The Republic of Mozambique

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Fisheries production underpins the economy of the Republic of Mozambique, as well as livelihoods, food and nutrition security. Stark differences characterize the ways in which men and women use, experience and share in the benefits from these activities, with women facing limitations on their access to resources and assets, and playing a limited role in fisheries management and decision-making. Yet women are key food and income providers, playing a diversity of critical roles in seafood production, including through fishing by walking in the intertidal zone (gleaning).

Mozambique has made significant achievements in promoting women's rights, including by supporting the establishment of women's organizations, by encouraging a more active role for women in politics, and by increasing school attendance for girls.

Yet considerable work is needed to address the deeper structural factors that underpin and perpetuate inequalities. This is particularly true for addressing these deeper structural factors that underpin and perpetuate inequalities.

This fact sheet provides an overview of the role of capture fisheries production in Mozambique, with a focus on gender dimensions, and is a starting point for conversations about how to support gender equity and equality in the sector and beyond. Our hope and intent is to update this document and incorporate new information and perspectives as they arise. It is part of a series meant to offer development agency employees, government agencies, NGOs, funders and researchers with a snapshot of gender and fisheries to inform the planning and delivery of relevant activities these actors might be involved in, or are in the process of developing.

### **Fisheries production**

Total annual fish production reported by the Ministry of the Sea, Inland Waters and Fisheries (MIMAIP) stood at 447,000 tonnes of diverse seafood in 2020.<sup>1</sup>

The Sea Around Us estimated total annual marine capture production for Mozambiquan fleets as follows:<sup>2</sup>

► Marine subsistence (2019) – 42,951 tonnes

Marine commercial (2019) – 222,001 tonnes (artisanal); 32,367 tonnes (industrial, of which 30,199 tonnes were caught in Mozambique's Exclusive Economic Zone (EEZ) and 2,168 tonnes on the high seas). In 2019, total industrial catches in Mozambique's EEZ by foreign fleets were estimated at 1,077 tonnes.

Total freshwater production is estimated at 100,000 tonnes (2018).3

### **Fish consumption**

Two-thirds of Mozambique's population lives in coastal areas, with a fifth of households relying on fisheries for income generation and food security. The Food and Agriculture Organization of the United Nations estimated apparent fish consumption at 11.5kg per capita per year (2019). Fisheries account for about 50% of total animal protein consumed nationally.

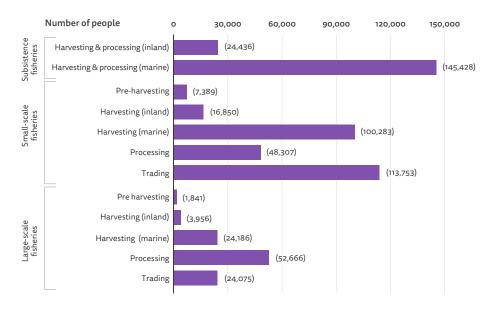
### Fisheries contribution to GDP

The fisheries sector contributed to about 10.3% of GDP in 2017.8 Earlier estimates put the sector's contribution at 3-4% (2013), with the country's shrimp fishery representing a key source of foreign-exchange earnings.9

The small-scale fisheries sector is a multi-species fishery, focused primarily on shallow-water crustaceans such as shrimp and crab, small pelagics as well as larger pelagic and demersal fish. Mozambique's industrial commercial catch, consisting largely of coastal and deep-sea shrimp, other crustaceans<sup>10</sup>, as well as some high-value pelagic and demersal fish species, is mostly exported to the EU (mainly Spain and Portugal).<sup>11</sup> While industrial catches represent only a small proportion of total landings, they account for slightly more than half the total value of the nation's total fisheries production.<sup>12</sup>

### Employment (all)

The Illuminating Hidden Harvests (IHH) Initiative estimated that a total of 563,169 individuals engage in the fisheries sector<sup>13,14</sup> (2022), including pre-and post-harvest as well as subsistence fishing activities, and with most individuals involved in the marine small-scale fisheries sub-sector (see graph below). The IHH also estimated that a total of approximately 2.4 million people depend, at least partly, on fisheries or subsistence fishing: 1,367,893 for small-scale fisheries, 635,303 for subsistence fisheries (majority women) and 410,429 for large scale fisheries.<sup>15</sup>



#### **Employment (women)**

"A total of 199,730 women are active across the fisheries sector."

