production, availability, cooking and consumption, including vegetables and fruit.

These activities have resulted in the reduction of poverty levels, given the high number of families and communities benefiting from them, especially with regard to the reduction of periods of hunger, malnutrition and under nutrition.

Analyzing the results obtained by ProPESCA and the constraints faced, the following is recommended:

- For similar or other projects in artisanal fisheries, IDEPA and Partners should pay greater attention to setting realistic goals in order to avoid that certain activities are not carried out, or are carried out without the appropriate quality and sustainability;
- It is necessary that the period for 'launching and preparing processes' and the period for the implementation of the planned activities, including the period for disbursement and availability of financial resources for this purpose, be calculated correctly;
- In the case of activities that are carried out by other Government institutions or NGOs, binding mechanisms (and not just memorandums) should be adopted to ensure that these other institutions achieve the goals of the planned activities and within the established deadlines;
- The use of local actors and beneficiaries of the project has demonstrated greater potential for achievement and sustainability. In this sense, it is recommended to replicate the project approach, which consisted of training local carpenters to build boats and efforts at community level to set up microfinance institutions to facilitate and massify credit access;
- For ongoing and future projects, IDEPA should adopt, together with donors, mechanisms to allow effective and timely disbursement of funds by donors, as a precondition and indispensable, including internal mechanisms for timely provision and use;
- The completion of works initiated, purchase of vessels, engines, ice, credits and recycling of beneficiaries, given their high level of impact, should be followed up immediately, as part of new projects, or through the general budget of the State, with deadlines for their implementation.

## A. Introduction

### A.1. Background

1. The Government of Mozambique, through the Ministry of the Sea, Inland Waters and Fisheries has designed and implemented the Project to Promote Artisanal Fisheries (ProPESCA), for a period of seven years, in 30 selected growth poles located along the entire coastal zone of Mozambique, in 24 districts of the provinces of Cabo Delgado, Nampula, Zambézia, Sofala, Inhambane, Gaza and Maputo, which represents about half of the 51 coastal districts.
2. The design of the ProPESCA project had an initial participatory process involving participants from each of the coastal provinces who took advantage of the experience and lessons learnt from the three artisanal fisheries projects that were in progress, namely the Artisanal Fisheries Project at Sofala Bank (PPABAS), the Artisanal Fisheries Project in Northern Nampula and Cabo Delgado (PPANNCD) and the Artisanal Fisheries Project in Gaza and Inhambane (PPAGI).
3. Three key principles guided the design of the project, namely (i) diversification of fishing activities with a focus on higher value fishing operations within a value chain approach, (ii) a focus on a number of growth poles up and down the coast, and (iii) a focus on poverty and gender focus through social and spatial inclusion processes.
4. Due to the context, and as a result of the monitoring activities carried out throughout the project implementation, some changes have been made to the project, such as the withdrawal of activities to establish micro-financial institutions in the Development Poles, and the integration of the nutrition and aquaculture component.
5. The project started in January 2012, following the PPABAS project which ended in December 2011. Some delays were experienced in the initial implementation phase of the project, and the first supervision mission took place from September 3rd to 14th, helping to get some of the initial actions right. In May 2015 the mid-term evaluation of the project was undertaken, which found that the project activities were based on the initial strategy designed and proposed actions and strategies to be followed until the end of the project. The last monitoring mission took place from February 18 to March 1, 2019.
6. This Project Completion Report focuses on the implementation processes, objectives and goals, the coordination aspects of the project and the articulation with the implementing partners at central, provincial, district and community levels. It describes and analyses its positive and negative aspects, the difficulties faced, the lessons learnt, proposals for capitalizing on and enhancing these lessons and presents guidelines for future interventions.

### A.2. Methodology

7. The process of preparing this Report involved extensive literature review, which included the main documents with emphasis on the project document, the mapping report, the baseline reports of 2014 and 2019, the mid-term evaluation report of 2015, the log frame, the aide memoire of the supervision missions, the 2018 progress report and other sector policy and strategy documents.
8. At the fieldwork level, entities that participated in its implementation at various levels were involved, from key informants at local, district, central and provincial levels, and project implementation partners, through individual interviews; and ProPESCA beneficiaries at the 30 growth poles level, namely fishermen and fishermen's families, through focus group discussions.
9. The work was carried out over a period of 45 working days, starting in November 2019 and ending in March 2020. The preparation of the activity, including the drawing up of the instruments for the data collection was carried out from September to October. The report was drafted simultaneously, from January to February 2020. Meetings to discuss the results and conclusions were held in February and March.

10. Based on these methodologies and techniques, the following chapters describe the work carried out and the results and impacts of the project, throughout its seven (7) year period.

## **B. Project Description**

### **B.1. Project context**

#### **B.1.1 Poverty in Mozambique and Artisanal Fishermen**

11. Poverty in Mozambique, which recorded very high rates at the end of the 1990s, has declined significantly over the last 15 years, from 69.7% in 1997, to 52.8% in 2003, 51.7% in 2009 and 46.1% in 2015 (MEF, 2016).
12. Despite significant and successive reductions in poverty levels, around half of the Mozambican population remains in absolute poverty, with a higher incidence in the areas where most artisanal fishermen are concentrated.
13. The baseline study conducted in 2014 found that more than 60% of households studied in the development poles where ProPESCA was running, lived in houses built with precarious materials; more than 50% had no access to potable water and 83% went hungry for periods of up to 4 months.
14. These high levels of poverty, especially in rural areas, placed limitations on the groups targeted by ProPESCA, for participation, absorption and access to assets and resources made available by the Project, in particular artisanal fishermen.

#### **B.1.2 Potential and Availability of Fishing Resources**

15. During the period of preparation and implementation of ProPESCA, the availability of marine resources was established between 218,000 to 338,000 tonnes, of which 163,000 to 218,000 tonnes were by sea and 55,000 tonnes by inland water.
16. In terms of overall capacity to catch fish, the actual catch was estimated at 115,000 to 124,000 tonnes in the period, thus providing more than half of the available resources for fishing. Another feature of resources and fishing capacity is that there is over-exploitation of certain areas, than many other areas with potential that have not been explored.
17. ProPESCA has therefore been designed and implemented in a context of fish availability in general. In certain areas of the open sea and high seas there was abundance, taking into account the low concentration of fishermen and consequent low exploration.

#### **B.1.3 Institutions, Programmes and Reference Projects in Artisanal Fisheries**

18. ProPESCA followed on from other projects in the artisanal fisheries area, namely: PPABAS, PPANNCD and PPAGI, which provided important experiences and lessons learnt, allowing the adoption of best practices and approaches for the development of artisanal fisheries in all aspects directly and indirectly associated with it.
19. A diversified group of institutions have made available to ProPESCA, their vast experience in the area of artisanal fisheries, ensuring structural conditions for the success of the project. Among these institutions, the following stand out: the Institute for the Development of Small-Scale Fisheries (IDPPE); the National Fisheries Administration (ADNAP); the National Institute for Fisheries Investigation (IIP); the National Institute for Fisheries Inspection (INIP); the Fishing Promotion Fund (FFP) and the Fisheries School (EP). In addition to these institutions, the Funder itself, IFAD, stands out, with vast experience in this area, both inside and outside Mozambique.
20. These institutions have provided a consistent and secure basis both in the design and implementation of ProPESCA, supporting from the conception, technical, financial, material and qualified human resources for the success of the project.

#### **B.1.4 Fishermen's Organization, Means and Fishing Equipment**

21. With regard to community-based artisanal fisheries organizations, it is estimated that there are around 1100 community-based organizations, among them 315 fishing associations, 353 savings and revolving credit groups (PCRs) and 415 other forms of community organizations dedicated primarily to participatory fisheries management (CCPs) and the construction of schools, health posts and potable water sources (ProPESCA, 2010). At the end of the 8 years of ProPESCA implementation, according to the 2018 progress report, 2783 groups of associations were created, of which 872 are existing groups strengthened. There were also 3,425 community-based fishing organizations, including 1,622 fishing associations, savings and revolving credit groups, and 347 other forms of local organizations linked to participatory management of fisheries resources.
22. Several types of equipment are used by artisanal fishers including beach trawls and beach nets, often employing 10-15 men; marine equipment such as fishing lines, surface and bottom gillnets, purse seines and longlines. Trawls are responsible for the largest proportion of the artisanal catch, corresponding to 38%. Most of the remaining catch is taken by bottom-set gillnets and lines. In total, the recent census estimated that artisanal fishermen were using about 42,300 gear items. About 39 400 boats are currently used in artisanal fishing activities, of which about 77% are canoes made from tree trunks; 9% are Moma canoes, 6% rafts and 6% skiffs. It is estimated that the number of boats equipped with engines has not increased significantly since the previous census in 2002 when they accounted for 3 percent of the total (ProPESCA, 2010).
23. At the beginning of ProPESCA implementation there were few funding institutions, most notably FFP and GAPI. It should be noted that most of the actors in the artisanal fisheries sector (79.3%) are not involved or are members of savings groups, and about 86.5% of the interviewees still do not benefit from the financial services available in the national market.
24. In this context, access to financing (formal and/or informal) by artisanal fishermen has been one of the main objectives from the beginning of the design and implementation of ProPESCA.

### B.1.5 General Situation of the Artisanal Fisheries Value Chain

25. The implementation of ProPESCA began in a context of inoperability of the value chain characterized by the difficulties of Artisanal Fishermen in the field of transport, impassability of access roads, markets, in the processing and fish conservation, due to lack of ice, both in the fishing sites, as well as in the Centres and Fish Markets.
26. The limitations in terms of first-sale markets and poor knowledge of handling techniques for fish products did not confer the necessary quality to these products.
27. In this context, the development of the value chain was also one of the major objectives to be achieved by ProPESCA.

### B.2. Project objectives

28. The project's development goal is to improve the incomes and livelihoods of families involved in artisanal fisheries. This should be achieved by increasing the catch volume of the highest value fish on a sustainable basis and increasing the income from marketed fish.
29. This has been achieved by diversifying fishing effort from the coastal area (in shallow waters) to the more distant open sea improving the income per unit effort and increasing the efficiency of the value chain with members of the fishing communities who are the primary beneficiaries. Achieving this required a combination of linked interventions, contributing directly to meet the project objective.

### B.3. Implementation modalities

30. ProPESCA was implemented with funding from the International Fund for Agricultural Development (IFAD), the OPEP Fund for International Development (OFID), a donation from the European Union (EU) and funds from the Government of Mozambique (GoM) itself, totalling USD 57.8 million. The project funding amounts were distributed as follows:

**Table 1: ProPESCA Financing by Components and Financiers**

Component	Financer	Value (USD)
Component 1: Development of fisheries products with higher commercial value	IFAD	8,158,000
	EU	4,505,000
	GdM	3,188,000
Component 2: Improving economic infrastructure	IFAD	1,051,000
	OFID	13,314,000
	GdM	472,000
Component 3: Development of financial services	IFAD	2,201,000
	EU	3,212, 000
	GdM	113,000
Component 4: Institutional strengthening, policy initiatives and project	IFAD	9,522,000
	OFID	216,000

management	EU	954,000
	GdM	327,000
Component 5: Nutrition Promotion	IFAD	200,000
	EU	2,238,000
	GdM	61,000

31. Initially, the project was under the responsibility of the Ministry of Fisheries, through the Small-Scale Fisheries Development Institute (IDPPE) and its Provincial Delegations. With the extinction of IDPPE, IDEPA became directly responsible for its operations, in coordination with the DPMAIPs. In addition to IDEPA, several institutions were directly involved, such as the National Fisheries Administration (ADNAP), the National Institute for Fisheries Research (IIP), the Fishing Promotion Fund (FFP), the Fishing School, the Road Fund working with the Provincial Road Departments of the National Road Administration (ANE), the EDM (Electricity of Mozambique) in conjunction with FUNAE (National Energy Fund), the District Administrations through the District Services for Economic Activities (SDAEs) and Municipalities.
32. ProPESCA's implementation mechanisms were multi-sectoral and multidisciplinary, with the various specialties involved, contributing in terms of areas of knowledge and experience.
33. Following these modalities, the five components of ProPESCA were implemented by the Project Coordination Unit (PCU) of ProPESCA based in Maputo, with IDPPE Delegations and later DPMAIPs at provincial level having an important part of the implementation responsibility. At provincial level the activities were guided/ coordinated by the Consultive Councils, guided by the Provincial Governors.
34. As part of the coordination of the project, the project reference group was established, which was responsible for its design and facilitated the participation of ProPESCA's development partners in project planning, monitoring and implementation. In addition to representatives of government agencies it included the participation of civil society and the private sector.
35. The identification of priority activities to be funded each year was defined through community consultations, carried out in a participatory process based on the growth poles assessments, which involved several sessions in communities and districts. In an initial phase, this was conducted by the provincial delegations of the former IDPPE and, from 2016 by the Provincial Directorates for Sea, Inland Water and Fisheries.
36. Based on the priorities obtained, Annual Activity and Budget Plans (PAAOs) were drawn up annually in all the Provinces, involving the CPU, DPMAIPs and the above-mentioned Partners.
37. In addition to the different actors mentioned, the Project was coordinated by a Steering Committee, which ensured the functioning and implementation of the different planned activities, including monitoring and evaluation actions.

#### **B.4. Target groups and places of intervention**

38. The primary target groups are poor people involved in fishing and related activities in the project area, who have a potential to expand their activities or market the fish with the support of the project. These groups have been estimated at 8,800 poor men and women directly involved in artisanal fisheries; 3,500 poor men and women involved in the processing and trade of fresh fish and traditionally processed fish in the coastal areas of Mozambique; and 500 poor men and women who provide inputs and services to fishermen and traders.
39. The secondary target groups comprise poor people living in the project area, but they are not necessarily involved in fisheries. They consist of people who will benefit, for example, from participation in credit and savings groups and labour generated by road works.
40. A third category consists of people and institutions that have benefited directly from the project interventions and resources, but are neither poor nor small-scale operators and target group, especially with regard to the project's objective, with 750 owners of boats that are less poor, 1 700 medium and larger ice producers, processors, traders, market agents and transporters that are less poor or richer but have played an important role in the value chain of artisanal fisheries.
41. There are an estimated 334 000 professionals and other people directly or indirectly dependent on artisanal fisheries. They are distributed through 1 217 fishing centers that are linked to fishing communities, with the predominance being found along the coast. Most fishing communities are small, poor and semi-subsistent in nature and generally combine fishing and marketing with subsistence agriculture. Some are seasonal, but most are permanent communities that depend primarily on fishing for their lives. Among the coastal artisanal fishery population, about 70 percent are fishermen, with the rest being shellfish collectors (about 20 percent, most of whom are women) and divers (less than 10 percent). To this number are added naval processors and carpenters.
42. The project activity area extends along the entire coastline from the Tanzanian border in the north to South Africa in the south. This

responded to the government's goal of combining the three existing artisanal fisheries projects and unifying their project areas - adding the previously excluded Maputo Province. However, only the growth poles were supported.

43. Twenty-six growth poles were identified - most were already important centers for fishing and fish marketing operations or had a strong potential to become important centers if certain constraints would be removed, often linked to road access and electricity availability.
44. Following the evaluation of the project's progress, 4 more growth poles were added, totaling 30 until its closure.
45. On average there were 14 fishing centers per growth pole, with a tendency to use the main centre as the point of sale and the place where fishermen buy ice, nets, gear (fishing tackle) and other equipment and access to services such as banks. The accumulation of marketing activities and service functions provides economies of scale and has created a dynamic that results in benefits for fishermen, traders and other people and institutions involved in the sector - promoting this was one of the underlying principles for the project.
46. The size of growth poles varies considerably, but on average the communities that constitute a growth pole have: a population of 112,000 including 3,000 fishermen; a catch of about 1,500 tonnes/year; 500 different types of boats including canoes and improved boats; and in most growth poles at least one financial service institution.

## **C. Assessment of project relevance**

### **C.1. Relevance vis-à-vis the external context**

47. From conception to implementation, ProPESCA has proven to be relevant as it responds to the needs of the target groups in the context of rural poverty in Mozambique, where low levels of production and fishing productivity combined with low exploitation of the commercial potential of the value chain have done little to reduce poverty levels.
48. The project is compatible with the country's main strategic guidelines as specified in PARPA II and the PESPA, PQGs of the last ten years, which highlight in particular the crucial role that the promotion of effective market linkages must play. Each of these documents, while promoting poverty alleviation, highlights the critical need for economic development to facilitate change and achieve poverty reductions in a sustainable manner.
49. It is also in line with the 2025 agenda which emphasizes the importance of markets for rural development and the need to focus on productivity increases in agriculture and fisheries, and foresees the importance of undertaking medium and long-term productive investments in agriculture and fisheries;
50. ProPESCA is compatible with IFAD's 2007-2010 Strategic Framework, which emphasizes the importance of ensuring that the poor rural people have access to transparent and competing markets to enable them to achieve higher incomes and increased food security. It is also compatible with IFAD policies as specified in COSOP, in particular the goal of "integrating small-scale agriculture and artisanal fisheries into the market economy and transforming them into profitable economic activities". In support of this objective, ProPESCA focuses on "interventions on the development and marketing of high value fish", and promotes "public-private partnerships", helps "private operators gain access to investment finance" and "increases the saleable production of artisanal fishermen".
51. The ProPESCA design process was participatory, listening to and involving the main actors and stakeholders, namely poor artisanal and small-scale fishers; poor communities located in the project area and small-scale traders. Based on this approach, the needs and priorities of these target groups, including their potential and opportunities for development, were accurately assessed.
52. In this perspective, the largest proportion of ProPESCA's resources, assets and services have been targeted at artisanal fishers and poor local communities, ensuring that they benefit and impact on the lives of the target groups, their families and the community at large.
53. The approaches have been appropriately framed within the social, political and economic conditions of the country, through the appropriate adequacy of the project in these areas. Environmental and climatic conditions were referenced, but not adequately, which resulted in substantive damage, the drought that devastated southern Mozambique in 2014 and 2015 and the passage of cyclones Dineo (2017), Idai and Kenneth (2019) in Cabo Delgado, Sofala, Manica, Zambezia, Inhambane and Gaza Provinces.
54. ProPESCA's objectives, approaches and activities focused on improving the living conditions of artisanal fishermen and rural families, in perfect harmony with the strategic plan and objectives of IFAD in the fisheries sector in Mozambique, including the policies and philosophies of targeting, innovation and participation of the private sector, with the purpose of maximizing results and gains. The objectives were realistic and demonstrated alignment with poverty reduction strategies that prioritize the most vulnerable populations in rural areas and the respective national development plans.
55. ProPESCA included an appropriate logical framework, which was readjusted and complemented throughout the implementation of the project. Activities were consistent and proportionate, but in the infrastructure and financial services components the targets were too ambitious and needed to be revised.
56. The indicators established allowed adequate monitoring of the implementation and results of ProPESCA, but there were weaknesses in the permanent and timely monitoring of the products and results under the responsibility of other sectors, namely the road, energy and market sectors. Adjacent risks were identified, but insufficient response capacity was established, especially with regard to natural disasters such as earthquakes and cyclones.
57. The strategic documents on which ProPESCA was based remain valid. Despite the changes that occurred during the implementation

period of the project, they did not produce any structural changes to the project.

58. Other documents such as the Poverty Reduction Strategy, the Rural Development Strategy and the Master Plan for Fisheries (1995 - 2005) were used as a reference for the ProPESCA design, which reinforced its relevance.
59. The evaluation of the relevance of the project is **satisfactory**, having contributed to the correct and adequate definition of the needs and priorities of the target groups, and to the coherent alignment of the project objectives, the general approach (inclusive and participatory) and the modalities of its implementation.

## C.2. Internal Logic

60. In terms of internal logic, the management and implementation of ProPESCA was ensured by IDEPA, through a Project Coordination Unit (PCU), which responded directly to the Institution's Board in coordination with the different Service Directorates. The PCU also articulated with the other Fisheries sectors, in particular ADNAP, FFP, the School of Fisheries, the Inspection of Fishery and the Fisheries Investigation Institute. At provincial and district level the articulation was ensured with the Provincial Directorates of the Sea, Inland Water and Fisheries and with the SDAE's. The logic was to insert ProPESCA in the structures and mechanisms of operation of the Fisheries Sector in general, as a strategy to ensure rationality and sustainability, after its completion.
61. For the design of ProPESCA, a participatory approach was used with the involvement of stakeholders from all coastal provinces in order to take into account the problems identified, take advantage of the experience and lessons learned from the three ongoing artisanal fisheries projects - the Artisanal Fisheries Project at Sofala Bank (PPABAS), the Artisanal Fisheries Project in Northern Nampula and Cabo Delgado (PPANNCD) and the Artisanal Fisheries Project in Gaza and Inhambane (PPAGI).
62. The logical framework of the project was designed to have a vertical and horizontal link between all its elements. There is considerable complementarity between the project components, with each one directly linked to the development of the value chain for higher value fishing/marketing operations in the selected growth poles.
63. The activities designed were in line with each component, following the established project theory of change. The proposed activities were commensurate to achieve the proposed objectives as they contributed to increasing the volume of higher value fish on a sustainable basis and increasing the income from marketed fish.
64. The budgetary resources made available were adequate to achieve the objectives, although they were cut when they were typed in 2018, allegedly because the historical level of financial implementation had been low, which created problems in making payments, particularly in categories of funding where EU funds could not be used for this purpose.
65. The implementation of the project timetable was affected by bureaucratic obstacles, which prevented the allocation of funds in a timely manner and in sufficient volumes, being the biggest impediment to the good performance of the project.
66. The institutional strategy of the project was to work with the group of actors that ensured the successful development of the value chain for the highest value fish. This included key government agencies at district, provincial and national levels with IDEPA in the lead; financial service institutions that provided credit to fishermen, traders and entrepreneurs who invested in the value chain from boats, engines, ice machines/cold storage; traders, entrepreneurs and other private sector actors involved in the marketing and processing of fishery inputs; operators providing specialized services including promotion/ training of PCRs; and private contractors for road rehabilitation and installation of energy transmission lines.

## C.3. Adequacy of design changes

67. During the implementation of the project, some changes were made to ProPESCA. The major changes were:
  - Integration of the nutrition component, with the purpose of facilitating the sustainable reduction of malnutrition within the target households of the interventions foreseen in ProPESCA and the promotion of good eating habits, through a balanced diet that includes protein and micro-nutrients. This line of action complemented the results of the other components and was accompanied by a specific and additional budget to ensure the implementation of all activities within the project period. The implementation of the nutrition component followed the approaches of the other components and sub-components of the project, and was carried out through the contracting of external services specialized in these areas.
  - Given the great potential of aquaculture found in the poles, actions to promote this culture were carried out, consolidating the initiatives that had been taken in this area. This enabled to take advantage and enhance the existence of initiatives for the cultivation of aquatic species as a way of diversifying income generating alternatives and alleviating the extractive fishing effort.
  - The project period was also extended for a further 12 months without additional costs, so that activities could be completed, in particular market and economic infrastructure.
68. The changes were therefore appropriate in all areas, including financial, methodological and implementation mechanisms. All stakeholders in ProPESCA's implementation were involved in the best adequacy of the changes made to the project, which contributed to its success.

## D. Assessment of project effectiveness

### D.1. Physical Objectives and Product Delivery

69. For the evaluation of the ProPESCA's effectiveness and other components, as well as its results, the IFAD classifier will be used, according to the following table:

**Table 2: Performance rating scale**

Scales	Score	Percentage
Highly satisfactory	6	91 -100%
Satisfactory	5	71 - 90%
Moderately satisfactory	4	51 - 70%
Moderately unsatisfactory	3	31 - 50%
Unsatisfactory	2	11 - 30%
Highly unsatisfactory	1	0 - 10%

Source: IFAD, PCR, 2012; IDEPA, Progress Report 2018

70. The Project recorded different levels of achievement of planned activities, objectives achieved and product delivery, according to the different components and different results, as follows:

#### Component 1 - Support for the Development of the Highest Value Fish Chain

71. In this component, the implementation of PropESCA achieved the results described below, in table 3:

**Table 3: Summary of the Training Carried out under Outcome 1**

Results Indicator	Targets	Achieved Results	Level of achievement (%)	Score	Qualification
Persons trained in boats construction	95 Persons	233	245	6	HS
Boat drivers trained	120 Persons	348	290	6	HS
Engine mechanics trained	210 Persons	195	93	6	HS
Fishermen trained in good practice of fish handling	160 Men	756	473	6	HS
	140 Women	128	91		
Fishermen trained in gear and improved fishing	295 Men	792	268	6	HS
	20 Women	44	220	6	HS
Fishermen who gain access to business development services	500 Men	798	160	6	HS
	15 Women	60	400	6	
New/existing associations supported	100	108	108	6	HS
<b>Score</b>				<b>6</b>	<b>HS</b>



72. As shown in the table above, the goals regarding the training of Naval Carpenters, naval mechanics, boat drivers, fishermen, fish processors, traders and market participants, were exceeded. These successes were based on a consistent organization and an efficient campaign to publicize the initiative and mobilize potential trainees in the various specialties offered.

73. The activities undertaken are described below:

- Training of naval carpenters in the construction of improved boats.** This activity was implemented in all 7 Provinces of the Project. The target was set at 95 people, aiming to provide naval carpenters with basic knowledge (theoretical and practical) of building improved vessels for open sea fishing. This activity had a lot of adherence by the carpenters which resulted in exceeding the initially established targets, having trained 280 naval carpenters. The trained Naval Carpenters contributed to the creation of around 840 jobs for young apprentices, which resulted in the construction of 2,041 Moma type boats and 2,235 motorboats, suitable for fishing in the open sea. Of these vessels, 2,380 were motorized, which made it possible to relieve the fishing effort along the coast, considered to be an area of great diversity of fishing habitats such as mangroves and seagrass. More than 50% of fishermen purchased their engines with their own funds, resulting from more efficient and profitable fishing due to capacity building (training) and better knowledge from fish resource studies carried out.
- Training of drivers and boat owners in the maintenance of marine engines.** In this activity, 120 drivers and boat employers were planned, and the target was exceeded by 290%, with the training of 348 persons in preventive maintenance of outboard marine engines. This achievement has been preventing engine malfunctions, having a long "life time" and ensuring that vessels operate regularly resulting in more fishing days and consequent increase in production and productivity.
- Training of mechanics in the repair of maritime engines.** 195 mechanics have been trained in this activity, 15 less than the 210 target set. This activity has allowed professionals to be available for occasional and long term repairs, ensuring that vessels do not remain on land due to breakdowns, particularly the less complex and small ones. These trainings created several jobs for young people who mostly opened small repair shops for marine engines and motorcycles close to the landing centers, reducing the distances in the search for these services by fishermen.
- Training of fishermen on fish handling and use of ice on board.** Within this scope the target set was 160 men and 140 women. There were 756 men trained and the target was 473% higher. On the female side, 128 women were trained, 9% less than expected. During the Project's duration, 507 Fishermen were trained, exceeding the global target set of 275. These training greatly reduced the fish's post-catch losses during fishing at sea, landing better quality fish.
- Training of fishermen in improved fishing gear/ techniques and equipment.** As a result of awareness raising by technicians and extension workers on the field, fishermen have joined the replacement of their fishing gear by more productive, selective and sustainable ones. 836 people were trained, 792 of whom were men, close to three times the target of 295 and 44 women more than twice the target of 20. In percentage terms, the goal of men was exceeded by 268% and women by 220%. With this acquired knowledge, the fishermen joined the fishing programs in the open sea with the use of aid navigation and fishing equipment (compasses, GPS, fish finders) which provided added results, improved their levels of catching highest commercial value fish and allowed fishermen to safely carry out their fishing activities on the open sea.

Figure 02: Training of naval carpenters in the construction of improved vessels for open sea fishing





Source: IDEPA, 2019

74. The majority of the engines were acquired with the fishermen's own funds, constituting a 1918 total, against 393 acquired with Project funds. In terms of the ways in which the fishermen acquired the boats, it was found that 5,163 acquired them with their own funds and 21 with Project funds. With regard to boats suitable for open sea fishing, 2,041 Moma canoes and 2,235 open deck boats were registered (IDEPA, Mapping Report, 2019).
75. Training in fishing gear allowed for a better match between open sea fishing effort, with the need to use gear appropriate for the highest commercial value fish, bearing in mind that many of the artisanal fishermen, used gear appropriate for near shore fishing rather than open sea fishing. The training increased the number of artisanal fishermen with the ability to use gear required for the open sea, particularly the handline/ longline.
- **New/existing trade associations supported.** Assistance to these 108 associations provided foreseen their training and transformation into profitable cooperatives by hiring a specialized service provider, which is the only one in the country. This contracting was not finalized for administrative reasons, so the assistance to the associations was made with internal technical resources, mainly with regard to their organization, strengthening and preparation of internal documentation in order to prepare them for a better opportunity for their transformation. IDEPA recently established a partnership with this institution, and the associations assisted by the project will be included in the intervention package aiming at their technical assistance and the transformation into modern cooperatives.
76. In relation to **result 2**, the progress achieved is summarized in the table: 4, below described:

**Table 4: Summary of Outcome 2: Improved skills and organization to improve post-harvest utilization and maintain fish quality**

Result Indicator	Target	Achieved Results	Level of achievement (%)	Score	Qualification
<b>Processors/ Traders trained in handling, preserving and marketing fresh/frozen fish</b>	2600 Men	3220	117	6	HS
	1400 Women	1443			HS
<b>Fishery and fishing inputs fairs held</b>	130	118	91	5	S
<b>Traders/processors who gain access to business development services</b>	1800 Men	1036	55	4	MS
	950 Women	483			MS
<b>new/existing trade associations supported</b>	50	52	104	6	HS

Score				5	S
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Source: IDEPA, ProPesca Impact Analysis Report, 2020

77. Among the progress achieved in result 2, the following are highlighted:

- **Trained processors and traders in good handling and processing practices for fresh/frozen fish.** 3,220 men were trained in total, exceeding the 2,600 target set. 1,443 women were trained, exceeding the 1,400 target set. The focus of the training was on handling and conservation of fish using ice, which improved the quality of the fish and increased its value and sales revenues. In the project's intervention areas, there has been a progressive reduction in post-capture losses, mainly due to the extension of electricity and improvements in access routes, which allow fish traders, ease of transport and the use of cold means. for the production of ice and for freezing conservation. Women are strongly involved in this activity, and many of them, beneficiaries of the project's Fund for the Promotion of Women Entrepreneurs, purchased freezers and colmans for the conservation and sale of fish.
- **Trained traders/ processors in good fish handling and processing practices using traditional techniques - salting/drying/smoking.** In this context, the Project trained 1,987 people, corresponding to about half of the established target, which was 2,883 people. Although the goal was not achieved, the dissemination of traditional techniques had a direct impact on reducing post-capture losses and on product valorization, mainly in the central and northern areas of the country, by improving quality and conservation, thus providing an increase sales and, consequently, the income of the beneficiaries. On the other hand, it is important to note that due to the increasing expansion of the electricity network of the national network and the availability of ice and freezers, it tends to reduce the use of traditional salting-drying techniques.
- **Demonstrations on value-added products and the full use of fish were carried out.** These actions involved 117 people, having consolidated the knowledge obtained in training on handling and processing fish using modern (ice) and traditional techniques, increasing the quality and value of fish products. Although few people were trained, the initiative to develop value-added products was well received by the communities and groups involved. In several areas where these actions were triggered, several women are currently involved in the production of some of the added value products, mainly at fairs and festive dates, due to the concentration of consumers, which shows that they are accepted, although lacking its massive production due to market limitations, on a daily basis.
- **Realized fairs of production inputs and fishery.** There were 118 Fairs, out of 130 planned, in five Provinces of ProPESCA implementation. The Fairs allowed for greater dissemination and sale at affordable prices of production inputs and fishery products, which allowed access to these instruments by many Fishermen of low financial capacity. The fairs also stimulated the opening of new markets, particularly in the interior districts, which started to consume protein products of marine origin. These spaces and events are also a time to disseminate and give visibility to the actions developed and the beneficiary communities in the scope of handling, conservation and use of fish, also showing that much of what has been learned is being implemented.
- **Traders/Processors with access to business development services.** In this action, among the 1800 men established as targets, 1036 benefited from access to business development services. Regarding the number of women, 483 had the same benefits, being 467 less than the 950 target set. On average, both men and women's results are positive, standing at 55% as shown in table 4 below. Traders / processors who have benefited from training in business management have acquired skills in the behavior of markets, increased the number of customers and reduced the risks of the activity, thus multiplying their income.
- **New/existing trade associations that have benefited from various supports for business development and income improvement,** 50 associations were set to benefit the multifaceted support. In total, 52 Associations supported, which corresponds to 104% of the established target.

78. These trainings and fairs enabled processors, fish sellers and other market actors to handle, process and preserve fish, giving to it higher quality and commercial value.

79. The activities to support the Trade Associations, to increase the availability of fish in retail stores and the training of fish processors and traders to develop viable businesses, reached on average more than 80% of achievements. This result represents a major contribution to the purpose of ProPESCA, which is to increase the income of fisherman and all actors in the value chain. It is important to note that although in general the number of women is lower than that of men, they are the ones who show greater dynamism and enthusiasm in the follow-up and implementation of the messages produced. On the other hand, as for the techniques promoted, the use of ice by fresh fish traders is already ingrained, and all of them no longer dispense with ice in their operations, many of them resorting to homemade ice, due to the insufficiency of conventional ice or of manufactures.

Figure 3: Methods of conservation through the use of ice



Source: IDEPA, 2019

Result 3a, ice production and availability for fish conservation

80. According to table 5 below, 21 ice plants and machines have been secured, more than double of the 10 target set. In terms of household freezers, 362 women have them and are already making ice, having exceeded the 240 target set achieving 151%.

Table 5: Summary of Outcome 3a: Market related infrastructure and input supply to ensure good quality fish handling and

**marketing under hygienic conditions**

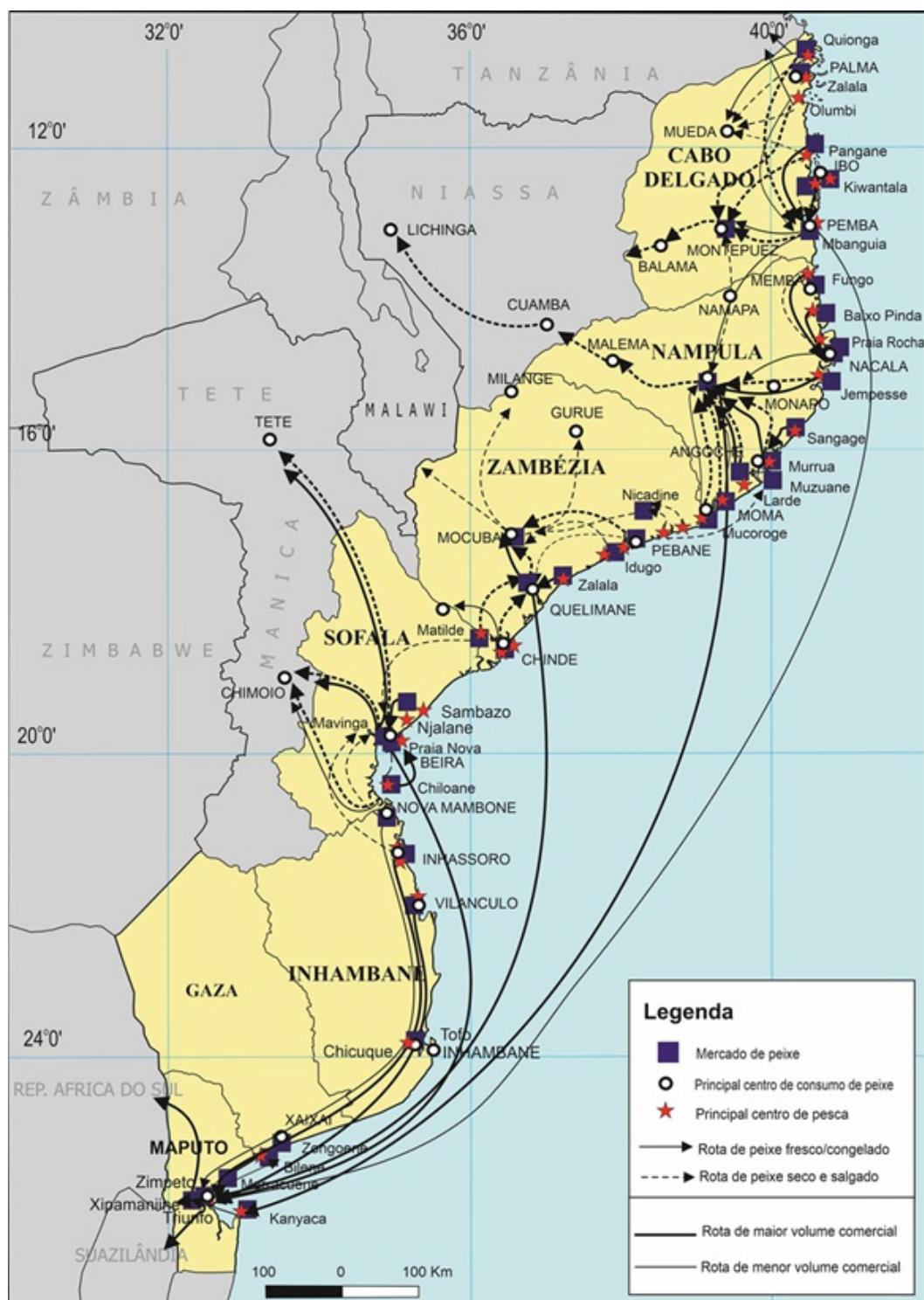
Result Indicator	Target	Achieved Results	Level of achievement (%)	Score	Qualification
Ice machines and established freezing/cooling storage facilities	10	21	210	6	HS
Entrepreneurs with domestic freezers for ice production	160 Men	0	151	6	HS
	80 Women	362			
Established first-sale markets	11	15	136	6	HS
Market agents trained by type	670 Men	613	90	5	S
	330 Women	284			
Established small-scale processing units	14	0	0		N/A
Motorised transporters for fish/inputs established by type	122 Men	40	33	3	MI
	60 Women	0			
Established urban retail shops	13 Men	0	0		N/A
	13 Women	0			
Improved urban fish market facilities	6	17	283	6	AS
Score				4	MS

Source: IDEPA: Final ProPESCA Mapping Report and ProPESCA Report, 2018

81. In the effort to develop first-sale markets, 15 markets were established, above the 11 planned. The construction of 15 new fish markets contributed to a better organization of the activity of buying and selling fish, which was previously carried out in scattered places and without conditions of hygiene and sanitation, the new market facilities provide consumers with better quality products, contributing to the increase of income of the various players in the production and marketing value chain. These markets contribute with 342 new stalls with appropriate conditions for the sale of fish, an installed production capacity of 16 tonnes / day of ice, about 38 tonnes of fish storage capacity, 2.4 tonnes / day of rapid fish freezing. In addition, 72 domestic freezers with a capacity of 500 liters / each are available for the conservation/production of ice and the conservation of fish.
82. In order to boost trade in fish, derivatives and other related products, 897 Market Agents were trained, 613 of whom were men and 284 women. Taking into account that the target set was 1000, the execution rate is 90%.
83. No small-scale processing units and retail fish shops were established by the private sector, in line with the project design, however, the private sector chose to invest in simpler infrastructure with less investment from their homes where the fish is processed, kept in domestic freezers/refrigerators or coolers boxes and sold at retail or wholesale. In most cases, the fish with the higher commercial value is transported to the main urban markets by public transport and also those purchased with funds from the project, in a commercial relationship that was established by the owners of these small establishments with the sellers of the retail markets, being that payments are made through electronic platforms such as MPesa, MCash, e-Mola.

**84. Fish distribution circuit and channels in the project area**





Source: Mapping Report IDEPA – 2019

Among the 182 motorized transporters of fish and inputs, which should have been established, only 40, corresponding to 33%, were reached with project funding, being all male. However, within the favorable environment created by the Project, dozens of transporters have emerged and are in operation, which were not created or financed by the project, but which contributes to the availability and improvement of conditions for the circulation of products and stakeholders in the value chain. In terms of rehabilitation of urban fish markets, 17 were rehabilitated and improved with 283% of the established target of 6 markets, strengthening the bases for the development of fishing markets. The fish markets stimulate the commercial link between production centers and places of consumption. The activities that most directly lead to improvements in marketing results are, in addition to regular access to fishing centers, the conservation of fish and fishery products on board vessels and on land, their handling and processing. These actions contribute to the reduction of post-catch losses and the increase in quality and translate into improvements in fishermen's income. Another aspect to be taken into account relates to market information and fishing inputs aimed primarily at artisanal fishermen in order to increase their bargaining power and, consequently, their income. The involvement of women in marketing is high and visible in urban areas where there is energy, ice and markets for fresh fish consumption. Being the largest participants in informal financial services (PCRs), they thus obtain a financial base and skills for the development of commercial activity.

**Figure 4: Ice making and conservation of ice on São Patrício fish market**



85. After the quantitative and qualitative evaluation of component 1, it is considered that it can be classified as **Satisfactory**.

## **Component 2 - Improving Economic Infrastructure**

### **• Outcome 3b, Electrification of Growth Poles and Fishermen's Villages**

86. In this context, electrification activities of markets and fishermen's villages were carried out through the National Energy Network (NEN) and Alternative Energy Sources (AES). Table 6 presents the degree of achievement of the outcome 3b:

**Table 6: Village and Growth Pole Electrification**

<b>Result Indicators</b>	<b>Targets Established</b>	<b>Results Achieved</b>	<b>Degree of Achievement (%)</b>	<b>Score</b>	<b>OBS:</b>
Extended power lines within growth poles - Km	160	185	116	6	HS
Electrical connections made		2.845		6	HS
Established alternative energy sources	7	8	114	6	HS
<b>Score</b>				<b>6</b>	<b>HS</b>

**Source: IDEPA, Progress Report, 2019**

87. Based on this table, it can be seen that over the life of the project, 185kilometers of the 160 planned were electrified, at the level of the growth poles, with an achievement of 116%.

### **• Electrification of fishing villages and growth poles**

88. In terms of Fishermen's Villages located in the growth poles, 2,845 electrical links were established, benefiting around 11,380 people, taking into account that each link represents a family and according to INE, 2017, the average of members of a household is 4 people. This progress is far-reaching, as each family of fishermen has basic conditions for the production of its own ice for fish conservation.

89. The connection of electricity to fishing villages and fishing centers has boosted fishing, fish conservation and commercialization activities, in particular fish of the highest commercial value. Other new activities emerged such as ice production and fish conservation in the markets built by the project, manufacture of homemade ice for fish conservation, opening new businesses of food cooking, conservation and sale of perishable food products, using domestic freezers. Other sectors such as Agriculture, Health and Education have improved the quality of their services, based on this Energy.

90. From the medium voltage line extension and the connection of these fishing villages to the national energy network financed by ProPESCA, EDM expanded the network to reach other villages. For sustainability reasons, the lines and transformers were handed over to the responsibility of EDM, meaning that EDM will continue to expand and perform the maintenance of the network..

**Figure 5: Electrificação**



Mulai-Pebane village

Matasse – Nova Mambone village

- **Electrification of Markets Based on Alternative Energy Sources (AES)**

91. Eight alternative photovoltaic energy systems were installed in places with difficult access to energy from the national grid, that is, islands with great fishing activity where fish markets were established. The availability of energy allows the manufacture of ice, the reduction of post-harvest losses and the devaluation of fresh fish that was processed and transformed into dried fish, as well as the availability of fish in bad weather days when fishing cannot be carried out, or, transport conditions to the continent for commercialization. This intervention significantly improved working conditions, and the income of fishers and fish traders. In total, the ice made from these photovoltaic systems allows the availability of about 2.5 tonnes every 2-3 days as well as fish freezing. Members of the management committees of these markets were trained in matters of maintenance and minor system repairs.



Matild Market solar system



Ice production

**Outcome 4: Improved access between fishing centers, markets and the national road network**

92. The table 7 below summarizes the progress made in road rehabilitation and maintenance in the growth poles area. According to the strategy adopted, these activities were developed by the National Road Administration (ANE) and the Road Fund (FE), through the Private Sector.

**Table 7: Rehabilitated and Maintained Access Roads and the number of personnel involved**

Result Indicators	Targets Established	Results Achieved	Degree of Achievement (%)	Score	OBS:
Local contractors trained	50 contractors		N/A		
Improved roads to ensure passability every year	500 Km	518	103.6	6	HS



People benefiting from labour-based road jobs	6.000 Men	3625	60	4	MU
	2.000 Women	775	39		
District staff trained in road maintenance	34	38	112	6	HS
Roads maintained for access at all seasons (km: 500)	500	300	60	4	MS
<b>Score</b>				<b>5</b>	<b>S</b>

Source: Progress Report 2018

93. No local contractors were trained with ProPESCA funds, because ANE and FE promote the training and recycling of contractors with other resources, so it would not be an asset, so this activity was not considered a priority and the allocated funds were integrated into other activities.
94. In the field of intervention on the roads, 518 km of road were improved, which ensure the transability throughout all seasons, guaranteeing the flow of fishery products and the movement of other actors in the value chain.

