

Under Their Own Steam

Natural disasters like cyclones, more than the COVID-19 pandemic, coupled with lack of research on the conditions of the poor, threaten the well-being of small-time fishers in Mozambique

When the COVID-19 pandemic landed on Mozambique shores last year, it found a country in dire need of socioeconomic renewal and welfare reform. A series of natural disasters—cyclones, floods, drought—and ongoing military conflict had already reduced the most vulnerable communities of the country to fighting for scraps. Employment and income, already very low, were hit badly by the government's restrictions on movement, in response to the pandemic. Informal workers lost jobs or other means of income and often saw themselves forced to relocate to their places of origin, away from the cities where the infection rates were high.

While the government's strict prevention measures were necessary, several rural communities considered them unfair because their regions were not badly affected; they thought the measures had limited success in disease prevention but disrupted their business significantly. (Testing for COVID-19 was very limited in Mozambique's rural areas in the pandemic's initial phase.) Furthermore, some sectors like tourism felt the economic impact much harder than others, despite the rate of infection remaining comparatively low in rural areas where the businesses are located.

Joaquim Macassa, a fisheries technician from Inhambane Province, said the pandemic went on taking a terrible toll on fishers' income, till the government relaxed its prevention measures in September 2020. "The fishers had nowhere to sell their product because, for example, the local lodges were closed for business," he said. "On the other hand, the traditional fish buyers (who used to roam the beaches in small refrigerated cars, motorcycles, bicycles and cool

boxes to buy fish) also disappeared, fearing the pandemic."

The slowdown in fisheries had disastrous socioeconomic impacts. Despite the fisheries sector's relatively low direct contribution to the gross domestic product (GDP) of 2 per cent in 2019, its social contribution is significant. The sector, especially the small-scale fisheries (SSF) sub-sector, generates about 400,000 direct jobs in the country, with women—despite few owning boats—strongly involved in many of them.

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It provides food security to about 850,000 households, or roughly 20 per cent of the country's total population. It doubles up as a source of income, a subsidiary livelihood strategy.

Key food component

Most fishing communities are small, isolated and poor. Fishing and marketing is usually part of a complex livelihood strategy often integrated with agriculture. Fish is a key component of the Mozambican food basket (accounting for 27 per cent of protein) and, according to a 2018 MIMAIP report, the per capita consumption of fish and fish products rose from 10.4 kg in 2012 to 16.8 kg in 2019, a level close to the 18 kg that the World Health Organization recommends. Government statistics

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Arrival of fishing craft at Maputo, Mozambique. The small-scale fisheries sub-sector generates about 400,000 direct jobs in the country, with women—despite few owning boats—strongly involved in many of them

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from 2019 show that artisanal fishing accounts for over 90 per cent of the country's total fish production.

Despite the obvious growth, sustainable fishing faces several threats in the country. Decline in stocks, discrepancies in abundance, distribution and size of inshore species, combined with illegal fishing, have led to steep drops in produce. These scenarios have magnified due to the degradation of critical ecosystems and the impact of climate change. Studies also point to higher rates of unemployment, and a lack of alternative sources of income, with inadequate law-enforcement measures contributing to the problem.

"Here in Mabuluku we are in good health. We have no known cases of COVID-19 despite being close to the South African border," said Agostinho, president of Mabuluku's Community Fisheries Council (CCP), when asked about the impact of the pandemic on artisanal fishing communities. "But, between April and August last year, we faced difficulties in selling our produce at the Maputo city market because buyers stopped to show up out of fear of the pandemic." The solution, he

said, was to sell the product within the community, albeit at a loss, because local buyers could not afford to pay real prices for shrimp and first-quality fish.

Conversations with several fishers across the country revealed that business was badly hit by the pandemic despite the low infection rate among the community. This was mainly due to government restrictions on movement, social distancing, self-quarantine and border closures.

Movement restrictions

In Tete province, the largest producer of freshwater fish in the inland provinces of the country, the impact was felt in the markets, with as many as five semi-industrial fishing companies shutting down for lack of business. A representative of the local fisheries administration revealed that an average of 25 workers were laid off due to the shutdowns. According to her, the slowdown occurred in part due to the movement restrictions along Mozambique's borders with Zimbabwe and Zambia.