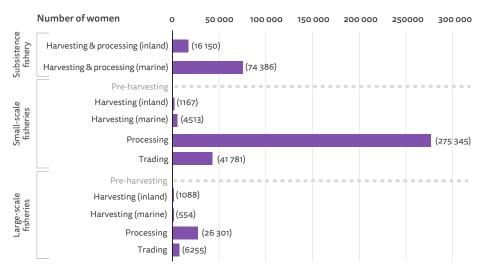
"Women's roles vary markedly across the country, underscored

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fisheries."

Women play an active role in fisheries throughout Mozambique, with the IHH estimating that a total of 199,730<sup>16</sup> women are active across the fisheries sector. Women are more likely than men to engage in subsistence fishing, representing 53.3% of the total number of people engaged in subsistence fishing. They also play a key role in fish processing, representing 57% of total number of people active in the fish processing segment of small-scale fisheries.



Numbers could not be estimated based on availability of data and methods used.

Many women contribute to fisheries production, engaging across the value chain from pre-harvest to harvest as well as processing, trading and marketing activities.<sup>17</sup> In the artisanal shallow water shrimp fishery sector, for instance, women are engaged in freezing and packing of shrimp into small boxes. 18 Where women engage in harvesting activities, they can be found mainly gleaning<sup>19</sup> for shellfish such as oysters (Imbare), mussels, pen shells (Makaza), chitons, cockles and cowries as well as invertebrates such as crabs, and targeting octopus (Mjewa) using a spear, knife or wire in shallow waters and the intertidal zone for subsistence and commercial purposes.<sup>20,21,22,23,24</sup> Octopus fishing is widely identified as a key fishing activity and livelihood opportunity for women across the Western Indian Ocean region.<sup>25,26</sup> Some women can also be found fishing with nets of small mesh sizes, including mosquito nets, for Madada (small fish such as juvenile reef fish, the main target group, as well as anchovy and sardine).23 The method of deploying mosquito nets by women, Kutanda, makes reference to a traditional form of fishing mainly conducted by women using cloth.<sup>27</sup> This practice sees groups of three or four women deploying a single mosquito net, or several stitched together, and using them in a seining method in shallow open waters over sand and seagrass.<sup>27</sup> Use of mosquito nets can be an important part of household livelihood activities that can fit in with other commitments, especially in adaptive strategies beyond subsistence in mixed agriculture and fishing communities. Women who rely on octopus fishing or shell collecting often do so because they have fewer assets and cannot afford more expensive fishing gear (e.g., boats, nets), or the startup capital required for trading and processing activities.

Importantly, women's roles vary markedly across the country, underscored by the high diversity of women engaged in fisheries. In some villages, such as Quiwia, close to the border with Tanzania, some women dive for octopus, an occupation traditionally dominated by men.<sup>23</sup> In the Bay of Maputo, women collect shellfish and sell them at the city markets or door-to-door.<sup>28</sup> As a result of these activities, many women are boatowners, employ local fishers, and are part of a complex chain of intermediaries (*maguevas*) that represents an important socioeconomic network supplying the city

"The intertidal fishery is vital to many women's livelihoods and food security." with fresh seafood.<sup>28</sup> On Ibo Island in Cabo Delgado, research on octopus harvesting by women suggests there is a correlation between fishing effort and vulnerability, with more vulnerable women (female-headed households) fishing more often.<sup>29</sup> In the post-harvest sector, the majority of women fish traders operate informally: outside established markets, on the streets or door-to-door in urban and rural areas, while men fish traders have access to better transport (e.g., refrigerated trucks) and higher-end markets (e.g., hotels and restaurants).<sup>17</sup> Language is a barrier for most women since many of the tourist businesses are run by South Africans.<sup>17</sup>