**Figure 7: Nova Mambone-Matasse (Inhambane) road aqueduct. Chilaulene-Mahelene Road (Gaza)**



95. In the road works carried out in 2018, 155 women and 725 men benefited from Employment. Thus, it is estimated that during the road improvement and maintenance work, about 3,625 men and 805 women were temporarily hired by the contractors. These figures represent an important contribution of the project in creating jobs and increasing the income of those hired directly to work on the roads but also to other residents of the villages along the intervened roads, who provided support services such as housing rentals, food preparation and other services.
96. In order to maintain the conditions and the quality of transability of the roads of the growth poles, over the years, 38 staff from various districts were trained in road maintenance theories, techniques and practices. The target achieved represents a highly satisfactory 111.8%.
97. In order to ensure access and transability of roads at all seasons of the year, 300 kilometers of maintenance was carried out, against 500 planned. This activity was already carried out at the end of the Project, when resources were already depleted. Despite the limitations, the actions carried out, have overcome the serious problems of access roads in the growth poles, especially in rainy seasons, which annually make it impossible to communicate and circulate regularly between fishing centers and markets.
98. Due to delays in the tendering and evaluation processes, maintenance works in other provinces (26 km in Sofala province and 27 km in Cabo Delgado) were not considered, for reasons of remaining time to close the project and no new commitments were assumed since the available funds were already committed to work in progress.
99. According to the updated baseline study, it was found that on the roads intervened with ProPESCA funds, the average number of vehicles passing through is 462 per day, contributing decisively to the greater mobility of people and goods, in particular fishery products, from fishing centers to the main consumer markets.
100. After the quantitative and qualitative evaluation of component 2, it is considered that it can be classified as **Satisfactory**.

### Component 3 - Financial Services Development

#### Outcome 5: Artisanal Fishermen and Community Based Organizations with Added Capacity to Mobilize Savings and Loans

101. Based on the data in this table, 485 workers of the PCR promoters were trained, of which 65 women and 420 men, reaching a percentage of 840 % in relation to the target of 100 beneficiaries. In the specific field of financial education, 6,969 women and 5,091 men were trained. In both cases, the targets of 1,700 and 2,700 for men and women respectively were exceeded. In order to increase



the income and gains of fishermen and other actors involved in the value chain, they were trained in business planning and development, in 5,091, under the 8,000 target set.

102. The performance recorded in outcome 5 is presented in Table 8 below:

**Table 8: Artisanal Fishermen and Community Based Organizations with Increased Capacity to Mobilize Savings and Loans**

Result Indicators	Targets Established	Results Achieved	Degree of Achievement (%)	Score	Qualif.	
Technicians (Employees) of PCR Promoters trained	50 Men	420	840	6	HS	
	50 Women	65	130			
Supported PCR groups	1,600	2,188	136	6	HS	
Number of active savers	16,000 Men	12,962	81	5	S	
	16,000 Women	16,718	104	6	HS	
Number of Borrowers	8,000 Men	6,789	85	5	S	
	8,000 Women	8,564	107	6	HS	
Value of Savings - million USD	1,300,000.00	3,984,727.48	306	6	HS	
Amount of Loans - million USD	2,600,000.00	7,717,507.33	297	6	HS	
New PCR groups assisted	2,000 Men	807	40	3	MU	
	1,000 Women	655	66			
People trained in financial education	1,700 Men	5,091	299	6	HS	
	2,700 Women	6,969	258			
People trained in Business Development and Planning	8,000 Men	5,091	64	4	MS	
	8,000 Women	6,969	87	5	S	
Entrepreneurial women accessing pilot investment funds	1000 Women	492	49	3	MU	
Value of pilot investment fund - USD	250,000.00	345,000.00	138	6	HS	
Formal CBFS providers supported	11	0	0.00	1	HU	

Value of Grant Matching spares formal CBFS providers - millions of USD	750,000.00 USD	0	0.00	1	HU	
Formal CBFS provider members	18,000 Men	15,512	86	5	S	
	18,000 Women	16,718	93			
Assisted created PCR	1,600	2,400	150	6	HS	
PCR led by Women		1877		5	S	
<b>Score</b>				<b>5</b>	<b>S</b>	

**Source: IDEPA, Project Impact Report, 2019**

103. With a view to strengthening the PCRs, 2,188 groups were assisted, having exceeded the established goal, which represents a level of achievement of 137%. With these actions, they involved a total of 29,680 members, of which 56% are women. It should be noted that the target set for women beneficiaries has been exceeded, with an achievement level of 104%. With regard to borrowers, a total of 15,353 members were registered, of which 56% are women. It should be noted that the established target disaggregated by gender was 85% for men and 107% for women beneficiaries.
104. Regarding their performance, the PCR groups recorded accumulated savings of 3,984,727.48 USD and credits of 7,717,507.33 USD. These values allowed members to invest in small businesses along the value chain of artisanal fisheries and alternative income-generating activities.
105. In order to ensure the sustainability of PCRs, their connection with formal financial services was facilitated, through the introduction and dissemination of innovative products and services, with emphasis on mobile banking, consisting of the use of e-currency platforms, namely, M-kash, M-Pesa, e-Mola. Both for groups as well as for their members.
106. These initiatives made possible to improve accessibility, security and flexibility in the groups' savings and credit operations. These initiatives contributed significantly to a greater connection between PCRs and formal financial services, resulting in the opening of 2,525 accounts, of which 1,430 are bank accounts and 1,095 mobile money (M-Pesa, M-Kesh and e-Mola). In addition, micro life insurance and funeral services were introduced to group members. These connections benefited 1,462 PCR members, 655 of whom are women, which represents a level of achievement of 66% in relation to the target set for women and 40% for men.
107. Additionally, associations of animators based in the community were created in order to guarantee the regularity and continuity of assistance to the PCRs during and for the post-project period.
108. In terms of PCR leaderships the majority continue to be made up of men, but a significant number of 1,877 PCRs led by women have been reached in the context of Artisanal Fisheries.
109. In the field of support for formal financial service providers (CBFS), despite the efforts made, none of them benefited from them and no amount of the 750,000.00 USD foreseen for formal providers was applied, having proved to be unattractive. However, the constitution of CBFS formal provider members was promoted, reaching 15,512 men and 16,718 women.
110. In the scope of the granting of loans, the established target was 2,600,000.00 USD, but they were 933,929.00 USD, ie 35.92% of the planned amount.
111. With regard to pilot investment funds for women's enterprises in the artisanal fisheries value chain, 425 projects were financed, in the amount of 345,000.00 USD. In the field of funds to support emerging enterprises, 29 projects were financed, which represents a level of achievement of 74%, with emphasis on the establishment of stores for the sale of fishing inputs, aquaponics, vehicles for the transport of fish, finger lingers and feed production.
112. The mechanisms adopted made possible to improve access to finance for stakeholders in the artisanal fishing value chain, allocated mainly to the acquisition of improved boats for open sea fishing, selective fishing gear, processing devices, cooler boxes, equipment for fish conservation (domestic freezers) and means of transport (motorbikes and bicycles). These interventions contribute to improve the quality of fish with the highest commercial value and income, which allowed beneficiaries to improve the living conditions of their households by reinvesting in decent housing conditions, access to education, health and food security and nutritional.

#### **Outcome 6: Commercial Sector Financial Institutions Actively Involved in Financing Investments Related to Fisheries and PCRs**

113. In general, no satisfactory performance was recorded at the level of outcome 6 as shown in the following statements:
114. In the area of disbursed donations, a performance level of 419,400.00 USD was registered, less than 12% of the established goal of 3,500,000.00 USD. In this context, only 29 financial institutions had access to donations and RMF loans against 250 established to access them.
115. However, in contrast to this scenario, the amount of donations to formal Financial Institutions reached 1,347,500.00 USD, exceeding

more than 100% of the planned amount of 800,000.00 USD. These amounts created the basic conditions required for the development of credit lines.

116. In terms of the establishment of Formal Financial Institutions Branches, at the level of growth poles, 7 branches were installed, about half of the 15 planned, which continued to keep the availability of these services limited at local level.

117. In terms of training the staff who are Agents of these Services, the FI's staff were not trained and the strategy of PCR's joining the RFA and SACCO's was not achieved.

118. The performance recorded in result 6 and shown in table 9, which follows:

119. In order to guarantee the availability of credit lines to intervening parties in the value chain by the intermediary financial institutions, the risk mitigation fund (FMR) was operationalized, with an amount of 419,400.00 USD being disbursed to 29 Financial Institutions.

120. At the same time, disbursements were made for the operationalization of the credit line through microfinance institutions (MFIs) in order to guarantee direct financing to operators in the artisanal fishing value chain. In this context, a sum of 1,347,500 USD was disbursed to 6 MFIs, with a performance level of 40% in relation to the MFIs that started to operate with the beneficiaries.

**Table 9: Summary of Results 6. Private Financial Institutions Actively Involved in the Financing of Investments Related to Fisheries**

Result Indicators	Targets Established	Results Achieved	Degree of Achievement (%)	Score	Qualif	
Companies accessing Donations/ RMF Loans	250	29	11	2	U	
Amounts of guarantee funds disbursed - million USD	3,500,000.00	419,400.00	12	2	U	
New outlets of formal Financial Institutions	15	7	47	3	MU	
Grant Amount for Formal Financial Institutions - USD	800,000.00	1,347,500.00	168	6	HS	
Formal FI employees trained	36 Men	0	0	1	HU	
	12 Women	0	0	1	HU	
PCR joining the RFA and SACCOs	2,000 Men	0	0	1	HU	
	1,000 Women	0	0	1	HU	
Former PCR members accessing loans for company development from formal FIs	1,050 Men	154	15	2	U	
	519 Women	115	22	2	U	
<b>Score</b>				<b>2</b>	<b>I</b>	

**Source: ProPESCA Progress Report 2018**

121. With the amounts disbursed, conditions were created for the establishment of credit lines from which 330 income generation projects were financed in the artisanal fishing value chain, with an emphasis on fishermen, fish processors, boat builders and fish manufacturers. ice and fishing gear.

122. Although there are no systematic records on employees trained at the level of the intervening financial institutions, the credit lines implemented presuppose the creation or existence of capacity for their operationalization. In these terms, it is understood that a significant number of staff at the level of the MFIs have been trained to operate the established credit lines.

123. Regarding the strategy for the evolution of PCRs in savings and credit cooperatives (SACCOs), an assessment was made that culminated in the classification of the stage of development of the intervention groups. Under the Memorandum of Understanding

signed with the Mozambican Association for the Promotion of Modern Cooperatives, the continuation of assistance actions for the promotion of potential groups to savings and credit cooperatives is expected.

124. Interventions were made in order to facilitate the connection of PCR members in order to access credit lines with formal banking. Of the connections established, a total of 269 beneficiaries were registered, of which 115 are women, which corresponds to an overall achievement level of 18%. Regarding the goals disaggregated by gender, an achievement level of 22% was recorded for women and 15% for men.

125. The established credit lines contributed to expand access to financial services to finance business initiatives and income generation activities in the artisanal fisheries value chain.

126. The financial services provided made it possible to improve the acquisition of inputs, vessels, marine engines that streamlined the capture of fish of high commercial value in the open sea. In addition, access to and use of freezers for ice production and fish conservation has increased, conditions necessary for reducing losses after fish catch, guaranteeing fish quality and improving productivity.

127. After the quantitative and qualitative evaluation of component 3, it is considered that it can be classified as **Moderately satisfactory**.

#### **Component 4 - Increased institutional capacity to support production/ marketing and management of the highest value fish resource**

##### **Outcome 7: Increased institutional capacity to support resource management, capture and marketing of fish of higher commercial value, improved policies/ appropriate legal framework for artisanal fisheries in place and effective project management systems in place**

128. As a result, 36 extension workers were recruited and placed at the Growth Poles, compared to the 52 planned, corresponding to 69%. With regard to the evaluation of the fishery resources potential of the artisanal fishing area, there were 14 reports from the 26 established. In these specific activities, the following actions were also carried out:

- The cruise to assess the potential of fisheries resources accessible to artisanal fisheries has been completed;
- Completion of the protocol for the pilot study entitled "Comparison of efficiency and ecological sustainability between the use of beach trawls and cages in the artisanal fisheries of Inhassoro district" and testing of the efficiency of cages as an alternative to beach trawling in Inhassoro district.
- The state of exploitation of the resources accessible to the artisanal fishery was updated and the respective reports were prepared.

**Table 10: Institutional Capacity Building of Growth Poles**

Result Indicators	Targets Established	Results Achieved	Degree of Achievement	Score	Rating
Extension workers recruited and placed in the growth poles	52 People	36	69	4	MS
Districts with established fishing management units	23	7	30	2	U
Poles with report of evaluation of fishing resource potentials elaborated	26	14	47	3	MU
Government officials at provincial and district level trained in fisheries administration	84 Men	393 Men	593	6	HS
	23 Women	242 Women			
<b>Score</b>				<b>4</b>	<b>MS</b>

**Source: ProPESCA Progress Report 2018**

129. In the specific scope of capacity building of the Fisheries Sector for the management of the area, 7 Districts benefited from Fishing Administration Units, corresponding to 30% of achievement in relation to the established goal of 23 Districts.

130. Regarding the development of human resources, 635 government employees at provincial and district level were trained in fisheries administration areas, namely 393 men and 242 women. The target set for this achievement (107 staff) has been largely exceeded and ensured increased capacity of these staff to manage the Sector.

131. These records, with disparate trends, point to a final average score of moderately satisfactory.

##### **Outcome 8: Improved Policies/ Appropriate Legal Framework for Artisanal Fisheries Established**

132. The outcome 8 on improved policies / appropriate legal framework for artisanal fisheries established was not achieved because no

specific policy for artisanal fisheries was approved. However, it is important to note that the different guiding and regulatory instruments of the fisheries sector in some way represent an appropriate legal framework for artisanal fisheries.

133. On the other hand, as part of institutional development efforts and support to policy and legislation initiatives, 17 houses were built through ProPESCA, distributed across all 7 Project implementing provinces. Although the target of 26 houses has not been achieved, the number achieved will have a significant impact, as it will ensure the retention of extension workers at local level, where they will provide permanent technical assistance to artisanal fishermen and other actors in the fish value chain.

134. Also in the area of institutional development, construction began on a sector building in Pemba, in Cabo Delgado province, and finishing work was carried out on the building where the Department for the Promotion and Development of Fishing and Aquaculture operates, in the city of Beira.

135. After the quantitative and qualitative evaluation of component 4, it is considered that it can be classified as **Moderately unsatisfactory**.

#### Outcome 9: Support Missions and Project Steering Committee Meetings

136. In this result, 30 investment plans were drawn up in the growth poles, an action that was executed at 100%. The production of studies and research reports were fully carried out, with the achievement of 21 reports set.

137. In the plan for holding and conducting workshops and/or seminars, 30 of the 140 planned were carried out, corresponding to 21%.

138. During the project period, 26 workshops/seminars were held against 174 planned.

**Table 11: Assessment of Result 9**

Result Indicators	Targets Established	Results Achieved	Degree of Achievement (%)	Score	OBS:
Growth hub investment plans prepared	30	30	100	6	AS
Studies and research reports produced	21	21	100	6	AS
Disbursement rates as part of AR targets.	100% (\$57.8)	(\$51.8)	95	6	AS
Planning and review workshops/seminars conducted	140	30	21	2	U
Knowledge management and advocacy products created		45	6	6	AS
<b>Score</b>				<b>5</b>	<b>S</b>

Source: ProPESCA Progress Report, 2019

139. In order to strengthen institutions, 540 technicians were trained to provide extension services in artisanal fisheries, which represents 193% of the planned amount.

140. The initial value of the project was budgeted at USD 57.7 million, however due to currency fluctuations that occurred during the implementation period, the final (allocated) budget was USD 54.3 million, corresponding to 95% of the allocated amount.

141. Support missions were carried out to all provinces by members of the PCU to monitor and documentation of ProPESCA's achievements was carried out to strengthen communication and visibility actions. Meetings of the project steering committees were also held on a regular basis to ensure coordination and dynamism.

142. After the quantitative and qualitative evaluation of component 4, it is considered that it can be classified as **Satisfactory**.

#### Component 5 : Nutrition Promotion

#### Outcome 10: Strengthening the capacity of fishing families to fight malnutrition

143. The implementation of the nutrition component shows remarkably positive results, in terms of achievement of goals and impacts on the target groups. In fact, all the activities, training and demonstrations planned on nutrition have been carried out and more communities and families have been reached in relation to the targets set.

**Table 12: Summary of Outcome 10 Achievements**

Result Indicators	Targets Established	Results Achieved	Degree of Achievement (%)	Score	OBS

Established demonstration horts	264	3,381	1,280	6	HS
People trained in horticultural preparation	13,700	31,009	226	6	HS
Demonstration of cookery performed	650	18,248	2,807	6	HS
People trained in proper food preparation	5,700	18,247	320	6	HS
<b>Score</b>				<b>6</b>	<b>HS</b>

Source: IDEPA, ProPESCA Impact Report, 2018

144. In the training of families to combat malnutrition, 12,436 families were reached, being well above the established goal of 2,724. In terms of community mobilization activities to combat malnutrition, 12,639 communities were reached, far exceeding the 400 programmed communities. Developed and disseminated 758 nutrition programs through different media, against the defined goal of 36 programs.

145. The targets were exceeded excessively, which is a good indicator. However, without demeriting the results, it can also be an indicator that the goals were established in a modest or unrealistic way. It was due to the extension of the program to other provinces and the massive adherence of the communities specially the women.

146. Community participation to combat malnutrition disaggregated by sex had the following results: in Maputo 89% of women and 87% of girls are aware of diet diversity and its benefits, in Inhambane, currently, 91% of women consume more than 5 food groups, in Zambézia, 40% of women of reproductive age consume more than 5 food groups, Cabo Delgado there was an increase of 67% and 53% of women and children, for girls an increase of 2 more groups of food, and 1 food group respectively.

#### Outcome 11: Mobilizing the community to fight malnutrition

147. In this result the Communities through their local leaderships were mobilized on the importance of a balanced and healthy diet, action that was expanded and strengthened through radio programs. In order for the new generations to develop with skills to prevent and combat malnutrition and sub nutrition, the nutrition promotion component included children in selected schools.

148. In effect, 1,648 leaders, 234% of the defined goal, were trained on the need for a balanced and healthy diet.

Table 13: Trained Leaders and Radio Programs Conducted on Nutrition

Result Indicators	Targets Established	Results Achieved	Degree of Achievement (%)	Score	OBS
Community leaders trained on the need for a balanced and healthy diet	240 Leaders	1,648	234	6	HS
Nutrition programs broadcast through community radio stations	126 hours	563 hours	446	6	HS
Children sensitized in schools	7,500 Children	7,220	96	6	HS
<b>Score</b>				<b>6</b>	<b>HS</b>

Source: IDEPA: ProPESCA Report, 2019

149. These actions were extended to the Schools, where sensitization sessions were held, covering 7,220 children. Taking into account the potential of pupils and teachers to disseminate messages, the group reached could triple or reach even greater numbers of beneficiaries.

150. Targets have been exceeded, which demonstrates satisfactory results that can contribute to improving the nutrition of target populations. The results of IAFPA 2009/10 and 2016/17 seem to support this conclusion as they indicate *that the products most consumed by households living in the project's area of influence are maize, rice and vegetables, while the products less consumed are pork, milk and dairy products. Among these products, those with the highest consumption are Leguminosae, Chicken, Duck and Egg, which corresponds to 30%.* These facts may be related to the nutritional education campaigns that the project has been carrying out at community level.

151. All the sites and target groups covered by the nutrition program have the knowledge and practices to enable them to handle food in the best way, including combining different foods to make and eat a balanced and healthy diet, and this is one of the important mechanisms for reducing poverty.

152. After the quantitative and qualitative evaluation of component 5, it is considered that it can be classified as **Highly Satisfactory**.

## D.2. Evolution of the Levels of Capture of the Highest Commercial Value Fish

153. The table 14 below shows the evolution of the fish catch with more commercial value from 2013 to 2018:

**Table 14: Highest Value Caught in the Provinces Covered by ProPESCA (Tons)**

PROVÍNCES	2013	2014	2015	2016	2017	2018
Cabo Delgado	18,614	25,309	27,975	21,318	31,169	33,323
Nampula	27,509	52,785	39,946	51,666	55,892	59,297
Zambézia	23,425	17,038	21,657	39,422	41,138	53,430
Sofala	24,330	29,896	41,448	30,998	43,710	39,740
Inhambane	15,827	18,102	26,399	24,204	28,915	20,467
Gaza	1,285	523	2,785	1,858	2,214	1,142
Maputo	6,077	6,384	12,380	7,847	9,797	9,892
<b>Total Production of Highest Value Fish</b>	<b>117,067</b>	<b>150,037</b>	<b>172,590</b>	<b>177,313</b>	<b>212,835</b>	<b>217,291</b>
Total Production of Artisanal Fishing in the Provinces covered by ProPESCA	155,401	187,787	210,912	222,081	257,972	295,129
<b>Proportion of Highest Value Fish in Artisanal Fishing</b>	<b>75%</b>	<b>80%</b>	<b>82%</b>	<b>80%</b>	<b>83%</b>	<b>74%</b>

Source: MIMAIP, 2019

154. The data in table above indicate that at the level of artisanal fisheries, catches of fish of higher commercial value have risen substantially and progressively, particularly in the years 2017 to 2018. The Provinces of Nampula, Zambézia and Sofala aggregate the largest volume of fish, which corresponds to the largest potential available in terms of fishing resources.

155. Taking into account ProPESCA's target catch, established at 84,000 tons until the last year of its validity, it can be seen that the performance was satisfactory, having reached more than 200,000 tons in the year 2019.

156. Considering the fact that many of the fishermen involved have less than 10 years of experience of fishing in the open sea, initiated precisely through ProPESCA, the volumes achieved are satisfactory.

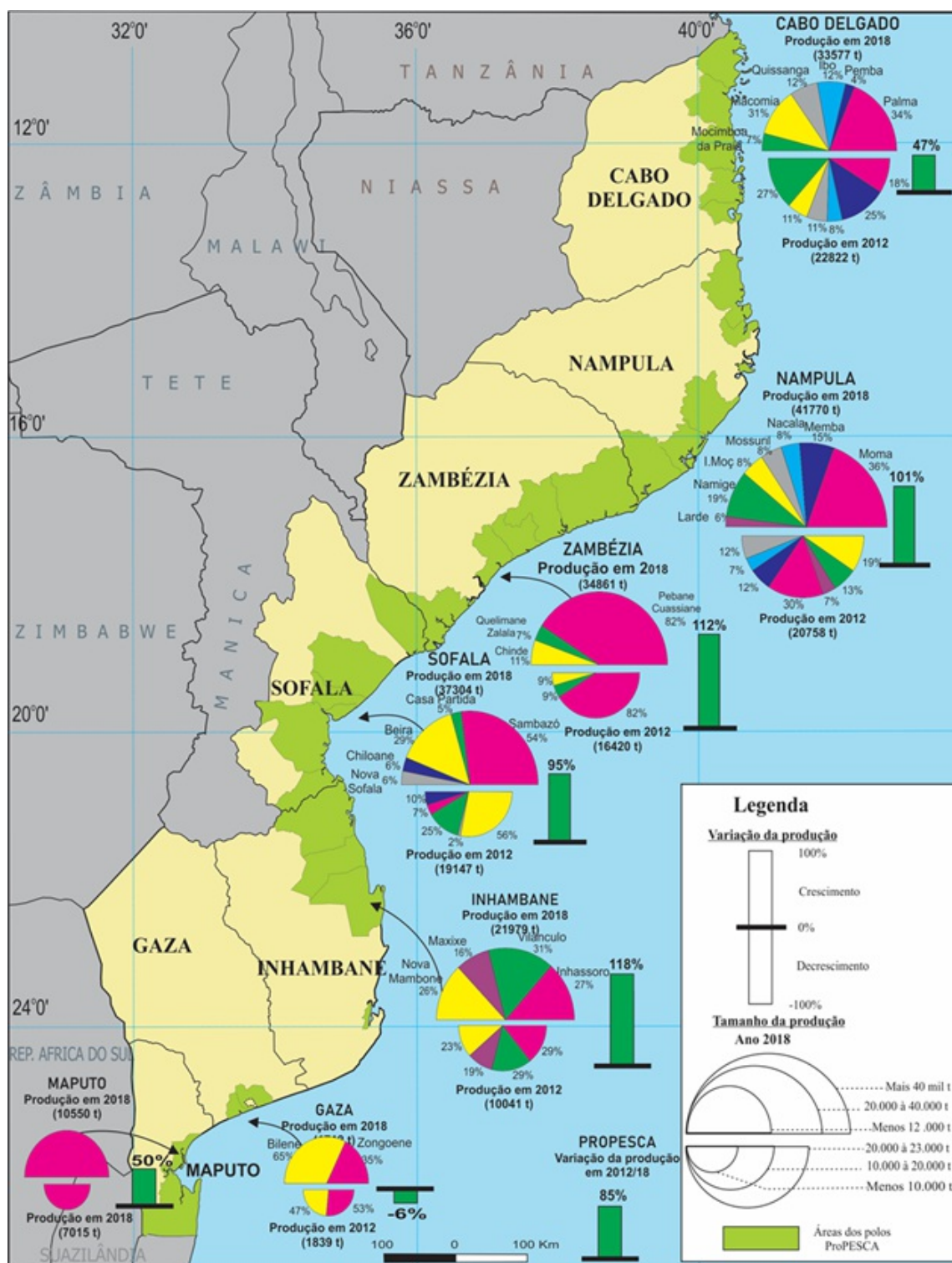
157. The record of substantial volumes of fish of higher commercial value is related to the improvements in vessels, fish conservation conditions, in the catching places, through the availability of ice, processing conditions, contributing to a higher quality of the products, resulting in the marketing at fair prices.

158. The training received by Fishermen, on "Fishing Gear", has consolidated their practical experience on the different types of Fishing Gear and has improved the skills and techniques needed to catch more fish in each working day.

159. In this context, a significant part of this progress must be attributed to ProPESCA, which has achieved its strategic objective of "...increasing the income of fishermen and their families and improving their living conditions".

160. This progress also derives from the diverse set of development conditions created by the project, including training in the construction of vessels with open sea fishing capacity, training in "Fishing Gear", the construction and rehabilitation of markets, the granting of credits for motorization, electrification and the improvement of access roads.

## Variation of fishery production during the period 2012 to 2018



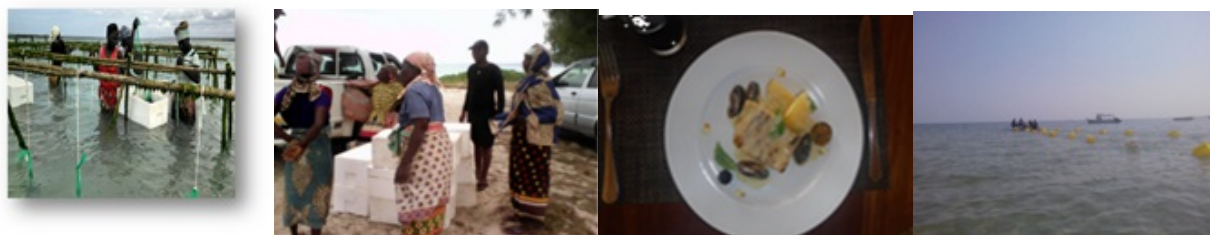
Note: Each color marked in the graphics represents a district 2012-2018  
Source: Mapping Report - IDEPA 2019 and DEPI - MIMAIP 2019

### D.3. Support for Aquaculture Development Pilot Initiatives

161. The initial design of ProPESCA did not include the culture of Aquaculture. However, given its relevance, the project proceeded to build Aquaculture infrastructures and demonstrations on how to develop the practice. In this context, a Training and Demonstration Center was built at the Fishing School, as well as an Incubator, a laboratory and 16 tanks. This Center will be used to train students from the Fisheries School, technicians from the Sector as well as the general public.
162. In Cabo Delgado, with the participation of the Chuiba United Women Association made up of 50 members, 2 structures populated with about 446kg of mussel seeds were set up covering an area of 5000m<sup>2</sup>. The ladies were also trained in handling and maintaining the structures, handling, processing and marketing. Great publicity work was done and the mussel produced by the association is placed in renowned restaurants in the city of Pemba, where dishes are highly appreciated by the local public and tourists from different parts of the world. This activity guarantees a source of income for the associated women. Mussel cultivation is accompanied



by environmental awareness sessions with regard to environmental sustainability. As direct and indirect benefits, they can be listed as a diet for the members of the group and community, the recovery of local marine fauna through adult individuals that reproduce and their larvae populate other places and the increase in family income. Likewise on the island of Kanyaka, with the participation of about 10 farmers, resulting from the exchange of experience where 3 farmers from the island moved to Cabo Delgado, 8 structures of 50 meters each were set up, whose mussels were placed in sachets with capacity for 660 mussel seeds.



**Fig. Chuiba ladies during mussel planting and Kanyaka farmers to assemble structures**

163. A demonstration was made of fish culture in aquaparks of earthen ponds. In this context, 40 ponds were opened in Metuge, not stocked, and 46 beneficiaries were trained, among which 10 are women, 8 technicians and extension workers, in fish farming techniques and improved fish food production. In Nampula (Nacuxa) 28 ponds were opened, among which 14 were stocked and the rest will be gradually stocked. In Muanza district, 16 ponds have been built and stocked. In Inhambane city, the Salela Association and the group working in downtown Machavenga were supported. In the district of Maxixe, in downtown Macuamene, other fish farmers were supported. Thus, in Inhambane City with an extension to Maxixe, about 156 tanks were populated, benefiting 31 fish farmers, 13 of whom were women. In Macassane, in Matutuine district, 17 ponds were rehabilitated and settled in the fish farmers' association with about 42,500 fish seeds.

#### **Demonstration of fish culture in floating cage aquaparks**

164. In this context, in the Maganja da Costa district, in the Rigoria lagoon, 50 floating cages were built and 8 beneficiaries identified, among which 4 were women. In Sofala, 35 cages were built in the Buzi district (Bandua and Estaquinha) and 40 in Dondo (Vale de Mandruzi). In Inhambane City, an association was identified in the Machavenga area that has 16 operational cages and another 16 damaged. In the district of Vilankulo 27 cages were built and populated for 35 beneficiaries, among them 11 women and in the City of Inhambane with extension to Maxixe 34 cages. In the Municipality of Praia do Bilene, three associations (Tsoveca, Matha and Tsatsene) and the first beneficiaries were identified for the start of the demonstrations. For the installation of 30 cages, Ndziva, Nhachiundze and Ndjire lagoons were identified, including the choice of the exact location to do so considering depth, safety and access aspects. Thus, 30 cages were built on this site and are operational. In Maputo, in Marracuene district 10 beneficiaries of Aqualnkomate Association were identified and 10 cages were built.

165. Having made the quantitative and qualitative evaluation of this pilot activity, not included in the initial design of ProPESCA, it is considered that it can be classified as **Satisfactory**.

### **D.4 Project Outcomes and Impacts**

166. For the analysis of overall results and impacts, in addition to the physical results already demonstrated (Chapter D1), we will rely on the corresponding indicators of the global targets defined in the logical framework:

- Households with improved possession index [R3]
- Reduction in the prevalence of % children suffering from malnutrition [R3]
- Households for which food security has improved (No.) [R3]
- Male/female illiteracy level (M: 64%; F: 53%) [R3]

167. However, since the indicators of asset ownership and food security are linked to the level of catch of high-value fish and income from them, we start by analyzing the evolution of stock fishing and household income.

#### **D.4.1 Project Outcomes**

168. The physical and qualitative results of the Project, (as shown in the previous chapter (D1), and in the case of components 1 - 2 - 4 and the component of pilot activities are rated **Satisfactory**. Component 3 is considered **Moderately Satisfactory**. Component 5 **Highly Satisfactory**. In general, the average of the final classification of ProPESCA's performance is **Satisfactory**.

#### **D.4.2 Project Impacts**

169. The following statements of impacts based on fish catch performance, income and asset ownership are presented:

##### **170. 1. Evolution of high value fish catch**

171. The table 15 below indicates that with the exception of 2012 (No data), all years of ProPESCA implementation were characterized by increasing levels of high value fish catches.

172. An analysis of the table allows us to conclude that between 2013 and 2018, at the level of artisanal fisheries, the average level of catch of high value fish was above 190 tonnes. This figure is higher than the initial year of assessment (2013) which was around 155, which means an increase in the highest value fish catch of around 12%.

##### **173. 2. Income Level Evolution**

174. In both 2014 and 2019 baseline studies (initial and final) confirm a moderate increase in the level of household income in good months in the order of 10% at the national level. The overall average rose from 23,806.9 meticaís per month in 2014 to 26,226.46 meticaís in 2019. With the exception of Sofala, all provinces recorded an increase in income. This development should also be attributed to the performance of the project.

175. This evolution occurred even in the low income months whose average in 2014 was 3,311 meticaís and increased to 8,178 meticaís in 2019.

176. These data are a clear indication that the project's goal of improving incomes has been achieved, although at non expressive levels.

177. **Table 15: Comparison of Income from Main Activity during Good Months (2014 and 2019)**

Provinces	Average of good months 2014	(Mt/ month) 2014	Average of good months 2019	(Mt/ month) 2019
1. Cabo Delgado	5,0	9.053,4	4,6	22.189,68
2. Nampula	3,4	12.068,1	4,2	24.298,48
3. Zambézia	9,3	9.283,7	5,1	20.853,23
4. Sofala	5,3	88.582,6	4,4	33.419.15
5. Inhambane	5,0	9.941,2	3,7	34.689,77
6. Gaza	4,5	12.583,3	3,6	27.388,95
7. Maputo	6,0	18.411,9	4,6	22.640.21
Total	5,5	23.806,9	4,4	26.226,46

178. **Source: IDEPA Baseline Studies (2014 and 2019)**

- Reduction in the prevalence of children under-nutrition [R3]
- Male/female illiteracy level (M: 64%; F: 53%) [R3]

179. The families started to base their income on fish, as declared by Afussa Chata in the village of Quissanga, in Cabo Delgado province:

180. *"...For a long time, I was dedicated only to housework, and my husband was a fish trader. When I saw that the income from the business was insufficient to cover all the expenses of the house, I started in 2010, helping my husband to buy and sell fish, and with time I became more and more aware of the business, as a result of the participation in a training session on gender equality promoted by ProPESCA, thus becoming a fish trader..."*

### 181. 3. Index of family possessions

182. In relation to the index of possession of family assets (one of the 4 indicators on Improving the incomes and livelihoods of poor families involved in artisanal fishing) in table 16 below it can be noted that although there is a decrease in possession of bicycles (the most accessible means of transport) there is an increase in possession of motorbikes, vehicles and tractors (means more difficult to access). Access to motor boats has more than doubled and there has also been an increase in possession of fishing nets. These data are an indication of a higher purchasing power of households.

183. **Table 16 : Possession of means of transport and work**

Year	Possession of means of transport and work			

	Motorbike				Trunk Boat										Boat with engine		Fishing net	
					Canoe													
					without	Vehicle	Tractor	Charrua	excavated	Biker								
2019		18,5		21,7		4,9		0,5		1,1		22,7		24,8		12,1		41,1
2014		24,93		14,81		2,53		0,49		1,25		21,58		19,54		5,06		36,03

184. Source: Compilation of tables 38 p. 42 , IDPPE (2014) Baseline Study in the Project Area, p. 37, IDEPA (2019) Baseline Study in the ProPESCA Area

185. The same trend is generally observed in the possession of domestic appliances and other household assets and in the possession of animals and trees for income. See tables 17 and 18 below.

186. **TABLE 17: Percentage distribution of respondents according to ownership of household appliances and other household assets**

Year	Radio	Television	Fridge/ Freezer	Machine Sewing	Lamp (petroleum)	Energy	Latrine	Telephone	Solar panel
2014	64,40	28,21	13,83	2,50	49,75	24,60	47,72	67,78	9,29
2019	48,4	52,0	29,5	2,8	16,0	49,7	65,5	87,5	23,3

187. Source: Compilation of tables 39 p. 43 , IDPPE (2014) Baseline Study in the Project Area, p. 38, table 36, IDEPA (2019) Baseline Study in the ProPESCA Area

188. **TABLE 18: Percentage distribution of interviewees by animal ownership and income tree ownership**

Year	Possession of animals and income trees							
	Goats/pigs/oves		Bovine		Coconut trees		Cashew trees	
2014	23,35		6,08		48,77		27,62	
2019	28,0		9,3		47,2		8,5	

189. Source: Compilation of tables 40 p. 43 , IDPPE (2014) Baseline Study in the Project Area, p.38, table 39, IDEPA (2019) Baseline Study in the ProPESCA Area

190. An example of the increase in the rate of possession of family assets is the case of Mr. Ossifo Manuel, a fisherman and founder member of the Zalala Community Fisheries Council, who benefited in 2016 from several courses given with the support of ProPESCA, namely on fishing technology, fish processing, associativism, business management, and by the performance shown, was chosen to be part of the experimental programme using a motor vessel for fishing with selective gear and the RFA. The beneficiary expressed itself in the following terms:

191. *"...I had a breakthrough in my life, from where I was able to build an improved house for my family, I created jobs for other fishermen, from sailors to employers of some fishing units, the education of my children in health, public administration and others. I also acquired a motorbike for family transportation, radio, television, a satellite dish and cell phones for the family. After all I have learned, I have significantly improved my fishing activity..."*

192. Thus, it can be concluded that ProPESCA has resulted in greater household ownership of consumer assets.

#### 193. 4. Food Security and Nutrition

194. The table 19 below shows that there has been a positive evolution in household perceptions of the situation of obtaining food in what means improvements in food security. The percentage of households that responded were always able to purchase food increased

from 25% in 2014 to 33.6% in 2019, and there was also a decline for those households that find it sometimes difficult to obtain food (from 52.18% in 2018 to 43.7% in 2019).

**TABLE 19: Percentage of respondents on the food obtainment situation: Comparison of results for 2014 and 2019**

Year	Obtaining food for the household			Total
	Always We do	Sometimes it can be difficult	Always is difficult	
2019	33,6	43,7	22,7	100,0
2014	25,45	52,18	22,36	100

Source: Compilation of tables 62 page 55 , IDPPE (2014) Baseline Study in the Project Area, table 57, page 54, IDEPA (2019) Baseline Study in the ProPESCA Area

195. The table shows a positive evolution in relation to perceptions of the situation of obtaining food in households which means improvements in food security.

## 5. Satisfaction of Needs

196. Finally and to complement table 20 below, it shows that the percentage of households that indicate they have always been able to meet their needs increased between 2014 and 2019 while decreasing the percentage that they considered sometimes difficult/always difficult.

197. On the other hand, a reduction in the occurrence, or duration, of food shortages from 3.2 in 2014 to 2.8 in 2019 and the nutritional status of children changed, decreasing the occurrence of problems caused by malnutrition such as stunting, wasting and underweight status.

**Table 20 : Percentage of respondents according to their opinions regarding the satisfaction of basic needs: Comparison of results of 2014 and 2019**

Year	Acquisition/satisfaction of basic assets/needs		Always is difficult	Total
	Always we do	Sometimes is difficult		
2014 %	60.66%	22.10	17.24%	100,00%
2019 %	52,0%	34.9	13,2 %	100,00%

Source: Compilation of tables 65 p. 58 , IDPPE (2014) Baseline Study in the Project Area, table 60, p. 57, IDEPA (2019) Baseline Study in the ProPESCA Area

198. In conclusion, there has been a positive evolution in almost all indicators concerning (a) the increase in the volume of fish of higher commercial value, on a sustainable basis; and (b) the increase in the income obtained from the marketing of fish and the improvement in the income and living conditions of families whose livelihood depends mainly on artisanal fishing, which is indicative of the impacts of the project on the beneficiaries, with an overall performance and a final rating of satisfactory.

199. The highly satisfactory effectiveness of ProPESCA had a direct bearing on the positive impacts on beneficiaries. In fact, improvements in the main impact indicators, especially the satisfaction of households' needs and the possession of assets, are directly linked to a higher level of income, which in turn results from the higher level of fishing production and marketing.

## D.4.3 Target and Range

200. The main targets of the project were:

- Poor people involved in fishing and related activities in the project area, who have a potential to expand their activities or market the fish with the support of the project. Poor men and women involved in the processing and trade of fresh and traditionally processed fish in coastal areas and poor women who provide inputs and services to fishermen and traders.
- Secondary target groups are poor people living in the project area, people participating in credit and savings groups and labour generated by road works.
- People and institutions that have directly benefited from the project's interventions and resources, processors, traders, market agents and transporters who are less poor or richer but have played an important role in the artisanal fisheries value chain.

201. The level of outreach recorded by the project for these target groups is satisfactory, as demonstrated in the chapter on analyzing the

effectiveness of the project. In fact, the targets for the training of these different targets have been exceeded in all the matters planned; the availability of and access to large and motorized boats for these groups has been ensured, although without the achievement of the targets; the main fishing centers have received ice making shops and markets for marketing fish. Existing PCR groups were consolidated and new groups were created, which are already working for the development of artisanal fisheries.

202. The training of families and community leaders to combat malnutrition exceeded the goals set three times over and enabled the trainees on food production and how to better prepare food, as well as the combination of them, for a balanced diet.

203. The improvement of access roads between fishing centers and markets, as well as electrification, did not achieve the defined goals, but contributed to the improvement of the value chain, through better movement of fish and the other agents involved in processing, conservation and marketing.

#### D.4.4 Innovation, Replication and Expansion

204. ProPESCA has been implemented with important innovation trends and dimensions. Among its innovative approaches, the following are noteworthy: the inclusion of sub-components of electrification and roads, whose implementation was assumed by the respective sectors, although coordinated by IDEPA; local capacity building (capacity building of local carpenters) and naval mechanics, for the construction, maintenance and repair of large boats, for fishing in the open sea; massive implementation of a nutrition sub-component, covering not only artisanal fishermen, but also their communities, leaderships and families.

205. Although Aquaculture is considered a pilot initiative, for this project (Aquaculture activity not foreseen in the design of Propesca), it is important to highlight the cultivation of fish in floating cages as a way of reusing existing water bodies in the project area and , on the other hand, an alternative for artisanal fishermen who, due to the lack of means for fishing in the open sea, can bet on the creation of fish in this type of floating installations. For this reason, the expansion of fish farming in floating cages, not only by aquaculturists and artisanal fishermen, should be a big bet in future projects.

206. Also, the use of artisanal feed production models based on local ingredients should be considered as a valid solution for reducing fish feed costs.

207. Local capacity building, based on local resources (Fishermen and Naval Mechanics) can be replicated and expanded for similar or other projects, given their potential for successful development projects.

208. Although with encouraging results, the other innovative approaches were implemented about 2 years before the end of ProPESCA, so there was not enough time for their consolidation and to certify if they can be replicated/expanded to other locations and scenarios.

### E. Assessment of project efficiency

#### E.1. Project costs and financing

209. AAs shown in table 21 below, ProPESCA's initial funding was 57 798 000 USD.

**Table No. 21: Initial Financing of ProPESCA by Financier (September 2019)**

					In thousand USD	
	Total	Total	Total	Total	%	%
Financier	Alocated	Alocated	Disbursed	Executed	Disbursed	Execution
	(Initial)	(Adjusted)	(Cumulative)	(Cumulative)		
IFAD	21 132	20 124	20 124	19 757	100	98
OFID	13 530	13 530	11 534	11 505	85	85
EU-MDG	18 975	16 572	16 084	16 084	97	97
GoM	4 161	4 161	4 121	4 161	99	100
<b>Total</b>	<b>57 798</b>	<b>54 387</b>	<b>51 863</b>	<b>51 507</b>	<b>95</b>	<b>95</b>

210. However, during the implementation years, especially the initial years, several constraints were registered that did not allowed the necessary speed and regularity in the application of funds on the activities and acquisition of assets and services of the Project:

- Some slowness in disbursements by the fund providers, delays and paralysis in making adjustments and improvements to the fund management system;
- The extinction of IDPPE and consequently of the Provincial Delegations and their integration into DPMAIP contributed to the weakening of the coordination of project activities, with emphasis on quality and timeliness of reporting. Delays and quality of accountability were also identified in the Implementing Agencies (IA);
- Procurement operated in a decentralized manner, with each IA being responsible for carrying out the complete process of procurement of contractors, assets and services. Significant delays were experienced in economic infrastructure, market construction, extensionist houses and office buildings;
- The payment of taxes and fees by the GoM continued to be a difficulty, and in the final part (2018) a solution was found, but the previous situations remain unresolved.

211. Some of the main consequences of these problems are that over the implementation years, the project was left without funds for several months. In this situation activities were implemented in periods and years without meeting the specific deadlines set in the PAOs. In addition to these constraints, the project funds suffered depreciations due to exchange rate fluctuations in the source currencies of IFAD and EU funding (SDR and EUR) with substantial losses of more than 3,411,000.00 USD over seven years of project implementation. This led to a downward revision of the overall budget from 57,798,000 USD to 54,386,464 USD as shown in table 22.

**Table 22: ProPESCA Revised Financing by Component**

Component	Total Alocated (Adjusted)	Total Executed (Cumulative)	% Execution	Balance
1. Support the Development of fisheries products with higher commercial value	14 865 688	14 956 885	101	(91 197)
2. Improvement of economic infrastructure	21 783 707	17 076 602	78	4 707 105
3. Development of financial services	4 995 243	4 260 640	85	734 604
4. Institutional strengthening, policy initiatives and project management	10 548 661	12 972 849	123	(2 424 188)
5. Promoting nutrition	2 193 165	2 240 240	102	(47 076)
<b>Total</b>	<b>54 386 464</b>	<b>51 507 216</b>	<b>95</b>	<b>2 879 248</b>

Despite these setbacks, resources were used rationally and optimally whenever they were made available and it was possible to cover most of the planned activities. The level of implementation of activities is satisfactory, although with delays. In these circumstances of late and irregular disbursements, the project ended up carrying out more activities with less favorable conditions and resources.