Restrictions on circulation and containment of agglomerations

hampered the fish trade. On the other hand, the number of operations decreased due to the fear of contact between the fishers, and also due to government protocols that demanded halving of boat crews. Many fishermen, lacking adequate means of storage, were forced to sell their products at lower prices, reducing their average incomes significantly.

Even while actual fishing activities by themselves did not face an impact in the first six months of the government lockdowns, the trade took hard body blows, say most observers. Their observations are consistent with the FAO's COVID-19 response plan that said vulnerable fishing communities found it difficult to access markets. Research conducted by the International Collective in Support of Fishworkers (ICSF) in Mozambique did not, however, confirm the assumption in the same plan that "the pandemic may have exacerbated existing food insecurity and poverty among small-scale farmers, fishers and other vulnerable groups".

In the 10 months since the COVID-19 outbreak (March to December 2020), despite the impacts on fish trade and business, there remains little to indicate dietary patterns have shifted in fishing communities. Fishing and agriculture, the two main livelihood activities, continued uninterrupted, both along the coasts and in inland areas, despite the restrictions.

Farming crops

In the island of Inhaca, close to Maputo city, the first months of the pandemic saw fisher families investing in farming crops suitable for the local soil to help balance their incomes, while assuring themselves of food necessary for their family's needs.

Jorge Mapengo, a community leader in Montanhana, confirmed this. He insisted that everyone was mindful of the government's prevention measures and were adhering to them strictly. "But this does not prevent us from continuing our fishing and farming activities."

The more we looked the more it seemed that the challenges of nutrition, food security and livelihood had less to do with COVID-19 and more to do with the cyclones that have hampered the fishing structures.

Fishing-community members insisted that the pandemic has not altered their ways of living drastically. No innovations worthy of record have come from within the community to battle the pandemic.

Government interventions

Sources indicate that the government has taken several fiscal and financial measures to ensure food security and supply during the pandemic. Visible examples include: a credit line (approximately costing US\$700 mn) from the National Investment Bank, with support from the African Development Bank; two cash transfer programmes (totalling US\$200 mn),

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supported by the World Bank; a single cash transfer (of US\$25 per family) equivalent to three months of regular subsidies to beneficiaries of vulnerable families; and other unconditional cash transfers for six months to low-income families and informal workers in urban and peri-urban areas. According to a World Bank report, both programmes reached a total of 1.5 mn people.

In the fisheries sector, the government efforts were directed towards helping the artisanal sub-sector recover from the impact of cyclones and COVID-19. Support for several fishing communities included distribution of more than 1,700 units of fishing gear and 240 cool boxes of 100 litres and another with 30-litre capacity to be coupled to bicycles for fish storage; financing of more than 90 small projects with an investment of more than US\$700,000 for the acquisition of boat engines, and promoting means of conservation and (motorized) transport of fish; and subsidized credit to the private sector for the implementation of aquaculture projects that integrate communities. Several fish markets with ice machines were built close to the main fishing sites to help with fish conservation and trade.

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Fish is very important for the community in Mozambique. Fishing and agriculture, the two main livelihood activities, continued uninterrupted, both along the coasts and in inland areas, despite the COVID-19 restrictions

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Specific support

There seemed to be little in terms of support specifically oriented to the fishing communities from NGOs and civil society. One reason for this, many revealed, was the low rate of COVID-19 infections in coastal fishing communities. Another was the fact that many of these organizations felt government interventions were addressing the fishing community's needs adequately. Safe to say, very little remains known.

A lack of in-depth analysis on the artisanal fishing sub-sector, the numbers and types of vulnerable people and families in such

communities, as well as the specific support they need means large gaps remain between what exists and what needs doing. For now, communities continue to navigate under their own steam, with the limited—though significant—help they receive. 3

For more

Welcoming and friendly

https://www.icsf.net/images/samudra/pdf/english/issue_39/871_art05.pdf

Mozambique Addressing the impacts of COVID-19 in food crises May 2020 – April 2021: Stemming an emergency to prevent a disaster

<https://reliefweb.int/sites/reliefweb.int/files/resources/CA9123EN.pdf>

Economic Impact of the Covid-19 Crises in Mozambique & Measures to Support Private Sector Recovery, WB (2020)