The intertidal fishery is vital to many women's livelihoods and food security. Women's role in Mozambique's fisheries sector is largely centered around subsistence food production. In the past, this would allow women a degree of influence over the household as food production was largely covered by subsistence activities. As societies are becoming increasingly globalized and cash dependent, men have gained more power within the household since it is easier for them to enter the commercial economy. Discriminatory social and structural barriers and norms also have protected and accentuated male power at household, community and political levels. However, as women fish traders go further inland than men fish traders to sell fish, they contribute to the improved nutrition of rural populations.<sup>17</sup>

#### Social considerations

How women and men interact with different parts of coastal marine ecosystems and engage in fisheries depends not only on their economic status, but the degree to which specific gender norms and associated responsibilities and cultural expectations are prevalent within their communities. Social norms and cultural practices vary widely across Mozambique, deeply affecting gender considerations. Evidence from across four sites in northern Mozambique showed that activities and identities closely related to fishing and involving travel to sea tended to be associated with men, including opportunities for relaxation and reflection.<sup>30</sup> In contrast, activities women engaged in were more restricted to the land, the shoreline and the home.<sup>30</sup> Moreover, in the south, women tend to be able to publicly play quite an active role in social and economic activities, while in the north, women, where they can, must exert their power privately, with conservative and traditional culture limiting women's social and economic empowerment.

Intersectionality plays an additional role in understanding the degree to which gender norms are restrictive and influence roles, responsibilities, and behaviours. Purdah, the religious custom of securing a woman's honour, has been identified as a key practice that limits women's rights and opportunities, especially in small-scale fisheries. While polygyny is officially prohibited in Mozambique, a lack of enforcement against the practice itself means nearly 20% of married women ages 15-49 are in polygamous unions.<sup>31</sup> Marital status can have a strong bearing on the support provided by a husband to their spouse, with the first wife, or senior wife, enjoying more recognition, but also reporting higher rates of violence.<sup>31</sup> Overall, violence against women in Mozambique is considered widespread<sup>32</sup>, with "one-third of 15-year-old adolescent girls declaring that they are survivors of physical violence; 46% saying they are survivors of domestic, sexual, or emotional violence from their partners; and 70% reporting being harassed at school."<sup>33</sup>

"Only 6% of women are wage workers, compared to 24% of men."

In many communities, women do most of the reproductive and part of the low-income productive work, while men's focus and responsibility tend to be on productive work. Women work is mostly through the informal sector and women are largely underpaid. Only 6% of women are wage workers, compared to 24% of men.<sup>33</sup> In matrilineal communities, women's

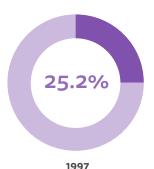
right to property is secured under customary law, but they do not have any formally recognised rights in the decision-making process.<sup>34</sup> After the end of Mozambique's civil war the government passed a radical land law in 1997<sup>35</sup>, which outlines that both women and men have a right to land use. While this has led to an increase in the number of women with land title use rights (25%), women's rights to land in rural areas is still restricted.<sup>36</sup>

# Women's rights and political empowerment

The role of gender in Mozambique has been deeply shaped by the country's political and historical context.<sup>37</sup> During the colonial period both women and men were deprived of their civil rights. After independence, Mozambique's state-centered political ideals supported equal access to education and jobs, but with an emphasis on the role of women as mothers and educators. During the Civil War (1977 to 1992), women were exposed to extreme physical and sexual violence, yet they also became the primary breadwinners for their families, and as mothers, were seen as the pillar of the family.<sup>37</sup> Since then, political structures have been increasingly supportive of women's active participation in all aspects of life, recognising that their economic, social, and political empowerment is necessary to eliminate harmful practices.<sup>38</sup> To this end, the country has enacted several laws to combat discrimination against women and girls and strengthen the principle of gender equality in existing laws.<sup>38</sup>

Equality is a right enshrined in Mozambique's constitution. Revised in 2004, it includes several clauses that emphasize gender equality. For instance, Article 36 promises gender equality, while Article 122 stipulates the promotion and support of women's participation, role, and empowerment in all spheres of the country's political, economic, social as well as cultural life.<sup>39</sup>

Representation by women in parliament:



42.4%

2022

Representation by women in parliament has increased remarkably from 25.2% in 1997 to 42.4% in 2022 – ranking Mozambique 21<sup>st</sup> out of 187 countries.<sup>40</sup> Women's representation at the local assembly and in government executive positions is also quite high. Of note in a fisheries context is that the country's Ministry of the Sea, Inland Waters and Fisheries, established in 2015 to develop a strong blue economy and support the sustainable use of ocean and inland water resources through increased decentralization, is headed by a woman: Lídia Cardoso.