Management was at a satisfactory level, considering that overall the difficulties experienced were more a result of international structural and somewhat national contexts.

Another factor limiting the project's efficiency levels is linked to the fact that the overall project budget was assessed as being low due to the effects of the exchange rate fluctuation of the original IFAD and EU funding currencies (SDR and EUR) resulting in a shortfall once the planned activities were not adjusted in line with the decrease in the budget. The limited financial resources caused by this phenomenon adversely affected the completion of work to improve access roads and electrification in growth pole areas and at the level of financial services and market construction and rehabilitation. This set of weaknesses and limitations reduced the project's capacity for efficient resource management, combined with problems of late disbursement and irregularity in the payment of fees and taxes by the Government.

If the speed of disbursement had been assured, the accountability of some IAs could have been made more efficient and more activities and better results could have been achieved with the approved funding, executing it at 100%.

## **E.2. Quality of project management**

212. The project management was characterized by two distinct phases:

213. In the **first phase**, the project had a complete and qualified team that guaranteed technical assistance to all professionals involved in the implementation of ProPESCA, at central, provincial and district levels. In this phase the project management presented high levels of quality and contributed to the achievement of the remarkable progress made.

214. In the **second phase**, there was a degradation of the structures created, especially with the decentralization processes, which were

not accompanied by the required capacities for new approaches, work practices and accountability. In this phase, the Monitoring and Evaluation Officer left and was not replaced until the end of ProPESCA. The Monitoring and Evaluation work was somehow covered by his assistant causing some imbalances. In 2019, due to the retirement of the project Coordinator, a member of the PCU was pointed as a project Coordinator.

215. Despite these adversities, the project management responded to the required standards, which ensured the implementation of most of the planned activities. The project management responded to the required standards, which ensured that most of the planned activities were carried out. The structural and organic changes that took place at local and provincial level caused some periods of stagnation. The decentralization processes and the extinction of IDPPE and the creation of IDEPA, required some time for operationalization and functionality in new ways, integrated in DPMAIPs. The excessively delayed processes of planning, tendering, road rehabilitation and electrification, together with the problems of late disbursements and also late reporting, made implementation difficult at certain times. Local management changes, the "loss" of key personnel such as the Monitoring and Evaluation Specialist, among others, represented setbacks in several aspects and limited the quality of data collection and analysis.

### **E.3. Quality of financial management**

216. The financial management showed satisfactory levels of performance and quality. It produced and used, as a pioneering project funded by IFAD, the e-SISTAFE, a financial management platform, and other good quality management tools, and complied with the financial reporting processes to the required standards. However, some problems contributed to the reduction of the quality levels of the performance achieved which are mainly related to (i) systematic delays in the start of financial execution due to the delay in the annual approval of the programme budget; (ii) the differentiation of the procedures for the transfer of funds, being for IFAD and EU funding via advance payments on the basis of the annual business plan and budget, while for OFID on the basis of the feedback of the payments made; (iii) the fact that the effectiveness of the funding occurred at different times conditioned the start of the implementation of some activities with emphasis on infrastructure; (iv) the poor coverage of remote rural areas with services for issuing biometric identity cards, NUIT and banking services, made it impossible in the first years of the project to carry out activities involving a significant part of the beneficiaries; (v) the low value established for the initial advance fund of OFID funding and the dragging of the negotiation towards increasing it limited the capacity to settle the billing for the works; (vi) the extinction of IDPPE and consequently of the Provincial Delegations and their integration into DPMAIP contributed to the weakening of the coordination of project activities and the observance of good practices, with emphasis on the quality and timeliness of reporting. Delays and poor quality of accountability were also identified in the Implementing Agencies (IA); (vii) Procurement operated in a decentralized manner, with each IA being responsible for carrying out the complete process of contracting contractors, assets and services. Significant delays were experienced in economic infrastructure, market construction, extensionist houses and office buildings; (viii) during the life of the project there were exchange rate fluctuations at a global level that significantly influenced the overall project budget. In particular, the exchange rate variations of the original IFAD and EU financing currencies (SDR and EUR) valued at around USD 3 million. (ix) The payment of taxes and fees by the GoM continued to be a difficulty and was already addressed in the final part (2019 has been solved, but the previous situations remain to be resolved).

217. The financial management showed satisfactory levels of performance and quality. It produced and used good quality management tools and complied with the required financial reporting processes. It regularly carried out the mandatory audits and these approved both the financial management and the procurement processes in a satisfactory manner. The problems that made higher levels of performance and quality impossible are related to the extreme difficulties of accountability at provincial and district level, and the fact that when they were reporting, it was incorrect and seriously deficient. One of the problems that complicated the provincial and district levels is linked to SISTAFE, whose assimilation and utilization capacity remains low.

218. The procurement of assets and services has been another barrier to better financial management. Irregularity and delays in the disbursement of funds also reduced the quality of management, in a context where activities were often not carried out and, as a consequence, it was not possible to make payments (implement the budget) on time, which meant that the preparation of the Financial Reports themselves took time. Sectors such as ANE and FE had their own procurement and fund management mechanisms, which made it difficult to speed up and execute the planned tasks.

219. Despite these constraints, all the resources provided were spent, which is an indicator of quality, even if not at the desired levels, at the highest level.

### **E.4. Cost-Benefit Analysis**

220. The investments made and the different costs of assets and services were compensated by satisfactory project results and the gains they represent for the different stakeholders involved. The increased knowledge and experience acquired by technicians in the sector and sub-sector, at central, provincial, district and local level, enable them to ensure improved management, relaunch and consolidate the development of artisanal fisheries.

221. The training of local naval carpenters ensures not only the construction of vessels with their own engines and capacity for fishing in the open sea, but also the maintenance of these vessels and the construction of other complementary equipment in a sustainable manner. The skills in ice making and use at fishing sites and first sales points and markets, give quality to fishing products and higher income in their marketing. Other infrastructure and services such as roads and electrification, represent progress not only for artisanal fisheries, but for all development poles and districts where they are located.

222. The multiplier effect of the training received by the different target groups of the project, on all areas, subjects, techniques and practices of artisanal fisheries, has provided great results and impacts that will continue for many years and some of them infinitely.

223. The costs of the different inputs acquired are moderate and appropriate to the local and national reality. These costs are the result of tenders and the comparison of prices from different suppliers, always allowing the choice of the lowest cost, without neglecting quality.

224. Loan costs are relatively low, as a result of mobilizing microfinance institutions to provide loans to this class of Fishermen, at local level, although in rather small numbers compared to what was anticipated. There are still severe limitations on access to loans by the target groups due to their structural decapitalization, but the formal and informal revolving savings and credit mechanisms provided by

the different savings and revolving credit groups created for this purpose fill an important part of the gaps left by microfinance institutions.

225. Another benefit of ProPESCA that largely covers the costs incurred is the improvement of nutrition brought by the project, resulting from the training given to the fishermen's communities and families, for food availability and the adoption of the best ways to handle, preserve and make it. Improved nutrition represents more health for families and communities, which are essential bases for global development.

## **F. Partners' performance**

### **F.1 Partners Performance**

226. The partners' performance in the fisheries sector has been satisfactory as they have carried out all the activities for which they were responsible under ProPESCA. In terms of technical assistance, satisfactory results were achieved, as most of the supervision missions were carried out during all the years of the Project's implementation and technical recommendations were given for the solution of the problems that were emerging in the Project's implementation process.
227. Despite satisfactory performance in technical assistance, there were delays in the disbursement of funds for the implementation of the Project, mainly from the EU and OFID. The operation and management of funds from different donors, some with their own rules, proved to be complex and contributed to the slowness. Despite the constraints, all IFAD funds were disbursed, with OFID not disbursed at all until the end of the Project.
228. With regard to the Partners involved in road improvement and maintenance activities and electrification, they performed moderately well, as they did not meet most of the targets set in the area of expertise, on the one hand, and on the other hand, due to delays in the execution of the works.

### **F.2. Quality of IFAD Supervision and Implementation Support**

229. IFAD's supervision was comprehensive and efficient at the project design stage, contributing decisively to the project's high quality standards and meeting the reality of the area of implementation and the needs and nature of the target groups.
230. IFAD's performance continued in the implementation of the project, carrying out the majority of the planned supervision missions, 14 missions and their reports and recommendations during the project's implementation and helping to identify and resolve the problems it faced.
231. However, the positive impacts of IFAD's efforts were limited by its delay in disbursing and making funds available for the implementation of activities.
232. Other aspects of IFAD's performance related to its consistent participation in policy dialogue processes for replication of results and good practice in the implementation of ProPESCA. As a result of this participation, new projects from the broad area of Fisheries are being prepared for implementation from this year onwards.

## **G. Assessment of sustainability**

### **G.1 Social Sustainability (Empowerment)**

233. As mentioned, ProPESCA is relevant because it meets the needs of the context of rural poverty in Mozambique. As a result of the implementation of ProPESCA, the beneficiaries of the project have the necessary technical skills and experience, both individually and collectively, to continue developing the activities initiated by the project. The artisanal fishermen, naval carpenters, traders and other relevant actors will continue to develop the activities, after the end of the project, as they are interested and part of their professional and social activities. The improvement of their income, as a result of catching higher value fish in the open sea, has also added a status and a social capital, which allows them a greater and stronger presence in society, which at the same time serves as motivation for the continuation of the project.
234. However, the value chain of fishing production is directly linked and benefits more to the men who do the fishing and then often market the fish, with women playing a relatively secondary role. These practices are in line with the gender roles of men in income-generating activities and decision-making positions, while women are dedicated to support and domestic activities. ProPESCA has taken into account this chain and division of roles but could have been more relevant by promoting activities that result in greater women's access to income and therefore greater economic empowerment. The focus in this aspect of successful promotion of women has been on savings and revolving credit activities (PCR). In the pilot aquaculture initiative to highlight mussel cultivation, an activity carried out on Chuiba beach in Cabo Delgado province, it is important to highlight the active participation of women, which means that in this activity the role of men is not very significant in the same way as fishing.

### **G.2 Economic and Financial Sustainability**

235. The relevant project actors have minimum capacity for family consumption and small investments as a result of their increased business income, resulting from increased production, including higher value fish. The initial (2014) and final (2019) baseline studies, as well as the mapping of ProPESCA's achievements and the 2018 Annual Report (cumulative) show that fishermen, traders and other relevant actors involved in artisanal fisheries have had increasing incomes since the implementation of ProPESCA. It is a fact



that the results and incomes could be higher, but those that have been obtained are positive and ensure economic sustainability, although for a smaller number of artisanal fishermen. Some of these fishermen have acquired engines for their boats, with their own financial resources.

### **G.3 Technical Sustainability**

236. The different target groups and beneficiaries of the Project have acquired knowledge and experience that will use them indefinitely, in accordance with the specificities of each beneficiary, described below:

- The carpenters continue to build boats on the basis of the training received and these capacities are consolidated based on their own experience
- Artisanal fishermen use the different gears learned for open sea fishing more effectively and efficiently, as well as in how to produce ice and handle and preserve fish, as a way to ensure the quality of the fish and obtain higher profits in its marketing. The technical aspects learned by Fishermen are more linked to the practice of their work, so they are properly assimilated and exercised, because they are prerequisites for their work and ensures their subsistence and development;
- Local contractors have increased and consolidated medium term skills and practices in road rehabilitation and maintenance technologies and other similar enterprises, and can now execute and manage them effectively and efficiently;
- Families and communities in general have benefited from the knowledge and practices of production and cooking and combining food for a balanced diet. These benefits are sustainable, as they will remain during their existence;
- Aquaculturists continue to build floating cages based on the training received and, in this way, guarantee the sustainability and increase of the family income. With this practice they will be able to ensure sustainable management and reduce pressure on extractive fishing
- Technicians from the fishing sector itself have been trained to better approach and manage this area. With this knowledge they have consolidated their performance and will be able to train other co-workers and partners in this area, ensuring a sustainable management of fisheries resources.

### **G.4 Institutional Sustainability**

237. The institutions supported by the project are self-sufficient, viable and currently have operational capacities that have been created and/or strengthened during the implementation of ProPESCA. The new approaches and practices promoted by the project have been integrated into normal government operations and there is already ongoing follow-up work on the part of the government until the closing date of the loan, both in terms of complementing actions not yet completed and in terms of developing similar activities for subsequent years.

238. In the field of roads and electrification, the actions continue therefore, access roads and energy for development, not only benefiting the fishing communities, but all those located in the development poles of the project incidence, and in the surrounding communities.

239. ProPESCA's approach and strategy, based on agglutination and partnerships from different sectors, with different vocations and specialities, has ensured the implementation of various essential activities for the project's success. Based on this strategy, there are bases for the continued rehabilitation and maintenance of the access roads to the growth poles, as well as the expansion of their electrification. Based on the partnerships developed, the maintenance and functioning of the markets will be continued, as well as the other actions for the development of the value chain.

### **G.5 Environmental Sustainability**

240. In general, the project activities have not resulted in significant environmental damage. However, some practices and achievements have added value to the environment:

- The relocation of fishermen to open sea fishing has not only provided fish of the highest value, but has also greatly reduced the pressure on the resources that need protection for their reproduction in coastal areas;
- Open sea fishing and the use of appropriate gear learned in the training has not caused a significant negative environmental impact.
- The actions of the project discouraged the use of beach trawls and other harmful gear;
- The proper handling of fishing products prevented diseases and environmental pollution;
- The construction of boats, based on wood obtained from sawmills, avoided the indiscriminate cutting of trees, contributing to the forest conservation, especially protected tree species.
- The construction of floating cages based on PVC materials that are less polluting of the environment, avoiding the cutting of mangrove species that are considered more resistant in water.

### **G.6 Impact on Rural Poverty**

241. The impact of project interventions has to be presented in quantitative and qualitative terms, using IFAD's standard impact domain classification. The PCR team, in addition to the impact domain of the project, examines in particular the baseline studies of 2014 and 2019, which show a considerable increase in the incomes of fishermen and their families, one of the main indicators of poverty reduction. They also show significant improvements in food and nutritional security, possession of durable and non-durable assets, housing, access to health, education and social protection, and potable water covering ever more families in the development poles targeted by the project. The impact on poverty reduction achieved by ProPESCA is in line with the results of the poverty assessment over the last 25 years, which shows a progressive reduction from almost 70% in 1989 to less than 50% in 2017.

### **G.7 Human and Social Capital and Empowerment**

242. The improvement in the living conditions of the population has increased its social capital, consequently, community members have increased the number of social events such as family ceremonies, weddings, associations, birthdays, among others, taking into account that these events, despite being social, are not at zero cost. One of the human capital reinforcements are the mutual aid organizations and associations, such as CCPs, Fishermen's Associations and Fishery traders, PCRs, including those of formal and informal financial credits. The empowerment of women and the involvement of youth in the activities and benefits of the project are part of human capital development in a sustainable manner.

## **G.8 Food Security**

243. Training and practical exercises on how to produce, preserve and make the different types of food were carried out, including the indication and demonstration of the most nutritious foods. Based on this set of strategic activities, the project improved the availability of food, produced or purchased on its own and guaranteed a minimum necessary intake for all family members. Today, part of the project beneficiaries have improved and more regular access to sufficient and more nutritious food. There is a reduction in the occurrence, or duration, of food shortages from 3.2 to 2.8 months and the nutritional status of children has changed, decreasing the occurrence of problems caused by malnutrition such as rickets, wasting and low weight.

## **G.9 Institutions and Policies**

244. The implementation of ProPESCA involved, at central, provincial and district levels, important public institutions, namely ADNAP, IIP, FFP, ANE, Fundo de Estradas, FUNAE, and IDEPA itself. This multisectoral involvement was carried out through harmonization and implementation of specific policies for each of them. In general, guidelines on the need for synergy between bodies to achieve common objectives have been materialized.

245. Based on the benefits provided by these institutions, there are changes in the capacities of the various community-based organizations supported during the implementation of the project, such as Rural Producer Groups, Stakeholders Groups or User Associations. The learning they have acquired and the practical experience have prepared them for the implementation of similar or larger projects.

## **H. Lessons learned and knowledge generated**

### **H.1 Lessons Learned and Knowledge Generated**

246. ProPESCA's processes and achievements have generated important knowledge and lessons learned, namely the following:

- The implementation of a project, whose activities are carried out by different institutions, requires strong operational linking mechanisms, without which the objectives and deadlines cannot be achieved;
- The adoption of strategic partnerships and collaboration with other Sectors has made it possible to carry out, even without reaching the goals and meeting the deadlines, activities of specialties beyond the reach of the Fisheries Sector, such as road rehabilitation and maintenance and electrification;
- ProPESCA proposed a wide range of components and results, and adjusted the adoption of a decentralised financial management (with several UGBs), based on E-SISTAFE, which required 2 to 3 years of "experimentation" and "learning". In this context some of the targets set by components turned out to be too ambitious and in a context of underestimating budgets;
- Deadlines for implementation of activities related to assets and services should be calculated in advance and taking into account the time required for tendering and contracting, disbursement and implementation of activities. These aspects may have negatively influenced the achievement of project goals, results and objectives;
- The emphasis on direct involvement of beneficiaries in project implementation maximises the gains for them, but also for other stakeholders;
- The empowerment of local carpenters to build boats makes it feasible and sustainable to provide more artisanal fishermen with the means to fishing in open sea, as these purchases are facilitated and accessible because they are local-based;
- The training of aquaculturists for the construction of floating cages allows a reduction in soil erosion due to the opening of tanks excavated on land and makes the activity less stressful and with higher yields.

### **H.2 IDAI Cyclone Impacts on ProPESCA Results**

247. Mozambique is vulnerable to climate change due to its geographical location in the inter-tropical convergence zone and downstream of shared river basins, its long coastline and the existence of extensive areas below current sea level. On the other hand, low adaptive capacity contributes to their vulnerability as well as poverty, limited investments in advanced technology and fragile infrastructure and social services with an emphasis on health and sanitation.

248. Fishing provides an important source of food, income and employment. It is estimated that the fisheries sector currently contributes 3% to Gross Domestic Product, a value that can be considered moderate. However, this sector has a considerable weight on food security and especially on access to animal protein (i.e. 50% of the animal protein consumed in the country) by a significant proportion of the country's population in rural and urban areas, balance of payments, public revenue, employment, equality and gender inclusion in the fishing cycle.

249. According to the 2012 census of artisanal fisheries and social and economic balance reports, in all districts affected by the cyclone IDAI, in the provinces of Sofala, Manica, Zambézia, Tete and Inhambane, there were a total of 24 306 fishermen, 11 645 fishing gear, 7 511 boats, 1 107 engines, with an expected production of 67 027 tonnes of fish, with the province of Sofala weighing about 75%.

250. In aquaculture, the pre-cyclone situation was characterised by 1 588 small-scale fish farmers with 2 075 production units (tanks and cages), stocked with 3 191 740 fry and expected production of approximately 989 tonnes of fish.

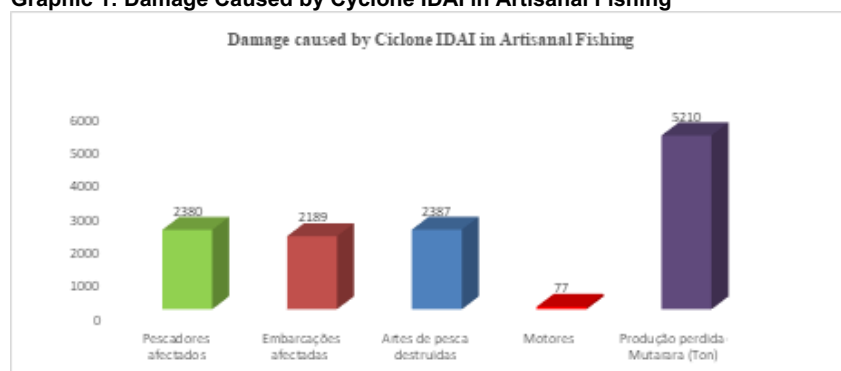
251. In March 2019, Mozambique suffered devastating effects from cyclone IDAI, particularly in the provinces of Sofala, Manica, Tete and Zambézia, resulting in the death of at least 602 people, with more than 1,641 people injured and an additional 1 million people in need of essential services and assistance. In the fishing sector the cyclone affected about 2,774 artisanal fishermen, destroying 2,107 boats, 69 engines and 2,412 fishing gear, with an estimated loss of 5,210 tons of fish. A total of 562 tanks with an area of 170 935 m<sup>2</sup> and 203 cages with an area of 1 866 m<sup>3</sup>, resulting in losses of 375 tons of fish. (MIMAIP; 2019).

252. The effects of cyclone on fishing and aquaculture were recorded in 30 districts, 9 in the province of Sofala (Gorongosa, Muanza, Beira, Dondo, Buzi, Machanga, Chiringoma, Marromeu and Nhamatanda); 5 in the province of Manica (Sussundenga, Gondola, Macate, Mossurize and Manica); 13 in the province of Zambézia (Derre, Gile, Gurue, Ilé, Inhassunge, Lugela, Maganja da Costa,

Mocuba, Morrumbala, Namacura, Pebane, Quelimane, Nioadala and Namarroi); 1 in the province of Tete (Mutarara) and 2 in the province of Inhambane (Inhassoro and Vilanculos).

253. The graph below illustrates in general the damage caused by cyclone IDAI, in the provinces and districts affected, with emphasis on the loss of fish in the district of Mutarara.

**Graphic 1: Damage Caused by Cyclone IDAI in Artisanal Fishing**



**Source: Progress Report 2018**

254. In aquaculture, where tanks and cages are normally built close to water sources, especially river sides and down areas, the impact of cyclone and flooding was severe, affecting about 895 small-scale fish farmers, where there was a total destruction of 562 tanks occupying an area of 170 935 m<sup>2</sup> and 228 cages occupying an area of 2 023 m<sup>2</sup>, stocked with 1 323 550 fry and an estimated loss of 396 tons of fish.

255. The cyclone IDAI affected the infrastructure of the fish feed and fingerlings and production unit, located in Beira city, and its urgent recovery is required, given the role it plays in the development of food and nutritional security and the development of the Sector in general.

256. The post-cyclone recovery should be carried out with recourse to the state general budget, from the Donors committed at the Beira Conference about post-cyclone IDAI recovery and from specific projects being prepared for artisanal fisheries and aquaculture.

### **H.3 IFAD Support to Artisanal Fisheries Sector in Mozambique: 1994-2019**

257. IFAD has been supporting the fisheries sector in Mozambique since the decade of the 90s, being the first project the Nampula Artisanal Fisheries (PPAN) in 1994, with the main objective of researching and getting to know the sub-sector and its resources, for a later action with knowledge and data.

258. The second project supported substantively by IFAD was the Artisanal Fisheries Project of Sofala Bank (PPABAS), implemented between 2003 and 2011, with the purpose of promoting the development of the artisanal fisheries sub-sector in Mozambique, based on the experience and results of the PPAN.

259. The PPABAS Project followed a needs-based and results-oriented approach, coordinated by IDPPE through headquarters and its delegations in the intervention provinces. The active participation of stakeholders and the involvement of collaborating institutions from government, NGOs, private sector, business or service providers, was the main element of the PPABAS implementation strategy.

260. The total cost of the project amounted to 34,305,015 USD, which was mainly financed by IFAD, with the participation of other donors, namely NORAD, BSF/Belgium, the German Government, the EU and the Government of Mozambique.

261. The objectives of the PPABAS project were:

- Empower and build capacity in fishing communities to take greater responsibility for local development initiatives, including the implementation of infrastructure and social services activities and the sustainable management of maritime resources;
- Improve access by artisanal fishers to the fishing resources of Sofala Bank and promote their sustainable and commercially viable use;
- Improve the links of artisanal fishing communities with input and product markets;
- Increase the availability of savings mechanisms and small credit for artisanal fishers as well as business opportunities for traders with links to fishing centers and improve services to fishers through access to financing by local small enterprises; and
- improve the enabling environment to promote and support the development of artisanal fisheries.

262. These objectives have been satisfactorily achieved, being the main achievements the following:

- Partnerships between key private and public stakeholders who have planned and worked together in the development and management of the fisheries project. It has promoted participation at all levels and "empowerment" of the different actors and has been acknowledged by all stakeholders as an innovative effort;
- Leadership in the development and establishment of Policy, Regulatory Framework and its corresponding strategy (PESPA 2006),
- Facilitating the improvement of social services (health, education and access to pure water sources in over 300 coastal communities) through training, community association development and investment in public works and services that meet the priorities and local needs expressed by the target group and, consequently, generated high levels of satisfaction among beneficiaries;
- Establishment of bases for promoting artisanal fisheries value chains based on real market needs;
- Introduction of a savings financial services model in community groups that helped to establish basic microfinance services.

263. The main innovative features of the PPABAS were the empowerment of fishermen and their communities in the management of fishing resources, access to markets, savings and credit, the planning and management of their activities, promoting the link with the market as an essential element of the project and supporting a legislative, political and strategic agenda that strengthens government intervention.
264. In general, the project reached 87,600 people directly (88% of the target) and 438,000 people indirectly (110% of the target), among whom 51% were women. 1,702 groups were reached, which is double the number planned. The project also benefited 491 communities.
265. Other substantial IFAD support was provided through PRODIRPA (Project for the Strengthening of Access Rights to Natural Resources by Artisanal Fishermen. PRODIRPA was implemented from 2014 to 2018, with a total value of 80 million USD. It has brought new dynamics in terms of access and use of natural resources for artisanal fishermen in Mozambique.
266. Following successive IFAD support in Mozambique, an improvement in food security was registered in all coastal provinces of Mozambique and elsewhere, evidenced by the increase in the number of families with sufficient food availability and greater diversification of diet.
267. The social indicators (education, health and water) have improved widely. There have also been improvements in institutions and services, greater access to savings by poor families and use of economies for their needs and improved access to markets.
268. The creation of structures and co-management system of resources, although are in initial stages, generated substantial benefits and their impact was moderately satisfactory. Generally, the impact of the project on stakeholders and the target population in particular is considered satisfactory.
269. There was a strong commitment of the communities to the project activities. Local Governments also provided material and human resources. The perspective of including these activities in local budgets will ensure continuity. However, limited resources may affect the capacity to maintain public works.
270. In general, the sustainability of different elements of the PPABAS varies substantially. While the sustainability of maintenance committees and some infrastructure (water wells, roads) is unsatisfactory and environmental sustainability is still at risk, other initiatives such as ASCAs, fishermen's associations, and PCCs show better perspectives for sustainability.
271. Both IFAD and Government agencies have performed satisfactorily in the implementation processes of IFAD projects over the past 25 years.
272. The adoption of a top-down (very short staffed project structure at headquarters) and bottom-up (enhanced presence in the implementation areas) approach has facilitated coordination.
273. The strategy of establishing savings groups first - instead of micro-credit has been rapidly accepted among the target communities. From an institutional point of view, there is an urgent need to implement a regulatory structure that favours and supports the rise of microfinance services.
274. The project focused on the achievement of results and neglected somewhat the management of knowledge about the project's approach and achievements for a wider audience.
275. After the PPABAS, ProPESCA was designed and implemented, covering all areas and all target groups addressed and benefited by previous projects. Above all, ProPESCA focused on creating and consolidating local capacities for the construction and management of vessels and infrastructure, equipment and means of fishing, as well as developing technologies for artisanal fishers, for the conservation and processing of fish and its marketing in competitive markets. In the development of strategic actions, ProPESCA included the acquisition of fishing engines by artisanal fishers in open sea, construction and rehabilitation of markets, opening/improvement of access roads and reinforcement of more kilometers of lighting, between fishing centers and main markets; development of fishing gear, nutrition and financial services. The implementation of its activities has involved different sectors and internal and external actors, which have ensured its success, especially ADNAP, FFP, Fishing School, ANE, Road Fund, FUNAE and private microfinance institutions.
276. The results and impacts of ProPESCA were equally satisfactory and were at high levels, as they introduced important innovations that boosted the development of the artisanal fisheries sub-sector and consolidated the processes launched and carried out in previous projects.
277. The implementing institutions have emphasized the value of the long-term partnership with IFAD in the artisanal fisheries sub-sector since the decade of the 1990s and the positive way in which it has responded to government requests.

## **I. Conclusions and recommendations**

278. The analysis of ProPESCA's activities, results and impacts allows the following conclusions and recommendations to be made:

### **I.1 Conclusions**

#### **Component 1**

279. The training provided under this component was the main pillar of ProPESCA's positive results, especially as it led to the construction and availability of vessels for open sea fishing, knowledge about the repair and maintenance of maritime engines; knowledge about navigation using technical and modern instruments, ice use capacity and fish conservation. These gains have allowed the capture of higher value fish, which has resulted in improvements in fishermen's income, as a result of the construction of fisheries support

infrastructures, such as: equipped markets, ice factories and their use, in fishing grounds, first sales points and competitive markets, making fishing viable, profitable and sustainable at this level. The evaluation of this component is **Satisfactory**.

## Component 2

280. The results of this component are remarkable and have contributed to the improvement of the value chain. The construction and rehabilitation of roads and the expansion of energy supply, although not achieving the targets, have provided higher quality products and development of marketing, with substantive revenues, for the different actors of the value chain, in particular artisanal fishermen, traders, managers of factories and ice shops, dealers and transporters. It has reached the level of **Satisfactory**.

## Component 3

281. The contribution of private institutions to the dissemination and granting of formal credits was weak, however, the strategy of setting up new groups and continuing and consolidating savings and revolving credit groups, made it possible to achieve the primary objective, which was the availability of and access to informal but also formal credits for financing various activities for the development of artisanal fisheries. Although the credits are still limited, they are of great impact because they involved a larger number of stakeholders and their conditions and specificities were appropriate. ProPESCA has made groups eligible for other credit institutions through the training they have received. The classification is **Moderately Satisfactory**.

## Component 4

282. The project has created new capacities and consolidated those already existing at the central and local levels of the DPMAIs and other sectors of promoting the artisanal fisheries development. These capacities ensured the involvement and ownership of the project's activities and approaches by artisanal fishers and other target groups. With a higher level of knowledge and experience, the technicians were able to implement the established strategies and methodologies that ensured the achievement of the project objectives and mitigated the negative impacts registered in certain sub-components. The balance is **Satisfactory**.

## Component 5

283. The project has effectively and efficiently provided communities with theoretical and practical knowledge on the availability, cooking and consumption of food, including fruit, in a balanced diet. These activities have resulted in the reduction of poverty levels, given the high number of families and communities benefiting from them, especially in terms of reducing periods of hunger, malnutrition and under-nutrition. Most of the actors involved in the activities of this component were women, so they improved the issue of gender equality and equity in the implementation of the Project. The ranking is **Highly Satisfactory**.

284. **Based on these data, ProPESCA's overall and average evaluation is Satisfactory.**

285. This assessment takes into account all aspects of the Project's organization, implementation and closure processes, including quantitative and qualitative aspects including the strategic importance of each component.

## I.2 Recommendations

- In future similar projects, IDEPA and Partners should pay greater attention to setting realistic targets, to prevent targets being exceeded more than 10 times or far below what is anticipated;
- They should calculate correctly and realistically the period for "launching and preparing processes" and the period for actually carrying out planned activities, including the period for disbursement and availability of financial resources;
- In cases of activities that are executed by the different institutions and implementing agencies of the Government, binding mechanisms should be adopted, to ensure that these other institutions achieve the goals of the planned activities and within the established deadlines;
- The use of local actors and beneficiaries of the project has demonstrated greater potential for achievement and sustainability. In this sense, it is recommended to replicate the project approach, which consisted in training the local beneficiaries to ensure the continuity of the activities, after their completion;
- The reinforcement of the installation, at the community level, of microfinance institutions, to facilitate access to credit and guarantee the sustainability of investment actions implemented with funds from development projects, namely, the replication of new fishing technologies (acquisition / construction of improved vessels, gear and equipment for fishing in the open sea, infrastructure and equipment for the conservation and marketing of fish, working capital for players in the value chain (fish traders, processors, fishermen, shipbuilders, input suppliers and other stakeholders);
- For the next projects, further studies and gender analysis will be necessary. These strategies respond in a transformative way to the needs and priorities of women and increasingly promote their economic empowerment. There must be greater rigor in the collection of data disaggregated by sex and its interpretation in order to have a clearer perspective on the beneficiaries in a gender perspective;
- For future projects, the Government must adopt, jointly with the financiers, mechanisms that allow covering expenses in full, including VAT and other taxes, to guarantee the implementation of the activities without interruption and the sustainability of the contractors and other service providers;
- The completion of works started and not completed due to insufficient funds, continuity of institutional presence in the field (assistance and monitoring of beneficiaries of project interventions), given their high level of impact, must be followed up immediately, integrated into new projects, or through the General State Budget.

## **Mozambique**

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### **Artisanal Fisheries Promotion Project**

### **Project Completion Report**

### **Appendix 1: Project logical framework**

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Loan ID 2000000351

East and Southern Africa Division  
Programme Management Department

This document will be publicly disclosed unless there is written dissent on its disclosure by the Borrower at the time of this document submission to IFAD or no later than the project closing date.



## Artisanal Fisheries Promotion Project

### Logical Framework

Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
Outreach Outreach	1.b Estimated corresponding total number of households members										n/a
	Household members			240 000		273 075	113.8				
	1.a Corresponding number of households reached										
	Households			48 000		54 615	113.8				
	1 Persons receiving services promoted or supported by the project										
	Females			16 800		22 583	134.4				
	Males			31 200		26 315	84.3				
	Total number of persons receiving services			48 000		48 898	101.9				
	Communities receiving project services (RIMS)										
	Communities receiving project services			0							
	Groups receiving project services (RIMS)										
	Groups receiving project services			0							
Project Goal Improve incomes and livelihoods of poor households involved in artisanal fisheries in the selected growth poles.	Households with improvement in household assets ownership index							Quantitative baseline, mid-term, completion survey including household level; Health statistics; Qualitative studies to complement indicator-based data			n/a
	Households										



Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
	Reduction in the prevalence of child malnutrition							Quantitative baseline, mid-term, completion survey including household level; Health statistics; Qualitative studies to complement indicator-based data			
	Reduction										
	Households for which food security has improved (no)							Quantitative baseline, mid-term, completion survey including household level; Health statistics; Qualitative studies to complement indicator-based data			
	Households										
<b>Development Objective</b> Increase the returns from fish sales for artisanal fishers and small market operators on a sustainable basis	Incremental value of sales obtained by fishers selling higher value fish							Quantitative baseline, mid-term, completion survey; Qualitative studies to complement indicators; ongoing monitoring of fish catches and sales			Effective targeting includes poorer and vulnerable households.
	Value	55 000		104 000							
	Incremental value of sales obtained by traders selling dried fish							Quantitative baseline, mid-term, completion survey; Qualitative studies to complement indicators; ongoing monitoring of fish catches and sales			
	Value	31 500		42 000							

Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
	Incremental value of sales obtained by traders selling fresh fish							Quantitative baseline, mid-term, completion survey; Qualitative studies to complement indicators; ongoing monitoring of fish catches and sales			
	Value	14 000		31 500							
<b>Outcome</b> 1A. Increased catch of higher quality fish in coastal areas of selected growth poles	Fishing units that predominantly target higher quality fish							IIP catch and effort survey data; Point-of-first-sale market records; Ice plant production records; IDPPE/IIP fish prices survey data			Absence of negative local and national economic / social effects that overshadow project results.
	Fishing units			3 300							
	Incremental quantity of fish caught by fishing units predominantly targeting higher quality fish							IIP catch and effort survey data; Point-of-first-sale market records; Ice plant production records; IDPPE/IIP fish prices survey data			
	Incremental quantity of fish	18 000		84 000							
<b>Outcome</b> 2B. Increased value of fish traded from the artisanal sector in coastal areas of selected growth poles.	Incremental production of non domestic ice							IIP catch and effort survey data; Point-of-first-sale market records; Ice plant production records; IDPPE/IIP fish prices survey data			Absence of negative local and national economic / social effects that overshadow project results.
	Incremental production of non domestic ice			67 000							
	Quantity of higher value fish traded in point-of-first-sale markets							IIP catch and effort survey data; Point-of-first-sale market records; Ice plant production records; IDPPE/IIP fish prices survey data			
	Quantity of higher value fish			3 500							

Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
	Average price of fish at point-of-first-sale markets in selected growth poles							IIP catch and effort survey data; Point-of-first-sale market records; Ice plant production records; IDPPE/IIP fish prices survey data			
	Price raise			25							
<b>Output</b> 1. Diversified, commercially viable fishing units with boats, gear and skills appropriate for operating in the open sea	People trained in boat building							Progress reports from contractors on market infrastructure works; Progress reports from services providers providing training, technical advice, business development services, and associations' support; Project monitoring registers on institutions (including contractors, associations, CCPs); training; infrastructure; financial support; Qualitative studies to complement indicator-based data			Demand for higher quality fresh and frozen fish is sufficient and growing; Key suppliers and services providers in the value chain are able to operate profitably. Regulation/monitoring by fisheries institutions prevent over-exploitation of fish; R: Insufficient ice utilization due to poor availability or for financial reasons; R: Unsustainable catch levels due to over-dimensioning of growth poles and lack of data on resource potential; R: Restrictions that disrupt access to fish grounds and artisanal fishing operations.
	People			95	126	233	245.3				

Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
	Boat drivers trained							Progress reports from contractors on market infrastructure works; Progress reports from services providers providing training, technical advice, business development services, and associations' support; Project monitoring registers on institutions (including contractors, associations, CCPs); training; infrastructure; financial support; Qualitative studies to complement indicator-based data			
	People			120	262	348	290				

Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
	Engine mechanics trained							Progress reports from contractors on market infrastructure works; Progress reports from services providers providing training, technical advice, business development services, and associations' support; Project monitoring registers on institutions (including contractors, associations, CCPs); training; infrastructure; financial support; Qualitative studies to complement indicator-based data			
	People			210	96	195	92.9				

Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
	Fishers trained in good fish handling practices							Progress reports from contractors on market infrastructure works; Progress reports from services providers providing training, technical advice, business development services, and associations' support; Project monitoring registers on institutions (including contractors, associations, CCPs); training; infrastructure; financial support; Qualitative studies to complement indicator-based data			
	Males			160	675	756	472.5				
	Females			140	0	44	31.4				

Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
	Fishers trained in improved gear and fishing							Progress reports from contractors on market infrastructure works; Progress reports from services providers providing training, technical advice, business development services, and associations' support; Project monitoring registers on institutions (including contractors, associations, CCPs); training; infrastructure; financial support; Qualitative studies to complement indicator-based data			
	Males			295	629	792	268.5				
	Females			20	37	44	220				

Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
	1.1.4 Persons trained in production practices and/or technologies							Progress reports from contractors on market infrastructure works; Progress reports from services providers providing training, technical advice, business development services, and associations' support; Project monitoring registers on institutions (including contractors, associations, CCPs); training; infrastructure; financial support; Qualitative studies to complement indicator-based data			
	Total number of attendances to training sessions					2 019					
	Men trained in fishery			2 455		1 600	65.2				
	Women trained in fishery			160		419	261.9				
	Total persons trained in fishery					2 019					



Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
	Fishers accessing business development services (RIMS)							Progress reports from contractors on market infrastructure works; Progress reports from services providers providing training, technical advice, business development services, and associations' support; Project monitoring registers on institutions (including contractors, associations, CCPs); training; infrastructure; financial support; Qualitative studies to complement indicator-based data			
	Males			2 210	447	798	36.1				
	Females			90	0	60	66.7				

Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
	New/existing associations supported							Progress reports from contractors on market infrastructure works; Progress reports from services providers providing training, technical advice, business development services, and associations' support; Project monitoring registers on institutions (including contractors, associations, CCPs); training; infrastructure; financial support; Qualitative studies to complement indicator-based data			
	Associations supported			100	11	52	52				

Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
	People receiving vocational training (RIMS)							Progress reports from contractors on market infrastructure works; Progress reports from services providers providing training, technical advice, business development services, and associations' support; Project monitoring registers on institutions (including contractors, associations, CCPs); training; infrastructure; financial support; Qualitative studies to complement indicator-based data			
	Males			500							
	Females			15							

Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
Output 2. Improved skills and organization for post-harvest utilization and maintenance of quality of fish	Fish fairs held							Progress reports from contractors on market infrastructure works; Progress reports from services providers providing training, technical advice, business development services, and associations' support; Project monitoring registers on institutions (including contractors, associations, CCPs); training; infrastructure; financial support; Qualitative studies to complement indicator-based data			
	Fish fairs			130	85	118	90.8				

Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
	2.1.2 Persons trained in income-generating activities or business management							Progress reports from contractors on market infrastructure works; Progress reports from services providers providing training, technical advice, business development services, and associations' support; Project monitoring registers on institutions (including contractors, associations, CCPs); training; infrastructure; financial support; Qualitative studies to complement indicator-based data			
	Females			950	47	436	45.9				
	Males			1 800	421	615	34.2				
	Persons trained in IGAs or BM (total)					1 051					

Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
	Traders/processors trained in handling, conservation, marketing (RIMS 2.1.2 People trained in post-production, processing and marketing)							Progress reports from contractors on market infrastructure works; Progress reports from services providers providing training, technical advice, business development services, and associations' support; Project monitoring registers on institutions (including contractors, associations, CCPs); training; infrastructure; financial support; Qualitative studies to complement indicator-based data			
	Males			2 600							
	Females			1 400							

Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
	New/existing inputs/trader associations supported							Progress reports from contractors on market infrastructure works; Progress reports from services providers providing training, technical advice, business development services, and associations' support; Project monitoring registers on institutions (including contractors, associations, CCPs); training; infrastructure; financial support; Qualitative studies to complement indicator-based data			
	associations supported			50	0	52	104				

Results Hierarchy	Indicators							Means of Verification		Assumptions	
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency		Responsibility
Output 3. (C1) Market-related infrastructure and investment to ensure good quality fish handling and marketing under hygienic conditions	Ice plants and freezing/cold storage facilities established							Progress reports from contractors on market infrastructure works; Progress reports from services providers providing training, technical advice, business development services, and associations' support; Project monitoring registers on institutions (including contractors, associations, CCPs); training; infrastructure; financial support; Qualitative studies to complement indicator-based data			Demand for higher quality fresh and frozen fish is sufficient and growing; Key suppliers and services providers in the value chain are able to operate profitably. Regulation/monitoring by fisheries institutions prevent over-exploitation of fish; R: Insufficient ice utilization due to poor availability or for financial reasons; R: Unsustainable catch levels due to over-dimensioning of growth poles and lack of data on resource potential; R: Restrictions that disrupt access to fish grounds and artisanal fishing operations.
	Ice plants and freezing/cold storage facilities			10	17	21	210				



Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
	Entrepreneurs with home freezers for ice production							Progress reports from contractors on market infrastructure works; Progress reports from services providers providing training, technical advice, business development services, and associations' support; Project monitoring registers on institutions (including contractors, associations, CCPs); training; infrastructure; financial support; Qualitative studies to complement indicator-based data			
	Males			160							
	Females			80	191	362	452.5				

Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
	Point of fist sale markets established							Progress reports from contractors on market infrastructure works; Progress reports from services providers providing training, technical advice, business development services, and associations' support; Project monitoring registers on institutions (including contractors, associations, CCPs); training; infrastructure; financial support; Qualitative studies to complement indicator-based data			
	Point of fist sale markets established			11	3	15	136.4				

Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
	2.1.2 Persons trained in income-generating activities or business management							Progress reports from contractors on market infrastructure works; Progress reports from services providers providing training, technical advice, business development services, and associations' support; Project monitoring registers on institutions (including contractors, associations, CCPs); training; infrastructure; financial support; Qualitative studies to complement indicator-based data			
	Females			330		237	71.8				
	Males			670		429	64				
	Persons trained in IGAs or BM (total)					666					

Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
	Small-scale processing units established							Progress reports from contractors on market infrastructure works; Progress reports from services providers providing training, technical advice, business development services, and associations' support; Project monitoring registers on institutions (including contractors, associations, CCPs); training; infrastructure; financial support; Qualitative studies to complement indicator-based data			
	Small-scale processing units established			14							

Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
	Motorized transporters for fish/inputs established by type							Progress reports from contractors on market infrastructure works; Progress reports from services providers providing training, technical advice, business development services, and associations' support; Project monitoring registers on institutions (including contractors, associations, CCPs); training; infrastructure; financial support; Qualitative studies to complement indicator-based data			
	Males			122							
	Females			60							

Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
	Urban retail shops established							Progress reports from contractors on market infrastructure works; Progress reports from services providers providing training, technical advice, business development services, and associations' support; Project monitoring registers on institutions (including contractors, associations, CCPs); training; infrastructure; financial support; Qualitative studies to complement indicator-based data			
	Males			13							
	Females			13							

Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
	Urban fish market facilities upgraded							Progress reports from contractors on market infrastructure works; Progress reports from services providers providing training, technical advice, business development services, and associations' support; Project monitoring registers on institutions (including contractors, associations, CCPs); training; infrastructure; financial support; Qualitative studies to complement indicator-based data			
	Urban fish market facilities upgraded			6							
	2.1.6 Market, processing or storage facilities constructed or rehabilitated							RIMS			
	Total number of facilities					60					
	Market facilities constructed/rehabilitated			28		31	110.7				
	Processing facilities constructed/rehabilitated			264		29	11				

Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
Output 3. (C2) Market-related infrastructure and investment to ensure good quality fish handling and marketing under hygienic conditions	Electricity lines extended within growth poles							Progress reports from contractors on road works and social clauses; EDM records on electricity connections; ANE monitoring reports on contractor and road maintenance performance; Project monitoring registers on institutions (including contractors); training; infrastructure; Qualitative studies;			improved roads lead to the required increase in transport availability and reduction in transport costs; No undue shocks in electricity prices; R: Districts do not give priority to maintaining unclassified roads during ProPESCA and after it ends.
	Electricity lines extended within growth poles			160	74	98	61.3				
	Electricity connections made							Progress reports from contractors on road works and social clauses; EDM records on electricity connections; ANE monitoring reports on contractor and road maintenance performance; Project monitoring registers on institutions (including contractors); training; infrastructure; Qualitative studies;			
	Electricity connections made				1 932	2 845					



Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
	Alternative power sources established by type							Progress reports from contractors on road works and social clauses; EDM records on electricity connections; ANE monitoring reports on contractor and road maintenance performance; Project monitoring registers on institutions (including contractors); training; infrastructure; Qualitative studies;			
	Power sources			7	3	8	114.3				
<b>Output</b> 4. Improved access between fishing centres, markets and the national roads network	Local contractors trained (RIMS 1.2.1)							Progress reports from contractors on road works and social clauses; EDM records on electricity connections; ANE monitoring reports on contractor and road maintenance performance; Project monitoring registers on institutions (including contractors); training; infrastructure; Qualitative studies;			improved roads lead to the required increase in transport availability and reduction in transport costs; No undue shocks in electricity prices; R: Districts do not give priority to maintaining unclassified roads during ProPESCA and after it ends.
	Local contractors			50							

Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
	People benefitting from labour-based road works employment							Progress reports from contractors on road works and social clauses; EDM records on electricity connections; ANE monitoring reports on contractor and road maintenance performance; Project monitoring registers on institutions (including contractors); training; infrastructure; Qualitative studies;			
	Males			6 000	0	725	12.1				
	Females			2 000	57	155	7.8				
	District staff trained in road maintenance aspects							Progress reports from contractors on road works and social clauses; EDM records on electricity connections; ANE monitoring reports on contractor and road maintenance performance; Project monitoring registers on institutions (including contractors); training; infrastructure; Qualitative studies;			
	People			34	6	38	111.8				

Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
	Roads maintained to all season access (RIMS 2.1.5)							Progress reports from contractors on road works and social clauses; EDM records on electricity connections; ANE monitoring reports on contractor and road maintenance performance; Project monitoring registers on institutions (including contractors); training; infrastructure; Qualitative studies;			
	Length of roads			500	0	300	60				
	2.1.5 Roads constructed, rehabilitated or upgraded							Progress reports from contractors on road works and social clauses; EDM records on electricity connections; ANE monitoring reports on contractor and road maintenance performance; Project monitoring registers on institutions (including contractors); training; infrastructure; Qualitative studies;			
	Length of roads			500	322	196	39.2				

Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
<b>Output</b> 5. Community-based financial institutions with increased capacity for savings mobilization and lending	Staff of PCR promoters trained							Progress reports from CBFi promoters; Progress reports from financial institutions supported; Project monitoring registers on institutions (including promoters, member-based financial institutions, formal financial institutions, promoters); training; financial support; Qualitative studies			Conducive regulatory framework for financial sector operations; Improved availability of financial resources and services stimulates the target group to respond to opportunities in the emerging value chain;
	Males			50							
	Females			50							
	Member-based financial institutions supported by type							Progress reports from CBFi promoters; Progress reports from financial institutions supported; Project monitoring registers on institutions (including promoters, member-based financial institutions, formal financial institutions, promoters); training; financial support; Qualitative studies			
	Financial institutions			1 600							

Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
	1.1.5 Persons in rural areas accessing financial services							Progress reports from CBFI promoters; Progress reports from financial institutions supported; Project monitoring registers on institutions (including promoters, member-based financial institutions, formal financial institutions, promoters); training; financial support; Qualitative studies			
	Total number of accesses to financial services					45 033					
	Women in rural areas accessing financial services - savings			16 000		16 718	104.5				
	Men in rural areas accessing financial services - savings			16 000		12 962	81				
	Men in rural areas accessing financial services - credit			8 000		6 789	84.9				
	Women in rural areas accessing financial services - credit			8 000		8 564	107.1				
	Total persons accessing financial services - savings					29 680					
	Total persons accessing financial services - credit					15 353					

Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
	Value of savings							Progress reports from CBFi promoters; Progress reports from financial institutions supported; Project monitoring registers on institutions (including promoters, member-based financial institutions, formal financial institutions, promoters); training; financial support; Qualitative studies			
	Savings			1 300 000							
	Value of loans							Progress reports from CBFi promoters; Progress reports from financial institutions supported; Project monitoring registers on institutions (including promoters, member-based financial institutions, formal financial institutions, promoters); training; financial support; Qualitative studies			
	Loans			2 600 000							

Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
	Members of new solidarity groups joining RFAs supported under the project							Progress reports from CBF1 promoters; Progress reports from financial institutions supported; Project monitoring registers on institutions (including promoters, member-based financial institutions, formal financial institutions, promoters); training; financial support; Qualitative studies			
	Males			2 000							
	Females			1 000							
	People trained in functional adult literacy							Progress reports from CBF1 promoters; Progress reports from financial institutions supported; Project monitoring registers on institutions (including promoters, member-based financial institutions, formal financial institutions, promoters); training; financial support; Qualitative studies			
	Males			1 700							
	Females			2 700							

Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
	People trained in business planning and development							Progress reports from CBFi promoters; Progress reports from financial institutions supported; Project monitoring registers on institutions (including promoters, member-based financial institutions, formal financial institutions, promoters); training; financial support; Qualitative studies			
	Males			8 000							
	Females			8 000							
	Women entrepreneurs accessing pilot investment support fund							Progress reports from CBFi promoters; Progress reports from financial institutions supported; Project monitoring registers on institutions (including promoters, member-based financial institutions, formal financial institutions, promoters); training; financial support; Qualitative studies			
	Females			1 000							



Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
	Value of pilot investment support grants							Progress reports from CBFi promoters; Progress reports from financial institutions supported; Project monitoring registers on institutions (including promoters, member-based financial institutions, formal financial institutions, promoters); training; financial support; Qualitative studies			
	Grants value			250							
	Formal CBFS providers supported							Progress reports from CBFi promoters; Progress reports from financial institutions supported; Project monitoring registers on institutions (including promoters, member-based financial institutions, formal financial institutions, promoters); training; financial support; Qualitative studies			
	CBFS			11							

Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
	Value of matching grants to formal CBFS providers							Progress reports from CBFI promoters; Progress reports from financial institutions supported; Project monitoring registers on institutions (including promoters, member-based financial institutions, formal financial institutions, promoters); training; financial support; Qualitative studies			
	Value of matching grants			750							
	2.1.1 Rural enterprises accessing business development services							Progress reports from CBFI promoters; Progress reports from financial institutions supported; Project monitoring registers on institutions (including promoters, member-based financial institutions, formal financial institutions, promoters); training; financial support; Qualitative studies			
	Rural enterprises			1 600		2 400	150				
	Males			18 000		15 512	86.2				
	Females			18 000		16 718	92.9				
	Women in leadership position			0		1 877	Inf				

Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
<b>Output</b> 6. Private financial institutions actively involved in financing fisheries-related investments	Enterprises accessing matching grants / RMF loans							Progress reports from CBFi promoters; Progress reports from financial institutions supported; Project monitoring registers on institutions (including promoters, member-based financial institutions, formal financial institutions, promoters); training; financial support; Qualitative studies			Conducive regulatory framework for financial sector operations; Improved availability of financial resources and services stimulates the target group to respond to opportunities in the emerging value chain;
	Enterprises			220	0	7	3.2				
	Value of matching grants / RMF loans disbursed							Progress reports from CBFi promoters; Progress reports from financial institutions supported; Project monitoring registers on institutions (including promoters, member-based financial institutions, formal financial institutions, promoters); training; financial support; Qualitative studies			
	Value of matching grants / RMF loans disbursed			3 500		100	2.9				

Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
	New outlets of formal financial institutions by type (RIMS 1.3.4 Financial institutions participating in project)							Progress reports from CBFi promoters; Progress reports from financial institutions supported; Project monitoring registers on institutions (including promoters, member-based financial institutions, formal financial institutions, promoters); training; financial support; Qualitative studies			
	outlets			15	0	7	46.7				
	Value of matching grants to formal financial institutions							Progress reports from CBFi promoters; Progress reports from financial institutions supported; Project monitoring registers on institutions (including promoters, member-based financial institutions, formal financial institutions, promoters); training; financial support; Qualitative studies			
	Grants value			800							

Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
	Staff of formal financial institutions trained (RIMS)							Progress reports from CBFi promoters; Progress reports from financial institutions supported; Project monitoring registers on institutions (including promoters, member-based financial institutions, formal financial institutions, promoters); training; financial support; Qualitative studies			
	Males			36							
	Females			24							
	PCR members joining RFAs and SACCOs							Progress reports from CBFi promoters; Progress reports from financial institutions supported; Project monitoring registers on institutions (including promoters, member-based financial institutions, formal financial institutions, promoters); training; financial support; Qualitative studies			
	Males			2 000							
	Females			1 000							

Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
	(ex)PCR members accessing enterprise development loans from formal financial institutions							Progress reports from CBFI promoters; Progress reports from financial institutions supported; Project monitoring registers on institutions (including promoters, member-based financial institutions, formal financial institutions, promoters); training; financial support; Qualitative studies			
	Males			1 050							
	Females			450							
<b>Output</b> 7. Increased institutional capacity to support resource management, production and marketing of higher value fish	New growth pole extensionists recruited, trained and equipped							Progress reports from IDPPE delegates; Progress reports from contracted technical assistance; Project monitoring registers on institutions (government); training; financial support; Quantitative survey reports; Qualitative study reports			R: Lack of local regulation and resource management due to delays in setting up the district fisheries administration. R: Policy/regulatory development emphasises conservation interests without adequately considering artisanal fisheries.
	growth pole extensionists			52	47	47	90.4				

Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
	District with fisheries administration established							Progress reports from IDPPE delegates; Progress reports from contracted technical assistance; Project monitoring registers on institutions (government); training; financial support; Quantitative survey reports; Qualitative study reports			
	Districts			23							
	Growth poles with resource potential assessment reports							Progress reports from IDPPE delegates; Progress reports from contracted technical assistance; Project monitoring registers on institutions (government); training; financial support; Quantitative survey reports; Qualitative study reports			
	Growth poles			26	0	21	80.8				

Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
	Provincial and districts staff trained by gender and type							Progress reports from IDPPE delegates; Progress reports from contracted technical assistance; Project monitoring registers on institutions (government); training; financial support; Quantitative survey reports; Qualitative study reports			
	Males				333	333					
	Females				135	135					
	Government officials and staff trained (RIMS)							Progress reports from IDPPE delegates; Progress reports from contracted technical assistance; Project monitoring registers on institutions (government); training; financial support; Quantitative survey reports; Qualitative study reports			
	Males			84	50	393	467.9				
	Females			23	45	242	1 052.2				
	Total People			107	95	635	593.5				



Results Hierarchy	Indicators							Means of Verification		Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility
<b>Output</b> 8. Improved policy/legislative framework supportive of artisanal fisheries	Conducive and sustainable management policies, regulations and legislation introduced							Progress reports from IDPPE delegates; Progress reports from contracted technical assistance; Project monitoring registers on institutions (government); training; financial support; Quantitative survey reports; Qualitative study reports		
	Policies, regulations and legislation introduced									
<b>Output</b> 9. Effective project management systems	Policy 1 Policy-relevant knowledge products completed							Progress reports from IDPPE delegates; Progress reports from contracted technical assistance; Project monitoring registers on institutions (government); training; financial support; Quantitative survey reports; Qualitative study reports		
	Number				30	0				

Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
	AWPBs, progress and audit reports submitted on time							Progress reports from IDPPE delegates; Progress reports from contracted technical assistance; Project monitoring registers on institutions (government); training; financial support; Quantitative survey reports; Qualitative study reports			
	AWPBs, progress and audit reports submitted on time			21	2	5	23.8				
	Disbursement rates as proportion of AR targets							Progress reports from IDPPE delegates; Progress reports from contracted technical assistance; Project monitoring registers on institutions (government); training; financial support; Quantitative survey reports; Qualitative study reports			
	Disbursement rates			100		79	79				

Results Hierarchy	Indicators							Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result (2019)	Cumulative Result (2019)	Cumulative Result % (2019)	Source	Frequency	Responsibility	
	Planning and review workshops/seminars conducted							Progress reports from IDPPE delegates; Progress reports from contracted technical assistance; Project monitoring registers on institutions (government); training; financial support; Quantitative survey reports; Qualitative study reports			
	Workshops/seminars			140	25	30	21.4				
	Knowledge management and advocacy products created							Progress reports from IDPPE delegates; Progress reports from contracted technical assistance; Project monitoring registers on institutions (government); training; financial support; Quantitative survey reports; Qualitative study reports			
	Products										

## **Mozambique**

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### **Artisanal Fisheries Promotion Project**

### **Project Completion Report**

### **Appendix 2: Summary of amendments to the financing agreement**

Document Date: 07/08/2020  
Project No. 1100001517  
Report No. 5478-MZ  
Loan ID 2000000351

East and Southern Africa Division  
Programme Management Department

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## **Summary of Amendments to Financing Agreement**

During the implementation of ProPESCA, changes were made to the financing contract, such as

- Introduction of the nutrition component;
- Introduction of aquaculture; and
- Extension of the project implementation period for a further 12 months.

These changes to the project funding contract had no effect on ProPESCA's total budget.

## **Mozambique**

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### **Artisanal Fisheries Promotion Project**

### **Project Completion Report**

### **Appendix 3: Actual project costs**

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## Current Project Costs

The current project costs are **54,386,464 USD** corresponding to the available and disbursed funds, as shown in the table below. Under these conditions, the funds have been executed as planned, component by component.

**Table 25: Final Funding of PropESCA, by Components**

Componente	In thousand USD			
	Total Alocated (Adjusted)	Total Executed (Cumulative)	% Execution	Balance
1. Support for the Development of fisheries products with higher commercial value	14 865 688	14 956 885	101	(91 197)
2. Improvement of economic infrastructure	21 783 707	17 076 602	78	4 707 105
3. Development of financial services	4 995 243	4 260 640	85	734 604
4. Institutional strengthening, policy initiatives and project management	10 548 661	12 972 849	123	(2 424 188)
5. Promotion of nutrition	2 193 165	2 240 240	102	(47 076)
<b>Total</b>	<b>54 386 464</b>	<b>51 507 216</b>	<b>95</b>	<b>2 879 248</b>

The project funds have suffered devaluations and exchange rate problems of the source currencies (SDR and EUR, IFAD and EU funds) with substantial losses of more than 3,411,000.00 USD over seven years of project implementation. This led to a budget review from 57,798,000 USD to 54,386,464 USD as shown in table 25.

## **Mozambique**

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### **Artisanal Fisheries Promotion Project**

### **Project Completion Report**

### **Appendix 4: Project internal rate of return (detailed analysis)**

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## **Mozambique**

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### **Artisanal Fisheries Promotion Project**

### **Project Completion Report**

### **Appendix 5: Environmental social and climate impact assessment (detailed analysis)**

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## Appendix: Environment and Natural Resources Management and Climate Change

### a) Environmental and Social Impact Analysis Summary

ProPESCA was categorized B in terms of environment and social risk considerations. The project was designed prior to the integration of climate risk analyses in IFAD and thus was not classified in terms of climate change risk. However, based on the project objective and activities as well as the intervention sites that are climatologically heterogeneous albeit coastal, the climate risk classification could be considered moderate.

ProPESCA activities target the management of natural resources and positive impact was anticipated from the project through encouraging artisanal fishermen to shift away from overexploited inland waters to underutilized open sea areas. In addition, capacity development in fish conservation, co-management and research for fishing potential also contributed to improved resource management.

Climate related events, particularly cyclones (Dineo (2017), Idai and Kenneth (2019)), impacted ProPESCA investments particularly the infrastructure related ones and equipment procured during implementation. The impacts of Idai have been articulated in section H.2. Future investments along the coastal areas should take into account the climate change related risks, based on future projections that show increased frequency and intensity of extreme events and include adequate adaptation measures in the siting, design and construction of infrastructure to ensure robustness and specific considerations for the type and housing of equipment.

As a category B project an Environment and Social Management Plan (ESMP) should have been developed to guide the overall risk management during implementation. Specific activities that should have been covered through the ESMP would be the road rehabilitation, pond construction and electrification works, market related infrastructure development as well as fish handling and processing. Despite the lack of the ESMP the site specific nature of potential adverse impacts resulted in localized risk management measures outlined in the table below. Overall the project implementation did not result in significant adverse impacts on the environment and natural resources being managed.

**Table: Environmental impact analysis for ProPESCA**

Activities Affecting Environmental Resource Values of the Project	Environmental Impact (Negative, positive, minimal, significant etc.)	Mitigation measures under ProPesca	Comments
Operation of ice plants	Minimal negative impact due to small size of the structures and available sources of water	Capacity building provided to operators  Informed siting of plants	
Fish conservation and processing	Minimal negative impact related to fish waste and site management	Capacity building provided to processors	

Activities Affecting Environmental Resource Values of the Project	Environmental Impact (Negative, positive, minimal, significant etc.)	Mitigation measures under ProPesca	Comments
Electrification and alternative power supply installation	Disturbance of soils Removal of vegetation	Site management plans included with the works	Community maintenance capacity for the alternative power supply installations needs to be ensured for sustainability
Market, processing or storage facilities constructed or rehabilitated	Disturbance of soils Removal of vegetation Impact on habitats Land use change	Site management during works Restoration of sites following works Capacity building for the maintenance and operation of the facilities	Site operations and management plans will need to be monitored
Rehabilitation of roads	Disturbance of soils Removal of vegetation Impact on habitats	Site maintenance during works Restoration of sites following works Disposal of waste in appropriate areas	
Resource use and management	Positive impact	Capacity building for artisanal fishermen in fish handling including hygiene as well as provision of gear Research on fishing potential	
Boat building and operation	Minimal negative impact linked to sites and potential fuel spillages	Capacity building in boat construction and operation	
Demonstration Farms	Disturbance of soils Land use change	Capacity building in vegetable farming including farm management	
Fish pond construction	Disturbance of soils Removal of vegetation	Site management during works Restoration of sites following works	



Activities Affecting Environmental Resource Values of the Project	Environmental Impact (Negative, positive, minimal, significant etc.)	Mitigation measures under ProPesca	Comments
Installation of fish cages	Limited to specific sites	Informed site selection  Capacity building for beneficiaries	
Impact on existing watercourses	Positive	Capacity building for artisanal fishermen  Encouraging shift from inland resources to underutilised open sea areas	

## **Mozambique**

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### **Artisanal Fisheries Promotion Project**

### **Project Completion Report**

### **Appendix 6: Dates of supervision mission and follow-up missions**

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<b>Mission</b>	<b>Dates</b>
<b>Impl. Sup/Follow Up Mission 1</b>	17 October 2011 - 17 October 2011
<b>Supervision Mission 1</b>	12 February 2012 - 17 February 2012
<b>Impl. Sup/Follow Up Mission 2</b>	11 May 2012 - 15 June 2012
<b>Supervision Mission 2</b>	03 September 2012 - 14 September 2012
<b>Impl. Sup/Follow Up Mission 3</b>	14 February 2013 - 20 February 2013
<b>Supervision Mission 3</b>	08 September 2013 - 20 September 2013
<b>Impl. Sup/Follow Up Mission 4</b>	24 March 2014 - 01 April 2014
<b>Supervision Mission 4</b>	17 November 2014 - 28 November 2014
<b>Mid-Term Review 1</b>	22 June 2015 - 03 July 2015
<b>Impl. Sup/Follow Up Mission 5</b>	18 April 2016 - 22 April 2016
<b>Supervision Mission 5</b>	24 October 2016 - 04 November 2016
<b>Supervision Mission 6</b>	02 May 2017 - 12 May 2017
<b>Supervision Mission 7</b>	16 April 2018 - 27 April 2018
<b>Impl. Sup/Follow Up Mission 6</b>	01 October 2018 - 06 October 2018
<b>Supervision Mission 8</b>	18 February 2019 - 01 March 2019

## **Mozambique**

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### **Artisanal Fisheries Promotion Project**

### **Project Completion Report**

### **Appendix 7: Terms of Reference of the completions review mission**

Document Date: 07/08/2020  
Project No. 1100001517  
Report No. 5478-MZ  
Loan ID 2000000351

East and Southern Africa Division  
Programme Management Department

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## Report Terms of Reference



**MINISTRY OF THE SEA, INLAND WATERS AND FISHERIES  
NATIONAL INSTITUTE FOR DEVELOPMENT OF FISHERIES AND  
AQUACULTURE (IDEPA)  
PROJETO DE PROMOÇÃO DA PESCA ARTESANAL (ProPESCA)**

**TECHNICAL ASSISTANCE FOR THE PREPARATION OF THE FINAL PROJECT  
REPORT  
(individual consultant)**

**TERMS OF REFERENCE**

### **I. INTRODUCTION**

The Project to Promote Artisanal Fisheries (ProPESCA) is being implemented in accordance with the International Fund for Agricultural Development loan agreement (IFAD No L-I-822-MZ of 24 March 2011), the OPEC Fund for International Development loan agreement (OFID No 1408P) and the European Union donation agreement (No C-ECM-822-MZ)<sup>1</sup>. The project is under the responsibility of the Ministry of the Sea, Inland Waters and Fisheries (MIMAIP), with the National Institute for Development of Fisheries and Aquaculture (IDEPA) as the coordinating agency.

The project is being implemented along the entire maritime coastal zone of Mozambique, but its investments are concentrated on 30 growth poles<sup>2</sup>, places where there is potential for expansion and diversification of artisanal fisheries. The list of growth poles can be seen in Annex 1.

The development objective of ProPESCA is to improve the incomes and living conditions of families whose livelihood depends mainly on artisanal fishing. This objective will be achieved through (a) increasing the volume of fish of higher commercial value on a sustainable basis; and (b) increasing the income obtained in marketing the fish.

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<sup>1</sup> O financiamento da União Europeia, no quadro da Iniciativa dos Objectivos de Desenvolvimento do Milénio (MDG-1c), foi assegurado após início do projeto. Com este financiamento adicional quatro pólos de crescimento e uma componente de Promoção da Nutrição foram acrescentados ao projeto.

<sup>2</sup> Entenda-se por pólo de crescimento uma região litorânea que abrange vários centros de pesca e aldeias associadas com uma atividade pesqueira expressiva, fluxos comerciais de pescado regulares entre si e, eventualmente, com mercados mais distantes. O centro do pólo está normalmente dotado de um conjunto de infraestruturas e serviços que facilitam a realização de negócios com produtos pesqueiros de valor comercial mais alto.

The project, which involves an investment of approximately USD 58 million<sup>3</sup>, comprises five investment components: (a) Support for the Development of Fish of Higher Commercial Value<sup>4</sup>; (b) Improving Economic Infrastructure; (c) Developing Financial Services; (d) Institutional Strengthening, Policy Initiatives and Project Management; and (e) Promoting Nutrition. Further details on each component are provided in the following paragraphs.

The year 2018 represented the seventh year of implementation of ProPESCA. The project was expected to be implemented over 7 years, from April 2011 to March 2018. However, in order to allow for the completion of ongoing actions and the appropriate closure of the intervention, IFAD approved the extension of the project duration for a further 12 months until 31 March 2019.

In addition, the end of PROPESCA marks a critical stage in the more than 20 years of IFAD and EU support to the Artisanal Fisheries sector in Mozambique, which started in 1994 with the PPANNCD project (2 provinces - 1994); PPABAS (3 provinces - 2002); EU-PROPAPA (2009); ProPESCA (7 provinces - 2012). Long term institutional support to the sector has brought positive results and innovations from these previous projects help to better understand the current stage of the sector. ProPESCA was designed on the basis of previous experiences and lessons that are important to highlight after long years of investment in the artisanal fisheries sector, as well as drawing lessons and recommendations for future projects in the artisanal fisheries area.

Mozambique was devastated in March 2019 by the devastating cyclone IDAI and affected to a large extent the artisanal fisheries sector and the entire value chain particularly in the provinces of Sofala, parts of Inhambane and Zambézia. The effects of this disaster will to some extent impact on the results and objectives of the project and it is important to document and clarify how this disaster will influence the artisanal fisheries sector.

Therefore, a detailed report highlighting the results (outputs, effects and impacts) of ProPESCA should be prepared, with a specific section highlighting the contribution of previous projects. The intention is to contract technical assistance services to assist in the preparation of the project completion report. These terms of reference outline the intended work.

## **II. CONSULTANCY OBJECTIVES**

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<sup>3</sup> Incluindo contingências físicas e de preço.

<sup>4</sup> Entende-se por qualquer operação na cadeia de valor com potencial de expansão para obtenção de rendimentos acrescidos pela quantidade ou pela qualidade do pescado. Por exemplo pela captura de espécies de pescado com valor comercial intrinsecamente mais alto (ex.: pesca à linha), pelo desembarque de grandes quantidades de pescado (ex.: pesca do cerco), pela melhoria da qualidade (ex.: conservação do peixe pelo gelo), pelo valor acrescentado através de novos métodos de processamento (ex.: bolinhos de peixe) ou pela diversificação da produção (ex.: aproveitamento de escamas para artesanato).



The objective of the consultancy is to assist the Project Coordination Unit (PCU) of ProPESCA in the elaboration of the Completion Report. The consultancy work should involve the entities that participated in the implementation of the project at various levels, including the beneficiaries of the intervention. The consultancy should culminate in the elaboration of a document on the project that identifies the added value brought by the project during its implementation, taking into account the objectives and goals.

The Project Completion Report should focus on the implementation processes, the coordination aspects of the project and the articulation with the implementation partners at central and local level (provincial, district and communities). The report should also provide information on the results and impacts recorded as a result of the implementation of the project, its positive aspects, the difficulties faced, the lessons learned, proposals to capitalise on and enhance the lessons learned and also present guidelines for future interventions.

In these terms, the tasks of the consultant are the following:

- a) To evaluate the progress made during the implementation of the project taking into account the objectives, results and goals previously defined;
- b) To evaluate the performance of the project, particularly focusing on: Relevance, Effectiveness, Efficiency, Impact, Sustainability, Rural Poverty Impact, Gender, Innovation, Ampliation and others (for further details see Annex 1 - Main performance criteria);
- c) Record the lessons and experiences from the implementation of activities in each component of the project and their replication for the subsequent period;
- d) To analyse the relevance of the scope of interventions and to envisage subsequent lines of action following the results, impacts, lessons learned from project implementation and perspectives for future interventions;
- e) Carry out an economic analysis of the project to assess the return on the project investment;
- f) To undertake a retrospective and evaluation of more than 20 years of IFAD and EU support to the artisanal fisheries sector, with a focus on recommendations for future projects;
- g) To document the effects of Cyclone IDAI and how this impacts on ProPESCA's development objectives;
- h) Produce the final evaluation report of ProPESCA, using the IFAD model;
- i) Produce the evaluation report of ProPESCA in two languages, namely Portuguese and English.

The main topics that should be addressed in the report are:

- a) Internal evaluation. This is the first step in the evaluation process. For this phase of work, a consolidated implementation report will be made available by the PCU. In this phase, documentary information and interviews on the implementation stage of the project activities will be collected. Primary sources of consultation are the

project document, financing agreements, progress reports, memoirs of project supervision missions, documents from the review of the IFAD country supported project portfolio and any other relevant documents. Aspects of internal project management and coordination, coordination mechanisms with central and provincial implementing partners should also be analysed;

- b) Auscultation of the institutions and elaboration of the detailed report. At this phase, consultations and interviews with the institutions involved in the implementation of the project activities, including the representatives of the beneficiary communities, should be carried out in order to carry out a detailed and critical analysis on the implementation of the specific activities and the results achieved in order to document the constraints that prevented better results from being obtained, draw the necessary conclusions and identify solutions for future interventions.

This consulting work is expected to provide an illustrative document on ProPESCA's interventions and results. The study should culminate in a descriptive, analytical and comparative document on the results obtained from project implementation and guidelines for subsequent interventions.

### **III. MAIN TASKS OF THE CONSULTANT**

The consultant's main tasks are listed below:

- a) The presentation of a detailed working methodology for the work of the project completion report;
- b) Assisting the PCU in the preparation and conduct of one or more workshops involving the 'stakeholders' with a view to systematizing the project results;
- c) To prepare a final report with the results of the evaluation whose analysis should, among others, address aspects on the relevance, effectiveness and efficiency of the project, coordination and implementation arrangements, progress, results, impacts, lessons learned, perspectives for future interventions and priorities;
- d) Present guidelines to be taken into consideration in the implementation of future interventions to promote the value chain of artisanal fisheries and small-scale aquaculture.

In carrying out these tasks the consultant should work closely with the ProPESCA Coordination Unit (PCU). Other IDEPA technicians (including specialists contracted under the project and IDEPA heads and technicians) will be involved in the process according to specific needs.

The preparation of the Project Completion Report should be in line with IFAD guidelines for this purpose.

### **IV. DURATION OF CONSULTANCY**

The consultancy will have a total duration of 45 working days, being 5 days for the preparation of the work, 5 for the internal review of the available information; 5 days

for the consultation of the implementing partners; 25 days for the sorting, cross-checking and analysis of data and preparation of the project completion report (draft). The remaining 5 days are for the finalization of the report after the observations of IDEPA and its partners have been issued.

## **V. BASIC LOCATION FOR THE CONSULTANCY**

The base place for this consultancy will be the offices of the National Institute for Development of Fisheries and Aquaculture (IDEPA) in Maputo. The consultant, in coordination with the PCU, will establish a detailed calendar showing the different stages of the work. The calendar will also indicate the times when the involvement of IDEPA's technicians will be necessary, as well as the periods when the consultant will be present at the institution.

## **VI. EXPECTED RESULTS AT THE END OF THE CONSULTANCY**

From this consultancy it is expected to obtain a detailed report presenting the final evaluation of ProPESCA and recommendations for future interventions, whose analysis should, among other aspects, address the relevance, effectiveness and efficiency of the project, coordination and implementation arrangements, progress, results, impacts, lessons learned, perspectives for future interventions and priorities. The document is intended to be both descriptive and analytical.

## **VII. CANDIDATE PROFILE**

For this work, it is desirable that the consultant has extensive experience in strategic planning, including the design of tools for data collection, planning and evaluation of development projects in rural areas, particularly in the fisheries sector. The work in question also requires a mastery of the use of IT resources, especially at the level of information processing and analysis production and in the preparation of descriptive and analytical reports. The consultant must have a university degree in development studies (social sciences, statistics, economics, sociology, etc.) or related areas, focusing on socio-economic development and strategic planning. Work experience in the artisanal fisheries sub-sector will be considered an asset.

## **VIII. SELECTION METHOD**

The consultant will be selected on the basis of an objective review of his Curriculum Vitae in accordance with national bidding procedures.

Report language - English and Portuguese

IX. Supporting Documents:

IFAD PCR Guidelines/Template

## **Mozambique**

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### **Artisanal Fisheries Promotion Project**

### **Project Completion Report**

### **Appendix 8: List of person met and mission's programme**

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Programme Management Department

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### List of Contacted Entities

Nº	Name	Institution
1	Luis Silva	IDEPA
2	João Gomes	IDEPA
3	Acácio Alexandre	IDEPA
4	Carlos Macaneta	IDE;PA
5	Gilahumo António	FFP
5	Angelina Bombe	MIREME
6	Baptista Melo	FE
7	Edson Claêncio Uamusse	FUNAE

## **Mozambique**

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### **Artisanal Fisheries Promotion Project**

### **Project Completion Report**

### **Appendix 9: Final wrap-up/stakeholder workshop findings**

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## **Mozambique**

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### **Artisanal Fisheries Promotion Project**

### **Project Completion Report**

### **Annex: Appendix Rims Data**

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## RIMS Data

### Main Performance Indicators - ProPESCA Supervisory Missions - 18 February to 1 March 2019

MAIN PERFORMANCE INDICATORS							
Outcome 1: Diversified and commercially viable fishing units with appropriate boats, equipment and techniques for catching fish of higher commercial value							
DESIGNATION	INDICATOR	TARGET	ACHEAVED	% ACHEAVED	SCORE	QUALIFICATION	
1.1. trained naval carpenters	Person	95	233	245%	5	HS	
1.2 Trained boat drivers and employers	Person	120	348	290%	.		
1.3 Trained naval mechanics	Person	210	195	93%			
1.4 Fishermen involved in demonstrations of the use of ice on board	Person (H)	160	756	473%			
	Person (M)	140	128	91%	?		
1.5 Trained fishermen in open-sea fishing techniques and gear	Person (H)	295	792	268%			
	Person (M)	20	44	220%		0	
1.6. Fishermen assisted in business management matters	Person (H)	500	798	160%	5		
	Person (M)	15	0	0%	5	0	
1.7 Assisted fishermen's associations	Group	100	48	48%	2		
Outcome 2: Improved techniques and organization for post-capture use and fish quality maintenance							
DESIGNATION	INDICATOR	TARGET	ACHEAVED	% ACHEAVED	SCORE	QUALIFICATION	
2.1. processors/traders trained in handling, preserving and marketing fresh/frozen fish	Person (M)	2600	3220			HS	
	Person (F)	1400	1443	117%	5	HS	
2.2. Processors/traders trained in conservation and marketing of traditionally processed fish	Person (M)						
	Person (F)						
2.3 Fishery fairs and fishing inputs held	Number	130	118	90.77%	4	MS	
2.4 Assisted business processors/traders	Person (M)	1800	1036				
	Person (F)	950	483	55%	4	MS	
2.5. Assisted processors/traders associations	Group	50	52	104%	5	AS	

### Outcome 3: Support infrastructure for production and marketing to ensure good conservation of fish and their sale under hygienic conditions

DESIGNATION	INDICATOR	TARGET	ACHEAVED	% ACHEAVED	SCORE	QUALIFICATION	
3.1 Ice plants and freezing/preserving chambers installed	Number	10	21	210%	5	AS	
3.2 Entrepreneurs investing in domestic freezers for ice production	Person (M)	160	0	151%	5	AS	
	Person (F)	80	362				
3.3 Established first-sale markets	Number	11	15	136%	4	AS	
3.4 Established market management commissions	Group	13	25	192%	27	0	
3.5 Improved fish retail markets	Number	7	2	28%	6	0	
3.6 Power lines extended to the growth poles	Km	160	98	61.3%		MS	
3.7 Established domestic power connections	Aggregate	NA	2845			AS	
3.8 Established alternative energy sources	Number	7	8	114.3%		AS	

### Output 4: Improved access between fishing centres, markets and the national road network

DESIGNATION	INDICATOR	TARGET	ACHEAVED	% ACHEAVED	SCORE	QUALIFICATION	
4.1 Improved roads to ensure year-round passability	Km	500	518	103.6%	6	AS	
4.2 People benefiting from employment created in road improvement works	Person (M)	6000	725	12.1%	2	I	
	Person (F)	2000	155	7.75%		I	
4.3 District staff trained in road maintenance	Person (M)	34	38	111.8%	6	AS	
	Person (F)						
4.4 Roads with maintenance for access at all seasons of the year	Km	500	300	60%	4	MS	

### Outcome 5: Community-based organizations with increased capacity to mobilize savings and loans

DESIGNATION	INDICATOR	TARGET	ACHEAVED	% ACHEAVED	SCORE	QUALIFICATION	
5.1 New savings and revolving credit groups created	Group	1600	2400	150%	5	AS	
5.2 Existing PCR groups strengthened	Group		2188	136.75%	5	AS	

Result 6: Financial institutions in the commercial sector actively involved in financing fisheries-related investments							
DESIGNATION	INDICATOR	TARGET	ACHEAVED	% ACHEAVED	SCORE	QUALIFICATION	
6.1 Entities accessing the credit line and amounts involved	Number and value	10	7 (83.5 millions MT)	70%	7(31,903,00 Mt)	4 (26,9 milhões MT)	
6.2 Entities accessing the risk mitigation fund and amounts involved	Number and value	250	29	11.60%	1	MI	
6.3 New established formal financial institutions branch	Number	15	7	46,67%	2	I	
6.4 Entities accessing funds to support emerging ventures	Number	35	29 (6,9 mi Mt)	83%	14	26 (6.2 mi MT)	
6.5 Women entrepreneurs accessing special funds	Pessoa	1154	282	24%	100	87 (5.7 mi MT)	
Outcome 7: Increased institutional capacity to support resource management, catch and sale of high commercial value fish							
DESIGNATION	INDICATOR	TARGET	ACHEAVED	% ACHEAVED	SCORE	QUALIFICATION	
7.1 Additional extension workers recruited and established in the growth poles	Person (M)	52	36	69.2%	5	S	
	Person (F)						
7.3 Assessment reports of the fishery resource potential prepared	Number	26	14	46.7%	4	MI	
7.4 Government officials at provincial and district level trained in fisheries administration materials	Person (M)	84	393	593.5%	6	AS	
	Person (F)	23	242				
Outcome 8: Improved policies / appropriate legal framework for artisanal fisheries established							
DESIGNATION	INDICATOR	TARGET	ACHEAVED	% ACHEAVED	SCORE	QUALIFICATION	
8.1. Support to sustainable production and management policy making	Number	NA			NA		
Outcome 9: Effective project management systems in place							
DESIGNATION	INDICATOR	TARGET	ACHEAVED	% ACHEAVED	SCORE	QUALIFICATION	
9.1 Investment plans in the growth poles prepared	Number	30	30	100%	6	AS	

9.2 Study and research reports produced	Number	21	21	100%	6	AS	
9.3 Project expenditure compared to budgets - million USD	USD	57.8	45.9	79%	5	S	
9.4 Workshops / planning and review seminars held	Number	140	30	21.4%	2	I	
<b>Outcome 10: Ability of fishing families to combat malnutrition strengthened</b>							
<b>DESIGNATION</b>	<b>INDICATOR</b>	<b>TARGET</b>	<b>ACHEAVED</b>	<b>% ACHEAVED</b>	<b>SCORE</b>	<b>QUALIFICATION</b>	
10.1 Established demonstration farms	Numero	751	515	69%	ACEITAVEL		
10.2 People trained in opening vegetable farms	Pessoa (H)	12.500			5	S	
	Pessoa (M)		9.996	80%			
10.3 Demonstration of cooking performed	Numero	1.835	2513	137%	6	AS	
10.4 People trained in proper food preparation	Pessoa (H)	12500			6	AS	
	Pessoa (M)		12147	97%			
<b>Outcome 11: Community mobilized to fight malnutrition</b>							
<b>DESIGNATION</b>	<b>INDICATOR</b>	<b>TARGET</b>	<b>ACHEAVED</b>	<b>% ACHEAVED</b>	<b>SCORE</b>	<b>QUALIFICATION</b>	
11.1 Community leaders trained in the need for balanced and healthy eating							
	Person	640	622	97%	6	AS	
11.2 Nutrition programmes broadcast through community radio stations	Number	480	529	110%	6	AS	

## **Mozambique**

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### **Artisanal Fisheries Promotion Project**

### **Project Completion Report**

### **Annex: Appendix Registration Of Women**

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Registration of Women benefited by ProPESCA			
Activity	Participation of women in the Project		
	Target	Acomplished	%
Fishermen trained in good practice of fish handling	140	128	91,43
Fishermen trained in gear and improved fishing	20	44	220,00
Fishermen who gain access to business development services	15	60	400,00
Processors/ Traders trained in handling, preserving and marketing fresh/frozen fish	1 400	1 443	103,07
Traders/processors who gain access to business development services	950	483	50,84
Entrepreneurs with domestic freezers for ice production	80	362	452,50
Market agents trained	330	284	86,06
Motorised transporters for fish/inputs established	60	0	-
Established urban retail shops	13	0	-
People benefiting from labour-based road jobs	2 000	805	40,25
Technicians (Employees) of PCR Promoters trained	50	65	130,00
Number of active savers	16 000	16718	104,49
Number of Borrowers	8 000	8564	107,05
New PCR groups assisted	1 000	655	65,50
People trained in financial education	2 700	6969	258,11
People trained in Business Development and Planning	8 000	6969	87,11
Entrepreneur women accessing pilot investment funds	1 000	492	49,20
Formal CBFS provider members	18 000	16718	92,88
PCR led by Women	2 400	1877	78,21
Formal MFI employees trained	12	0	-
PCR joining the RFA and SACCOs	1 000	0	-
Former PCR members accessing loans for bussiness development from formal IF's	519	115	22,16
Provincial and district government officials trained in fisheries management	23	242	1 052,17
<b>Total</b>	<b>63 712</b>	<b>62993</b>	<b>98,87</b>

## **Mozambique**

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### **Artisanal Fisheries Promotion Project**

### **Project Completion Report**

### **Annex: Appendix Case Studies**

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## CASE STUDIES / INTERVIEWS

### IN CABO DELGADO PROVINCE

#### Financing promotes women's empowerment in Quissanga



The commercialization of fish in the northern part of the country is practiced mainly by men since, for cultural imperatives, women only dedicate themselves to the practice of agricultural activities, collecting seafood in the inter-tidal and domestic zones. For Afussa Chata, a native of the Quissanga District in Cabo Delgado province, it is different.

For a long time, she devoted herself only to housework, and her husband was a fish trader. In 2010, when she saw that the income that came from this business was insufficient to cover all the expenses of the house, she started to help her husband in the purchase and sale of fish and as time passed she became more and more

acquainted with the business. On the occasion of participating in a training session on gender equality promoted by ProPESCA, "I woke up", said Afussa. Afussa realized that despite being a *Muani* woman, she could overcome cultural barriers and have her own business. From that moment on, she started to save money to buy her own fresh fish, to process and sell locally. The opportunities did not stop there, and in 2015 she participated in training on good practices fish handling and business management in 2017, where she gained more strength and learned how to better manage the business.

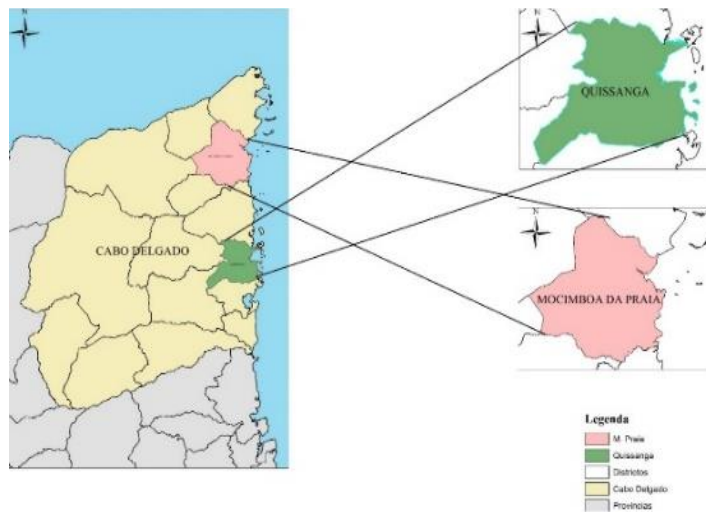
During the training, she became aware of the availability of the Fund for the Promotion of Women Entrepreneurs, to

which she applied for the acquisition of a freezer, thus becoming a beneficiary of these funds in the province of Cabo Delgado. With the freezer, a cooler box and a weighing scale, Afussa Chata became one of the largest suppliers of fresh fish in the Quissanga District, her income increased, she bought another freezer, built a small fish shop, covered her house with zinc plates and connected her house to the national power grid. All her children go to school.

"My life was very complicated, I only did jobs at home. A woman in the *Muani* community, cannot own a business, only men can," said Afussa Chata.

Today, Afussa, overcame the barrier and is a reference in the sale of fish, she participates in local

trade fairs and to her customers Pemba and in other  
provides quality fish locally as well as in places.



## The success in capturing octopuses through cages



Octopus Fishing Day



Combo Atibo, a fisherman and fish trader, started his activity in 2004 selling fried fish at the Mocímboa da Praia development pole. At that time, the Pole did not have electricity from the national grid. In addition, there were enormous difficulties in transporting fish due to lack of transport. As the sale of fried fish required a lot of effort, he decided to sell fresh fish using ice, with the main market being the district of Mueda and Mocímboa da Praia. As he was recognized as the best supplier of fish, Mr. Combo Atibo started to benefit from free ice. With the closure of the ice company, he started supplying octopus to another local company, in addition to supplying to the local market.

Through ProPESCA, he benefited from several training courses, including training in the construction of cages, which are traps for capturing octopuses.

As the construction does not involve many costs, the material is local (bamboo and bark fibers), he decided to build his cages for the

capture of octopuses, thus increasing his catches.

This way, he expanded his market and his income increased significantly. He started to make savings and with the savings he managed to build an improved residence with a zinc plates, purchased 2 petrol freezers for fish conservation, and his children completed secondary school.

In order to develop more and better his activity, the big desire of Combo Atibo is to acquire a motorized boat that will facilitate not only the capture of octopuses, but also other seafood that will further leverage his business.

“ I am happy with this activity, I have helped a lot of people and I often helped other fishermen to boost their business” says Combo Atibo.



## In NAMPULA PROVINCE

### Road rehabilitation program in Nampula province Improved accessibility in Moma

The specific case is that of the Crz324 road at the administrative post of Mucoroge, in the district of Moma, Nampula Province. In an informal conversation with a fish trader from Mucoroge, he revealed that before the rehabilitation of this road around 2012, it took at least 3 hours of travel from Mucoroge to the main village of Moma. Now with the rehabilitation work done (in 2018) under ProPESCA, this trip could be made in just 30 to 40 minutes.

