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MOZAMBIQUE AQUACULTURE BRIEFING NOTE

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Summary

The Minister of the Ministry of the Sea, Inland Waters and Fisheries (MIMAIP) requested support for the Development of Alternative Means of Life and Community Infrastructure in the Scope of Emergency in Cabo Delgado (hereafter referred to as the “aquaculture project”). This briefing note looks at the aquaculture sector in Mozambique and provides observations and recommendations on possible support to MIMAIP.



Background

The Ministry of the Sea, Inland Waters and Fisheries (MIMAIP) is responsible for regulating the aquaculture sector. The National Fishery and Aquaculture Institute (IDEPA), part of MIMAIP, deals with small-scale aquaculture. Mozambique has an Aquaculture Development Strategy (EDA) 2020 -2030, which was approved through Council of Ministers Resolution 48/2020. There are also General Regulations on Aquaculture Decreto 35/2001. Additional background on these items as well as the aquaculture project are contained in [here](#).

The aquaculture project was developed in response to the political crisis that is generating Internally Displaced persons (IDPs) and resettlement, both temporary and permanent. The project targets resettlement zones with interventions to support the IDPs and host communities. The project aims to assist districts and communities to (a) stabilise the living conditions of host communities and generate opportunities for sustainable livelihoods; (b) promote inclusive and participatory development; and (c) strengthen social integration.

The project notes that resettlement centres are mostly in mountainous and sandy areas with no bodies of natural water. This characteristic makes it necessary to (a) use canvas tanks for aquaculture and (b) supply these areas with water to the canvass tanks. No comprehensive feasibility study was provided. Indicative costs of a canvas tank (4.2 million MZN) and associated water supply system (4.0 million MZN), or approximately \$130,000 USD per system. Few details are provided about how production, social organization, marketing, supply, and other issues will be organized. Returns against investment are not shown.

OBSERVATIONS ON THE MIMAIP AQUACULTURE PROJECT CONCEPT

01

Supporting IDPs with income generating opportunities is critical to preventing the spread of Violent Extremism. It is clear that MIMAIP desired to support IDPs find income generating economic activities in Cabo Delgado. As many of the IDPs are fishers, there is logic behind MIMAIPs focus on aquaculture; however, fishing skills and aquaculture skills are not identical, nor are their respective value chains.

Many of the IDP camps are not located in areas defined by MIMAIP as having potential for aquaculture.

Many of the camps, for example in Chiure District, are located in areas without significant water resources, neither riverine nor freatic.² Note that the author selected this district as an example as he lived many years there and knows the water situation intimately. Even where water is available, and given existing difficulties with water for other IDP use (e.g., sanitation and hygiene), it is difficult to imagine that substantial investments for the competing use of aquaculture would be a priority for Disaster Relief partners.

02

Ownership of the aquaculture infrastructure is not clear and is exacerbated due to the land tenure issues associated with IDPs. Currently, policy is that IDPs will receive land use documents that are valid for 2 years, from host communities and families. If both parties are willing, this 2-year use right may be extended or made permanent, also using customary law. What this means is that any investment in aquaculture infrastructure will be made for the purposes of supporting IDPs who may or may not have permanent land rights in the communities where investments are made.

Aquaculture models promoted through the project are untested.

The models used to develop aquaculture (as set out in the [Aquaculture Development Strategy \(EDA\) 2020 -2030](#) and the [Small-scale Aquaculture Development Project \(PRODAPE\)](#)) are as of yet untested. A clearer picture of their success will take several years. It may not be wise to roll out untested models to IDPs.

03

04

05

Lack of dedicated aquaculture inputs could jeopardize overall investment. Supporting supply chain infrastructure such as feed and fingerling supplies are not yet in place. Without means of ensuring critical inputs to the aquaculture farms, investment into the aquaculture may not yield the intended economic benefits.

² Perfil Ambiental e Mapeamento do Uso Actual da Terra nos Distritos Da Zona Costeira de Moçambique: Chiure. Accessed 5/9/2021 @ <https://www.biofund.org.mz/wp-content/uploads/2019/01/1547474596-Perfil%20Chiure.pdf>



RECOMMENDATIONS

Blue economy and marine conservation potential of Mozambique is enormous and building a close collaborative relationship with MIMAIP should be a priority of the USAID/SPEED program. Successful engagement with MIMAIP on both aquaculture and Marine Protected Area creation for fisheries purposes should be considered of high strategic importance for coastal livelihoods and resilience. Follow up technical discussions should be held with MIMAIP, USAID, USAID/SPEED and through other USG programs.