While Mozambique has a good legislative and strategic framework to promote equal access to development opportunities for both women and men, actual implementation of key policies remains difficult, and most key human capital indicators show stagnation.<sup>33</sup> On the one hand, 83.3% of national legal frameworks promoting, enforcing and monitoring gender equality are in place<sup>41</sup> and actions by the government and the UN Committee on the Elimination of Discrimination against Women, together with local NGOs, have yielded promising results. These include a narrowing of the gender gap in schooling, decreases in maternal mortality and increases in women's political representation. However, severe gender disparities remain, with the country ranking 136<sup>th</sup> out of 170 ranked countries in the Gender Inequality Index (see below). Mozambique has one of the highest child marriage and adolescent pregnancy rates in the world and domestic violence, domestic servitude, forced labour, and sex trafficking remain critical problems.<sup>38</sup>

The following government bodies are key institutions responsible for advocating women's rights in Mozambique. The Ministry of Gender, Children and Social Action is the Ministry with the overall responsibility for gender issues in Mozambique. The Directorate-General for Women's

Affairs is the institute responsible for the implementation of decisions and policies from the Ministry. The National Council for Promoting Women convenes all stakeholders, including official organizations, NGOs, private sector participants and religious officials, supportive of women's rights in Mozambique.<sup>36</sup>

### Key frameworks promoting gender equality and their ratification status

- ✓ Convention on the Elimination of Discrimination Against Women (CEDAW) ratified in 1997 and its optional Protocol ratified in 2008.
- ◆ Beijing Platform for Action (1995) with national review submitted in 2019.<sup>42</sup>
- ✓ Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women (Maputo Protocol) ratified in 2005.
- √ Mozambique is one of 12 member states that have signed the Agreement Amending the SADC Protocol on Gender and Development in 2016 to align it to the Post-2015 Sustainable Development Goals and Targets, the African Union Agenda 2063, and the Beijing Plus 20 Review Report.<sup>43</sup>

# Social Institutions and Gender Index (SIGI)

Higher SIGI values indicate higher inequality and range from 0 for no discrimination to 1 for very high discrimination. With an aggregated index value of 0.26 in 2024, Mozambique was ranked as having overall low levels of gender discrimination in social institutions.

| Year               | Total<br>aggregated<br>index value<br>(category)44 | Discrimination in the family | Restricted<br>physical<br>integrity | Restricted<br>access to<br>productive<br>& financial<br>resources | Restricted<br>civil<br>liberties |
|--------------------|--|------------------------------|-------------------------------------|---|----------------------------------|
| 2014 <sup>45</sup> | 0.1375 (Med.)                                      | o.4181 (High)                | 0.3793<br>(Med.)                    | 0.4076 (Med.)   | 0.4505<br>(Med.)                 |
| 2019               | 0.24 (Low)   | o.32 (Med.)                  | 0.155 (Low)                         | 0.153 (Low)   | 0.329<br>(Med.)                  |
| 2023               | 0.226  | 0.216                        | 0.15                                | 0.338   | 0.191                            |

Africa Gender Index (AGI)

Value (2019)46

0.649

(on a scale from 0 to 1, with a score of 1 representing parity between women and men)

Rank (2019)

8

(out of 51 countries)

Gender Inequality Index (GII)

Value (2021)47

0.537

(on a scale from 0, where women and men fare equally, to 1, where one gender fares as poorly as possible in all measured dimensions) Rank (2021)

136

(out of 170 ranked countries)