Under ProPESCA, the road rehabilitation program in the province of Nampula started in 2014, with the rehabilitation of the Nacala-Mahelene road (18 km), in the district of Nacala-Porto, and Crz324-Mucoroge (23 km), in the district of Moma. In the following years with the confidence

that the implementers were gaining within the fishing communities, the road rehabilitation and maintenance program was extended to other growth poles in compliance with the goals set in their respective action plans.

During the period of ProPESCA, 155.2 km of roads were rehabilitated and maintained in the province of Nampula, benefiting more than 48,000 people, in 16 communities directly or indirectly linked to fishing activities.

With the implementation of ProPESCA (2011-2019), problems related to accessibility and/or difficulties in transporting fishery products from fishing centers to local markets were overcome.



The beneficiary communities resented the end of the project. Of the 8 roads rehabilitated and maintained, more than 80% of the workforce was local, which contributed to the improvement of living conditions, albeit temporary, in this target group. But the essential thing remains, today fish traders are more fluent in the interior markets where relatively



higher prices are practiced, and this implies greater revenue, consequently some value for the development of business and family support. The transporters have also benefited as the number of passengers and the load to be transported increased. In addition to reduced travel time, good traffic conditions guarantee longer vehicle life.

## Operation of the Market management commission for the first sale of fish in the Sangage district, as a good example to follow

Sangage is 40 km from the village of Angoche. This Administrative Post purchased ice in Angoche for fish conservation or the fish was sent to Angoche for conservation, since, at the local level, there were no means for fish conservation.



MPV Photovoltaic System

Thus, the MPV of Sangage was built with the support of PPABAS and in 2014 ProPESCA had the rehabilitation and expansion of the photovoltaic system and freezers. The management committee of Sangage MPV was created in 2013 and it has five members. Members are responsible for cleaning the market, making ice, collecting fees

for using market stalls, preserving fish, storage of fish in insulated boxes (cooler boxes, used freezers).

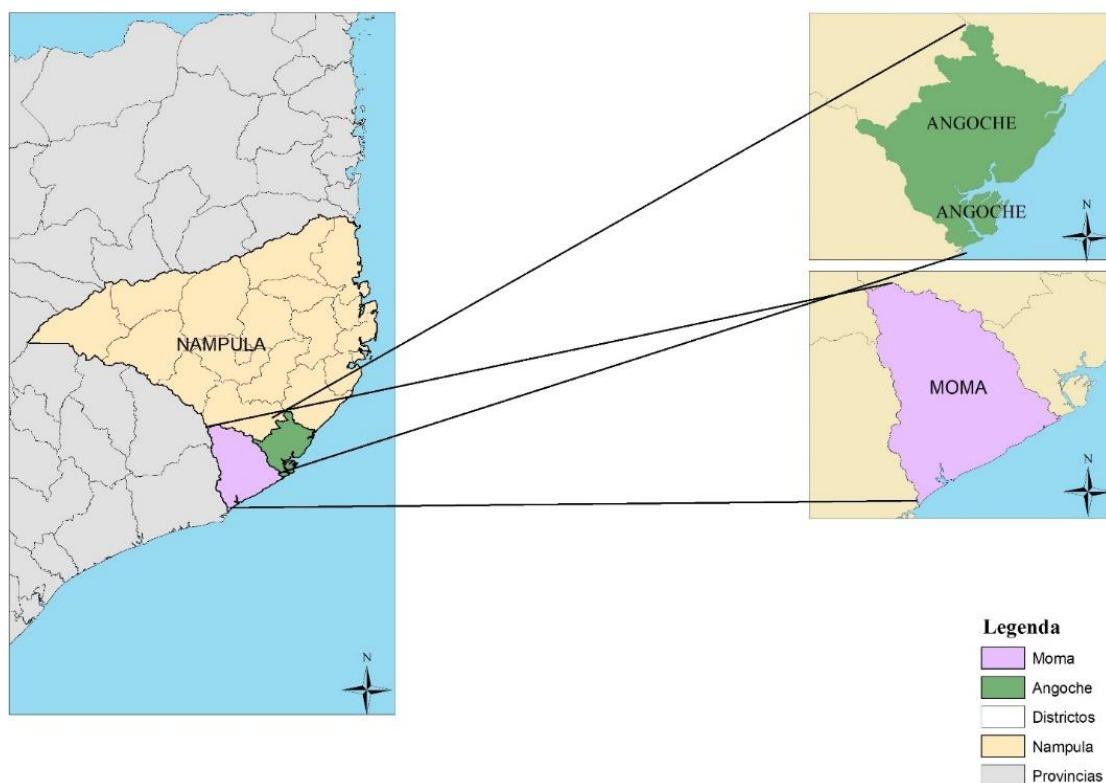
The collection of these fees guarantees the functioning and maintenance of the market. In parallel with the activities described above, the commission also registers the quantities of fish that circulate in the market. The management commission benefited from training for the management and operation of the market and on fish conservation techniques.



The market operation and the availability of locally produced ice

on the market improved the conservation of fish in Sangage, thus allowing the fish to be sent directly to the City of Nampula without going through Angoche, which reduced the costs they had with the conservation and transport of the fish. The market created a

new dynamism in Sangage, being a meeting point for several purposes. The production of ice and the freezers ensure that the fish of Sangage is well preserved. There is also a record of reduction in post-capture losses.





## Associativism improves yields in artisanal fishery in the District of Angoche, Nampula Province

It is the “*Cuidado com a Vida*” Association, located in the District of Angoche, in the province of Nampula, composed of processors who are dedicated to smoking fish and are also members of a group of Saving and Revolving Credit (PCR). Each member worked individually in their home, some of whom owned traditional smokehouses in pit holes dug in the ground. The fact that they meet once a week under PCR promoted by ProPESCA constitutes a moment of exchange of experience between them.



Fish packaging



Package of Smoked Fish

It was from that moment that they realized that it was better to work together, because together, the effort of each one would be maximized. After establishing themselves as an association, they had the opportunity to learn techniques for building and using improved smokehouses. This is how the association *Cuidado com a Vida* was created. As they made savings in parallel with the smoking activity, with the value of the savings the members built 2 medium size smokehouses next to a porch, with production capacity of 3 boxes of fish per day, corresponding to about 120 kg per smoking/smoking cycle. All members are involved in the different activities that are carried out within the association, starting with the search for firewood, the purchase of fish and its treatment from the beach to the porch, the smoking and marketing. The activities are done on a rotating basis. All tasks are well

divided among the members, while women are dedicated to fetching water, processing fish and firewood, men are engaged in tougher activities. In this region, due to the uses and traditions of the local population, who appreciate the consumption of smoked fish on the one hand, and on the other hand, due to lack of electricity in other areas, this activity is very practiced by many households as a common way for the conservation and treatment of fish.

The fish, once smoked, is packed in bales and sent to the different regions of the province and beyond. The members of the association finally realized that cooperating is better than competing, for a common purpose. With the income earned, members improved their homes, purchased transportation and purchased school supplies for their children who study at local schools and outside the District.



Smokehouse



## IN SOFALA PROVINCE

### Fisherman from the Chiloane District who became a successful trader



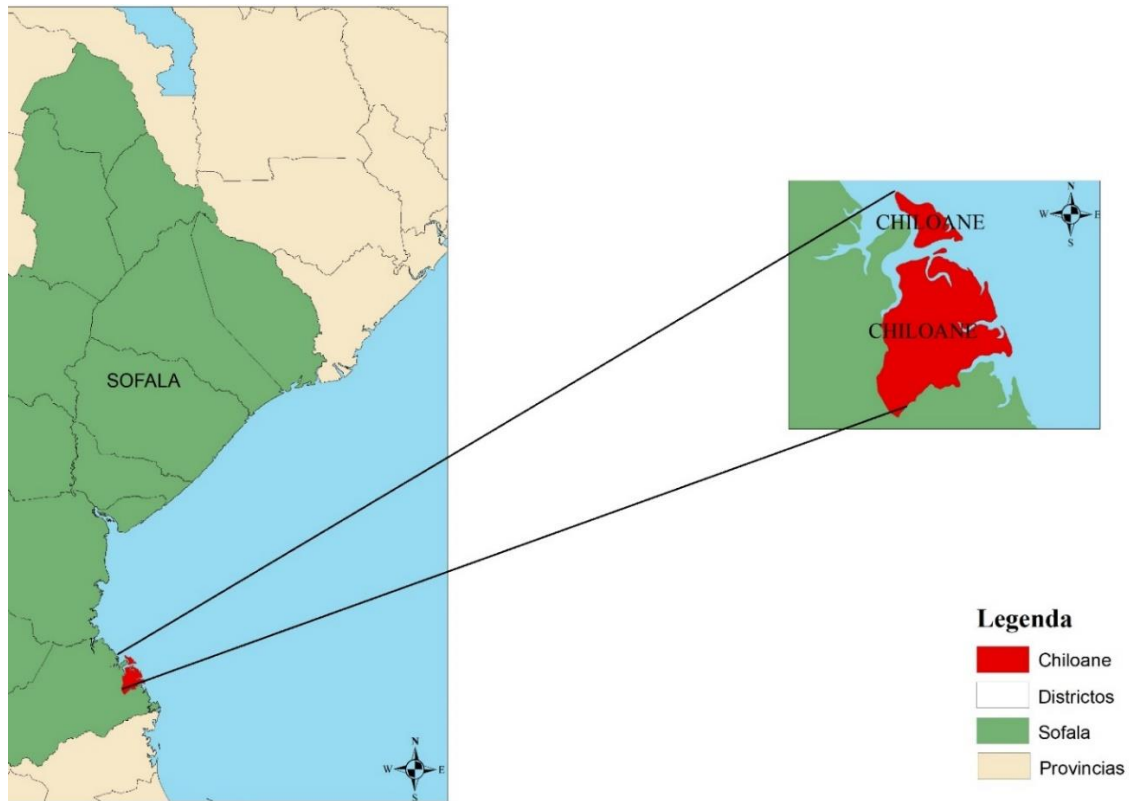
Fisherman since 2007, at the Chingune fishing center in Chiloane, in the province of Sofala, Mr. Patreck, as he is affectionately treated in that community, develops fishing activities and sells various products. He started his fishing activity with a small gill gear that aimed at the Mullet fishery, known locally as Magarage, and combined the gear with the hand line. At this time, fishing offered good catches, which allowed him to open a grocery store for the sale of diverse products since in this area the community had to travel about 1 km to buy products. In 2010, he acquired a Chata type vessel and a second-hand engine,

which carries out gillnet fishing, but also acquires an onboard trawl gear. Years later, he benefited from training in engine maintenance and repair, promoted by ProPESCA, which strengthened his activity, starting to assist his engine and other minor engine failures. Fisherman since 2007, at the Chingune fishing center in Chiloane, in the province of Sofala, Mr. Patreck, as he is affectionately treated in that community, develops fishing activities and sells various

products. He started his fishing activity with a small gill gear that aimed at the Mullet fishery, known locally as Magarage, and combined the gear with the hand line. At this time, fishing offered good catches, which allowed him to open a grocery store for the sale of diverse products since in this area the community had to travel about 1 km to buy products. In 2010, he acquired a Chata type vessel and a second-hand engine, which carries out gillnet fishing, but also acquires an onboard trawl gear. Years later, he benefited from training in engine maintenance and repair, promoted by ProPESCA, which strengthened his activity, starting to assist his engine and other minor engine failures.

From 2015 to 2016, he participated in several training courses on the handling and conservation of fish, which provided him with greater dynamics and recognition in the delivery of products with better quality to traders in Mambone and the city of Beira.

He currently has a fleet of 3 vessels, one of which is a flat boat, a Moma and a dug-out canoe that does mullet fishing in the estuaries, which serves as bait for line fishing, and has 4 trawling gear on board, gillnet, longline and hand line, and employs 8 permanent workers. Apart with this activity, he is currently attending his 2nd year at the Catholic University of Mozambique.



## Savings result in Future Gains



The trader Cacilda Manuel Vieira Vilanculos, started her business with 2.000,00 MZN, in 2012. The business involved buying and selling tomatoes, onions and charcoal and cookies to fishermen. This business was only for food, raising children and some savings were kept under the

mattress. In December 2015, through awareness raising under ProPESCA, by the PCR service provider, she entered a revolving savings and credit group called ALEGRIA. So her business of buying, processing and selling dried fish went on, and she deposited her savings in the savings group. This way she managed to buy two vessels.

In the second cycle, with the knowledge acquired during the business management training

at ProPESCA, she built a grocery store and bought a piece of land in the city of Beira and in the following year (2018) she started building her own house in the city of Beira with the money from processing and sale of dried fish. Mrs. Cacilda's future plans are to continue the activity of processing dried fish and resuming fishing activity using canoes.



## IN ZAMBÉZIA PROVINCE

### A life dedicated to fishing activity

Ossifo Manuel, 54 years old, is a fisherman and a founding member of the Zalala Community Fisheries Council. Ossifo started fishing (hand line fishing), but given the difficulties he faced in 1989, he switched to bottom gill fishing and employed two more sailors. In addition to gillnet fishing, in 2005 he decided to start with one more activity, the Shrimp Fauna Collection (RFA).

In 2016, he benefited from several courses given with the support of ProPESCA, namely on fishing technology, fish processing, associations, business management. For the performance shown, he was chosen to be part of the experimental program using a motorized vessel for fishing with selective gear and the FRG. Mr. Ossifo improved his life with the construction of an improved house for the family, the creation of jobs for other fishermen, who passed from seafarers to heads of some fishing units, the training of children in the health area, public administration and others.



Mr. Ossifo also purchased a motorbike for family transportation, radio, television, a satellite dish and cell phones for the family. After everything he learned, he significantly improved his fishing activity.



## The use of Txopela to transport fish in Pebane brings benefits



Cassamo Njoma is a processor and trader of fresh fish in the village of Pebane. He started his activity at the age of 19, at the time making the journey to the nearest fishing centers on foot, acquiring small quantities of fish and processing dry and salted fish and selling locally because he had no other conditions to conserve the fish. Later, with the

connection to the electrical network to the District, he started selling fish preserved on ice in a Coleman and saved money until he managed to acquire a bicycle to facilitate his business. A few years later, Njoma acquired a freezer, started to buy fish that he froze and then he sold in the districts of Mocuba, Gilé and Molócué. In 2016, as a way of supporting

the sale of fishery products of higher commercial value, that was promoted by ProPESCA, on an experimental basis, an initiative to use *txopela* for the transport and sale of fish was initiated. Mr. Cassamo was chosen among several candidates to experiment the use of *txopela*.

Subsequently, he started making several daily trips to

the district's fishing centers to purchase fish. Today, with more than 3 large freezers, one motorized and one txopela (4-wheel motorized coupled to a thermal box), Cassamo Njoma is a

reference in the sale of fish in the Pebane fish market, which was also built as support for PROPESCA. He participates in local fairs and annually takes about a ton to sell at FACIM in

Maputo. With this activity, he has built his a bigger house, all his children are at school. "My life depends on fishing" says Njoma.



## IN ZAMBÉZIA PROVINCE

# Overcoming women's challenges in fishing

Mariana Afonso is a woman who develops the activity of processing and marketing fish, in the Province of Zambézia, where this activity is practiced mainly by men with a lot of experience in the fish business.

She started her activity in 1995, in the village of Sopinho, where she claims to have seen the work done by the processing technicians of Combinado Pesqueiro de Sopinho, which encouraged her to materialize her desire

to become a fish processor and trader.

In the first moments, the commercialization of fresh fish constituted a high priority for insertion in the activity and, for reasons related to the access routes and the lack of means and / or equipment for the conservation of fish in Sopinho, she was forced to move from this center to Zalala fishing center, where she continued to market fresh and subsequently frozen fish.

When the freezer was purchased, the

second and third quality fish started to be processed using the smoking technique, while the first one was either frozen or taken to be frozen at the Zalala fishing center.

In the first phase, all fresh, frozen and smoked fish was traded within the city of Quelimane. According to Ms. Mariana, the decision to move the product and market it in Nampula Province and Morrumbala district in Zambézia, was due to the problem associated with an increase in

processors and traders at the fishing centers located near the city of Quelimane, on the one hand, and on the other, the increase in freezers for the manufacture of ice and the freezing of fish for commercialization in the cities of Quelimane and Nampula respectively.

Taking into account the objectives of developing and improving the living conditions of the fishing communities, Ms. Mariana benefited from various training in the area of the value chain, from fish processing using traditional methods and ice, full use of fish, business management,

processing of various foods and among others. Today, she is one of those who have more control over the activity and recognizes all the effort that the sector has developed over the years, with regard to improving the living conditions of fishing communities.

## IN INHAMBANE PROVINCE

### The Optimism of a Woman Warrior and Entrepreneur

Victória da Graça, one of the women



warriors and entrepreneurs in the district of Maxixe, in the province of Inhambane. We found Mrs. Victória da Graça in her modest commercial establishment named after her "Victórias's Bar, in the village of Chicuke, on the outskirts of Maxixe

With the profits from her business, Mrs. Victória embraced another project, which is the construction of an establishment that, according to her, will serve to host various social events, such as christening parties, weddings and others, as well as

city. She set her business through funds from a loan granted by the savings and revolving credit group, aka PCR of which she is a member.

According to the interviewee, Mrs. Victória, started her activity in 2014, dedicating herself to the sale of various food products in a small establishment of unconventional construction, as a rental and, over the time, she thought about acquiring her own space with the value of xitique and she built her shop with conventional material as the image above documents

institutional events, in this case, of meetings and seminars given the weak offer of these services at the level of the City of Maxixe.

One of Mrs. Victória's biggest dreams is to finish her house and

she believes that with the little income she gets from her shop and with the support of xitique, she will be able to achieve this great goal, she concluded.



## IN GAZA PROVINCE

# Thanks to the Savings and Rotated Credit Program, today I am someone



António Cossa, a fisherman by profession, from the growth center of Bilene, started to practice this activity when he was 15 years old. "My father taught me to fish," he says. I always fished on other fishermen's boat. I used to ask to join them, then when I returned from fishing, the fish was divided or we were paid for the services'. In 2017 he joined a group of Savings and Revolving Credit (PCR). At the end of the cycle, he received his savings and with the value he

bought a boat and a fishing net. "It changed my life," said Cossa. His customers come from outside, mainly from Maputo. With his own vessel, the changes he had in his life were so great that he managed to build a new type 3 house, which is already in the final stage.

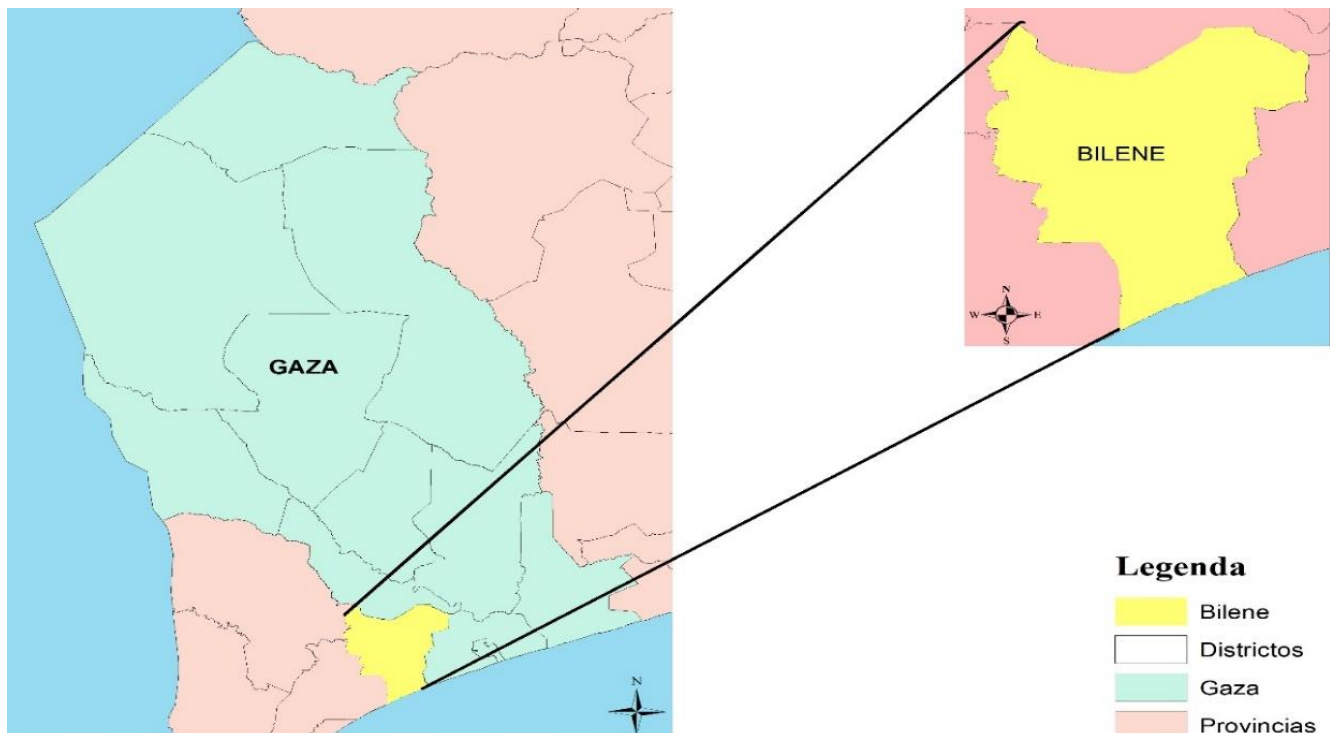
"I managed to feed my children, the children go to school with uniforms and school supplies".



António's friends and some community members, are following his example, take PCR money to invest in fishing by buying fishing nets, and boats. "Today I can say that I am someone, thanks to the PCR".

I would like to save money to be able to buy another boat to improve

the business. "I'm very happy, I don't have words, I pray that things will continue to improve' '. Mr. António was the first in his community to use the money he collected from the PCR to invest in fishing after buying his vessel.





## Sale of fish, a business to make a living in the Bilene District

Hortência José Macie, 39, a fish trader for a long time in the village of Bilene, Gaza Province, started selling fish very early. She comes from a family of fishermen. At the time, as her father was a fisherman, she sold the fish that her father caught. With the money I bought clothes. Later she started helping the family with money from the business, she helped build her mother's house. Through ProPESCA, in 2016 she acquired a freezer and also benefited from training in good practices in handling and fish conservation and nutrition.



After the acquisition of the freezer, the quantities of fish sold increased,

the number of customers increased, many people started to buy fish at her home and also sold outside the town of Bilene. Consequently, her income increased, the children started to have food every day, she bought school supplies and uniforms for her children. The remaining income was saved in savings, where she was promoted to president of the group of Savings and Revolving Credit (PCR) made up of 16 women. With the amount of savings she managed to buy the second freezer and built her own house, where she lives with her family.

As president, she is able to motivate other women to participate and save their money to invest in their businesses by buying Colman, freezers and other goods.

"Today I have two large freezers where I keep my fish, I have plans to build a fishmonger to sell fish, buy more freezers to increase my

business because “it is possible to  
earn money selling fish”, says  
Hortência.





## From a simple seafood trader to a successful businesswoman in Bilene District



In the center, Ms. Felizmina, a successful businesswoman photographed with her workers

Felizmina Ngoenha, a woman who has always dreamed of living in the Bilene District, Gaza Province, has been dedicated to buying and selling fresh fish for about twenty years in the town of Bilene, a town that is

well known for its beautiful beaches.

We found Mrs. Felizmina in her new establishment, albeit as a rental, a reference restaurant in the town of Bilene.

"Whoever arrives in Bilene, has to go to this restaurant to

taste the good seafood," said Ms. Felizmina.

Speaking of her career as a fish trader, Ms. Felizmina started her activity by selling small quantities of fresh fish that she bought on the beach. The fish was transported in

plastic bowls, in small quantities, it grew until one day, with the support of ProPESCA, and she obtained financing for the acquisition of a freezer.

In addition to being a fresh fish trader in the district and town of Bilene for over 20 years, Ms. Felizmina Nguenha is also a member of the

Savings and Revolving Credit Group, but according to the interviewee, her main source of income is selling seafood. In addition, she owns a shipyard dedicated to the sale of coarse sand, stone and blocks for the construction of housing, a business that she has been implementing for over 10 years. In the

future, Mrs. Felizmina's biggest dream is the acquisition of industrial refrigerators for the sale of all types of seafood. She received training in good fish processing, handling and conservation practices as part of the ProPESCA program.

## IN THE PROVINCE OF MAPUTO

# From apprentice to Instructor of Naval Mechanics in artisanal fishery



Alfredo Pacule, 43 years old, is a fisherman and naval mechanic, residing in the KaMavota Municipal District, in Maputo City. At the age of 20, his father took him overboard to fish. Later, with some practice, he started to work alone. In 2004,

his older brother taught him to repair engines, together they started to repair their engines and those of some friends and family. In 2014, he participated in a training course at the Escola de Pesca in Matola, Maputo Province on naval

mechanics (repair of outboard motors for craft fishing vessels), within the scope of ProPESCA. For his excellent performance in this training, he was again invited by IDEPA and a partner company to participate in the training of trainers in naval mechanics. Thus, after training, Alfredo and some colleagues traveled almost all over the country to train naval mechanics and drivers in engine repair and maintenance, where they trained more than 50 people. With the training, Alfredo became a professional not only in engine repair but also in the training of other professionals in the area, having repaired more than 100 engines in the community. In his workshop, located at his residence, in addition to repairing engines he

also teaches other mechanics in the community. Currently, Pacule, is dedicated to mechanics and fishing. he has 21 workers who support him in fishing and in the engine repair shop installed at his home. With his income, he built his house where he lives with his family. He has 9 children who attend school, some are at universities and others in secondary and primary schools, he also managed to buy the car of his dreams, a Land Rover Defender and 5 plots for future projects. His future project is to build a larger workshop to repair outboard engines in his community and teach others how to repair engines.

## Aquaponics, an innovative business in Aquaculture

Daniel Mudumelane is an electronic engineer by profession, resides in the province of Maputo, city of Matola, who decided to embrace fish production to improve his family income. He started breeding fish in 2016 after participating in some aquaculture forums as an emerging business. In his research, he approached the National Institute for the Development of Fisheries and Aquaculture (IDEPA). At IDEPA, he had the opportunity to collect information on different aquaculture production techniques

and made the big decision. "I'm going to invest," he said. He started small according to the advice of the technicians of the area, but it was not enough to raise fish, he also wanted to produce vegetables and found it better to combine the two things, he found the solution in aquaponics which is the integrated production of fish and vegetables, where the water that it is used to raise fish is recycled and starts to water the plants. For this, he built a small greenhouse in his house and added it to

a fish tank that he populated with about 200 tilapia fry. For about one cycle it produced about 150 kilograms of fish with a survival rate of 100%. In the greenhouse, Mr. Daniel produced a lot of parsley, beets, cabbage, lettuce, onions and other vegetables. The production of tilapia fish allowed him to improve the diet of his family, but also of his friends and his entire community, since it is a protein rich food and the sea fish was increasingly expensive and scarce in his community. With this system of

cultivation and by managing to unite fish production, sport fishing and green spaces without leaving home, Mr. Daniel saw that aquaponics was a very simple, profitable, sustainable and resilient activity.

Due to the high demand for his fish, Mr. Daniel saw the great opportunity to make a big deal out of tilapia fish production. Thus, in

2017, it built a larger structure with two tanks, one for fattening 18,000 liters and another for water re-circulation, which will then irrigate the 18 garden beds with gardens, all in concrete. At the end of the cycle, he expects to harvest more than a ton of red tilapia fish and lots of vegetables to sell on the national market. The initial diet for fattening was produced by him, on an experimental

basis, based on vegetables, bran and fish. "It is possible to make large investments and profit from the fish farming system even inside our homes, we do not need to be in the field to produce fish," said Daniel Mudumelane.

For the growth of his activity, Mr. Daniel had the support of the ProPESCA Fund for the Promotion of Emerging Entrepreneurs.

## New way of doing “*Xitique*”, improves the lives of women fresh fish traders, in Maputo Province.

It is a group called



N'Jombo, which means “Luck”, composed only of women, who decided to promote a new approach to saving, which in popular language in Mozambique is known as *xitique*, based on income resulting from the marketing of fresh fish.

Joana André Nguenha

has been a fresh fish trader at the District and town of Marracuene for more than 15 years and in the company of other women, they decided to transform their traditional and ritual method of making *xitique*, which was a monthly and shared contribution at the end of a certain cycle agreed by the members, into another, more ambitious way of saving, which is weekly and with a well-identified common purpose.

This is a savings account that is intended exclusively for the purchase of construction material and or improvement of their homes.

In terms of the functionality of this new approach of doing *xitique*, this group of sixteen women meets weekly to make their savings at an amount set at thirteen hundred meticaïs for each member. From this amount, one thousand meticaïs is used for savings that are used for the purchase of construction material,

two hundred meticaïs for expenses related to the purchase of food by the member who is going to receive the amount and the rest is for a social fund, for example for hospital support from a member in need, said Ms. Joana in an interview.

According to Ms. Joana, this type of savings is gaining a lot of space in the community where these women live. "There are many people who want to join us, including men who ask to be part of the group".

With the amount coming from this type of savings, Mrs. Joana has already erected another house about to be finished, which, according to her, she intends to lease to third parties in order to generate more profits for her other needs. "We are all happy for this initiative, we would like that one day we will have support from the Government to increase our fund, she concluded.

In fact, this type of saving is a success story that can be replicated for other communities that still

continue to save in traditional ways, as this experience is quite innovative, since the value resulting from savings has a very good pre-determined destination, identified and assumed by the group members. Here, there is no deviation in the application of the amount received by each member.

This group of women, according to what was found, benefited from training on savings and revolving credit (PCR), within the scope of the ProPESCA project.





## Improved fishing techniques improve yields in artisanal fishery



Mateus Chaincomo, a 40-year-old fisherman in Inhaca, has dedicated his entire life to the practice of fishing-related activities. In his fishing activity he uses trawl, gillnet and hand lines.

In addition to owning a 10-meter fishing vessel, he also owns a vessel for tourism (transport).

Mateus Chaincomo saw his income increase after adopting good fish handling and processing

practices that include fish hygiene, evisceration and the use of ice on board. These changes improved the way of conservation and, consequently, the quality of the

commercialized fish, which allowed to increase the value of the fish, and thus increasing its yields. Before training, fishermen insisted on not eviscerating the fish, believing that the fish would lose value.

In his community, other training courses related to business management, fish processing using ice, fish processing using traditional techniques (salting, drying, and smoking), full use of fish, good hygiene practices were given. Training in naval carpentry and construction of improved fishing gear was also given, and in terms of infrastructure, a first sale market was built and equipped. They also benefited from training in

financial education as well as in nutritional education that included home gardens, demonstrative kitchens and food processing.

The correct application of the knowledge acquired in the training allowed him to increase his income, in such a way that he built his house and purchased different furniture and other domestic equipment.

## **Mozambique**

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### **Artisanal Fisheries Promotion Project**

### **Project Completion Report**

### **Annex: Project Impact Assessment Report**

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**MINISTRY OF SEA, INLAND WATERS AND FISHERIES  
NATIONAL INSTITUTE OF FISHERIES AND AQUACULTURE DEVELOPMENT  
ARTISANAL FISHERIES PROMOTION PROJECT (ProPESCA)**

**FINAL PROJECT IMPACT ASSESSMENT REPORT**



Maputo, December 2019

**Elaborated by: Agostinho Magenge**

25 de Setembro Av., 1123, 9th Floor E, Prédio Cardoso

Tel: +258-21306035; Fax: +258-21306037

Cell: +258-823135380; +258-823055236; 847878439

**Maputo-Mozambique**

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**Directed by:** Verónica Quina Namashulua

**Author:** Agostinho Magenge

**Coordination:** Selso Cuaira and Luís Silva

**Collaborators:** Saide Amade; George Tembe; Carlos Macaneta; Francisco Mancuele; Mery Mondlane Fiel e Lelo Nhatsodo.

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## ACRONYMS

<b>AC</b>	Acceptable
<b>ADNAP</b>	National Fisheries Administration
<b>ANE</b>	National Roads Administration
<b>CCP's</b>	Fisheries Community Councils
<b>FFP</b>	Fisheries Promotion Fund
<b>GD</b>	Good
<b>HHs</b>	Households
<b>IDPPE</b>	Small Scale Fisheries Development Institute
<b>MIMAIP</b>	Ministry of Sea, Inland Waters and Fisheries
<b>PCR</b>	Revolving Credit Program
<b>PDP</b>	Fisheries Master Plan
<b>ProPESCA</b>	Artisanal Fisheries Promotion Project
<b>VG</b>	Very Good
<b>VW</b>	Very Weak
<b>WK</b>	Weak



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## EXECUTIVE SUMMARY

The Artisanal Fishery Promotion Project (ProPESCAS) was implemented between 2012 and 2018 on the seacoast of Mozambique, specifically in the provinces of Cabo Delgado, Nampula, Zambézia, Sofala, Inhambane, Gaza and Maputo, with a total of 30 growth Poles. The overall budget for the project was approximately US \$ 58 million financed by IFAD<sup>1</sup>, OFID/OPEC<sup>2</sup> and the European Union (EU) and it was established a Steering Committee for work plans, budget and reports approval.

Throughout the project life, Baseline and End line Studies were carried out to describe the socio-economic characteristics of Households (HHs) and ended with a Mapping Report aimed to collect data for the project final evaluation.

The evaluation of the Project was made in 3 dimensions, (i) general evaluation of the project components, (ii) evaluation of the project itself, and (iii) evaluation of the project economic and social impact on the beneficiary communities. Data collection was carried out through questionnaires and interview guides to key informants.

The result of the evaluation by component shows that in component 1, Support for the Development of Fishing of Highest Value Fish, during the project lifespan, it created capacities in the sub-sector of artisanal fishing that allowed adding value to the fish, having registered an increase in training and capacity building for boatbuilders, drivers and their respective employers, mechanics and fishermen, having also supported 48 fishermen associations, small traders and carpenters.

In terms of skills improvement, the achievement was positive as a result of training of processors and traders in good practices in handling fish, holding of fish fairs and granting of inputs to small traders association.

Regarding the market-related infrastructures, the result was positive, demonstrated by the construction and rehabilitation of 32 fish markets, installation of equipment for the production of ice and conservation of fish and the respective training of small traders and operators of equipment in handling and conservation of good quality fish. In addition to the above-

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<sup>1</sup> International Fund for Agricultural Development

<sup>2</sup> Institutional Development Fund

mentioned activities, the project financed the acquisition of 393 marine engines for an equal number of boats, although, this activity was not contemplated in any component.

In component 2 referring to the improvement of economic infrastructures, the result was also positive due to the construction of 63% of the planned infrastructures for 15 energy power transmission lines with 98km of length, 7 photovoltaic systems and electrification of 8 fish markets. Most of the existing access roads are not paved and, during the rainy season, are inaccessible due to their degradation state. However, during the term of the contract, 27 roads were rehabilitated, for a total of 518 km they were involved 880 people, of whom 155 were women.

Financial Services Development-Component 3 aimed to improve the life quality of the target group in the community. For the result referring to community-based Financial Institutions with the capacity to mobilize savings, 485 PCR promoter technicians were trained, supported 2,188 PCR groups, undertaken various training courses in financial education, created the mechanisms to access the pilot investment funds, having registered 492 beneficiaries and USD 250,000.00 disbursed to the pilot investment fund. In addition, 11 CBFS<sup>3</sup> providers were supported and matching grants worth of USD 750,000.00 were disbursed. On the other hand, 2,400 PCR groups were assisted, of which 1,877 are led by women.

The intervention of private financial institutions actively involved in the financing of investments related to fisheries resulted in 29 companies accessing the Risk Mitigation Fund (FMR) in the amount of USD 419,000.00, 7 formal community based IF's branches were established and by the end of the project no PCR group had benefited from the community-based funds.

The Institutional Strengthening, Policy Initiatives and Project Management component had a positive performance due to the strategy adopted for the program implementation, consisting in appropriation of the objectives by the technicians and managers of the sector, resulting in institutional sustainability. Another positive aspect of the component was the focus on policies and legal framework improvement, having contributed to the approval of the currently in force Fisheries Law No. 22/2013, of 1 November.

The Nutrition component aimed to improve the diet of women in reproductive age (15-49 years) and children from 6 to 23 months in the growth Poles covered by ProPESCA, it was highly scored because it aroused a lot of interest in

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<sup>3</sup> Community Based Flexible Funds

beneficiary women who actively participated in the training sessions, establishment of demonstration vegetable gardens, training in the culinary and in the correct preparation of food.

In order to boost the mobilization of communities to participate in nutrition education sessions and on the need to adopt a balanced and healthy diet, community leaders and other influential people in the communities, such as religious leaders and teachers were trained, also established radios broadcasting programs to raise the communities awareness to nutritional education matters. These training courses were also extended to schools, where demonstrative vegetable gardens were established and different nutritional education sessions were held, including plays' performance.

Regarding to financial resource, around USD 55 million was allocated to the Project, of which 95% was executed. The total allocated by donor resulted in IFAD executing 100%, OFID in 85%, EU-MDG-I in 97 % and the Government of Mozambique by 99%.

The total financing of the project initially set at approximately USD 57.8 million, was downwards revised to USD 54.4 million as a result of exchange rate fluctuations to which the original currencies were subject, namely SDR<sup>4</sup> and EUR, respectively of IFAD and EU financing. The difference found, totalling USD 3.4 Million, represents a couple of activities that, although planned, could not be carried out due to the loss of this amount.

Of the total allocated amount, USD 51.9 million were disbursed, corresponding to 95.4%, and had an execution of 95%.

ProPESCA had a positive and considerable impact on its general objective **“sustainable increase the volume of higher-value fish and increase the revenues obtained from commercialized fish”**, which led to an improvement in the income and livelihoods of families involved in artisanal fishing. From 2013 to 2017 the fish with the highest commercial value caught in the Poles covered by the project, represents 80% of artisanal fish, and at the country level artisanal fisheries in the provinces where the Project was implemented, the average total volume represents 82% of the total production, corresponding to 11.7% on average for each province, against about 6% of each province not benefiting from the Project, which demonstrates a significant and high impact contribution of ProPESCA to the country.

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<sup>4</sup> Special Drawing Right (SDR) - is an international reserve asset created by the IMF



The project beneficiaries had an immediate impact on their lives, having the average HHs income almost triplicated until the end of the project, if compared to the first year of the project implementation, with the exception of the province of Maputo which registered an increase of only 12%. The improvement in the level of income allowed these families to acquire and possess durable assets, for example, the possession of durable assets for fishing and fish conservation demonstrates an appreciable quantitative leap, with emphasis on the reduction of dug-out canoe possession in contrast to the increase in ownership of boats with an engine, which from 5.31% of respondents in 2012 that held this type of boats, in 2019, 12.37% of respondents were owners of these assets, this is also true for boats without engine that from 21.39% increased to 30.27%, an analogous fact also occurs for fish conservation assets, that from 18.57% of the interviewees in 2012 that had the possession of these assets, in 2019, 35.33% are owners of the assets, this as a result of financing granted by the project, as well as investments made using their own funds and, on the other hand, it shows the improvement of the economic power, as a result of the increase in the level of income from their fishing and related activities.

On the other hand, the immediate impact on families is witnessed by the improvement in the quality of housing, where most households currently live in masonry houses, i.e., with walls, roof and floor covering in conventional material, compared to period before the implementation of ProPESCA. For example, regarding the houses with cane walls and sticks and or palm, adobe blocks or matic sticks, there is a significant decrease, and, in contrast, houses with walls in cement, bricks or zinc wood, register a significant growth, and most of these houses have electricity, either from conventional systems or from photovoltaic systems, as a result of the electrification of these areas with ProPESCA funding, which reveals the improvement in the living conditions of families.

Therefore, for the community in general where the project was implemented, it had a considerable impact, resulting in the improvement of living conditions provided by the economic infrastructure, rehabilitated and or acquired by the project. The 172 km extension of the power transmission line benefited more than 2,217 inhabitants in 51 villages and neighbourhoods, including the electrification of 14 First-Sale Markets, 586 shops and 28 public buildings, the families and institutions that had or will connect to electricity network have or will have direct benefits not only from lighting, but gradually from what is possible to be done with electricity access.

Indirectly, the lighting of these Poles has provided a better life for all those who buy from local stores and benefit from better services provided by local institutions, especially health and education. Specifically, on the economic side, with the electricity access, the working hours of local traders tend to be extended and in these areas there is already a significant increase in electrical equipment such as freezers, fridges and televisions, as well as the

emergence of small local stores (tents), small grocery stores, catering industry, and entertainment houses, among others.

The electrification of social infrastructures, such as local government buildings, health centres and schools, has brought social benefits that have resulted in improved public service provision.

Regarding roads, by rehabilitating approximately 518 km of roads, estimated to be used daily by 462 vehicles on average, ProPESCA contributed significantly to greater mobility of the beneficiaries and expansion of trade, especially in the sale of fish and consequently well-being improvement among these communities. Furthermore, the involvement of local communities in the construction / rehabilitation works and in the maintenance of these roads, has had a positive impact in increasing the income of these communities.

Although the Nutritional Education Component was introduced late, its implementation had a significant impact on the lives of the beneficiary communities, which resulted in a significant improvement in the children malnutrition rates, as well as in the communities eating habits.

Combining the assessment of the level of achievement of the ProPESCA Components with the assessment of the Impact of its Implementation on the beneficiaries, both direct and indirect, as well as in the community in general, it is concluded that ProPESCA performed well, having achieved its general objective and with a positive impact, at the economic and social level, not only for the beneficiaries, but also for the country as a whole.

However, despite these results and impacts of the implementation of the Project, the recent IDAI and Keneth cyclones, caused considerable severe damage to boats, engines, fishing gears and infrastructures, which, which negatively impacted the results achieved with ProPESCA implementation, and urgent interventions should be taken, to replace the equipment and infrastructures now damaged, to at least return to fishermen the operational capacity they had before the outbreak of these cyclones.

It is pertinent to capitalize on the experiences and lessons learned in ProPESCA, as well as to consolidate the capacity already created by the project, in order to replicate in future projects, plans and or future programs of the sector.

The monitoring issue and a robust database, needs to be taken care of in future interventions, as projects of this size, must be evaluated, not only by their effectiveness and objectives, but mainly by their impacts, in the positive change of lives, for both direct and indirect beneficiaries.

In order to objectively measure efficiency, it is recommended that in future projects, the Budget be presented and allocated by results.

## 1. INTRODUCTION

### 1.1 Overview

Following the loan agreements signed between the Government of Mozambique and the International Fund for Agricultural Development (IFAD), OPEC Fund for International Development and the European Union Grant Agreement, under the responsibility of the Ministry of the Sea, Inland Waters and Fisheries (MIMAIP), since 2012 the country has been implementing the Artisanal Fishery Promotion Project (ProPESCA), with IDEPA as the coordinating agency.

This project was implemented throughout the coastal zone of Mozambique, but its investments were concentrated in 30 growth Poles, sites where there is potential for expansion and diversification of artisanal fishing. ProPESCA aims to improve the incomes and living conditions of families whose living depend mainly on artisanal fishing.

ProPESCA's investment is estimated at approximately USD 58 million and comprises five components, namely: (a) Support for the Development of Higher Commercial Value Fish; (b) Improvement of Economic Infrastructures; (c) Development of Financial Services; (d) Institutional Strengthening, Policy Initiatives and Project Management and (e) Promotion of Nutrition.

At the beginning of the Project, a baseline survey was carried out to describe the profile of the families involved in the project's activities, their socio-economic profile, the perception of the households about poverty and well-being and analyse crosscutting aspects. On the other hand, between the years 2016 and 2017, IDEPA carried out the Fishermen and Aquaculture Households Survey (*Inquérito dos Agregados Familiares de Pescadores e Aquacultores - IAFPA*). This survey also covered ProPESCA's areas of activity, providing information that allows a comparison of the relative well-being of the project beneficiary families.

As the project ended in June 2019, there was an urgent need to carry out an impact assessment of ProPESCA, so a new survey on the relative well-being of households living and working in the project area was carried out. For this purpose, IDEPA hired specialized services to assist in the comparative analysis of the initial, intermediate and final periods of the project, culminating in the preparation of this document on the impact of the project.

### 1.2 Evaluation Objectives

#### 1.2.1 Geral Objective

The evaluation is one of the import requirements in the project management process, as it allows managers and other interested parties to know the progress or success in achieving the expected objectives and results. The final evaluation of the project is particularly important because it allows to evaluate the performance and the level of achievement of the expected results, as well as to demonstrate the impacts, either economic or social, that these results brought to the beneficiaries, both direct and indirect and to the community in general.

In 2015, ProPESCA was subjected to an intermediate assessment to assess progress in achieving the expected results, which culminated in the review of some indicators and targets initially set.

The required evaluation in this consultancy is made from three perspectives, namely (i) General Evaluation of the Project components, that is, evaluation at the General Objective level; (ii) Project Evaluation at the Specific Objectives level. This evaluation focuses on the relevance, effectiveness and efficiency of the project; and (iii) Economic and social impact Evaluation of ProPESCA to the beneficiary communities and to the direct beneficiaries.

The evaluation focused on identifying and measuring the performance achieved in relation to the project expected results, based on the indicators and targets established in the project. For this purpose, two evaluation methods were used, namely (i) analysis of relevant project documents; and (i) Interviews with key actors and other stakeholders in the artisanal fishery sector.

The purpose of this assessment is to measure the performance and impact of ProPESCA results.

This assessment, although analysing the aspects of financial management, does not constitute an audit, so it does not issue judgment on aspects of internal controls or management irregularities, but only on the levels of disbursement, justification of allocated funds, among other related aspects.