<https://blogs.worldbank.org/nasiliza/covid-19-mozambique-team-effort-ease-economic-hardship-families>

Fisheries co-operation

Welcoming and friendly

This is an account of an exchange trip of two South African community leaders from fishing villages to Mozambique

In August this year, two community leaders from fishing villages along the Western Cape coast of South Africa visited fishing villages along the coast of Mozambique. Nico Waldeck and Charles Thompson were representing Masifundise Development Trust and the fishing communities with whom Masifundise works. The trip was organized by the Trust for Community Outreach and Education (TCOE), a non-governmental network of organizations to which Masifundise is affiliated. The aim of the trip was to enable leaders from rural communities in South Africa to learn from the experiences of rural people's movements in Mozambique, to share strategies for organizing and to build alliances and networks.

This was the first time that either of the two fishers had ever visited fishers in another country, and they were both very excited and curious when they left South Africa and crossed the border into Mozambique. Although community leaders have been concerned about the poverty and problems facing small-scale fishers in South Africa, they were shocked to see the difficulties faced by fishers in Mozambique.

Nico reports on the aspects that struck him the most: "Mozambique is a land of many faces. On the one hand, it is a very green landscape, with beautiful fishing areas, a tourist's paradise. On the other, it is a land with very visible poverty, especially within the fishing communities. Mozambique has been badly affected by the war of independence with the former colonial power, Portugal. The infrastructure in the fishing villages is of very poor quality. The roads to, and in, the fishing villages are chaotic. The majority of the fishers'

houses are made of reeds. There are no facilities or factories, not even freezing facilities in the communities. As a result, fishers are forced to sell their catch for very low prices on a daily basis. Low prices mean that fishers must catch fish every day. This places heavy pressure on the fish resources. The boats and equipment are also very outdated. For the first time in my life, I saw fishers go to sea without protective clothing or safety gear.

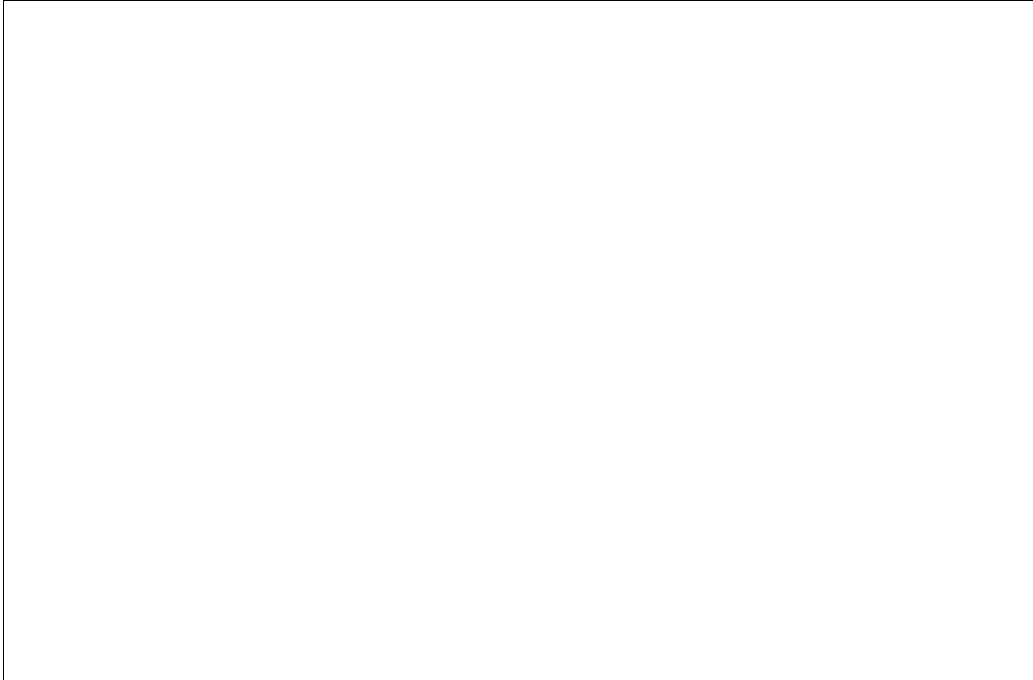
Women are also very involved in the fishing industry. They play a big role in the harvesting as well as in the buying and selling of fish. It is also obvious that the government of Mozambique does not have the financial resources and manpower to protect and manage their fish resources effectively.