# Gender in fisheries governance

"Some fisher-women only fish opportunistically, as their basic needs are met, others fish more often due to food insecurity, and others still focus only on fish trade." As women are predominantly working in the informal fisheries sector, they are not yet officially recognized as making important contributions to the artisanal fisheries sector. Women also tend to be excluded from decision-making and do not get a chance to shape fisheries policy to suit their needs, priorities and roles. There is recognition that women are often at a disadvantage, as they tend to not be formally organized, and are underrepresented in local fisheries co-management Community Fisheries Councils (Conselhos Comunitarios de Pesca - CCPs)17,28, and, to a lesser extent, credit groups. 48,49 This limits their access to resources, including storage, as well as fish-preservation and processing equipment, reducing quality of product, leading to waste and constraining women's ability to distribute their goods. 17 However, while women tend to lack formal groupings, many have strong informal ties between them that they use to help them fish and navigate other areas of their lives. In addition, it is important to recognise that women are not one homogeneous group.29 Some fisherwomen only fish opportunistically, as their basic needs are met, others fish more often due to food insecurity, and others still focus only on fish trade. This difference should be accounted for when women are asked to represent themselves in CCPs. Indeed, for instance, during focus group discussions, men fishers who were a part of CCPs indicated that they would like to have more fisherwomen as members to better understand fish prices.<sup>17</sup> These considerations may provide a useful starting point to consider how best to build locally legitimate institutions that effectively and fairly support and empower women involved in different segments of the fish value chain. Formal recognition of intertidal gleaning, possibly as separate from fisheries more broadly, could further help shine a light on women's fishing activities and support their active engagement in representation and leadership to support more equitable and sustainable fishery practices.

The Action Plan for the Reduction of Absolute Poverty (2006-2009) acknowledged gender inequality as a key obstacle to the country's economic growth. This Plan was key to help frame the integration of gender issues across policy-making in Mozambique. While the Women and Social Action Sector assumes responsibility for ensuring social integration of disadvantaged and vulnerable population groups, it was noted that "all sectors are responsible for integrating the gender component into planning and budgeting." To meet a key objective of women's empowerment, priority actions included: approval and implementation of gender policies in all sectors, adoption of new legislation against domestic violence and capacity building of stakeholders, expansion of agricultural extension services, integration of women in development to small and medium sized enterprises, access to adequate credit, promoting gender balance in leadership positions and increasing capacity for women to assume positions, reducing gender disparities in education, and improving sanitation in rural areas to reduce women's work and time burdens. The plan's priority for reducing poverty within the fisheries sector was to "ensure adequate measures are taken to promote environmental sustainability through an integrated management of the marine environment and fisheries resources." Actions included increasing domestic markets, aquaculture production, and support participation of fishers in management. In this plan, gender and fisheries were recognized for their potential contribution to eradicating poverty.

In 2006, the Government approved the **Strategic Plan for Artisanal Fisheries Sector** (PESPA - Plano Estratégico para o Sector de Pesca Artisanal) for the period 2006-2015, developed with the support from the International Fund for Agricultural Development (IFAD) to guide the progressive development of artisanal fisheries.<sup>49</sup> Gender issues were

"Formal recognition of intertidal gleaning could strengthen female leadership and support more equitable fisheries." one of the cross-cutting aspects and thus well integrated in the Strategic Plan. For example, the Plan had provisions for encouraging women's participation in CCPs and recognised the importance of intertidal aquatic and terrestrial resources for women, their households and communities. The Plan also recommended literacy and organisational support for women involved in the processing and marketing of fish, in particular through the strengthening of women's informal groups such as "xitique" (solidarity networks in artisanal fishing). This was very progressive as it predated the FAO Voluntary Guidelines for Securing Small-Scale Fisheries<sup>50</sup>, launched in 2015.

In line with this, Mozambique developed a gender strategy specifically for artisanal fisheries to help ensure that women have equal rights and opportunities within the artisanal fisheries sector.<sup>51</sup> The government also established a Fund for the Promotion of Female Entrepreneurs, which was later converted into a special fund for women working on fish transformation and conservation.<sup>49</sup>

In May 2012, the Government committed to adhere to the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security, adopted by the Committee on World Food Security<sup>49,52</sup>, which includes provisions for non-discriminatory and gender sensitive national policies and laws for tenure rights.