### 1.2.2 Specific Objectives

## 1.3 Study Limitations

During this study, some constraints were faced which, in one way or another, were limiting factors, as follows:

- (i) The first case was originated by the impossibility to cover part of the villages that are part of the project's growth Poles. This, due to the situation of instability in Cabo Delgado, Kenneth and IDAI Cyclones that devastated the provinces of Cabo Delgado and Sofala, respectively.
- (ii) The second error occurred more frequently during the data collection, processing and validation process. This last error was minimized with the training of the personnel involved in data collection and processing. Thus, at the end, 2.409 heads of fishermen households were interviewed, 2.269 being direct beneficiaries of the project

and 140 indirect beneficiaries.

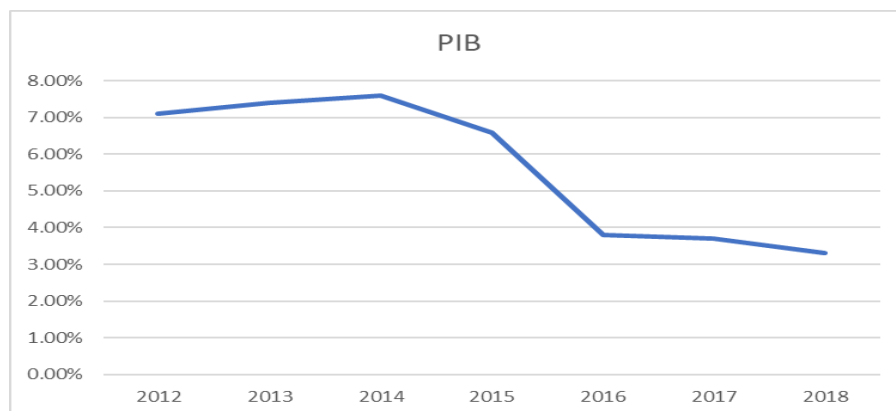
- (iii) Another constraint was the difficulty in obtaining Project results data, as a consequence of the Project not having a consolidated database from which the necessary information can be obtained in due time and, due to its lack of systematization, mainly the statistics referring to the period under evaluation. To gather what was possible always took a long time, sometimes because it was not easy to locate or because those who held it were not available to provide it. There were cases in which, for a certain period and a certain component or indicator, contradictory information emerged that it was necessary to use our judgement. This was more evident in the Financial Services Component.

## 2. MOZAMBIQUE MACRO-ECONOMIC PROFILE

### 2.1 Mozambican Economy

In the last 7 years, the Mozambican economy has presented a context of great opportunities and challenges, despite the deceleration effect generated by the disclosure of undeclared debts that has generated an environment of uncertainty and lack of confidence in public management. The opportunities are evident in the strong economic growth recorded between 2010 and 2014 and it was expected to remain at the level of 7% in the subsequent 5 years. It was also expected that the GDP growth per capita in the order of 7%, which currently has reduced to 3 % due to the current situation. The scenario is expected to change in the medium to long term due to the extractive industry impact.

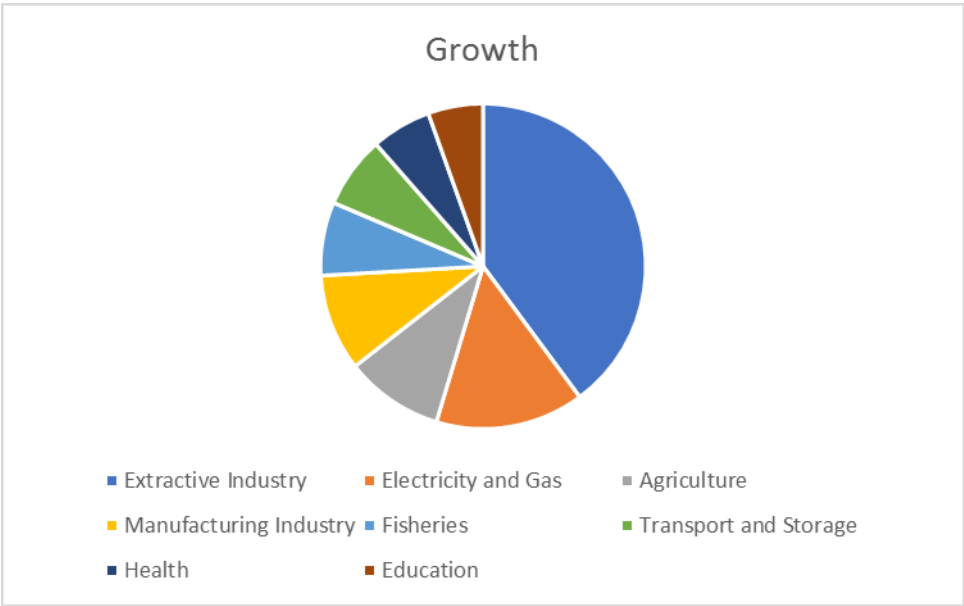
Between 2012 and 2014, Mozambique's economy had a relatively stable and robust growth trajectory, consolidating the growth rate observed in previous years, being extractive industry, construction and transport and communications the most dynamic sectors in this period. Statistics from INE (2018), show that the Gross Domestic Product (GDP) grew by 7.1% in 2012, registering 7.4% in 2013, 7.6% (2014), 3.8% (2016) and 3.7% (2017). Inflation fell from 2.7% (2012) to 2.6% (2014). Small and medium-sized enterprises had a setback and their ability to generate jobs was further reduced, which is why it became known as the two-speed economy.



Graph 1: Gross Domestic Product (GDP)

Despite this, the 2018 Economic and Social Plan projected GDP growth at 5.3%, above the 4.7% forecast in 2017, sustained by growth in all sectors, with emphasis on Agriculture, Manufacturing, Trade and Transport, positive performance expected in the sectors of Extractive Industry (24.0%), Electricity and Gas (8.9%), Agriculture (5.9%), Manufacturing (5.8%), Fisheries (4.4%), Trade (4.4%), Transport and Storage (4.3%), Health (3.6%) and Education

(3.3%). The country registered an inflation rate of 5.65% in 2017 and 3.91% in 2018.



**Graph 2: Sectoral Growth Rates**

A deceleration in economic activity in 2019 was expected, followed by a gradual recovery in 2020, still standing below its potential. This recovery will be stimulated mainly by the post-natural disaster reconstruction activities and by the dynamics resulting from the implementation of the natural gas projects in the Rovuma Basin.

On the other hand, the recent Peace Agreement could improve the investment climate and economic activity. Such perspectives are reinforced by the optimistic economic climate indicators and industrial production index.

The Metical's stability influences the inflation rate reduction to 7% and the drop in food prices. The growth of agricultural production after about three years of severe drought (the El Niño effect) also contributed to this trend. The forecast of greater domestic price stability continues to be due to the expectation of less pressure on the foreign exchange market, while the forecast of lesser foreign exchange pressure in the medium term stemmed from expectations of greater foreign currency inflows to finance post-disaster (Idai and Kenneth cyclones) reconstruction and natural resource exploration projects in the Rovuma basin.

With the announcement of final investment decision (FID) of USD 25 billion made by Anadarko in June 2019, regarding the production of about 5 billion cubic meters of natural gas in area 1 (AMA1) of Rovuma basin, it is expected that from 2024, the Gross Domestic Product of Mozambique doubles, generating 5,000 direct jobs and 45,000 indirect. In terms of revenues, the project is expected to generate around USD 2,000 million per year for 25 years and another USD 2.5



million to finance Mozambican services providers to Anadarko.

However, debt levels remain high and at an unsustainable level. External debt decreased from 103.7% of GDP at the end of 2016 to around 85.2% at the end of 2017, mainly due to the appreciation of the Metical, while the levels of the Central Government's internal debt increased due to financing needs of the State Budget.

Meanwhile, Mozambique continues to be in default on its Eurobond and on undisclosed loans. In view of Metical depreciation, the Central Bank has been implementing measures to control inflation. Considering the prevailing and recurrent current account deficit, it is evident that Mozambique will continue to demand more US dollars to face imports and this will contribute to a greater depreciation of Metical and all the previously reported challenges.

Since the last Monetary Policy Committee (CPMO) held in October 31, 2019, domestic public debt contracted using Treasury Bills, Treasury Bonds and advances from the Central Bank increased to 134,478 million meticaïs, reflecting the issue of Treasury Bonds of 3,787 million meticaïs. The above amounts do not consider other domestic public debts such as mutual and leasing contracts and overdue liabilities.

In relation to this CPMO of 31 October 2019, the assessment of the risks underlying the inflation projections has become relatively more favourable, however, uncertainties persist. Expectations surrounding the recent Peace Agreement improve the overall assessment of domestic risks, given its impact on economic activity. However, the main sources of risk remain, the focus of military instability in Cabo Delgado, the sustainability of public debt against the need for financing of both 2019 elections deficit and the post- natural disaster infrastructures reconstruction.

International reserves suffered an accumulated reduction of USD 96.3 million, up to mid-February 2018, mainly due to the sales made by the Central Bank in the Foreign Exchange Interbank Market, in the amount of USD 87.8 million (of which USD 55.5 million stands out for the settlement of the invoice for fuel) and external debt service (USD 86.1 million). Meanwhile, the balance of gross international reserves stood at USD 3.188 million, enough to cover 7.2 months of imports, excluding transactions of large projects.

International reserves continue at comfortable levels, capable of ensuring about six months of imports in 2019. Since the CPMO of October 31, 2019, gross international reserves increased by USD 111 million, to USD 3,244 million, covering approximately 6 months of imports of goods and services, excluding transactions of big projects. This behaviour reflects a greater availability of foreign exchange on the market, which has allowed the banking system to meet import needs and sell the excess to the Central Bank.

## *2.2 Mozambican Fisheries Sector*

The Republic of Mozambique is located on the south-eastern coast of the African continent and has an ocean surface of approximately 586,000 km<sup>2</sup> and approximately 13,000 km<sup>2</sup> of inland water surface consisting of rivers, lakes and other types of water flows, with high economic importance. The country's coastal length is 2,750 km, of which about 200 miles covered by Exclusive Economic Zone (EEZ).

The immensity of oceanic surfaces and inland waters provide the country with a great potential for fishery production, which is currently estimated at around 300,000 tons of different species, with 240,000 tons located in the sea, 31,000 tons in inland waters and more than 78,000 tons possible to be produced in captive systems.

According to data provided by the National Statistics Institute (INE), about 2/3 of the total population of Mozambique live along the coastal zone and therefore, most of them rely on fishing for their subsistence and, in some particular cases, a good number of stakeholders make fishing a source of family income generation making the fishing sector the main supplier of animal protein for the populations.

It is the responsibility of the Sea, Inland waters and Fisheries (MIMAIP) sector to promote activities that contribute to the fish production increase to improve the food and nutritional security of the population and to improve the living conditions of small-scale fishing and aquaculture communities and exercise State authority concerning the licensing, planning, inspection of the use and exploitation of aquatic resources and respective ecosystems.

The annual production plan for fisheries and aquaculture for the 2018 financial year was set at 349,223 tons, of which 31,416 tons of industrial and semi-industrial fishing, 315,605 tons of artisanal fishing and 2,202 tons of aquaculture.

Public administration control over all subsectors of fishing activities still requires special improvements for the subsector of artisanal fishing, which has been reported to use of harmful fishing gears in their fishing activities.

Although in 2011 the sector experienced a notable recovery of its growth rate, reaching 13.7% against 7.7% in 2010, the worst year in the history of fisheries production of all times. Some challenges have been registered in the sector, which have been originating withdrawals of some of the operators and or capital outflows to other sectors of activity, increasingly reducing the sector's contribution to the National Economy.

Operators have historically complained about high operating costs, especially diesel and ice for fish conservation and

now with the recent worsening of the situation with increased license fees, charging of fishing rights and reduced fishing effort.

Still in the Sector revitalization efforts, in 2010, the implementation of PDP 2010-2019 began in order to ensure that the different actors, e.g., the fisheries public administration, the private sector, coastal populations started to advocate and to adopt more appropriate procedures and practices to remove the sector from lethargy, to modify and to consider, since then, for the future, visions and perspectives conducive to the development of the fishing sector.

Among the various efforts made by the Government to reverse this trend, several management measures have been taken and one of them was the submission and approval by the Assembly of the Republic of the Fisheries Law (Law 22/2013, of 1 November ) aiming at promoting the revitalization of the Sector in the light of the prevailing reality.

### 3. METHODOLOGY

#### *3.1 Scope of the Study*

The project's evaluation geographic coverage comprises the 30 growth Poles where ProPESCA was implemented, which is the maritime coastal zone of Mozambique that stretches along the entire coastline, from the Rovuma River (border with the Republic of Tanzania) to the border with South Africa. The 30 selected growth Poles are in 40 districts, including municipalities and located in 7 coastal provinces, namely: Cabo Delgado, Nampula, Zambézia, Sofala, Inhambane, Gaza and Maputo.

#### *3.2 Methodological Approach*

The project under evaluation was designed and implemented based on the Results-Driven Management approach. Thus, the evaluation was also based on this approach.

The evaluation focused on the identification and measurement of the achievement of the project's expected results, based on the respective indicators and targets, as well as the measurement project's outcomes to the direct and indirect beneficiaries.

In order to carry out this work, the criteria for evaluating projects / programs were combined by using the Logical Framework and the Rapid Participatory Diagnosis methods, consisting of desk research and document analysis and qualitative and quantitative data collection and processing, allowing to assess the ProPESCA's relevance, effectiveness, efficiency and impact.

In addition to MIMAIP managers and technicians at different levels, other key players from the public and private fisheries sectors were also involved, including artisanal fishermen, fishermen's associations, Community Fisheries Councils and other stakeholders who directly or indirectly intervene in the sector. The objective of this exercise was to ensure the collection of data (qualitative and quantitative) in an effective way and to allow the main players involved in the fishing sector to share their experiences and express their opinions in relation to the achievement of the project's objectives and above all to the Impact generated by ProPESCA.

### 3.2.1 Data Collection Methodology

#### 3.2.1.1 Primary Data Collection

The primary data collection was carried out by IDEPA technicians through a questionnaire and interview guides administered to key informants in order to facilitate the team in obtaining relevant information and data at the level of the ProPESCA actors and the consultant focused on secondary data collection.

The semi-structured interviews were also carried out with the key informants at the government institutions level in order to obtain information that allowed undertaking a complete diagnosis of the ProPESCA administration services, with regard to its organization, operation, constraints, among others.

The field data collection was carried out between August and September 2019. For this purpose, different teams of interviewers were formed, which were responsible for collecting data in the seven provinces covered by the project. In each province, 2 teams were formed, composed of 4 interviewers, including the team leader who also assumed the role of trainer and interviewer.

On average, each interviewer worked in 2 districts and interviewed 24 people per hub. In Cabo Delgado, due to the situation of military instability, data collection was carried out in some villages of the growth poles of Palma, Quissanga and Macomia Poles.

#### 3.2.1.2 Secondary Data Collection

Secondary data means any information that is relevant for impact assessment, it is the result of other studies, or even can be official statistical information available in databases, reports, etc.

In order to provide the Consultant with tools to allow prior understanding of IDEPA's organizational structure and above all, the ProPESCA Management Unit, its scope, as well as identifying additional sources of information. In addition to consulting the project stakeholders to find out about their perception about ProPESCA, the consultant, always considering the Terms of Reference, collected data and information from national statistics and studies, project management reports and from IDEPA, internet, etc.

### 3.2.2 Sampling and Sample Size

The sample was prepared based on the initial baseline study, in order to ensure the results' comparison. The sample is also random and stratified into three project target groups, according to the following description:

**The primary target group** consists of poor people involved in fishing and related activities in the project area, who have the potential to expand their activities with project's support. These are poor men and women directly involved in artisanal fishing; in the processing and trade of fresh and traditionally processed fish in coastal areas of Mozambique; and those who provide inputs and provide services to fishermen and small traders.

**The secondary target group** comprises families that have fishing and fishery products as the main source of subsistence and, often, the only source of income. This group includes poor men and women most of them hired as workers for local labour-based road improvement works; members of the community-based credit and savings groups and rural finance associations supported under the project.

**The third category** comprises people and institutions that directly benefit from the project's interventions and resources but are neither poor nor small-scale operators. These are boat owners who employ other people who, under the project's activities, had the opportunity to improve their fishing equipment and their incomes; ice producers, fish processors, small traders, market agents and transport owners that play an important role in boosting the fish value chain.

Thus, the sample size initially defined was 2.947 Households, distributed among 1.457 Fishermen, 740 Fish processors or small traders, 447 service providers that form the group of project's direct beneficiaries. Additionally, 303 indirect beneficiaries were included, as shown in the following table:

**Table 1: Sample Size**

Province	Fishermen	Processors or Small Traders	Service Providers	Total direct Beneficiaries	Total indirect Beneficiaries	Total of value chain actors
Cabo Delegado	235	119	70	424	48	472
Nampula	329	169	104	602	70	672
Zambézia	235	121	75	431	50	481
Sofala	329	168	99	596	69	665
Inhambane	188	92	56	336	37	373
Gaza	94	47	28	169	19	188
Maputo	47	24	15	86	10	96
<b>Total</b>	<b>1457</b>	<b>740</b>	<b>447</b>	<b>2644</b>	<b>303</b>	<b>2947</b>

### *3.3 Data Processing and Analysis*

The information collected went through the process of organizing, screening and digitization using “SPSS” software. In the screening process, the questionnaires were counted and separated by AE and by district. The data from the questionnaire was digitalized in the computer and archived in the database created for this purpose. Thus, the outputs were presented in the form of frequency tables for analysis, using descriptive statistics, use of central trend measures and dispersion (mean, variance, standard deviation) according to the applicability for the selected variables.

The qualitative data were processed and analysed based on the content of expressive and consensual answers from the respondents to the questionnaires, and for that purpose a matrix of the interviews results was elaborated, which contained the graduation of the answers given for each question, compiled in summaries and resulting in a Database. Thus, for the analysis of qualitative data, the Pattern Matching method was applied - a technique consisting in combining similar answers, explaining of differences and obtaining relevant conclusions. Pattern matching is like frequency distribution analysis in quantitative analysis.

### *3.4 ProPESCA Evaluation Criteria*

In order to ensure objectivity in the evaluation of the expected and achieved results during the implementation of ProPESCA, quantitative and qualitative evaluation criteria were established with a score on the scale of 1 to 5. Score 1 qualitatively means that the evaluation is very weak and the achievements were below or equal to 25%; Score 2 is a weak evaluation whose achievements fell between 26%-50%, meaning that the activities started and were subsequently interrupted, but with some achievements and or with an oscillating evolution trend; Assessment 3 means an acceptable assessment quantitatively between 51% to 75% in which the activities have not ended and there are guarantees of continuity; evaluation 4 means qualitatively good with quantitative results ranging from 76% to 100% with activities completion and results achieved; and 5 means very good evaluation with more than 100% of achievements, as shown in table 2 below.

**Table2: Evaluation of ProPESCA Implementation Level**

Table of Level of PDP II Implementation		
Scoring		Requirements
Scores	Classification	
1	Very Weak (VW)	<ul style="list-style-type: none"> <li>• <math>\leq 25\%</math> of execution</li> <li>• Not started/ Started without any result</li> </ul>
2	Weak (WK)	<ul style="list-style-type: none"> <li>• <math>26\% \leq 50\%</math> of execution</li> <li>• Starts and interrupted, but with some results and/or with oscillating trend</li> </ul>
3	Acceptable (AC)	<ul style="list-style-type: none"> <li>• <math>51\% \leq 75\%</math> of execution</li> <li>• Execution on progress and with assured continuity</li> </ul>
4	Good (GD)	<ul style="list-style-type: none"> <li>• <math>76\% \leq 100\%</math> of execution</li> <li>• Concluded execution and expected results achieved</li> </ul>
5	Very Good (VG)	<ul style="list-style-type: none"> <li>• + than 100% of execution</li> <li>• Execution concluded before or at the end of the project and results achieved above expected.</li> </ul>



## 4. SUMMARY OF ProPESCA

### 4.1 ProPESCA Objectives

The project was implemented along the coastal zone of Mozambique, but its investments were concentrated in growth Poles, places where there is potential for expansion and diversification of artisanal fishing. The development objective of ProPESCA is to improve the incomes and living conditions of families whose livelihood depend mainly on artisanal fishing. The project expected that this objective would be achieved through: (a) increasing the volume of higher value commercial fish on a sustainable basis; and (b) the increase in income from the sale of fish.

Given to its design, ProPESCA benefited different target groups, namely: (a) The primary target group consisting of people who are below the poverty line involved in artisanal fishing and related activities in the project area, who with the support of the project, they had a natural potential to expand their activities of production or commercialization of fish products; (b) The secondary target group comprises households whose fisheries are the main source of livelihood and often the only source of monetary income. These families will benefit from certain project interventions not necessarily linked to fishing, such as employment in road rehabilitation works or participation in savings and revolving credit schemes; (c) The third category, which was considered to be critical to the success of the project, comprised people and entities that would directly benefit from the project's interventions and resources, but were not below the poverty line nor are they small producers (resellers of fishing inputs, owners of fish processing industries, etc.).

All these elements combined, it is estimated that around 150 thousand households would obtain direct benefits from the project, which is equivalent to approximately 760 thousand people.

### 4.2 ProPESCA Logical Framework

ProPESCA is structured in 5 components, namely: (i) Support of Higher Commercial Value Fish; (ii) Improvement of Economic Infrastructures; (iii) Development of Financial Services; (iv) Institutional Strengthening, Policy Initiatives and Project Management; (v) Promotion of Nutrition. Specific measurement results and indicators are defined for each of these components. Thus, the ProPESCA Logical Framework Matrix is structured as follows.

**Table 3: Summary of ProPESCA Logical Framework Matrix**

Components	Results	Indicators
<b>1. Support for Higher Commercial Value Fish Development</b>	<b>Result 1:</b> Diversified and commercially viable fishing units with boats, equipment and appropriate techniques to operate in the open sea.	1.1 People trained in the construction of boats (M + F: 95) 1.2 Boat sailors trained (M + F: 210) 1.3 Engine mechanics trained (M + F: 210) 1.4 Fishermen trained in good fish handling practices (M: 2.160; F: 140) 1.5 Fishermen trained in equipment and improved fishing (M: 295; F: 20) 1.6 Fishermen able to access to business development services (M: 2.210; F: 90) 1.7 New / existing associations supported (No. 100)
	<b>Result 2:</b> Improved skills and organization to improve post-harvest for post-harvest utilization and maintenance of quality of fish.	2.1 Traders / processors trained in fish handling, conservation, commercialization (M: 2,600; F: 1,400) 2.2 Fish fairs held (No 130) 2.3 Traders / processors able to access to business development services (M: 1,800; F: 950) 2.4 New / existing traders associations supported (No. 50)
	<b>Result 3:</b> Infrastructure related to markets and supply of inputs to ensure the handling and commercialization of good quality fish in hygienic conditions.	3.1 Ice machines and freezing / cold storage facilities established (No. 10) 3.2 Entrepreneurs with domestic freezers for ice production (M: 160; F: 80) 3.3 Established Wholesale markets (No. 11) 3.4 Market agents trained by type (M: 670; F: 330) 3.5 Small-scale processing units established (No. 14) 3.6 Motorized transporters for fish / inputs established by type (M: 122; F: 60) 3.7 Urban retail stores established (M: 13; F: 13) 3.8 Improved urban fish market facilities (No. 6)
<b>2. Economic Infrastructures Improvement</b>	<b>Result 3:</b> Infrastructure related to markets and supply of inputs to ensure the handling and commercialization of good quality fish in hygienic conditions.	3.9 Electricity transmission lines expanded within growth Poles (km: 160) 3.10 Electricity connections made (No.) 3.11 Alternative energy sources established by type (No. 7)
	<b>Result 4:</b> Improved access between fishing centres, markets and the national road network	4.1 Local contractors trained (No. 50) 4.2 Roads improved to the standard of all seasons by type of road (km: 500) 4.3 People who benefit from the employment of labour-based road works (M: 6,000; F: 3,000) 4.4 District staff trained in road maintenance aspects (M + F: 34) 4.5 Roads always maintained for access (km: 500)
<b>3. Financial services</b>	<b>Result 5:</b> Community-based financial institutions with increased capacity to mobilize savings and loans.	5.1 PCR promoters trained (M: 50; F: 50) 5.2 Membership-based financial institutions supported by type (No. 1,600) 5.3 Number of active savers (M: 16,000; F: 16,000) 5.4 Number of borrowers (M: 8,000; F: 8,000) 5.5 Amount of savings (USD 1.3 million) 5.6 Amount of loans (USD 2.6 million) 5.7 Members of new solidarity groups that join FRGs supported under the project (M: 2,000; F: 1,000) 5.8 People trained in functional adult literacy (M: 1,700; F: 2,700) 5.9 People trained in business planning and development (M: 8,000; F: 8,000) 5.10 Businesswomen with access to the pilot investment support fund (F: 1,000) 5.11 Amount of matching grants to support pilot investment (USD 0.25 million) 5.12 Supported formal CBFS suppliers (11) 5.13 Amount of donations corresponding to formal CBFS suppliers (USD 0.75 million)

	<b>Result 6:</b> Private financial institutions actively involved in financing fisheries related investments	6.1 Companies with access to /FMR loans / related grants (No. 220) 6.2 Amount of FMR loans / related grants disbursed (USD: 3.5 million) 6.3 New outlets for formal financial institutions by type (No. 15) 6.4 Amount of matching grants to formal financial institutions (USD: 0.8 million) 6.5 Personnel from formal financial institutions trained (M: 36; F: 24) 6.6 PCR members who join RFAs and SACCOs (M: 2,000; F: 1,000) 6.7 (ex) PCR members with access to business development loans from formal financial institutions (M: 1,050; F: 450)
<b>4. Institutional Strengthening, Policy Initiatives and Project Management</b>	<b>Result 7:</b> Increased institutional capacity to support resource management, production and commercialization of highest value fish.	7.1 New growth Poles extensionists recruited, trained and equipped (M + F: 52) 7.2 Districts with established fisheries administration (No. 23) 7.3 Growth Poles with resource potential assessment reports (No. 26) 7.4 Provincial and district staff trained by gender and type (M / F)
	<b>Result 8:</b> Improved political / legislative framework that supports artisanal fishing	8.1 Introduced policies, regulations and legislation leading to and of sustainable management (No.)
	<b>Result 9:</b> Effective project management systems.	9.1 Study, survey and strategy reports produced (No.) 9.2 AWPBs interim and audit reports submitted on time (No. 21) 9.3 Disbursement levels as part of the AR targets (100%) 9.4 Planning and review workshops / seminars conducted (No. 140) 9.5 Knowledge management and advocacy tools created (No.)
<b>4. Nutrition Promotion</b>	<b>Result 10:</b> Strengthened capacity of fishermen families to combat malnutrition.	10.1 Established demonstration gardens (No. 751) 10.2 People trained in opening gardens (No. 12,500) 10.3 Cooking demonstrations carried out (No. 1,835) 10.4 People trained in proper food preparation (No. 12,500)
	<b>Result 11:</b> Community mobilized to combat malnutrition	11.1 Community leaders trained on the need for a balanced and healthy diet (No. 640) 11.2 Nutrition programs broadcast through community radio (480 hours) 11.3 Children awareness creation in schools (No. 2,500)

## 5. STUDY RESULTS

### 5.1 Socio-Economic Characteristics of ProPesca Beneficiaries

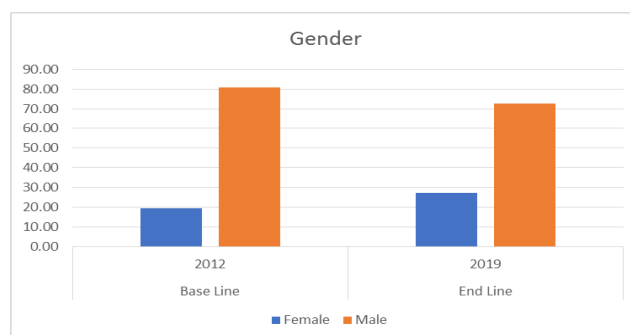
The fish catch is an activity of the exclusive responsibility of the fishermen, sometimes it is supported by some members of the family, the gatherers, who are dedicated to the collection of crustaceans and mollusks by the beach where the Fishing Centre is located. The collectors are usually women and children who, using their hands and walking along the beach, collect seafood and other products from the sea. This group is important in terms of the number of people involved and their activities that are relevant to the food security of fishing families, as the products collected are mostly used for family consumption.

Generally, artisanal fishermen carry out their fishing activities in the open sea, and in coastal areas, as well as in inland waters composed of lagoons, lakes and rivers, including their estuaries, which run along these provinces.

#### 5.1.1 Households Profile

The end line study shows that there was a greater influx of women (27.3%) compared to the baseline study (19.3%). Most respondents are male, with 72.7% in the end line study and 80% in the baseline study.

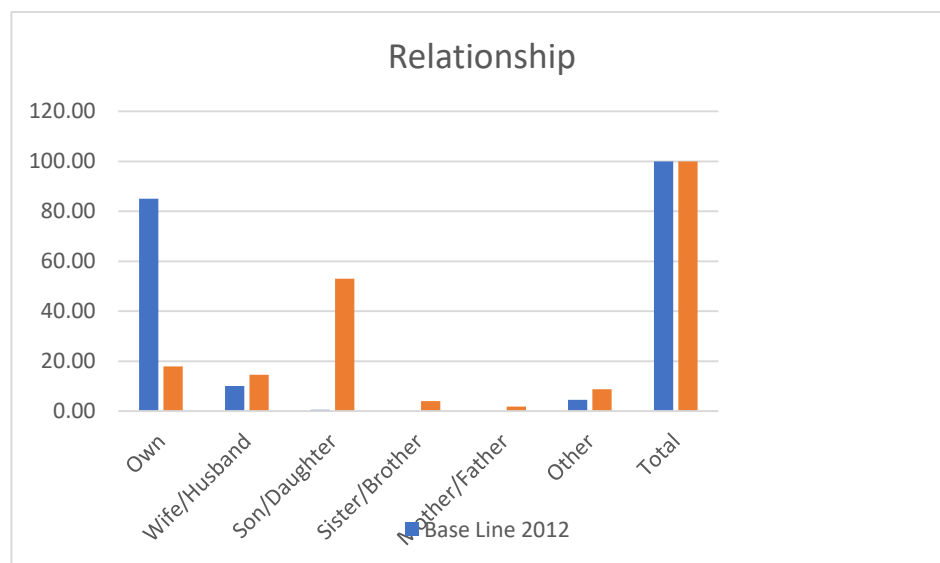
Graphically, it is showed that there was a small change in the participation of women during the implementation of ProPESCA.



Graph 3: Gender

Regarding kinship, the data show that most respondents in the end line study are children of the head of the family with 53% and followed by the head of the family with 17.8%. Below is the mother/father with 1.6%. While in the baseline study, most respondents were the heads of the family with 85% and then the wife / husband with 10%.

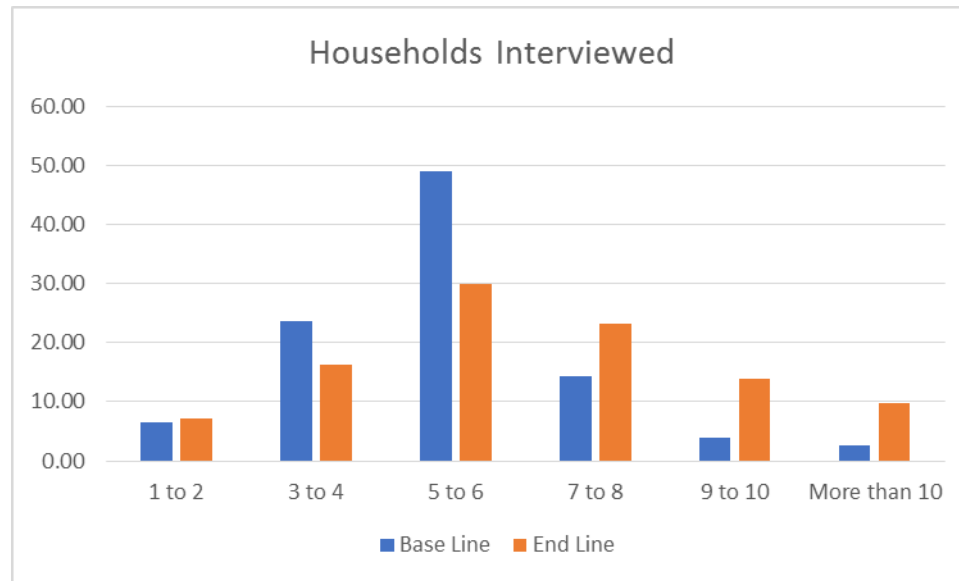
The graph below shows that with the implementation of ProPESCA there was more participation of Youth in the data collection, since at the beginning only 0.5% participated and increased to 53% in the end line study.



**Graph 4: Relationship**

Regarding the size of Households (HHs), the number of households interviewed varies from one person to more than 10 people, with 29.9% of the interviewees having the most frequent number of 5 to 6 people in the end line study and the same for the baseline study it was 48.9%.

And the graph below shows the behaviour of the size of the households interviewed in the baseline study and in the end line study, highlighting the size of 7 to 8 people in the household, which went from 14.4% in the initial study to 23.2% in the final study.



**Graph 5: Interviewed Households**

## ***5.2 Evaluation of the Project's Components and Main Results***

The analysis of the project effectiveness is a tool that allows evaluating and measuring the extent to which the project implementation met the General Objective, as well as the extent to which the project has contributed to the achievement of the Expected Results.

The project defined as its General Objective the “Sustainable increase the volume of higher value fish and increase in the revenues obtained from commercialized fish”. For this purpose, 5 components were defined to be materialized through 11 results, about which the effectiveness of the project is analysed.

The analysis of effectiveness is based on the findings obtained both from interviews with key informants and from the project reports analysis.

### **5.2.1 Component 1: Support in Development of Fishing of Highest Value**

The objective of the component was to facilitate the sustainable increase in the production and commercialization of the highest value fish in 30 growth Poles. To achieve this goal, the component would facilitate the development of the value

chain for the highest value fish, from catch to the final market, in each of the growth Poles based on an interactive assessment of the constraints, potential and opportunities for each growth hub. The approach used for this purpose was to grant a flexible financing facility that would respond to the development needs of the growth Poles. Therefore, the project promoted fishing as a business, from the capture of the highest value fish to quality maintenance, using ice and appropriate handling techniques, conservation and transport to the final consumer.

In this component, three results were planned, namely: (i) Diversified and commercially viable fishing units with boats, equipment and appropriate techniques to operate in the open sea; (ii) Improved skills and organization to improve use after catches and maintain fish quality, and (iii) Infrastructure related to markets and supply of inputs to ensure the handling and commercialization of good quality fish under hygienic conditions.

#### 5.2.1.1 Evaluation by Results to Development of Value Chain for Highest Value Fish Support Component

**Result 1: Fishing Units diversified and commercially viable with boats, equipment and appropriate techniques to operate in the open sea.**

According to the goal of the project, which was to improve the incomes and livelihoods of families involved in artisanal fishing, this meant the coastal fishing diversification, which at the time was over-exploited, for fishing in the open sea where it was possible to obtain fish of better quality and high commercial value and which, as a final result, would improve the fishermen's income and quality of life.



Boat built for open sea fishing (Govuro)

To achieve these results, the following activities were carried out: (1.1) training of 233 naval carpenters in the various growth Poles, where the most prominent were the provinces of Cabo Delgado, Zambézia, Inhambane, Gaza and

Maputo, against 110 initially planned, which resulted in a benefit the most at 112% above the target; (1.2) training of 348 boat drivers and masters in matters of marine engines maintenance with a greater incidence in the provinces of Cabo Delgado, Nampula, Zambézia, Inhambane and Maputo, against 242 initially planned, with an achievement of 144%; (1.3) Training of 195 mechanics in the repair of marine engines, this action did not reach the target, having reached 93% of the planned; (1.4) training 756 fishermen and 128 fisherwomen in good fish handling practices against 160 and 140 for men and women initially planned, this action received a total of 564%, this shows the concern that communities have with the sanitary conditions in handling of fish; (1.5) training of 792 fishermen and 44 fisherwomen in equipment and improved fishing, for which 295 men and 20 women had been planned respectively, with results above 200%; (1.6) 798 fishermen trained (and no fisherwoman) to get access to business development services, this activity resulted in a 160% participation, which is the opposite situation for fisherwomen, in which no woman was trained in these matters, although it was planned the participation of 15. Another great inequality is the ratio of 500 men to 15 women, this shows that despite the project fighting for the empowerment of women and improving access to resources and means of production, they did not have the same attention as it was given to men, which shows the great inequality in the economic power between men and women; (1.7) 48 fishermen's associations were supported in business development and creation of value chains, against 100 planned, which represents a poor achievement for this indicator. The table below shows the summary of results by indicator.

**Table 4: Fishermen training on various techniques to improve their incomes**

Result's Indicator	Measurement Unit	Established Target	Achieved Results	Level of Execution (%)	Score	Classification
1.1 People trained in boat building	People	95	233	245%	5	Very Good
1.2 Boat drivers trained	People	120	348	290%	5	Very Good
1.3 Mechanics trained	People	210	195	93%	4	Good
1.4 Fishermen trained in fish handling good practices	Man	160	756	473%	5	Very Good
	Woman	140	128	91%		
1.5 Fishers trained in improved gear and fishing	Man	295	792	268%	5	Very Good
	Woman	20	44	220%	5	Very Good
1.6 Fishermen has access to business development services	Man	500	798	160%	5	Very Good
	Woman	15	0	0%		
1.7 New/ existing Associations supported	Number	100	48	48%	2	Weak
<b>Total</b>		<b>1555</b>	<b>3294</b>	<b>212%</b>	<b>5</b>	<b>Very Good</b>

This result had a good performance, reaching a maximum average of 5 points, equivalent to Very Good.



## Result 2: Improved skills and organization to improve use after catches and fish quality maintenance.

This result is related to the promotion of good practices in handling and processing fish in the post-landing stage of the fish, for which the following activities were programmed: (2.1) Training of processors and traders in good practices in handling and processing fresh fish/ frozen; (2.2) Holding of fish fairs and fishing inputs; (2.3) Small traders/processors who get access to business development services and (2.4) Inputs for small traders associations.

From the indicators defined for this result, the following activities were carried out: for indicator (2.1), 3,220 men processors and small traders were trained in handling, conservation and commercialization of fish, reaching an achievement of 123%, for a target of 2,600 men and 1,443 women processors and saleswomen were trained in the same subjects, against a target of 1,400, i.e., a full achievement, with an additional 4%; (2.2) 1,118 fish and fishery inputs fairs were held, with a performance of only 91%, being 9% below the target of the 130 initially scheduled fairs, which thus gives a good performance; (2.3) about 1036 male traders trained in business development, have access to business development services, representing around 58% and likewise, 483 female traders and processors, also obtained access to business development services, representing about 50% of the women trained and, finally, (2.4) 52 associations of traders received inputs for business development, of the approximately 50 planned resulting in a score of “very good”. The quantitative and qualitative evaluation of this result is shown in Table 5.

**Table 5: Training of Processors/ Traders in fish handling, conservation and commercialization**

	Result's Indicator	Measurement Unit	Established Target	Achieved Results	Level of Execution (%)	Score	Classification
<b>Result 2: Skills improved and Organization for use improvement after captures and keep the fish quality</b>	2.1 Processor/ Traders trained in fresh/ frozen fish handling, conservation and commercialization	Man	2600	3220	117%	5	Very Good
		Woman	1400	1443			Very Good
	2.2 Fish and inputs fairs held	Number	130	118	90.77	4	Good
	2.3 Traders / processors able to access the business development services (M: 1.800; F: 950)	Man	1800	1036	55%	3	Accepted
		Woman	950	483			Weak
	2.4 New/ existing traders associations supported (No 50)	Number	50	52	104.00	5	Very Good
	<b>Total</b>					4	Good

Thus, the degree of achievement of this result is “Good” having reached 4 points within the established evaluation criteria scale for this Project.

**Result 3.1: Infrastructures related to markets and supply of inputs to ensure the handling and commercialization of good quality fish in hygienic conditions.**

The infrastructures related to markets and the supply of inputs to ensure the handling and commercialization of fish comprise a set of structural elements that frameworks and support the entire value chain of artisanal fisheries on which fishing activities and their continuous growth depend.



First-Sale Market (Pangane- Mucojo Administrative Post)

The artisanal fisheries support infrastructures comprise the public fish markets, within commercialization circuits, both whether they are first sale or consumer sales, ice factories, shipyards and boats construction and maintenance carpentries, landings, aquaculture experimental and training/extension centres, artisanal fisheries administration and management buildings, roads, electricity, communication, among others,

These infrastructures are extremely important in the artisanal fishing value chain, as they contribute to increase the supply of fish, improve the well-being of communities dependent on artisanal fishing, strengthen the contribution of artisanal fisheries to national economic and social development and the sector's contribution to the balance of payments.

One of the focus infrastructures investment in the artisanal fishing sub-sector carried out in the last 10 years is the establishment of fish markets. The fish markets were designed and built to allow the handling, conservation and sale of fish under conditions that do not affect the quality of fishery products.



Vilankulo Fish Market

In order to materialize the planned in this result, and within the scope of the implementation of ProPESCA, several infrastructures supporting the value chain were rehabilitated and/or built from scratch in order to create new dynamic in the artisanal fishing value chain, as well as in other sectors of activity. In fact, in the period under review and in the seven coastal provinces, 32 fish markets were built and put into operation as part of the project's intervention, of which 27 are first sale markets (MPV) and the remaining are retailers. However, of these markets, only 15 were fully financed by ProPESCA for their construction and equipment.



First Sale Market (Nova Mambone)

From the activities carried out, the following results were obtained: for indicator (3.1), 21 ice machines were purchased, including freezing and cold storage facilities, against the 10 initially planned, this indicator shows that the fish conservation capacity and ice production has been increased throughout the areas where the project was implemented.



Ice Production Machine in a Wholesale Market (Pebane-Zambézia)

(3.2) about 362 businesswomen acquired domestic freezers for ice production, increasing the quantity of ice produced by ice machines, this number represents 151% of the planned; (3.3) 15 first sale markets were established, an achievement of 136%, which reveals “very good” performance;

(3.4) 897 market agents were also trained, 613 men and 284 women, representing a total of 90%, which represents a good performance; (3.5) although it was very important to establish small-scale processing units to add value to the fish, no units had been created by the end of the project; however, during the period of data collection for this evaluation, it was noted that at the initiative of the beneficiaries, there is the appearance of a considerable number of other units for fish processing and selling, such as fishmongers (21), houses (139) also equipped with freezers (35). (3.6) ProPESCA financed the acquisition and conversion (coupling of isothermal hives) of 5 motorcycles for the fresh fish transport system, against 182 planned, thus representing an achievement of 3%, for this indicator.



Motorbike with Conservation System for fresh fish transportation (Pebane)

(3.7) There is no evidence that urban fish retail stores were established through the project, although 13 stores for men and 13 stores for women had been planned; and (3.8) 17 urban fish market facilities were improved against 6 initially planned, meaning a performance of 283%.

**Table 6: Market and Inputs Supply related Infrastructures**

	Result's Indicator	Measurement Unit	Established Target	Achieved Results	Level of Execution (%)	Score	Classification
<b>Result 3: Infrastructure related to markets and supply of inputs to ensure the handling and commercialization of good quality fish in hygienic conditions.</b>	3.1 Ice machines and freezing / cold storage facilities established (No. 10)	Number	10	21	210%	5	VG
	3.2 Entrepreneurs with domestic freezers for ice production (M: 160; F: 80)	Man	160	0	151%	5	VG
		Woman	80	362			
	3.3 Established First-sale markets (No. 11)	Number	11	15	136%	4	GD
	3.4 Market agents trained by type (M: 670; F: 330)	Man	670	613	90%	4	GD
		Woman	330	284			
	3.5 Small-scale processing units established (No. 14)	Number	14	0	0%	1	VW
	3.6 Motorized transporters for fish / inputs established by type (M: 122; F: 60)	Man	122	5	3%	1	VW
		Woman	60	0			
	3.7 Urban retail stores established (M: 13; F: 13)	Man	13	0	0%	1	VW
		Woman	13	0			VW
	3.8 Improved urban fish market facilities (No. 6)	Number	6	17	283%	5	MB

Although it has not been contemplated in any component of the Project, ProPESCA financed the acquisition of 393 marine engines, thus having the same number of boats being motorized. Throughout data collection for this evaluation, it was found that the income obtained by the beneficiaries with the use of motorized boats, motivated the used and dissemination of motorized fishing, a fact demonstrated by the registration of a total of 2,275 motorized boats, mostly acquired by beneficiaries' own funds.

With the project's intervention in the modernization of the boats and based on the evaluation presented in table 6, above, this result had a good performance, scoring at 4 points, which qualitatively means "Good".

#### 5.2.1.2 Global Evaluation of Highest Value Fish Value Chain Development Support Component

The results achieved in the implementation of this component, shows that in the period under evaluation, ProPESCA created capacities in the subsector of artisanal fishing that allows the addition of value to the fish. Confirming the data

from IDEPA and other stakeholders reports on the implementation of the project, the majority of respondents who are part of artisanal fisheries, including fishermen and their communities, were unanimous in stating that ProPESCA was a real lever for changing the approach to artisanal fisheries and this approach allowed to see this subsector as a real industry and source of income, not only for the fishermen, but for all stakeholders in the value chain.