Monitor and evaluate results from the upcoming aquaculture investment via PRODAPE to gauge aquaculture viability for IDPs before committing to support. The concept of support to IDPs through aquaculture is a laudable one. However, there are too many open questions to support this particular initiative. The time to consider financing aquaculture activities inland is *after* results and learning from the existing PRODAPE project start to come in. MIMAIP certainly has sufficient funding from PRODAPE and a reasonable project plan to advance with proof of concept for its aquaculture goals for the time being.



Consider engagement with MIMAIP in other areas, such as fisheries, coastal aquaculture, and even IDPs. Many IDPs from Palma and Mocimboa da Praia have actually returned to coastal communities along the Nampula coastline. These are a special class of IDPs as they have been displaced from areas where they are pursuing their economic activity (fishing) back to the place where they actually have homes and reside permanently. A return home for these fishermen likely leads to damage to their livelihoods and will result in increased fishing pressure on already overfished coastlines. Support to these coastal fisherfolk IDPs is a big opportunity, and likely more sustainable than the inland aquaculture concept proposed by MIMAIP.

Additional Background Materials can be found here:

<https://docs.google.com/document/d/1e9dddtotalbpemtkErMQKTxfBRl3K0bPwWZIG2sCs/edit?usp=sharing>



RECOMMENDATIONS



Investigate investments in coastal aquaculture. Perhaps the lowest hanging fruit is **mangrove crab fattening**, which has been piloted in a number of areas in Mozambique. The USAID/Mozambique Broad Agency Announcement (BAA) for Resilient Coastal Communities activity may be one way to explore viability a bit more with consultancy support from India or Southeast Asia. Emergency relief funding, or funds from another source, might be used to develop a fundable crab fattening project for IDPs and their communities in Nampula, perhaps in the area where WCS is planning their Blue Carbon project. Note that increasing demand in fattened crabs may lead to other negative externalities which also need to be considered and managed. Good environmental and social action planning (an ESIA or ESAP) should be a part of this initiative.



Consider supporting MIMAIP in locally managed marine protected areas (LMMPAs) to increase sustainable fishing practices. Mozambique as well as the rest of the world have good experiences in increasing local fish capture through the use of marine protected areas (MPAs) which are sometimes referred to as no-take zones, many of these community-managed. A productive initiative to improve livelihoods for local fishers might be intensive work with MIMAIP's network of *Centros de Pesca* and *Conselhos Comunitarias de Pesca* (Community Fishing Centres, and Community Fishing Councils), already established all along the Mozambique coast) to establish a network of community-managed MPA's with the specific purpose of increasing local fish capture.



Support MIMAIP develop LMMPAs using existing fisheries legislation. Over the near term, the USG might assist MIMAIP to develop a series of MPAs, using fisheries legislation, with the specific purpose of improving community fish capture, thus addressing both resource exhaustion as well as economic IDP issues.



RECOMMENDATIONS



Support MIMAIP to develop a Marine Parks Management Unit (MPMU). Over the longer term, the development of a MPMU might be important, and would allow MIMAIP to assume leadership in marine habitat management and conservation for the benefit of fisheries and fisher communities.



Support MIMAIP to expand to 30 percent of territories waters protected by MPAs by 2030. Mozambique is a member of the High Ambition Coalition (HAC) for Nature and People, which, on 11 January 2021, at the One Planet Summit for Biodiversity, brought together over 50 governments from across six continents who announced their commitment to protect at least 30% of the globe's land and ocean by 2030. The group aims to secure a similar global agreement at the Convention on Biological Diversity COP15, which will be held later this year in Kunming, China.³ Thus, the development of MPAs for fisheries purposes, by the MIMAIP, would put the MIMAIP in a leadership position within the Mozambican government with respect to this international commitment, as well as increasing the well-being of fisher communities all along the Mozambican coast.



Support MIMAIP with the Seafood Import Monitoring Program (SIMP). SIMP, is a risk-based traceability program requiring the U.S. importer of record to provide and report key data—from the point of harvest to the point of entry into U.S. commerce—on more than 1,100 unique species. Launched in 2018, SIMP focuses on species and species groups identified as vulnerable to illegal, unreported, and unregulated fishing or seafood fraud. As Mozambique exports species covered by SIMP to the US, establishing compliance with SIMP will be necessary for certain fish species to be exported to the US. In addition, we speak with the Sustainable Fish Alliance next week to talk about their interest in work in Moz, so perhaps seafood certification and trade linkages through SFA could be an opportunity.

³ Accessed 5.9.2021 @ <https://lifeterra.eu/news/50-countries-commit-to-protection-of-30-of-earths-land-and-oceans-by-2030/>