The **Fisheries Plan** (2010-2019) produced by the Ministry of Sea, Inland Waters and Fisheries also had a strong focus on gender issues, with the specific aim to develop initiatives in favor of women given their fundamental role in the development of fishing communities through the collection, processing, and marketing of fish. The Plan reflected the necessity to incorporate gender into all needs assessments and training actions and the importance of gender mainstreaming across programs of work. Capacity building of institutions based on a gender approach was also highlighted, including development of initiatives for women in savings and revolving credit groups, fisher and processor associations, and aquaculture. Cross-cutting issues recognized as a challenge and in need of attention included the environment, marine conservation, gender and governance.

| Year |
|------|
| 1990 |
| 1990 |
| 1996 |
| 1996 |
| 2001 |
| 2002 |
| 2003 |
| 2003 |
| 2006 |
| 2006 |
| 2007 |
|      |

| Governance Text   | Year |
|---|------|
| Decree No. 57 approving the Regulation on Inland Fisheries  | 2008 |
| Fisheries Plan (2010-2019)  | 2010 |
| Ministerial Order No. 204 on the Regulation of harbours exploitation in fishery sector  | 2011 |
| Ministerial Order No. 205 on the Tariff Book for harbours in fishery sector   | 2011 |
| Protocol setting out the fishing opportunities provided for by the Fisheries Partnership Agreement, between European Community and Mozambique | 2012 |
| Fisheries Law No. 22  | 2013 |

## Threats and drivers of change in fisheries

Several key threats to and drivers of change in Mozambique's coastal ecosystems and encouraging examples of how these may be addressed are outlined below.

"Mozambique ranks 1st out of 180 countries on the latest Global Climate Risk Index."  Mozambique is one of the most disaster-prone countries in the world, ranking 1st out of 180 countries on the latest Global Climate Risk Index.53 Mozambique is highly vulnerable to the impacts of climate change and extreme weather events, such as drought, floods, sea level rise, changes in fish distribution because of ocean warming, and cyclones. Climate change represents a particular threat to key fisheries habitats such as coral reefs and mangroves.<sup>54</sup> These impacts are already being felt. Between 2019 and 2022 alone, Mozambique was affected by a total of seven devastating cyclones and/or tropical storms. Fishing communities are among the most isolated and marginalized and given traditional gender-based division of work and the decision-making structure in many communities, women are particularly at risk to the effects of climate change.55 Cyclones Kenneth and Idai, for instance, aggravated the risk of gender-based violence due to the exploitation of chronic and acute poverty, and placed an important recovery burden on female-headed households, who are both the income providers and caregivers. 56,57 Additionally, there are concerns that because of gendered fisheries management practices, adaptation measures to the effects of climate change explored thus far have placed a disproportionate burden on women by restricting access to areas they commonly utilise for fishing and gleaning. 58 Climate change has also led to increases in the number of men migrating to South Africa in search for jobs. This has led to women playing a greater role in productive work in addition to their reproductive work (i.e., care and domestic responsibilities). However, while this has increased the demands on their time it has also led them to play a greater role in decision-making processes.<sup>59</sup> Strengthening women's role in this regard will allow communities to respond and adapt more effectively to the impact of climate change related environmental stresses.

"Under UNFCCC
Mozambique is one of
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have approved gender and
climate action plans."

Addressing gender equality and women's empowerment has become a key focus under the United Nations Framework Convention on Climate Change (UNFCCC), with many countries, including Mozambique, taking the initiative to strengthen their commitments to gender equality. Indeed, Mozambique is one of only a few countries to have approved gender and climate action plans or strategies. Fo Nationally Determine Contributions (NDC) Partnership and members of World Resources Institute's Gender Equity Practice provided support to Mozambique to conduct gender assessments of their climate policy and implementation mechanisms. Mozambique successfully revised their NDCs and are now on the path of converting policy into action with fisheries included among

"Conservation efforts should account for gendered uses of coastal habitats and formally engage with both women and men"

"Bycatch rates in tropical shrimp trawls are of particular concern and estimated to be as high as 85%."