Most of the actions planned in this component were carried out and achieved results above the expected goals, and, consequently, the three results of this component present a Very Good and Good achievement, resulting in an average of Good score.

**Table 7: Global Evaluation of Highest Value Fish Value Chain Development Support Component**

Results	Evaluation	
	Scoring	Classifications
Result 1. Diversified and commercially viable fishing units with boats, equipment and appropriate techniques to operate in the open sea.	5	Very Good
Result 2: Improved skills and organization to improve use after captures and keep the fish quality.	4	Good
Result 3: Infrastructure related to markets and supply of inputs to ensure the handling and commercialization of good quality fish in hygienic conditions.	4	Good
<b>Total</b>	<b>4</b>	<b>Good</b>

### 5.2.2 Component 2: Economic Infrastructures Improvement

This component aimed to improve physical access to fishing centres and increase the availability of electricity for the good conservation of artisanal fishery products. Three types of interventions were contemplated as follows: (a) The rehabilitation and maintenance of roads connecting the centre of the pole to the main commercial corridors or peripheral fishing centres; (b) The extension of power transmission lines from the national or local network to the centre of the hub, and from there to the landing centres with the greatest productive potential and fishing villages;

(c) The implantation of isolated systems of electricity supply based on alternative sources (essentially solar) where the previous solution was not feasible.

The activities of this component were implemented by the National Road Administration - ANE / Roads Fund (Fundo de Estradas), Mozambique Electricity Company (*Electricidade de Moçambique*) for conventional power transmission lines and National Energy Fund ( FUNAE), for isolated electrification systems from alternative sources.



### 5.2.2.1 Evaluation by Result of Economic Infrastructure Improvement Component

For the Improvement of Economic Infrastructure component, the 2 expected results are evaluated, namely: (i) Infrastructures related to markets and supply of inputs to ensure the handling and commercialization of good quality fish in hygienic conditions; (ii) Improved access between fishing centres, markets and the national road network.

#### **Result 3.2: Infrastructures related to markets and supply of inputs to ensure the handling and marketing of good quality fish in hygienic conditions.**

The main activities that contributed to the materialization of result 3 in the **Improvement of Economic Infrastructures** component are: (a) Power lines extended to the growth Poles; (b) Domestic electricity connections established; c) Alternative energy sources established.

#### **a) Electricity**

Electricity is an infrastructure that plays a fundamental role in the value chain of artisanal fisheries, as it allows the establishment of fish conservation units, as well as ice production, in order to guarantee a good conservation and quality of fish, mainly the fresh fish in the fishermen and traders camp sites, in the cities (fish markets), among other places. Until the end of the ProPESCA implementation, not all Growth Poles and Fishing Centers had an electricity network, and in some Fishing Centers located close to the district or provincial headquarters, they took advantage of the electrical network available at the district or provincial capital headquarters to feed the fish conservation units. For example, in the region of Sofala Bank (BdS), Pebane, Chinde, Praia Nova Centers in the Beira city, and, in the province of Nampula, all fish markets have electricity, being Metal Box and São Patrício markets electrified by the public network, while the Sangage and Mucoroge markets depend on the photovoltaic system. In Sofala province, the electricity from solar panels also feeds the Chiloane market, while the Mavinga, Praia Nova and Chiconjo markets receive electricity from the public grid.



Quirimbas Island photovoltaic system

However, in the markets where electricity from the public grid is supplied, constraints on fish conservation have been faced as a result of the fluctuation in the intensity of the electric current, a fact that causes considerable damage or loss to fishermen and fish traders seeking to conserve their fish. On the other hand, the supply of energy through photovoltaic systems in remote areas or fishing centres, despite being a good strategy with a potential positive impact on the conservation and quality of fish.

In terms of extending energy to the growth Poles, ProPESCA planned the extension of 160 km, having been built 15 lines with an extension of 98 km, which represents an achievement of 61.3%. Regarding alternative sources of energy, in the Project region, of the 7 planned photovoltaic systems, 8 were installed for electrification of an equal number of fish markets, constituting an achievement of 114.3% of the planned target over the life of the Project. Regarding electricity connections, the project benefited more than 50 villages and/or residential neighbourhoods, having made 2,845 connections, benefiting 575 small shops (aka), 27 public buildings, 2,195 houses and 14 fish markets.

Thus, the degree of achievement of this result is good, which is equivalent to an average of 4 points on the scale of the established assessment, as shown in Table 8 below.

**Table 8: Electricity Connection at Growth Poles**

Result's Indicator	Measurement Unit	Established Target	Achieved Results	Level of Execution (%)	Score
3.9 Electricity transmission lines expanded within growth Poles (km: 160)	Km	160	98	61.3%	AC
3.10 Electricity connections made (No.)	Number		2.845		VG
3.11 Alternative energy sources established by type (No. 7)	Number	7	8	114.3%	VG



#### **Result 4: Improved access between fishing centres, markets and the national road network.**

##### **b) Roads**

In the Poles and provinces covered by ProPESCA, access roads are made up of a set of paved (tar, paved, concrete, etc.) roads and unpaved roads, as well as some waterways<sup>5</sup> that facilitate the river transport of people and goods, including the fish.

Paved roads generally allow the connection between the different fishing centers and the main fish markets located outside the district and/or province. However, there are some paved roads that connect a fishing center and the main markets in the district.

Unpaved roads are the main form of road connection within the ProPESCA region, as they link fishing centers or fishermen's camps to local fish markets, as well as connecting between some districts. For example, some unpaved roads of interest to the artisanal fisheries value chain at Sofala Bank (BdS) are Macuzi-Namacurra (45 km), Maganja da Costa - Pebane (126 km), in the province of Zambézia, Tica - Búzi (70 km), in Sofala and Nampula-Angoche (174 km), in the province of Nampula, among others. Currently, the transitivity on these roads is done with greater reliability in the dry season, and in the rainy season it is almost impossible to connect one point to the other and aggravated by the Idai cyclone that affected in Sofala Province.



Aqueduct, Nova Mambone-Matasse Road (Inhambane)

However, in the set of unpaved roads, there are unclassified roads that facilitate access to fishing centers. Most of these roads do not allow vehicles to circulate, and only bicycles, motorbikes and carts are used to transport fish. In terms of the state of conservation of unpaved roads in this class, they are in a very bad state, making it difficult for people and goods to move. The deplorable state of some access routes in the areas covered by the Project, contributes to the existence of

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<sup>5</sup> Waterway is a way used by an aquatic transport (boats, ships or ferries) to transport goods and passengers, in oceans, rivers, lagoons, etc.

deficiencies in the flow of artisanal fishery products, a fact that greatly influences availability and prices to different buyers, particularly consumers.

Linked to this result, the project envisaged carrying out the following activities: (i) Training local contractors - during the period under review, the project did not carry out training sessions for contractors, to avoid duplication of efforts and dispersion of resources, since the road sector has been training this group regularly and using funds from other programs; (b & c) Improving classified and unclassified roads to ensure accessibility throughout the year - As for these two activities, 27 roads were rehabilitated in a total of 518 km, against the planned 500 km, an achievement of 103.6%; (d) People benefiting from jobs created in road improvement works - 880 people were involved to materialize this activity, of which 155 women, representing an overall achievement of 11%, well below what was planned; (e) Train district officials in road maintenance - 38 technicians out of the 34 planned were trained, an achievement of 111.8%; (f) Maintenance of Roads for access during all times of the year - the maintenance of roads has involved 200 people / year, and over the period under evaluation, maintenance has been carried out for an extension of about 300 km, against the 500 established, which is equivalent to 60% of achievement.



Chilaulene-Mahelene Road (Gaza)

Thus, in terms of degree of achievement of this indicator, it can be considered acceptable with a score of 3 on the defined scale.

**Table 9: Rehabilitated Roads and Number of people involved**

Result's Indicator	Measurement Unit	Established Target	Achieved Results	Level of Execution (%)	Score
4.1 Local contractors trained (No. 50)	No	50	0	0%	VW
4.2 Roads improved to the standard of all seasons by type of road (km: 500)	Km	500	518	103.6%	VG
4.3 People who benefit from the employment of labor-based road works (M: 6,000; F: 3,000)	No	H: 6.000	725	12.1%	WK
		M: 2.000	155	7.75%	
4.4 District staff trained in road maintenance aspects (M + F: 34)	No	34	38	111.8%	VG
4.5 Roads maintained for access at all times (km: 500)	Km	500	300	60%	AC

### 5.2.2.2 Global Evaluation of Economic Infrastructures Improvement Component

With the activities developed to achieve the 2 results of this component, artisanal fishing has considerably improved its performance with regard to the availability of electricity for the conservation of fish, as well as improved access routes to fishing centres, commercialization of fish and inputs in the artisanal fisheries value chain. Thus, the overall performance of this component was on average Good.

**Table 10: Evaluation of Level of Achievement of Economic Infrastructures Component**

Results	Evaluation	
	Scoring	Classifications
Result 3: Infrastructure related to markets and supply of inputs to ensure the handling and commercialization of good quality fish in hygienic conditions.	5	VG
Result 4: Improved access between fishing centers, markets and the national road network	3	AC

### 5.2.3 Component 3: Financial Services Development

Savings and Revolving Credit Groups (PCRs) are organizations promoting access to financial services to low-income population, particularly in rural areas. Its characteristic is the community and its members involvement in the management of local financial structures, a methodology that allows replacing formal guarantees by moral guarantees. The methodology has already been tried out successfully in many African countries and has been promoted in Mozambique since the late 1990s (in [www.ruralmoc.gov.mz](http://www.ruralmoc.gov.mz)).

The objective of the component was to *improve the quality of the target group's livelihoods by improving the provision, access, adequacy and sustainability of financial services in artisanal fishing communities*. The component combined support for both formal and informal sectors with expansion and strengthening of PCRs as an approach and introducing new measures to facilitate the provision of financial services by institutions in the formal financial sector (banks, microbanks and MFIs).

The proposed approaches were the development of community-based financial services and financial support for investments in the fisheries value chain. This component was structured in two results, containing 23 indicators, as shown in table 10 below.

### 5.2.3.1 Evaluation by Result of Financial Services Development

#### **Result 5: Community-based financial institutions with increased capacity to mobilize savings and loans.**

In order to achieve this result, 16 indicators were established, and the respective goals established and it was expected various activities to be carried out, such as:

(5.1) *Training of PCR Promoters* - one of the first actions recommended in this result, was the training of PCR Promoters and who in turn should assist the groups of PCRs. In fact, during the implementation of the project, 485 technicians were trained, of which 420 men and 65 women, against the goal of 100 technicians that had been established, which by far exceed the pre-established goal. (5.2) *Support for PCR Groups* - the PCR promoters now trained, assisted around 2,188 PCR groups, against the planned 1,600, exceeding the target by about 137%, which is equivalent to a very good qualitative achievement.

(5.3) *Savers* - Regarding savers, 16,000 new savers were set for men and an equal number of women, and until the end of the project, 12,962 male and 16,718 female savers were registered, one of the reasons for the growth of female savers is due to the fact that they represent about 61.5% of PCRs members. (5.4) *Borrowers* - For borrowers, the target had been set at 8,000 borrowers, both for men and women, the latter having surpassed the target by reaching 104.5% of participation and men at 85% of the target, which evaluate this indicator as achieved Good score.

(5.5) *Savings* - The volume of savings expected was USD 1,300,000.00, having been executed in 306.52% of the planned amount, with the province of Inhambane standing out with the highest amount of 98,510,730.00 MT and Nampula had the lowest savings amounting at 31,789,530.00 MT, although it is the province that created the largest number of PCRs in total 770. (5.6) *Lending* - the volume of planned credit was USD 2,600,000.00, having been disbursed about 296.75% by the end of the project, with the province of Zambézia registering the largest volume of loans, a fact that can be witnessed by the greater number of boats, acquired during the period of ProPESCA, in total

4,970, of which 1,019 canoes (Moma type), 3,715 dugout canoes and 175 motorized boats, justifying the volume of loans disbursed; unlike Zambézia, the province of Nampula was the one with the least credit disbursed, however it is noted that in this province most operators in the fish value chain make investments with their own funds. The two indicators registered a very weak and weak performance, respectively, at 3.13% and 36%.

(5.7) *Assistance to PCR Groups* - regarding new assisted PCR groups, it appears that the assistance given was in the form of lectures on the importance of financial services, several topics were presented to different groups, highlighting the savings topic and its importance, as a way of teaching how to save for money use in the future, funds management strategies, composition and management of PCRs, among others. The number of existing PCRs that have been strengthened can be seen in Table 10, below.

(5.8) *Training in financial education* - In terms of financial education, 5,091 men and 6,969 women were trained, which demonstrates the relevance of the subject for strengthening of PCRs groups, taking into account that the target was 1,700 men and 2,700 women, which reveals a very good performance, with an achievement above 250% deserving for that reason, a score of "Very Good". (5.9) *Training in Business Planning and Development* - with regard to business development and management, the number of graduates is the same as that of financial education, however, for this the goals had been established in 8,000 attendees for men and the same number for women, so the achievement for this indicator was 63.3% and 87.11% for men and women respectively, which on average is acceptable with a final score of 75.4%.

(5.10) *Access to the Pilot Investment Fund* - in the case of access to pilot investment funds, of the 1,000 women expected, only 492 accessed these funds, which, by certain degree, may not have contributed to the improvement of women's living conditions who mostly live in poverty and with limited access to production assets and credit, having had access to these funds, only about 49.2%, therefore the performance of this indicator was "weak". (5.11) *Pilot Investment Fund* - However, regarding to the value of the pilot investment, which was planned at USD 250,000.00, a further USD 95,000.00 was disbursed, meaning an execution of 138%.

(5.12) *Support for formal CBFS providers* - During the life of the project, support had been programmed for 11 formal providers of Community Based Flexible Funds (CBFS) and until the end there had been no support. (5.13) *Matching Grants for CBFS Formal Providers* - Therefore, the value of donations budgeted at USD 750,000.00 for these providers was also not allocated, thus revealing a practically zero performance of these indicators.

(5.15) *Assistance for PCRs created* - In order to fulfil the objectives outlined by this component, 2,400 groups of Savings and revolving credit (PCR) were created and assisted, exceeding the goal of 1,600 PCR groups by 150%. (5.16) *PCR leadership by Women* - Of the groups created, 1,877 are led by women, showing the commitment that ProPESCA had for women's empowerment, participation in decision-making processes and access to production assets. The Nampula

province is the one with the highest number of PCRs, in a total of 770, while Maputo and Gaza are the ones with the lowest number of PCRs in the total of 140. Both indicators present a positive performance, scoring “very good”.

Overall, this result registered a very good performance, with an average achievement of 107.11%, as shown in the table 10, below.

**Table 11: Community based Organizations with Fund-raise Capability**

	Result's Indicator	Measurement Unit	Established Target	Achieved Results	Level of Execution (%)	Score	Result's Indicator
Result 5: Community-based financial institutions with increased capacity for savings mobilization and lending	5.1 Staff of PCR promoters trained	Men	50	420	840.00	5	VG
		Women	50	65	130.00		
	5.2 Member-based financial institutions supported by type	Number	1,600	2,188	136.75	5	VG
	5.3 Number of active savers	Men	16,000	12,962	81.01	4	G
		Women	16,000	16,718	104.49	5	VG
	5.4 Number of Borrowers	Men	8,000	6,789	84.86	4	G
		Women	8,000	8,564	107.05	5	VG
	5.5 Value of Savings - millions of USD	USD	1,300,000.00	3,984,727.50	306.52	1	VG
	5.6 Value of Loans - millions of USD	USD	2,600,000.00	7,715,507.33	296.75	2	VG
	5.7 New assisted PCR groups	Men	2,000	0	0.00	1	VW
		Women	1,000	0	0.00		
	5.8 People trained in financial education	Men	1,700	5,091	299.47	5	VG
		Women	2,700	6,969	258.11		
	5.9 People trained in business development and planning	Men	8,000	5,091	63.64	3	AC
		Women	8,000	6,969	87.11	4	G
	5.10 Women entrepreneurs accessing pilot investment funds	Women	1,000	324	32.40	2	W
	5.11 Value of the pilot investment fund	USD	250,000.00	345,000.00	138.00	5	VG
	5.12 Formal CBFS providers supported	Number	11	0	0.00	1	VW
	5.13 Value of Matching Grant to formal CBFS providers - millions of USD	USD	750,000.00	0	0.00	1	VW
	5.14 CBFS members	Men	18,000	15,512	86.18	4	G
		Women	18,000	16,718	92.88		
	5.15 Assisted Created PCR	Number	1,600	2,400	150.00	5	VG
	5.16 PCR led by Women	Women	0	1,877		5	VG

## **Result 6. Private financial institutions actively financing fisheries related investment.**

In relation to this result, it was planned to contract and bulk loans for banks and micro-banks, to contract and grants to increase the presence of FIs and micro-finance institutions in ProPESCA Poles, credit concession under Risk Mitigation special Funds (FMR) , Innovative Enterprises (FPPE) and Women Enterprises (FPME).

Under activities developed to achieve this result, of 250 companies qualified to access donations and the Risk Mitigation Fund (FMR), only 29, which represent 12% had access to these funds, in the amount of USD 419,400.00, representing about 12% of the budgeted USD 3,500,000.00, resulting in a very weak performance compared to the planned.

Seven (7) new branches out of 15 planned were opened by formal financial institutions, one of the reasons for opening of fewer branches than planned was the delay in the projects approval by the donor and the amount of donations reached USD 1,347,500.00, an execution of about 168% if compared to the planned USD 800,000.00 and none of the formal financial institutions' employee was trained. The lack of employee training was because the projects of these institutions were approved very close to the end of the project, that is, in the beginning of 2018. Thus, in qualitatively, these indicators scored "weak", "very good" and "very weak", respectively.

By the end of ProPESCA, no PCR group had access to community-based funds (SACCO) and not even the PCRs former members had access to loans for business development from formal financial institutions.

Therefore, the degree of implementation of this result is set at 34.1%, that is, weak, which corresponds to 2 points according to the established evaluation criteria.

**Table 12: Private Financial Institutions Involved in Financing the Fisheries Sector**

Result 6. Private financial institutions actively involved in financing fisheries-related investments	Result's Indicator	Measurement Unit	Established Target	Achieved Results	Level of Execution (%)	Score	Result's Indicator
	6.1 Enterprises accessing matching grants / RMF loans	Number	250	29	11.60	1	VW
	6.2 Value of shares disbursed - millions of USD	USD	3,500,000.00	419,400.00	11.98	1	VW
	6.3 New outlets (branches) of formal financial institutions	Number	15	7	46.67	2	W
	6.4 Value of matching grants to formal financial institutions	USD	800,000.00	1,347,500.00	168.44	5	VG
	6.5 Staff of formal financial institutions trained	Men	36	0	0	1	VW
		Women	12	0	0	1	VW
	6.6 PCR members joining the RFAs and SACCOs	Men	2,000	0	0	1	VW
		Women	1,000	0	0	1	VW
	6.7 (ex)PCR members accessing enterprise development loans from formal financial institutions	Men	1,211	0	0	1	VW
		Women	519	0	0	1	VW

### 5.2.3.2 Global Evaluation of Financial Services Development Component

With ProPESCA the revolving credit program (PCR) was strengthened, saving groups were created and trained, and service providers were hired to work with these groups in training them in all credit management techniques, business management and support in the preparation of projects, and received support in the registration of fishermen's associations/cooperatives as part of their eligibility for credit. Besides of facility credit access to the fishermen's, these activities aimed at educating not only the fishermen, but also the communities in credit culture (receiving, using for due purposes and repayment).



Regarding the result 5 of this component, activities that respond to the objectives of the component was implemented, namely; (i) savings increase, achieved 306% of execution, demonstrating that the members involved in the PCR groups developed the habit of sending of their savings to the groups; (ii) despite the fact that the majority of members continued to use own funds for investments in the artisanal fishing sector, there was a significant increase in the volume of credit granted, which is why, by the end of the project, tripled established target. The concession of credit promoted development in the Zambézia province, where many improved boats were purchased and the motorization of a significant number of boats; (iii) the other component's objective was women's empowerment and to improve their access production assets and to credit, a special credit line was created for women's enterprises and, of the 1,000 women planned to access these funds, only 32.4% was beneficiary of an amount of USD 345,000.00 against the budgeted USD 250,000.00.

On the other hand, Result 6, on private financial institutions involved in financing investments in the fisheries sector, was the one with a very low execution, around 34.1% and scoring "weak". The fact that activities 6.5, 6.6 and 6.7, which were crucial for improving the living conditions of fish value chain operators in the 7 provinces, were not carried out, had significant contribution to these results. There was no incentive for the development of ex-PCR members companies, nor did the PCRs groups access the community funds, in order to increase their ability to access to loans and to receive donor guarantees for loans granted to operators. Only 29 companies had access to donations and risk mitigation funds, with only USD 419,400.00 disburse out of USD 3.5 million allocated for this purpose.

The implementation of the Financial Services Component allowed a considerable number of fishermen to modernize their boats and to acquire fishing gear and modern means for fish conservation, and consequently increased their income levels. However, one of the biggest challenges faced in granting credit is repayment, since, according to information from the FFP, the repayment of credit granted is below desirable, which worries the institution, associated with the fact that at the beginning of the program an effective control mechanism for credit recovery has not been established.

Thus, the average execution of this component is 70.6% corresponding to acceptable score, as shown in table 12, below.

**Table 13: Evaluation of level of achievement of Financial Services Component**

Results	Evaluation	
	Scoring	Classifications
Result 5: Community-based financial institutions with increased capacity to mobilize savings and loans.	5	VG
Result 6. Private financial institutions actively involved in financing fisheries related investments	2	WK

## 5.2.4 Component 4: Institution Strengthening, Policy Initiatives and Project Management

Component 4 aimed to strengthen the institutions responsible for promoting artisanal fisheries so that they could play their roles in the implementation of the project and increase their capabilities to continue implementing these activities after the end of the project.

The strategy for implementing the project was based on working with the responsible government agencies, using their staff and modus operandi, and as needed, providing additional support to facilitate the implementation of specific activities within ProPESCA implementation framework. In the areas where both private sector companies and NGOs had a comparative advantage, they were hired to provide the necessary services. In addition to direct support to IDEPA, as responsible for implementing the project, this component also aimed at supporting the National Fisheries Administration (ADNAP), the National Fisheries Research Institute (*Instituto Nacional de Investigação Pesqueira* - IIP) and the Fisheries Promotion Fund (FFP), three institutions playing critical role in the Sea, Inland Waters and Fisheries sector.

For this component, three results were set, herein evaluated: (a) Increased institutional capacity to support resource management, capture and commercialization of higher commercial value fish; (b) improved policies/appropriate legal framework for artisanal fisheries; (c) Effective project management systems in place.

### 5.2.4.1 Evaluation by Result of Institutional Strengthening, Policy Initiatives and Project Management

**Result 7. Increased institutional capacity to support resource management, production and marketing of the highest value fish.**

In relation to this result, the following main indicators were established: (i) Extension workers recruited and placed in the Growth Poles; (ii) Districts with established fisheries management units; (iii) Report on the potential fishing resources assessment prepared; and (iv) Government officials at provincial and district levels trained in fisheries management. Thus, to achieve the goals defined for these indicators, over the seven years of the project, various activities were carried out, consisting in: (i) training of district and municipal administrations on the participatory management system; (ii) dissemination of the fisheries licensing, inspection and monitoring manual; (iii) Elaboration of fisheries administration management training tools; (iv) training of ADNAP technicians in fisheries management; (v) updating the exploitation state of resources accessible to artisanal fishing; (vi) assessing the potential of crab fishing accessible to artisanal fishing; (vii) validating the use of fishing area mapping methods; and (viii) Validation of potential areas for aquaculture.



House of an extensionist in Bilene Hub

Also in the context of strengthening institutional capacity, an internal evaluation of the implementation of the artisanal fishing gender strategy was carried out; gender strategy implementation plan (2013-2016); dissemination of the gender strategy; training and creation of awareness to staff on targeting and gender; development of a training manual on gender inclusion; and Definition of Terms.

The implementation of activities under this result had a Very Good performance on the 5-points scale, as illustrated in the table below. However, of the three planned activities, two failed to reach 50% of achievement, being qualitatively with a low degree of achievement, therefore, despite this weak achievement, in general, the indicator achieves a very good final achievement, derived on the one hand from the target set in one of the indicators being extremely low if compared to achievements, which evidently inflated the degree of achievement.

**Table 14: Evaluation of Result 7 of Component 4**

Result's Indicator	Measurement Unit	Established Target	Achieved Results	Level of Execution (%)	Score
7.1 New growth Poles extensionists recruited, trained and equipped (M + F: 52)	Pessoa	52	36	69.2%	AC
7.2 Districts with established fisheries administration (No. 23)	No	23	7	30.4%	VW
7.3 Growth Poles with resource potential assessment reports (No. 26)	No	26	14	46.7%	VW
7.4 Provincial and district staff trained by gender and type (M / F)	People (H)	84	393	593.5%	VG
	People (M)	23	242		
Average Degree of Achievement				184.95%	VG

## **Result 8: Improved policies/appropriate legal framework for artisanal fisheries.**

This result would be achieved through: (a) support for management policies development; and (b) introduction of regulations and legislation.

As part of the implementation of ProPESCA, no policy and strategy initiatives or actions aimed at revising regulations and legislation were supported. However, in the framework of other initiatives in the sector, during the period, revisions and formulation of laws and regulations for the fishing sector were carried out, which culminated in the approval of the current Fisheries Law, Law N°. 22/2013, of November 1. Following the approval of this law, processes of revision of regulations and fisheries management plan related to it continued, with a favourable impact on artisanal fishing. Thus, the achievement of this result can be considered good.

## **Result 9: Effective project management systems.**

It was defined that the achievement of this result would be through the implementation of monitored activities through the following indicators: (a) Investment plans in the identified Poles; (b) Studies and research Reports produced; (c) Planning and review workshops / seminars held; (d) Knowledge management and advocacy tools created.

(9.1) *Investment plans in the identified Poles* - At the beginning of the project implementation, consultation and participatory planning activities were carried out in the 30 growth Poles. Following this exercise, an action plan was prepared for each hub. The plans served as a reference for annual activity plans preparation. Based on the data collected at the time of the action plans preparation, basic information was also organized to monitor the impacts of the project on the growth Poles.

(9.2) *Studies and research Reports produced* - To serve as a monitoring tool of the project impacts, 2 studies were carried out in the initial (baseline) and final (end line) phases of the project, which are fundamental tool for measuring the project implementation impact in the target areas. In order to deepen the knowledge about the socio-economic situation of artisanal fishing and aquaculture, a mid-term evaluation study was also carried out, which culminated in the revision of some Project indicators and targets, in addition to these studies, the Survey to Households of fishermen and aquaculturists (IAFPA), in general this activity was executed in 23%, (9.3) and with regard to *disbursements*, until the end of the project, USD 51.863 million were disbursed, corresponding to 95.4 % of the amount allocated to the project and had

an execution of 95%, as shown in table 14 below; (9.4) regarding to *Planning Workshops and Seminars*, a total of 30 out of 140 programmed were carried out, representing an achievement of 16%,

**Table 15: Global financial situation**

Donor	Total Alocated (Inical)	Total Alocated (Revised)	Total Disbursements (Cummulative)	Total Executed (Commulative)	% Disbursements	% Execution
FIDA	21,132	20,124	20,124	19,757	100	98
OFID	13,530	13,530	11,534	11,505	85	85
EU-MDG	18,975	16,572	16,084	16,084	97	97
GDM	4,161	4,161	4,121	4,161	99	100
<b>Total</b>	<b>57,798</b>	<b>54,387</b>	<b>51,863</b>	<b>51,507</b>	<b>95</b>	<b>95</b>

Thus, the execution level of this result is qualitatively Good and scoring 4 points.

**Table 16: Evaluation of Result 9**

Result's Indicator	Measurement Unit	Established Target	Achieved Results	Level of Execution (%)	Score
9.1 Study, survey and strategy reports produced (No.)	No	30	30	100%	VG
9.2 AWPBs interim and audit reports submitted on time (No. 21)	No	21	21	100%	VG
9.3 Disbursement levels as part of the AR targets (100%)	%	100% (\$57.8 )	(\$45-9) 79.4%	79.4%	GD
9.4 Planning and review workshops / seminars conducted (No. 140)	No	140	30	21.4%	WK
9.5 Knowledge management and advocacy tools created (No.)	No		45		

#### 5.2.4.2 Global Evaluation of Institutional Strengthening, Policy Initiatives and Project Management

The strategy adopted in the implementation of the Project consisting in the strengthening institutional capacity, training and strengthening the main institutions involved in the implementation, had the desired effects, since the results presented here demonstrate an appropriation by technicians and managers in the sector, and this is already a guarantee of institutional sustainability. Additionally, by focusing on policy improvements and an adequate legal framework and having achieved a good degree of achievement in these results, this itself is a guarantee of a favourable environment for the development of economically viable fishing activities, from capture to commercialization.

In summary, the degree of achievement of the Institutional Strengthening and Project Management component is, on average, Good, as shown in the table below.

**Table 17: Evaluation of level of achievement of Institutional Strengthening, Policy Initiatives and Project Management Component**

Results	Evaluation	
	Scoring	Classifications
Result 7. Increased institutional capacity to support resource management, production and commercialization of highest value fish.	5	VG
Result 8: Improved political / legislative framework that supports artisanal fishing	4	GD
Result 9: Effective project management systems.	4	GD

### 5.2.5 Nutrition Component

The SETSAN Food and Nutrition Security Baseline Study, 2013, indicates that the prevalence of chronic malnutrition is highest in the northern and central provinces (Niassa to Sofala, 44-52%) and lowest in Maputo Province, Maputo City and Inhambane (26-31%). The prevalence of acute malnutrition follows the same pattern, being highest in the North and Centre (Niassa to Sofala, 6-12%) and lowest in the South (3-4% in Inhambane, Gaza, Maputo Province and Maputo City).

Consequently, in the Food and Nutritional Security Baseline Study (SETSAN), 2018, 531,476 people in 19 districts were classified in crisis situation (more than 20% in integrated analyses of food security and nutrition phases - IPC) in the districts of Chibuto, Chicualacuala, Chigubo, Guija, Mandlakaze and Mapai in the province of Gaza, Funhalouro, Mabote and Panda in the province of Inhambane, Cahora Bassa, Changara, Chifunde, Chiuta, Doa, Magoe, Marara, Moatize and Mutarara in the province of Tete and Chemba in Sofala Province needing urgent interventions to protect their livelihoods, reduce food shortages and increase their resilience to extreme events. The main causes were pointed out, poor agricultural productivity due to irregular rain fall and late onset, lack of improved seeds and tolerant to climate change, inadequate food consumption, insufficient food reserves, incidence of pests and diseases in crops and low access to improved water and sanitation services.

The Nutrition component aimed to improve the diversity of the diet of women in reproductive age (15-49 years) and children (6-23 months) in the fishing Poles of Maputo, Gaza, Inhambane, Zambézia, Sofala and Cabo Delgado, and

have as specific results: (i) Improved knowledge about a diversified diet, (ii) Improved availability of vegetables, fruits, local foods and animal products, and (iii) Improved food preparation, conservation and processing practices.

The Province of Nampula was not included in ProPESCA Nutrition component since it had its implementation before, being a pilot in PPABAS and influenced the performance of activities in the other provinces under ProPESCA.

This component was introduced in ProPESCA during its implementation, i.e. in 2016, and consists of two results herein evaluated, namely: (i) The capacity of fishing families to combat malnutrition is strengthened; and (ii) Community mobilized to combat malnutrition

#### 5.2.5.1 Evaluation by Result of Nutrition Component

##### **Result 10: Reinforced capacity of fishing families to combat malnutrition.**

To achieve this result, indicators were established and a set of activities was implemented, which consisted in: (10.1) *Establishment of demonstrative vegetable gardens* - For a total of 751 demonstrative vegetable gardens planned for all groups of women in the provinces where the component was implemented, 515 gardens were cultivated, which represents an achievement of 69%. The Gaza Province was the one that performed the best, because, with the planned 68 gardens, it established 84, thus reaching an implementation level of 124%. Sofala province was the least prominent, with a plan of 150 gardens, established 52 demonstrative vegetable gardens; (10.2) *Train beneficiaries in vegetables gardens establishment* - For the opening of vegetables gardens, it was set as a goal to train 12,500 women aged 15 to 49 and 9,996 women were trained, thus reaching the level of implementation in 80%. The Sofala Province was the one that performed the best with 116% of implementation level and with the least performance was the Cabo Delgado province with 73%; (10.3) *Culinary demonstrations* - with this activity, the objective was to enable groups of women aged 15 to 49 to prepare food properly, from hygiene to preparation. In all, 1,835 cooking demonstrations were planned, and 2,513 demonstrations carried out. The Sofala province was the one with the highest performance with an implementation level of 283% and the Cabo Delgado Province was the last one with an implementation level of 69%; (10.4) *Train beneficiaries in the proper preparation of food* - 12,147 beneficiaries were trained in the proper preparation of food, against the 12 500 initially planned.

As shown in table 17 below, Result 10, performed well, with an achievement of 91%.

Table 18: Evaluation of Result 10

Results Indicators	Unit of measurement	Established Goals	Results Achieved	Degree of Achievement (%)	OBS:
10.1 Established demonstration gardens	Number	751	515	69%	Acceptable
10.2 People trained in opening gardens	Number	12,500	9,996	80%	Good
10.3 Cooking demonstrations held	Number	1,835	2,513	137%	Very Good
10.4 People trained in proper food preparation	Number	12,500	12,147	97%	Good
TOTAL		27,586	25,171	91%	Good

### Result 11: Community mobilized to combat malnutrition

In order to achieve the objective of the nutrition component, for the materialization of the second result of this component, activities such as: (11.1) *Training community leaders on the need for a balanced and healthy diet were recommended* - this activity was important therefore, taking into account that eating habits and customs can be a factor that contributes to malnutrition, then the change in these habits and customs does not occur in a linear way at the individual or family level, so for its successful implementation, it was defined as essential the involvement of influential people in the communities, like Community leaders, presidents of CCP's, PCR's, fishermen's associations, Secretaries of neighbourhoods, including religious leaders. In this way, 622 training sessions were carried out for this group, against the planned 640, which represents an achievement of 97%, with Cabo Delgado Province performing the best with an implementation level of 155% and Sofala province with the least achievement with an implementation level of 18%; (11.2) *Radio broadcasting of nutrition programs through community radio stations* - For this activity, the target was to broadcast 480 radio programs, of which 529 were carried out, thus reaching a level of implementation of 110%; and (11.3) *raising awareness of children in schools regarding nutrition education* - throughout the implementation of the project, activities were carried out such as preparing home vegetables gardens, balanced food and eating habits, culinary demonstrations based on local products, hygiene and food preservation, demonstration of local food preservation techniques, among others. Thus, 2,992 sessions were held against the 2,500 planned in schools, that is, an achievement of 120%.

In summary, the performance of this result was very good with an achievement of 114%, as shown in table 18 below:



Table 19: Evaluation of Result 11

Results Indicators	Unit of measurement	Established Goals	Results Achieved	Degree of Achievement (%)	OBS:
11.1 Community leaders trained on the need for a balanced and healthy diet	Number	640	622	97%	Good
11.2 Nutrition programs broadcast through community radio	Hour	480	529	110%	Very Good
11.3 Sensitized children in schools	Number	2,500	2,992	120%	Very Good
<b>TOTAL</b>		<b>3,620</b>	<b>4,143</b>	<b>114%</b>	<b>Very Good</b>

#### 5.2.5.2 Global Evaluation of Nutrition Component

With the activities developed in order to achieve the 2 results, the nutrition component whose main objective was to improve the diversity of the diet in at least 40% of women at reproductive age, teenagers and children under 2 years old, had a good level of achievement.

Consequently, these activities allowed the start of positive changing of families diet attitudes; however it must be taken into account that interventions in the area of nutrition require a minimum period of 24 to 36 months for the visibility of their impact and that was not the case for this component. However, the end line study carried out at the end of the implementation of the component, revealed a significant improvement in the malnutrition rates in children, as well as in the eating habits of the communities benefiting from ProPESCA. Despite these results, there is still a need to continue to develop and consolidate nutrition activities as there are still less than half of women and children who do not have a good diet in the project areas.

Table 20: Global Evaluation of Nutrition Component

Results	Evaluation	
	Scoring	Classifications
Result 10: Strengthened capacity of fishermen families to combat malnutrition	4	Good
Result 11: Community mobilized to combat malnutrition	5	Very Good
<b>Total</b>	<b>5</b>	<b>Very Good</b>

### 5.3 Efficiency in ProPESCA implementation

The efficiency analysis aims to assess the management aspects of the project, including coordination, capacity in terms of human resources and the management of financial resources, as well as their suitability for the project.

ProPESCA, was initially designed for multiple funders and after approval, several withdrew, except for IFAD. Hence, financial reengineering was necessary for IFAD to finance other components that were not planned in the initial negotiation. In turn, IFAD made contacts with OFID/OPEC and the European Union to finance the project. The new financiers went to specific areas, such as the European Union, which only financed component 2 - Infrastructure Development in the provinces of Sofala, Zambézia and some project management activities, while IFAD financed project follow-up activities, training and institutional support.

As mentioned, the project was under ex-IDPPE, having been designated the respective National Director as the ultimate responsible for its implementation. For the operationalization of ProPESCA, a Project Coordination Unit was established at central level, led by a Coordinator who responded to the IDPPE Director, and to support the coordinator in the implementation, especially in the administrative, financial and monitoring aspects, were contracted and paid by the project, a Financial and Contracts Manager, a Monitoring and Evaluation Officer, a Monitoring and Evaluation Assistant, three Financial Assistants, a Procurement Assistant, an Administrative Assistant and a Driver. In addition to these technicians hired by the project, it had the collaboration of technical assistants from other areas of intervention of the project, such as infrastructure, Fishing technology, Value Chains, Gender and Financial Services, and also had specialized technicians from IDEPA, as well as from ADNAP, IIP and FFP. The implementation of the Infrastructure component as roads and energy was the responsibility of ANE, FUNAE and EDM.

A Project Steering Committee was also established to approve plans and quarterly reports.

At the provincial level, initially the activities were coordinated by the IDPPE Delegate, however with the changes that took place in 2015, in which the public administration of fisheries started to be executed by MIMAIP and by the institutions reorganized in accordance with the new organic structure, designed within the scope of the governmental organization of the new legislature, ProPESCA was integrated into IDEPA, an institution resulting from the merger of the then IDPPE and National Aquaculture Development Institute (*Instituto Nacional de Desenvolvimento da Aquacultura – INAQUA*), and, at the provincial level, IDEPA's activities were integrated into the Provincial Directorate of the Sea, Inland Waters and Fisheries, as the provincial IDPPE Delegations were extinguished.

The management of the project followed the rules and procedures established in the ProPESCA management manual, however some constraints observed in the project implementation are related to the initial delay in the expected disbursements due to changes in the government approach in the management of external funds allocated to sectorial projects that are now channelled to the Single Treasury Account (CUT). Consequently, the project took about 8 months for its effective implementation, since the State's E-SISTAFE fund management system was not prepared for the management of project funds of ProPESCA nature, and it was necessary to adapt it for that purpose. On the other hand, the organizational changes introduced in 2015, at some point had a negative impact on the performance of the project, since the vertical relationships (top down) that existed, both from the Project Coordination Unit and from the IDEPA Directorate to the provincial delegations, ceased to exist, having to coordinate with an institution of a political nature, such as the provincial directorates.

The final amount allocated to the Project was approximately US \$ 55 million, which the execution per component is presented as follows:

**Table 21: ProPESCA Global Execution by Component (in USD)**

Component	Total Allocated (Revised)	Total Executed (Cumulated)	% Execution	Balance
1. Support to Development of highest commercial value fish products	14,865,688	14,956,885	101	(91,197)
2. Improvement of Economic infrastructures	21,783,707	17,076,602	78	4,707,105
3. Financial services development	4,995,243	4,260,640	85	734,604
4. Institutional Strengthening, policy initiatives and project management	10,548,661	12,972,849	123	(2,424,188)
5. Promotion of Nutritional Education	2,193,165	2,240,240	102	(47,076)
<b>Total</b>	<b>54,386,464</b>	<b>51,507,216</b>	<b>95</b>	<b>2,879,248</b>

The global financing of the project initially established at approximately USD 57.8 million was revised downwards to USD 54.4 million in view of the exchange rate fluctuations to which the original currencies were subject, namely SDR and EUR, respectively of IFAD and EU financing. The difference found, totalling USD 3.4 Million, represents a set of activities that, although planned, could not be carried out due to the loss of this amount.

Regarding Management Control or Monitoring, although this area was established in the project and hired the person responsible for its operation, the system did not work efficiently, which was confirmed during the data collection for this

evaluation, as the specialist in charge from this area abandoned the project and neither was replaced nor created the capacity to continue to monitor the project based on the system that had been established. As a result of this gap, monitoring was carried out through the traditional activity reporting system, with this situation having an impact on the consistency of the preparation of the reports themselves, as it was found that there was a difference in data extracted from different sources, which required laborious work to validate a substantial part of the quantitative data regarding ProPESCA's achievements.

In general, the results achieved in this project reflect the applied resources, both financial and human. However, a better monitoring system could also have contributed to greater efficiency.

#### *5.4 Expected Impact from ProPESCA Implementation*

In this section, it is intended to demonstrate the changes resulting from ProPESCA and its relation to its general objective, here it is demonstrated, whether the implementation of the project influenced positive changes for the beneficiary communities, considering that the General Objective of the Project is the **“Sustainable increase in the volume of higher commercial value fish and increase in revenues obtained from commercialized fish”**, with the Global Goal of Improving the incomes and livelihoods of poor families involved in artisanal fishing. In pursuit of this objective, the main results were defined: (A) ***Increased capture of higher quality fish in coastal areas through diversification out of traditional coastal fishing methods***; (B) ***Growth in the higher value fish trade with increased profitability including small-scale operators in the value chain***.

##### **5.4.1 Immediate Impact to Project beneficiaries**

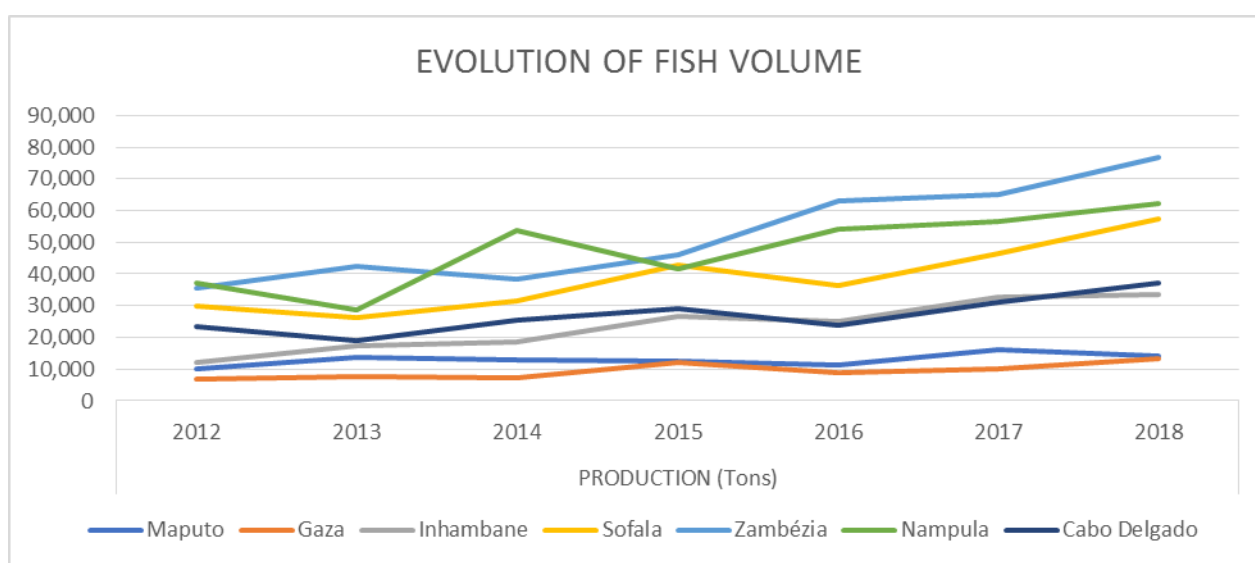
The immediate objective of ProPESCA is to provide as much benefits and improve living conditions of fishermen and their households. To contribute to the pursuit of this objective, the implementation of ProPESCA should result in an increase in production volume; increase in the average annual income of fishermen, and all those involved in the value chain of fishery production. The impact of this contribution must materialize in improving the living conditions of the community of artisanal fishermen.

Thus, the impact of the beneficiaries is demonstrated by the increase in the volume of production, the possession of durable assets and the level income raised.