The highlight of the fishing industry in Mozambique is the fish market in Maputo. Here you can buy fish and prepare it right there. You can choose from a great variety of food fit for a king, such as crayfish, lobster, calamari, oysters and many more.

Although the fishers are very poor, they are very welcoming and friendly. The fishing industry in Mozambique urgently needs development. Development is necessary so that the resources can be protected and the fishers can derive a livelihood from the fishing industry."

Raising awareness

On his return to South Africa, Nico has been actively raising awareness about the conditions facing fishers in Mozambique. It is his dream to be able to send the fishers that he met in Mozambique a wooden boat built on the west coast of South Africa. It is hoped that this trip will be the beginning of a process of building solidarity amongst fishers within the Southern African region. In November



2004, Nico and Charles will have the opportunity to reciprocate the warm hospitality they received in Mozambique when they and other fishers working with Masifundise in South Africa will host a conference for leaders from fishing and coastal communities in the Southern African Development Community (SADC) countries.

This report is based on an account by Nico Waldeck (jackie@tcoe.org.za or naseegh@masifundise.org.za), a community leader from Lambert's Bay on the west coast of South Africa. He also serves as a community representative on the Masifundise Board of Trustees and is an active member of 'Coastal Links', the regional structure representing fisher and coastal communities in the Western Cape

All together

As the experiences from Mozambique show, fisheries management regimes and institutional arrangements can work

Due to financial problems and the lack of marine/biological investigation, very little is known about the potential of marine resources accessible to artisanal fisheries in Mozambique. Furthermore, systems to monitor and evaluate the fisheries, to assess the stocks and impact of fishing effort, are weak. Since Mozambique's independence in 1975, the control of fishing activities in the small-scale fishery became the responsibility of the *Administraco Maritima*-ADMAR.

During the 1980s, the strategy for developing small-scale fisheries in Mozambique was based on the *Combinados Pesqueiros*, a quasi-government company that supplied fishing inputs and services to artisanal fishermen and marketed their surplus production. In 1987, Mozambique launched a Structural Adjustment Programme (SAP) and started a new process that tried to create more incentives and facilities to enhance the role of the private sector in the development of the national economy. As a result, a privatization process of the *Combinados'* assets and activities began.

The institutional set-up of the fisheries sector changed after the SAP and the Institute for Small Scale Fisheries Development (IDPPE) came into existence, with the responsibility to promote small-scale fisheries development in Mozambique.

As part of global political changes, a new structure for the fisheries administration was established in 1994. The institutions of the Ministry of Agriculture and Fisheries (MAP) involved in fisheries management (and which advises and gives recommendations to the MAP), are the following:

- *Direcco Nacional da Pesca* (DNP), dealing with legal aspects, mostly dealing with industrial fisheries;
- IDPPE, whose objectives are to improve knowledge about small-scale fisheries and identify development programmes;
- IIP, for biological research on the resource;
- The *Servicos Provinciais de Administraco Pesqueira* (SPAP), the state institutions in charge of monitoring and control at the provincial level, in co-ordination with the *Administraco Maritima* which is the only institution with actual field representation in all the coastal districts.

The Fisheries Master Plan approved by the Mozambique government in October 1994 sets the priorities and strategies of development to be pursued in the next years. In relation to management of small-scale fisheries, the Master Plan emphasizes the involvement of fishermen in setting up and enforcing the management regimes.

The implementation strategy towards promoting co-management arrangements implies that the first step should be to research the existing management regimes, focusing on the traditional systems in place to manage the fishery. In this respect, baseline data, as well as biological, socioeconomic, technological and other information, must be collected.

Management committee

From 1 January 1997, the *Regulamento de Pesca Maritima* came into force. This regulation sets forward a fisheries management committee, *Comisso de*

Administraco Pesqueira (CAP) that includes fishermen representatives from artisanal as well as semi-industrial and industrial sectors.

This committee is an advisory body that will meet four times a year to recommend management measures for the national fisheries.

The CAP has an advisory role to the Minister of Agriculture and Fisheries, dealing with conservation, fisheries management and regulation.

More specifically, it focuses on determining:

- fisheries quotas;
- fishing closure periods;
- maximum number of licences for the various fisheries;
- value of fisheries licences; and
- definition of protected areas.

Although many issues still need to be addressed regarding the functioning of the CAP, and the legal and institutional aspects of co-management, the committee provides a framework for further development of co-management arrangements in Mozambique.

The small-scale fishery in the Angoche and Moma districts, in Mozambique's northern province of Nampula, is characterized by a low diversity of fishing techniques, with seven per cent of the fishing units using beach seines. Drift gill-nets and hand-lines are also used.

The fleet is almost totally non-motorized, paddles and sails being the normal ways of propulsion. This high concentration of beach seines, often made of small-mesh nets, leads to an intensive exploitation of coastal fish stocks.

An artisanal fisheries survey, carried out by IDPPE in 1994, recorded a total number of 1,460 boats and 12,160 fishermen for the two districts. The area is characterized by a very high concentration of fishermen, with an average of one beach seine every 140 m of coast and around 90

fishermen per km. The breakdown of fishing units by fishing gear used is as follows:

Type of gear	Share (%)
Beach Seines	71.2
Gill-net	17.5
Hand-lines	10.4

The fishery is based on exploitation of small pelagics, mostly from the *Clupeidae* and *Engraulidae* families, and, to a lesser extent, higher-value demersals. Drying and salting-drying are the most common fish processing methods in the area and seem to be quite appropriate, given the lack of cold storage facilities and the low purchasing power of the inland populations. Smoking is less developed and the market for the product is mostly in the more coastal part of the province. There is a relatively small market for good quality fresh fish in Nampula.

With support from the International Fund for Agricultural Development (IFAD) and the OPEC Fund for International Development, the Institute for Small-scale Fisheries Development in Mozambique (IDPPE) has been implementing, since 1995, a six-year project in the area. The project was established with the overall objective of improving the level of income, employment and food security of about 9,300 fishermen and their families living in the two districts. This objective was sought to be achieved through integrated interventions in the following areas:

- artisanal fisheries development;
- establishment of financial services; and
- institutional strengthening.

Under the artisanal fisheries component, several activities were foreseen. The knowledge of fisheries resource accessible to small-scale fisheries in Mozambique is very limited.

No reliable data

The only studies done till recently focused on the stocks exploited by industrial and semi-industrial fleets and there was no

reliable data on small-scale fisheries production. The need to emphasize the study and management of the fish resource appeared clear.

A programme to improve the knowledge of fisheries resources exploited by artisanal fishermen in the project area was initiated in 1996. The core of the programme consisted of a catch assessment survey. The system was designed by IIP (the Fisheries Research Institute) with some technical assistance from the Norwegian government aid agency, NORAD. Implementation occurs in close collaboration between IIP and IDPPE. Data collection is done by the project extension workers. Complementary biological studies, on some of the main commercial species, have just been initiated, in collaboration with the Faculty of Science of the Eduardo Mondlane University.

Some other activities under the fisheries development component are aimed at supporting the diversification of fishing techniques and practices, and promoting co-management initiatives to allow for better and sustainable use of the resources.

Experimental fishing activities also began in 1996 and are focused on fishing trials of different types of gears, e.g. improved drifting gill-nets for small pelagics, various types of longlines, improved

bottom-set gill-nets for medium- and large-size fish, fish aggregating devices (FADs) and improved beach seines. The experimental fishing takes place with an improved sailing boat provided by the project and also based on agreements with interested fishermen.

At the time of the project start-up, there was virtually no management of the artisanal fisheries in Mozambique. Aware of this situation, and of the lack of financial means to implement more classical fisheries regulation mechanisms, the government decided to encourage the development of co-management systems. This policy was made official in the Fisheries Master Plan.

The activities of this component of the project started with the undertaking of a study under an ICLARM/North Sea Centre-supported programme, to assess traditional fisheries management practices in the project area and the potential to promote fisheries co-management there. The main conclusion was that the situation seemed to be favourable to develop schemes that would involve fishermen and administration in managing fisheries resources. The main recommendations for short-term action were:

- the creation of local co-management committees composed of representatives of the



administration and fishermen, where fishery regulation issues would be discussed and actions to be taken agreed upon, on a consensual basis; and

- implementation of a mechanism to control access to fishery resources in the project area.