##### **5.4.1.1 Fish Production Volume**

###### *a) ProPESCA's Contribution to Artisanal Fishery*

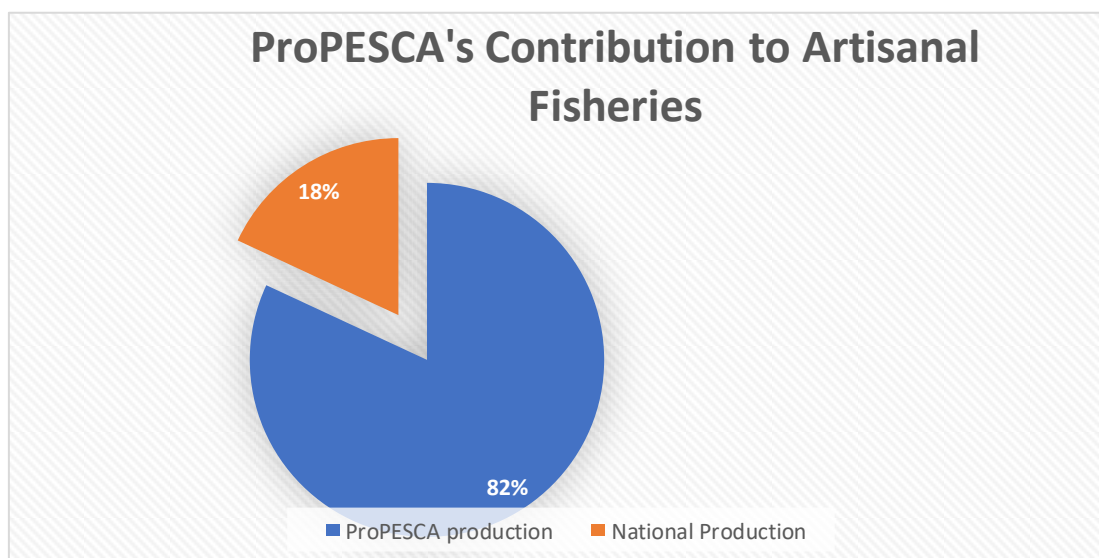
ProPESCA has set about 84,000 tons as a goal to be reached by the last year of the project. As can be seen in table 22, in 2018 the production of the provinces covered by ProPESCA totaled 295,129 tons, thus exceeding the goal initially set by more than 251%. Over the period of ProPESCA, the volume of global production of artisanal fisheries has always had a growth trend, with the province of Zambézia leading this trend, having reached around 80,000 Tons in 2018, as shown in graph 6 below. In terms of annual growth, the largest growth occurred between 2017 and 2018, with an increase of about 37,157 tons against a lower growth between 2012 and 2013, with an increase of 418 tons.



**Graph 6: Evolution of artisanal fishing in the provinces implementing ProPESCA**

In value, this production corresponds to total values ranging from (10<sup>3</sup>) MZM 8,953,019 in 2012 to (10<sup>3</sup>) MZM 17,567,578 in 2018.

The average total volume of artisanal fisheries in the provinces covered by ProPESCA, corresponds to 82% of the total production at the country level, which represents 11.7% on average for each province, against about 6% of each province not benefiting from the project. This demonstrates a significant and high impact contribution of ProPESCA to the country.



**Graph 7: ProPESCA's contribution to the volume of artisanal fishing**

*b) ProPESCA's Contribution to the Highest Commercial Value Fish*

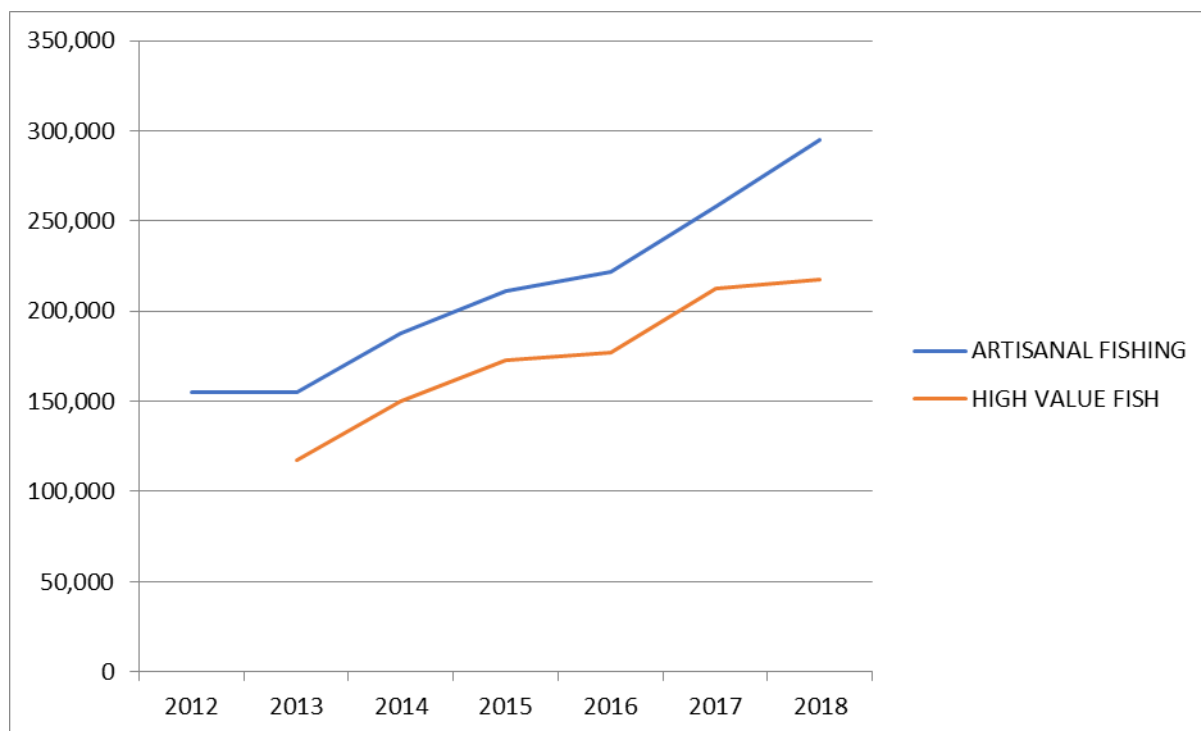
For the purposes of this analysis, data on the Highest Commercial Value fish were collected in the provinces covered by ProPESCA. For this analysis, a comparison between the volume of highest value fish and the volume of artisanal captures during the period of the project implementation (excluding 2012 due to lack of data).

**Table 22: Volume of Highest Value Fish Capture**

HIGHEST VALUE FISH CAPTURED IN ProPESCA'S COVERED PROVINCES (in Ton)						
PROVINCES	2013	2014	2015	2016	2017	2018
Cabo Delgado	18,614	25,309	27,975	21,318	31,169	33,323
Nampula	27,509	52,785	39,946	51,666	55,892	59,297
Zambézia	23,425	17,038	21,657	39,422	41,138	53,430
Sofala	24,330	29,896	41,448	30,998	43,710	39,740
Inhambane	15,827	18,102	26,399	24,204	28,915	20,467
Gaza	1,285	523	2,785	1,858	2,214	1,142
Maputo	6,077	6,384	12,380	7,847	9,797	9,892
<b>Total Production of Highest Value Fish</b>	<b>117,067</b>	<b>150,037</b>	<b>172,590</b>	<b>177,313</b>	<b>212,835</b>	<b>217,291</b>
Artisanal Fishery in ProPESCA's covered provinces	155,401	187,787	210,912	222,081	257,972	295,129
<b>Proportion of Highest Value Fish in Artisanal Fishery</b>	<b>75%</b>	<b>80%</b>	<b>82%</b>	<b>80%</b>	<b>83%</b>	<b>74%</b>

In the period from 2013 to 2017, the volume of artisanal fishing, the capture of the highest commercial value fish, registered an increasing positive evolution that varies from 75% to 83% (exception of 2018 that registers a slight

decrease), which demonstrates that the project has achieved the expected objective, resulting in the improvement of the income of the populations of the areas covered by the project and, consequently, in their quality of life. Graphically, this evolution is presented as follows:

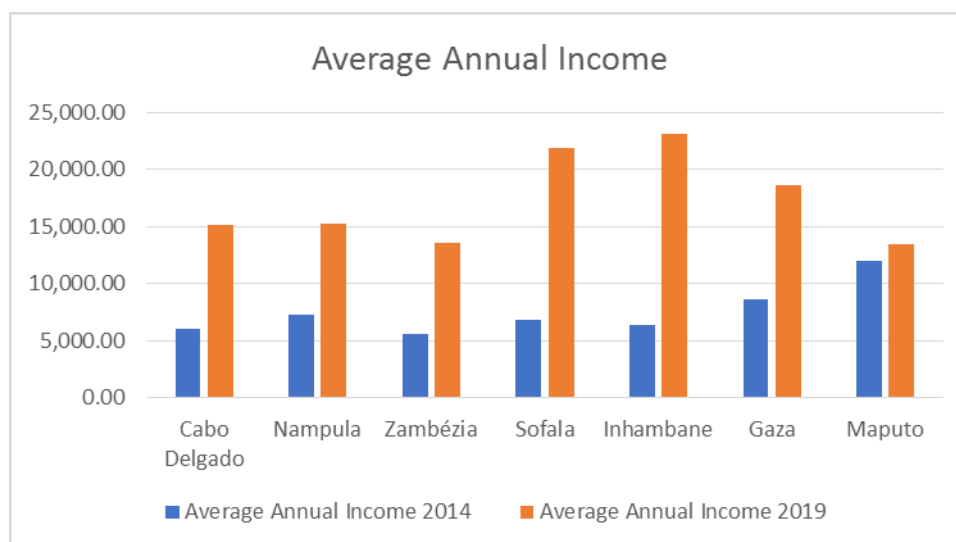


**Graph 8: Evolution of fish of high commercial value in the period of implementation of ProPESCA**

#### 5.4.1.2 Family Income

The main sources of household income in the growth poles covered by the project are Fishing and commercialization of inputs and fishery and agriculture products.

In these regions and as shown in Graph 9 below, the average yield of HHs almost tripled until the end of the project, compared to the initial year of its implementation, except for Maputo province which had an increase of only 12%. This allows concluding that the project played a central role in the improvement of fishermen and their families income level, and also, the fact is witnessed by the possession of durable assets acquired through this income, which significantly impacted on well-being of these communities.



**Graph 9: Average annual household income**

#### 5.4.1.3 Ownership of Durable Assets

The assessment of the durable assets possession is an instrument that allows a more in-depth assessment of the living conditions of households. Household ownership of durable assets is an indicator of well-being that suggests that households are at a relatively high level of income, depending on the type, quantity and real value of such goods. For all assets shown in table 23 below, until the end of the ProPESCA implementation, its ownership in general by the households, indicates a significant improvement, compared to the initial year of implementation of the Project, with the exception of the radio and bicycle which the ownership reduced, this due to appetite for substitute assets of greater use value, as televisions, cell phones and motorcycles.

In a specific and particular way, the possession of durable assets for fishing and conservation of fish demonstrate an appreciable quantitative leap, with emphasis on the reduction of possession of a canoe with a dug log as a counterpart to the increase in the possession of boats with an engine of 5.31% of the respondents in 2012 held this type of boat, in 2019, 12.37% of the interviewees were holders of these assets, this is also true for boats without an engine that went from 21.39% to 30.27%, an analogous fact also was verified for the fish conservation assets, that of 18,57% of the interviewees in 2012 had the possession of these goods, in 2019, 35,33% are owners of these assets, as a result of financing granted by the project, as well as investments made by own funds and on the other hand it shows the improvement of the economic power, as a consequence of the increase in the level of income from their fishing and related activities.



**Table 23: Ownership of durable goods by HHs headed by artisanal fishermen (in %)**

Property Ownership	Cabo Delgado		Nampula		Zambézia		Sofala		Inhambane		Gaza		Maputo		Total	
	2012 (n=570)	2019 (n=417)	2012 (n=577) ( )	2019 (n=461)	2012 (n=481)	2019 (n=485)	2012 (n=570) ( )	2019 (n=511)	2012 (n=373)	2019 (n=291)	2012 (n=188)	2019 (n=151)	2012 (n=96)	2019 (93)	2012 (N=2855)	2019 (N=2409)
<b>1. Durable Goods for Fishing</b>																
1.1 Boat with Engine	1.80	18.70	3.71	4.80	3.19	7.80	12.38	14.20	5.21	25.50	2.15	9.50	8.75	6.10	5.31	12.37
1.2 Boat without Engine	16.77	25.30	24.14	27.20	15.97	22.90	4.79	6.40	20.84	24.20	39.07	49.50	28.13	56.40	21.39	30.27
1.3 Dugout canoe	25.75	25.40	9.29	17.00	20.96	14.40	54.89	53.50	16.87	13.40	5.38	7.40	0.00	1.10	19.02	18.89
1.4 Fishing Net	30.74	43.20	30.00	35.40	31.34	34.10	46.91	55.00	32.26	30.80	47.67	49.20	48.75	56.70	38.24	43.49
<b>2. Durable Goods for Fish Conservation</b>																
2.1 Refrigerator / Freezer	9.38	31.4	10.14	24.5	5.19	18.6	7.78	18.6	15.14	48.5	37.99	50.3	44.38	55.4	18.57	35.33
<b>3. Means of Communication</b>																
3.1 Radio/DVD	69.46	44.3	61.86	40.5	48.9	42.7	72.26	53.7	64.76	60.6	73.84	56.8	66.25	56.9	65.33	50.79
3.2 Television	22.95	58.1	22	58.2	13.37	46.7	22.36	32.7	33.75	52.4	61.65	70.3	64.38	70.6	34.35	55.57
3.3 Mobile	72.26	91.6	69.43	91.8	38.92	81.6	64.27	84.1	74.44	87.1	93.91	91.1	85.63	89.1	71.27	88.06
<b>4. Means of Transport</b>																
4.1 Bicycle	29.14	15.60	23.29	18.60	32.93	25.50	33.33	16.80	20.35	20.40	12.19	14.10	1.25	3.90	21.78	16.41
4.2 Motorcycle	17.17	35.60	28.14	34.50	14.17	24.90	11.18	12.40	3.47	4.80	8.96	9.40	1.25	4.00	12.05	17.94
4.3 Vehicle	1.20	2.80	2.00	3.20	1.00	4.40	1.40	3.10	4.47	12.30	6.45	7.90	5.63	4.10	3.16	5.40
4.4 Tractor	0.00	0.70	0.00	0.00	1.40	0.60	1.20	0.90	0.50	0.00	0.00	0.50	0.00	2.00	0.44	0.67
<b>5. Other Goods</b>																
5.1 Sewing Machine	3.79	5.30	2.29	0.90	2.20	3.00	3.19	2.20	2.48	2.00	0.72	3.70	1.25	6.10	2.27	3.31
5.2 Lamp (oil)	45.71	7.80	75.57	23.70	22.36	4.00	48.50	23.40	57.82	16.40	43.73	18.00	29.38	25.00	46.15	16.90
5.3 Plow	0.00	0.90	0.14	0.00	0.00	0.40	2.99	1.30	4.22	0.70	1.79	6.50	0.00	1.00	1.31	1.54

## 5.4.2 Impact to the communities in general

The impact of the project on the beneficiary communities is assessed through the results of the economic and social infrastructures in which ProPESCA intervened, namely electricity and access routes, as well as housing conditions and the nutrition component.

### 5.4.2.1 Electricity

There are direct and indirect impacts that are associated with electrification at the project growth Poles. Families and institutions that have made or will make connections have or will have direct benefits not only from lighting, but

gradually from what is possible to do with electricity. Indirectly, the lighting of these Poles has provided a better life for all those who buy from local stores and benefit from better services provided by local institutions, especially health and education. Specifically, on the economic side, with electricity availability, the working hours of local traders tend to be extended and in these areas there is already a significant increase in electrical equipment such as freezers, fridges and televisions, as well as the emergence of small stores (aka), small grocery stores, the catering industry, entertainment houses, among others.

Many young people, before electrifying their places, used to move to other places in search of activities of a social or recreational nature (eg, partying, watching movies and TV, going to night bars, etc.). With the electrification of their areas of residence, these services are developed locally and have given rise to the attraction of many people, especially young people, from other areas, thus contributing to the growth of businesses. The information access via TV or radio has been decisive for people in rural areas to keep informed of what is happening in other corners of the country and in the world. The electrification of these Poles strengthens this connection.

In social terms, the electrification of social infrastructures, such as local government buildings, health centres and schools, has brought social benefits that have resulted in improved provision of public services.

In education, for example, lighting has enabled many students from local schools and other areas to prepare their classes, tests and exams and teachers, the lessons to be taught, which is reflected in the increase in pedagogical achievement. The scarcity of enrolment vacancies, the absence in some of these areas of secondary education and the need for literacy courses, are giving space to some evening courses made possible by the electricity availability. There are equipment with higher school value, such as computers and printers, photocopying machines that, being electric, can only be used with the electricity access in the area.

The change in economic and social conditions is evident in these areas, revealing a qualitative impact on the life of the population compared to the period before the implementation of ProPESCA. Looking at table 23 above, there is a growing trend towards the acquisition of assets whose operation requires electricity that were held by families before the implementation of the Project and the assets acquired over the project lifespan.

As a result of ProPESCA's contribution in installing energy sources, and, except for radio, there is a significant increase in the level of possession of assets that requires electricity for its operation.

With the electrification financed by ProPESCA, there was an extension of 172 km of the power transmission lines that benefits 2,217 inhabitants in 51 villages and neighbourhoods, including the electrification of 14

First-Sale Markets and 28 public utility buildings, as shown in table 24 below.

**Table 24: Access to Electricity financed by PROPECSA**

PROVINCES	Number of beneficiary villages / neighborhoods	Extention of Eletricity (KM)	Number of Beneficiaties			
			Shops (barracas)	Public Vuildings	Markets	Houses
C. DELGADO	4	6	60	0	1	522
NAMPULA	12	106	73	10	5	684
ZAMBÉZIA	8	31	345	5	3	650
SOFALA	3	2	26	2	0	124
INHAMBANE	6	24,5	69	9	3	105
GAZA	12	7,5	10	2	0	60
MAPUTO	6	2,5	3	0	2	72
<b>TOTAL</b>	<b>51</b>	<b>172</b>	<b>586</b>	<b>28</b>	<b>14</b>	<b>2.217</b>

The value of health is incalculable in the human life, with the electrification of the Project areas, the health benefits increase the value of human life through the provision of better quality services even at night, as well as the conservation of various medicines and the operation of medical equipment that previously could not be supplied without electricity. Hospitals and Health Units in these areas are responding better to health challenges with the existence of electricity. To confirm this fact, 91% of the HH's surveyed say they are in good health, a fact that contributed to the reduction of deaths from diseases in the communities.

#### 5.4.2.2 Roads

Regarding access routes, ProPESCA provided considerable benefits not only to the fishing communities benefiting from the project, but also to all communities in the districts and provinces in general where the growth poles are located. By rehabilitating about 518 km of roads, where it is estimated that an average of 462 vehicles will pass through daily, ProPESCA contributed significantly to greater mobility of the beneficiaries and expansion of trade, especially in the commercialization of fish and the consequent improvement of these communities well-being. Furthermore, the involvement of local communities in the construction/rehabilitation works and in the maintenance of these roads had a positive impact on the communities income increase.

**Table 25: Rehabilitated Roads and the Number of Involved People**

PROVINCES	Road Length (KM)	Average Number of Vehicles passing per day	Number of local people involved in the construction		Number of local people involved in the maintenance	
			Men	Women	Man	Women
CABO DELGADO	33,5	14	8	5	10	2
NAMPULA	151	68	282	100	46	30
ZAMBÉZIA	79	182	110	27	30	0
SOFALA	157	61	80	0	51	0
INHAMBANE	90,5	127	80	14	25	5
GAZA	4,5	10	15	6	0	0
MAPUTO	2,5	0	34	7	0	0
<b>TOTAL</b>	<b>518</b>	<b>462</b>	<b>609</b>	<b>159</b>	<b>162</b>	<b>37</b>

Still related to the impact of improving access routes, for example, 37% of respondents during this assessment, take less than an hour to access a Health Unit and 22.3% take between 1 and 2 hours to access the Health Unit, which confirms the testimonies made by 50% of the HHs who stated that the conditions of access have improved and that there are no periods which the roads are completely inaccessible, thus improving access to health units and the life quality of the HHs in the communities covered by the project.

#### 5.4.2.3 Quality of Houses

Looking at table 26 below, it can be inferred that most HHs currently live in masonry houses, i.e., with walls, cover and floor covering in conventional material, compared to the period before the implementation of ProPESCA. For example, at the level of houses with cane walls and sticks and or palm, adobe blocks or maticed sticks, there is a significant decrease, and, in contrast, houses with walls in cement, brick or zinc wood, register noticeable growth, which reveals the improvement in the living conditions of families.

On the other hand, both in terms of roofing material, floor covering material, the use of conventional materials is noted, given the financial capacity of the families that was provided by the increase in their income, thanks to the implementation of the project. As a result, most of these houses have electricity, whether from conventional or photovoltaic systems, this is shown in table 26 below, where 30.46% of respondents in 2012 had their homes electrified by conventional systems, and in 2019, 54.31% of respondents their homes are electrified by this systems, the same is true for photovoltaic systems, which of 9.10% of respondents owned these systems in 2012, and in 2019, 20.23% of respondents their homes are supplied by these energy systems.

**Table 26: Housing construction material and lighting systems**

Property Ownership	Cabo Delgado		Nampula		Zambézia		Sofala		Inhambane		Gaza		Maputo		Total	
	2012 (n=570)	2019 (n=417)	2012 (n=577)	2019 (n=461)	2012 (n=481)	2019 (n=485)	2012 (n=570)	2019 (n=511)	2012 (n=373)	2019 (n=291)	2012 (n=188)	2019 (n=151)	2012 (n=96)	2019 (93)	2012 (N=2855)	2019 (N=2409)
<b>1. Material of the Walls</b>																
1.1 Cement block	3.39	20.10	12.14	33.10	2.00	9.50	15.17	24.30	19.11	30.90	49.46	46.20	57.50	73.30	22.68	33.91
1.2 Brick Block	0.00	0.30	0.00	0.00	0.00	2.80	0.00	0.00	0.00	1.70	0.00	2.80	0.00	6.70	0.00	2.04
1.3 Adobe block	1.40	1.80	42.86	0.00	27.54	0.00	12.18	0.00	2.98	0.00	0.36	0.00	0.63	0.00	12.56	0.26
1.4 Wood and Zinc	0.00	3.40	0.14	0.00	0.40	0.60	0.20	0.20	1.99	16.90	0.72	3.40	2.50	1.10	0.85	3.66
1.5 Reed / Sticks / Bamboo / Palm	1.00	9.50	2.14	2.30	13.17	7.40	18.56	16.60	55.33	39.30	49.10	33.80	38.75	15.60	25.44	17.79
1.6 Matic Sticks	89.82	62.80	42.29	32.70	56.49	42.70	53.09	52.30	20.10	6.20	0.36	13.80	0.00	1.10	37.45	30.23
1.7 Can / Cardboard / Paper	0.00	0.30	0.00	0.00	0.20	0.40	0.20	0.20	0.00	0.00	0.00	0.00	0.63	0.00	0.15	0.13
1.8 Others	4.39	1.80	0.43	3.00	0.20	5.60	0.60	0.00	0.50	3.90	0.00	0.00	0.00	1.10	0.87	2.20
<b>2. Floor Material</b>																
2.1 Parquet / Wood	0.00	4.60	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69
2.2 Marble / granite	0.00	0.30	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.09	0.09
2.3 Mosaic / Tiles	0.20	0.00	0.71	1.30	0.00	2.00	9.98	1.10	1.74	10.40	3.23	9.70	1.88	8.90	2.53	4.77
2.4 Cement	29.34	57.20	27.57	54.90	7.98	38.40	24.95	37.60	61.54	77.00	87.46	84.10	76.88	88.90	45.10	62.59
2.5 Adobe	3.19	3.40	23.29	12.90	40.12	26.40	57.68	47.20	13.90	7.00	0.00	4.10	3.75	0.00	20.28	14.43
2.6 with nothing	66.87	34.60	50.14	25.90	51.70	33.20	6.59	13.30	22.08	2.20	9.32	2.10	15.63	2.20	31.76	16.21
2.7 Others	0.40	0.00	0.29	4.90	0.20	0.00	0.20	0.70	0.74	3.10	0.00	0.00	1.88	0.00	0.53	1.24
<b>3. Roofing Material</b>																
3.1 Concrete Slab	0.20	0.60	0.71	0.20	0.00	0.60	0.00	0.40	0.25	7.50	0.00	2.80	0.00	0.00	0.17	1.73
3.2 Tile	0.00	3.90	0.00	0.00	0.00	1.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.76
3.3 Fiber cement sheets	0.00	0.00	1.14	3.40	0.20	1.60	4.79	2.80	1.99	1.20	0.36	4.10	1.25	0.00	1.39	1.87
3.4 Zinc Sheet	25.95	60.40	22.14	56.70	21.96	52.70	33.53	39.50	44.42	72.20	94.27	80.00	89.38	98.90	47.38	65.77
3.5 Grass / Thatch / Palm	73.65	35.10	75.57	39.70	77.64	43.70	60.88	48.70	52.61	19.10	5.38	12.40	9.38	1.10	50.73	28.54
3.6 Others	0.20	0.00	0.43	0.00	0.20	0.00	0.80	8.50	0.74	0.00	0.00	0.70	0.00	0.00	0.34	1.31
<b>4. Lighting systems</b>																
4.1 Conventional Electricity	14.97	53.50	23.14	57.70	13.37	43.20	15.17	23.10	26.05	55.20	59.86	77.90	60.63	69.60	30.46	54.31
4.2 Solar Panels	4.39	16.90	5.43	24.40	10.58	22.50	15.97	37.40	17.12	22.30	3.94	11.10	6.25	7.00	9.10	20.23

#### 5.4.2.4 Nutritional Education

The implementation of the Nutritional Education Component allowed the start of changing attitudes of families in their positive diet, however it must be taken into account that interventions in the area of nutrition require a minimum period of 24 to 36 months for the visibility of its impact, which was not the case for this component. However, the end line study carried out at the end of the implementation of this component, revealed a significant improvement in the malnutrition rates in children, as well as in the eating habits of the communities benefiting from ProPESCA.

#### 5.4.3 IDAI and KENNETH Cyclones Impact to ProPESCA Results

In March 2019, the country was severely affected by tropical cyclones of category 4, which hit the central, southern and northern regions with greater focus on the Sofala province, which was devastated by the force of winds and heavy rains

of cyclone IDAI, having also reached the northern part of the province of Inhambane. In the northern region of the country, Cyclone Kenneth affected the Cabo Delgado province, causing huge damage to the sector and the production of fish at that point.

As is well known, the fisheries sector is one of the main sources of food production and contributes to the diversification of food and the guarantee of food security in the country. In addition to the nutritional component, it represents 3% of the Gross Domestic Product. With the outbreak of the cyclones, considerable damage was registered in boats, engines and fishing gears, distributed quantitatively as follows:

#### a) Cyclone IDAI

**Table 27: Damages caused by cyclone IDAI**

Province	Districts	Damages				Total Cost
		Affected Fishermen	Boats	Engines	Fishing gears	
Sofala	Beira	372	362	37	-	172.150.000,00
	Buzi	338	335	17	-	155.000.000,00
	Dondo	350	328	-	-	147.600.000,00
	Machanga	250	250	5	237	149.300.000,00
	Cherringoma	240	240	-	-	108.000.000,00
	Marromeu	202	197	-	-	88.650.000,00
	Muanza	325	325	8	-	148.250.000,00
	<b>Total</b>	<b>1.837</b>	<b>2.037</b>	<b>67</b>	<b>237</b>	<b>968.950.000,00</b>
Inhambane	Vilankulo	7	7	-	-	525.000,00
	Inhassoro	75	75	8	-	3.035.000,00
	<b>Total</b>	<b>82</b>	<b>82</b>	<b>8</b>	<b>-</b>	<b>3.560.000,00</b>

In Sofala province, 1837 fishermen were affected, representing around 12.2% of the total, in terms of vessels, 2037 boats were also affected, representing 32% of the total and in terms of engines and fishing gear, 67 and 237 were affected, representing 7.3% and 3%, respectively. The total cost of damages amounts to 968,950,000 meticaís, the equivalent of USD 15 million, which also corresponds to the replacement value of these assets.

In the province of Inhambane, only the districts of Vilankulo and Inhassoro were affected. Where the latter was the one with the greatest damage, 75 fishermen and an equal number of vessels were affected, 8 engines and no gear suffered, while in the Vilankulo district 7 fishermen and an equal number of vessels were affected, and the engines and the fishing gears were not affected. The total cost to replace the damage caused by IDAI in Inhambane Province, is estimated at

3,560,000 meticaís, equivalent to about USD 56 thousand. In general, across the province, 1.46% of fishermen, 10.93% of vessels and 4.47% of engines were affected by Cyclone Idai, which is very slight compared to the damage caused in Sofala province.

It should be noted that all districts affected by this cyclone are included in the ProPESCA growth Poles.

## b) Cyclone Kenneth

**Table 28: Damages caused by cyclone Kennet**

Province	Districts	Damages				Total Cost
		Affected Fishermen	Boats	Engines	Fishing gears	
<b>Cabo Delgado</b>	Palma	320	27	2	23	16.100.000,00
	Macomia	5.234	34	11	31	22.700.000,00
	Ibo	2.166	49	8	73	35.000.000,00
	Quissanga	1.540	85	10	49	48.100.000,00
	Metuge	325	36	10	49	26.050.000,00
	Pemba	620	37	4	37	23.200.000,00
	Mecufe	221	3	3	2	2.400.000,00
	<b>Total</b>	<b>10.426</b>	<b>271</b>	<b>48</b>	<b>264</b>	<b>173.550.000,00</b>
<b>Nampula</b>	Memba	-	72	-	17	33.590.000,00
	<b>Total</b>	<b>-</b>	<b>72</b>	<b>-</b>	<b>17</b>	<b>33.590.000,00</b>

The table above shows that the province of Cabo Delgado was the one that suffered most from Cyclone Kenneth, and it can be seen in terms of fishermen, the district of Macomia was the one that registered the largest number of affected people, which amount to 5,234 which represents 50% of the total affected fishermen, followed by the Ibo district with 2,166 affected fishermen, representing about 21%.

In terms of costs resulting from the damages caused by Kenneth, it amounts to 207.140.000,00MT, equivalent to about USD 3 Million, of which 84% corresponds to Cabo Delgado Province, and in this province the district of Quissanga is the one suffered more damages, with 85 vessels and 10 engines damaged, representing 27.7% of the total damage in the province.

These cyclones contributed to negative impact on the results achieved with ProPESCA implementation, and urgent interventions should be taken to replace the equipment now damaged, to at least return to fishermen the operational capacity they had before the outbreak of these cyclones.

#### **5.4.4 Impact of Oil and Gas exploitation in the Artisanal Fishery**

With the prospects of start-up of natural gas exploration activities in the Rovuma basin, by Anadarko Mozambique Area 1 (AMA 1), artisanal fishing in the poles located in north of Cabo Delgado province may be affected by seismic drilling operations in sea rocks and drilling operations of exploratory wells using rigs.

Although there are no conclusive studies on seismic operations and offshore drilling in Mozambican fishing activity, there are many international studies dealing with the matter, and it is based on them that the following points are made.

##### **5.4.4.1 Seismic Operations**

Many studies claim that with the start of seismic operations, there is a reduction in captures made in the region, and this is due to the fact that there is a restriction of access to areas where activities are carried out for safety reasons, damage to fishermen's equipment and reduction of fishing resources.

For the acquisition of marine seismic data, the exclusivity of a certain maritime space is necessary, while the activity lasts, because the arrangement of seismic cables may occupy an area of about 10 km in radius (in the case of 3D seismic) and its displacement cannot happen with the interruption of the seismic vessel's route. This way, fishing boats that are on the route must collect their fishing gear and move away from the area.

##### **5.4.4.2 Conflict between Artisanal Fishery and Oil and Gas Exploration Phases**

The conflict may occur from a technical, environmental and socioeconomic point of view, as shown below:

###### *(i) The Nature of the Conflict*

As mentioned in the previous chapters, 90% of the volume of national captures is attributed to artisanal and small-scale fishermen, who have the largest fleet in Mozambique. For these, the impacts of the oil industry will be even greater than for large-scale commercial fishing (industrial and semi-industrial), carried out by the fishing industries. Although, in many



cases, these small vessels are linked to the fishing industries, they suffer more from the impacts than the large vessels, as they have less autonomy.

It is important to note, however, that artisanal fishing, when carried out in an offshore environment, occurs close to the coast or in bays, which will happen in the same way in Mozambique, precisely in the Rovuma basin, which will also suffer the impacts of oil activities, for disputing the same areas.

*(ii) The consequences of seismic operations for fishing activity*

In the seismic data acquisition phase, there is a restriction of the fishing space. If the fisherman insists on enjoying the space occupied by the seismic, damage to his fishing equipment may occur, due to their contact with the vessels and with the seismographic cables.

In addition, seismic activities have two direct effects on the stock of fishing resources: firstly, by the sonic barrier, which can prevent the access of some fish to spawn, and secondly, because it causes the mortality of the fish plankton and therefore affects the areas of concentration of eggs and larvae of species that spawn at shallower depths.

*(iii) The consequences of the well drilling activity for the fishing activity*

Drilling activities in exploratory oil wells, as well as seismic activities, restrict the use of maritime space for fishing, which generates direct impacts for fishermen, especially artisans who have little space. In addition, accidents may occur involving fishing vessels and their equipment with vessels engaged in drilling operations, but only in case of disobedience to the space defined for oil activities.

The drilling activity also impacts fish populations, affecting their distribution, composition and behaviour due to noise and oil spills that may be caused. It is also important to point out that the drilling platforms are a factor of attraction for shoals, either due to the disposal of organic material or because they are “artificial reefs”.

*(iv) The conflict from the technical point of view*

The technical conflict concerns the space restriction that seismic and drilling activities impose on fishing activity, under the claim of representing a safety measure. However, in general, fishermen do not obey the limits, advancing under the risk area.

*(v) The conflict from the environmental point of view*

The activity of oil exploration causes the mortality of fish, significantly reducing captures. In addition, seismic activity can impact the population dynamics of fishing resources by forming a “sonic barrier” that can prevent fish from gaining access to their spawning sites and by their impacts on plankton in spawning and larvae concentration areas.

Regarding the drilling phases, the main environmental impacts are linked to potential leaks (the so-called blow-outs) that may happen, when the pressure of the gas inside the well being drilled suddenly forces the oil out.

Another impact on the environment caused by the drilling phase is the fact that the drilling units attract entire shoals because of the release of sewage and food scraps. However, as the place of activity is a restricted area, fishermen cannot benefit from the abundance of fish they attract, generating one of the main faces of this conflict.

*(vi) The conflict from the socioeconomic point of view*

Due to the restrictions imposed by the exploitation of oil, it can be counted as a major economic loss for fishing practiced in the area of influence of oil exploration. The damage is caused to artisanal fishing, since large-scale commercial fishing has greater mobility, and therefore has more possibilities for action. On the other hand, 90% of fishermen in Mozambique live from artisanal fishing and many without a secondary activity, which will cause an increase in the reduction of income and an increase in poverty in the areas affected by oil exploration.

## 6. CONCLUSIONS AND RECOMMENDATIONS

The accurateness observed during the data collection process, the accurate processing and analysis of the collected information, allow to safely make conclusions and recommendations that translates the reality of ProPESCA implementation. Despite the limitations and or constraints faced during the evaluation, these did not significantly affect the achievement of the evaluation's objectives.

The conclusions and recommendations herein presented are supported by the descriptive evaluation in chapters 4 and 5, summarized in Table 29 of the Global evaluation of the components of ProPESCA, presented in section 5.1 of the conclusions herein presented in summary.

The Global Goal of the Project was to improve the incomes and ways of living for the poor households involved in artisanal fishing and with the main objective of sustainable increasing the quantity of the highest value fish and increasing the revenues obtained from the commercialized fish.

### *6.1 Main Conclusions*

The evaluation concluded that the implementation of this project was relevant from its design to its implementation, as it responded to the needs of strengthening the capacity of artisanal fishermen to improve their capture techniques, their mobility for open sea fishing, processing techniques and conservation of fish, and on the other hand the project created the capacity in fishing and social infrastructures in the growth Poles where ProPESCA was implemented, which resulted in the addition of the value of artisanal fishing.

Regarding efficiency, it is concluded that the project achieved the recommended objectives, which result in an increase in the quantity of the highest value fish and, consequently, in an increase in the income of fishermen and in the improvement of the living standards of their families and fishing communities. And, at the government level, the project allowed to strengthen the institutional capacity in the planning, management and monitoring of artisanal fishing activities.

About efficiency, the management and coordination of the project was carried out in accordance with the established rules, which contributed to the project achieving the expected results.

### **6.1.1 ProPESCA's Results**

ProPESCA was initially conceived with the assumption of diversified financing sources, which did not happen when it started with its implementation. This situation led IFAD to individually guarantee over 35% of the financing, and the remainder was through other donors contacted by this organization and which committed to participate in the project.

Most of the goals, indicators and some results were defined subjectively, which makes it difficult to effectively analyse their achievement. The way in which these goals and indicators were established, leads to deep reflection on its definition and establishment rationality, but above all, the rational in the establishment of an entire strategic framework in a Project design. On the other hand, one of the major weaknesses of the project was the inefficiency of the monitoring and evaluation system that had been established, which leads to some divergences in quantitative data in project management reports.

The evaluation concludes that the project achieved the recommended objectives, which resulted in a sustainable increase in the quantity of the highest value fish and consequently in the improvement of the revenues obtained from the commercialized fish, thus contributing to the improvement of the standard of living of the fishermen, their families and fishing communities.

In part, the results recommended in the 5 components of ProPESCA were achieved, with the Economic Infrastructure Component being notable, which is the one that achieved the greatest performance, having largely exceeded the goals set for it, almost in all results and in global this component had a good performance. The components of Support for the Development of fishing of the Highest Value Fish, the Nutrition Component and the Institutional Strengthening Component, Policy and Management Initiatives, which present relevant results and have a greater impact for the direct and indirect beneficiaries, are highlighted below. Concerning the Support Component for the Development of Highest Value Fish, a notable fact is that although the motorization of boats was not contemplated in any part of the Project, ProPESCA financed the acquisition of 393 marine engines, having been thus motorized equal number of boats. With the availability of this equipment, the levels of production and productivity of fish of high commercial value have improved.

The Financial Services Component is the one that had fewer achievements. However, a fact worth mentioning for this component is that one of the products offered by the Project, i.e., the Fund for the Promotion of Women Entrepreneurs, which was intended to promote the participation of women entrepreneurs or groups of women engaged in an economic activity along the value chain of artisanal fishing, financed the acquisition of more than 362 freezers, benefiting about 235 women who use this equipment for ice production and fish conservation.

The growth of artisanal fisheries results not only from massive support (both through the State Budget fund, as well as external financing through specific projects, as is the case with ProPESCA), but also as a result of the ongoing process

on decentralized management and governance of artisanal fisheries through the participation of community based organizations (CCP, PCR and Associations). However, it is noted that the organizational strength of these organizations is greatly associated with the project areas, making it urgent to discuss not only their expansion to areas not covered by specific projects, but also aspects related to their sustainability.

Throughout the implementation of ProPESCA, artisanal fishing has benefited from other types of direct or indirect financial support through the implementation of specific development projects resulting from cooperation programs with development support agencies.

In the general, and according to the established criteria, the degree of realization of the components is “GOOD” as shown in table 29 below.

**Table 29: Global Evaluation of ProPESCA**

Numbering and designation of components		Classification				
		VW	W	AC	G	VG
1. Support for the Development of the Highest Value Fish	<b>Global Component Assessment</b>				○	
	<i>R 1: Diversified and commercially viable fishing units with boats, equipment and techniques suitable for operating in the open sea</i>					●
	<i>R 2: Improved skills and organization to improve use after captures and maintain fish quality</i>				●	
	<i>R 3.1: Infrastructure related to markets and supply of inputs to ensure the handling and commercialization of good quality fish in hygienic conditions.</i>				●	
2. Improve ment of Econom ic Infrastru	<b>Global Component Assessment</b>				○	
	<i>R3.2: Infrastructures related to markets and supply of inputs to ensure the handling and marketing of good quality fish in hygienic conditions</i>					●
	<i>R4. Improved access between fishing centers, markets and the national road network</i>			●		
3. Financial Services Develop ment	<b>Global Component Assessment</b>			○		
	<i>R 5. Community-based financial institutions with increased capacity to mobilize savings and loans.</i>					●
	<i>R 6. Private financial institutions actively involved in financing investments related to fisheries.</i>		●			
4. Institutional Strengthening , Policy Initiatives and Protect	<b>Global Component Assessment</b>				○	
	<i>R 7. Increased institutional capacity to support resource management, production and marketing of the highest value fish.</i>					●
	<i>R 8: Improved policies / appropriate legal framework for established artisanal fisheries.</i>				●	
	<i>R 9: Effective project management systems.</i>				●	
5. Nutritio n	<b>Global Component Assessment</b>					○
	<i>R 10: Enhanced Capacity of Fishing Families to Combat Malnutrition</i>				●	
	<i>R 11: Community mobilized to combat malnutrition</i>					●
<b>Global assessment of ProPESCA components</b>					○	

### 6.1.2 Impact of ProPESCA's Results

ProPESCA had a positive and considerable impact on its general objective “**Sustainably increase the volume of higher-value fish and increase the revenues obtained from commercialized fish**”, which led to an improvement in the income and livelihoods of families involved in artisanal fishing. From 2013 to 2017 the fish with the highest commercial value caught in the Poles covered by the project, represents 80% of artisanal fish, and at the country level artisanal fisheries in the provinces where the Project was implemented, the average total volume represents 82% of the total production, corresponding to 11.7% on average for each province, against about 6% of each province not benefiting from the Project, which demonstrates a significant and high impact contribution of ProPESCA to the country.

Regarding the beneficiaries of the project, they had an immediate impact on their lives, with the average income of the HHs, almost tripled until the end of the project, compared to the initial year of its implementation, with the exception of the province of Maputo which had only an increase of 12%. The improvement in the level of income allowed these families to acquire and possess durable assets, for example, the possession of durable assets for fishing and fish conservation demonstrates an appreciable quantitative leap, with emphasis on the reduction of the possession of dug-out canoe in contrast to the increase in ownership of boats with an engine which from 5.31% of respondents in 2012 held this type of boat, in 2019, 12.37% of respondents were owners of these assets, this is also true for boats without engine that from 21.39% jumped to 30.27%, an analogous fact also occurs for the fish conservation assets, that of 18.57% of the interviewees in 2012 had the possession of these assets, in 2019, 35.33% are owners of these assets, as a result of financing granted by the project, as well as investments made by own funds generated from their fishing and related activities.

On the other hand, the immediate impact on families is witnessed by the improvement in the quality of housing, where most HHs currently live in masonry houses, i.e., with walls, roof and floor covering in conventional material, compared to period before the implementation of ProPESCA. For example, at the level of houses with cane walls and sticks and or palm, adobe blocks or maticed sticks, there is a significant decrease, and, in contrast, houses with walls in cement, brick or zinc wood, register a noticeable growth, and most of these houses have electricity, either from conventional systems or from photovoltaic systems, as a result of the electrification of these areas with funding from ProPESCA, which reveals the improvement in the living conditions of families.

Consequently, for the community in general where the project was implemented, it had a considerable impact, resulting in the improvement of living conditions provided by the economic infrastructure, rehabilitated and or acquired by the project. The 172 km extension of the power transmission lines benefited more than 2,217 inhabitants in 51 villages and neighbourhoods, including the electrification of 14 First Sale Markets, 586 shops and 28 public buildings, the families and institutions that made or will make connections to electricity grid have or will have direct benefits not only from lighting, but gradually from what is possible to be done with electricity.

Indirectly, the lighting of these poles has provided a better life for all those who buy from local stores and benefit from better services provided by local institutions, especially health and education. Specifically, on the economic side, with the electricity access, the working hours of local traders tend to be extended and in these areas there is already a significant increase in electrical equipment such as freezers, refrigerators and televisions, as well as the emergence of small stores (aka), small grocery stores, the catering industry, entertainments houses, among others.

In social terms, the electrification of social infrastructures, such as local government buildings, health centres and schools, has brought social benefits that have resulted in improved provision of public services.

With regard to access roads, by rehabilitating around 518 km of roads, where it is estimated that on average 462 vehicles will pass through daily, ProPESCA contributed significantly to greater mobility of the beneficiaries and expansion of trade, especially in the fish commercialization and consequent improvement in the well-being of these communities. Furthermore, the involvement of local communities in the construction/rehabilitation works and in the maintenance of these roads had a positive impact in increasing the income of these communities.

Although the Nutritional Education Component was introduced late, its implementation had a significant impact on the lives of the beneficiary communities of the project, which resulted in a significant improvement in the malnutrition rates in children, as well as in the eating habits of the communities.

Combining the assessment of the level of achievement of the ProPESCA Components with the assessment of the Impact of their Implementation on the beneficiaries, both direct and indirect, as well as on the community in general, it is concluded that ProPESCA performed well, having achieved its general objective and with a positive impact, at the economic and social level, not only at the level of the beneficiaries, but also at the level of the country as a whole.

However, despite these results and impacts of the implementation of the Project, the recent passage of cyclones IDAI and Keneth, caused considerable severe damage to boats, engines and fishing gear, which negatively impacted the results achieved with the implementation of ProPESCA, and urgent interventions should be implemented, to replace the equipment now damaged, to at least return to fishermen the operational capacity they had before the outbreak of these cyclones.

## ***6.2 Main Recommendations***

In view of the findings and conclusions presented here, it is important to capitalize on the experiences and lessons learned in ProPESCA, as well as to consolidate the capacity already created by the project, in order to replicate in future projects, plans and or future programs of the sector.

The monitoring and a robust database issue needs to be taken care of in future interventions, as projects of this dimension, must be evaluated, not only by the meeting of their results and objectives, but mainly by their impacts, in the positive change of lives, for both direct and indirect beneficiaries.

In order to objectively measuring efficiency, it is recommended that in future projects, the Budget be presented and allocated by results.



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