Following this, an informal co-management committee comprising representatives of ADMAR, IDPPE, IIP and fishermen, has met a few times in Angoche.

During these meetings, issues were raised in relation to the need to control fishermen and the shrimp industrial trawlers, and the use of mosquito nets at the cod end on beach seines.

Project technical staff (including a team of 10 fishery extension workers) has been working to sensitize fishermen on the need to preserve fish resources. Study tours for fishermen and representatives of the fisheries administration have been organized to Inhassoro and Malawi to build awareness on the key issues of resource management and the need to develop participatory fisheries management schemes. A training course covering basic theoretical concepts and practical experiences on fisheries co-management has been organized in Angoche, for IDPPE extension workers

and fishermen representatives. These activities have contributed towards the establishment of co-management systems in Moma and Angoche. In addition to the co-management committee, local fisheries management committees (similar to the Beach Village Committees in Malawi) have been created. During the last few months, structures of this type have been made official in three fishing centres. The fishermen of Quelelene Island have been playing a leading role in this process.

The control of access to fishing ground appears to be the key issue in the implementation of co-management systems. Fishermen of Quelelene Island *proposed* to restrict the access to their area to fishermen registered in the island. They would themselves compromise by not going fishing in other areas.

After some discussions with the project team and ADMAR, this decision, on an experimental basis, for one year, was made official through a note from ADMAR in September 1997. To date, the measure has been respected by the majority of fishermen. Another key issue to be addressed is the stabilization of the number of beach seines operating in the project area. A significant reduction is unlikely to happen in the short term.

Regulatory measures

Although there are regulatory measures on minimum mesh size for the beach

seines, enforcement is quite non-existent and, had there been any, it would have had profound social consequences.

The project is working on a proposal to amend current regulations for minimum mesh size for beach seines from 38mm to 12mm. The measure would be more acceptable to fishermen, as it would allow the catch of anchovies and other small pelagics, while permitting the escape of juveniles and larvae of commercially valuable species. Through the local fisheries management committees, there will be a chance to enforce such measure.

The present Maritime Fisheries Regulation constitutes a constraint to the development of small-scale fisheries in areas where artisanal fisheries are in direct competition with industrial and semi-industrial shrimp trawlers. According to this regulation, trawlers are allowed to operate as close as one mile from the coast, so condemning the gill-net and longline fishermen to operate very close from the shore or take the risk of losing their gear. The destruction caused by trawlers on the substrata and the fish stocks close to the coast, is quite likely going to prejudice a sustainable use of the resource not only for the artisanal, but also for the industrial fishery.

The project is also seeking to modify current marine fisheries regulations so that industrial and semi-industrial shrimp trawlers should not be allowed to operate at less than 3 miles from the shore, to prevent conflicts between these fleets and artisanal fishermen, and to reserve sufficient space for artisanal fisheries development in the open sea, at least on an experimental basis, for the Angoche and Moma districts.

Although the establishment of co-management systems has been regarded as a priority and the way forward to address problems related to the use of fisheries resources in the Fisheries Master Plan, legal and institutional frameworks to encourage these types of developments are completely lacking in Mozambique.

The current maritime fisheries regulation that has been in force since January 1997,

has established the Fisheries Management Committee, a consultative forum that advises the Ministry of Agriculture on fisheries management matters. This committee, composed of fishing industry representatives, fisheries research institutes and fisheries administrators, meet at least four times a year to jointly discuss and address fisheries management problems, and reach a consensus on the actions that need to be taken to solve them.

Artisanal fishermen's representatives have been invited to these meetings, but the experience so far shows that the main concerns have been usually biased towards problems that affect the shrimp fishing industry, since it involves bigger players and stronger interests for the country, since shrimp remains the most important export commodity. In addition to this, to date, no provisions are in place to integrate local fisheries management initiatives-for instance, the Moma and Angoche experiences-into this national framework.

Control of resources

Thus, the consultancy being prepared with the support of [he project will be a crucial development. It will help address issues related to the award of legal status to the local fisheries co-management committees. It will also contribute towards some devolution of power to fishing communities on the matter of exploitation and control of fisheries resources and for the establishment of more fisheries co-management systems in Mozambique.

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