- the main sectors that are part of the portfolio of adaptation actions, measures, projects and policies.<sup>62</sup>
- Fisheries are in competition for maritime space with oil and gas exploration as well as tourism. The latter two sectors have generated important investments and raised expectations in terms of economic development and livelihood opportunities. Consequences, however, also include fishers facing limitations around, or losing access to, their traditional fishing grounds, affecting women directly through the loss of subsistence fishing opportunities or negatively impacting their livelihoods through the loss of processing and fish trading activities. Oil and gas exploration also represents a key threat to coastal habitats and marine resources<sup>70</sup>, with the capacity to monitor large-scale extractive projects often being limited. Greater efforts should be levied at ensuring that inclusive and effective consultations take place and that men and women from fishing communities are well informed about the potential impacts of oil/gas exploitation on the marine environment and coastal communities. CCPs can play an important role in this regard, but effective participation will require engagement and training.9 In addition, greater engagement across sectors may help address and resolve conflicts where these occur.
- **Conservation** is a driver of change, as the creation of protected areas and zonation within them has compounded the effects of other spatial drivers of change such as oil and gas exploration as well as development of high-end tourism (often linked to conservation projects). Several marine protected areas have been established with limited community consultation, resulting in tension between communities and conservation authorities and tourism operators. In many instances, fishers used to travel to uninhabited islands, some of which have now been designated as no-take zones. However, in many cases, these areas represented important fishing grounds for members of surrounding fishing communities, including women. In the town of Ndelane in southern Mozambique, for instance, local communities were critical of MPAs because of negative experiences with nearby protected areas, which are a source of longstanding conflicts over restrictions on resource use, namely Inhaca Island Marine Reserve and the Maputo Elephant Reserve. 63 Conservation and ecosystem management efforts therefore should account for gendered uses of coastal habitats and formally engage with the men and women stakeholders using those spaces and who hold relevant knowledge.<sup>30</sup> Improved information sharing among fisheries and park officials, tourism operators, and fishing communities can also support improved levels of compliance with park regulations and reduce the pressure on park officials to enforce compliance through punitive measures.9 Locally managed marine areas can be an effective means to involve local communities in resource management.<sup>21</sup> However their success depends in part on adequate financial and strategic as well as effective institutional and governance support, the establishment of equitable alternative livelihood programmes and capacity building opportunities, among other efforts (see also section below on programmes or initiatives aiming to advance gender equality).
- ▶ Overfishing by large industrial fleets, especially trawlers, and the rapid expansion and intensification of artisanal fisheries have led to important marine resources declines. <sup>64</sup> Bycatch rates in tropical shrimp trawls are of particular concern and estimated to be as high as 85%. <sup>11</sup> Unsustainable land-use changes (including shrimp aquaculture developments), declines in coastal ecosystem health, increased fishing effort and the continued use of fishing practices such as very small-sized mesh nets, and poison, have led to declining fish and invertebrate catches. These malpractices have also led to the degradation of important coastal ecosystems,

"Regional estimates indicate that IUU fishing costs Mozambique USD36-67 million each year."

including seagrass beds, which are critical to the livelihoods of many coastal communities, especially women through gleaning activities.<sup>21</sup> Estimates suggest that artisanal catches have declined by nearly 30% over the last 25 years. Fishers' experiences support macro-level data of declining trends in catches, reporting that the shallow inshore waters are depleted and fish size decreasing.<sup>65</sup> These trends are contributing to food insecurity and greater poverty.<sup>66</sup>

- Concentration of shrimp fisheries into companies that are majority foreign-owned has impacted the distribution of benefits from the fishery.<sup>7</sup>
- ▶ Illegal, unreported and unregulated (IUU) fishing has been identified as an important threat to local fishing communities. Regional estimates indicate that IUU fishing costs Mozambique USD 36-67 million each year<sup>11</sup> and that addressing the IUU problem in Mozambique would increase per capita availability of aquatic foods by 0.5kg per capita per year.<sup>67</sup> Illegal fishing is a problem also affecting the small-scale fisheries sector, through the use, for instance, of mosquito nets. Several fishing regulations ban the use of mosquito nets as a fishing gear. Yet, they remain widely in use, with engagement rates of up to 42% of fishers in some villages across the Cabo Delgado region, despite relatively high levels of awareness of prohibited gears and support for the fisheries regulations that ban them. This is probably related to poverty coupled with a lack of alternative livelihoods, particularly for women<sup>27</sup>, and low enforcement by the authorities, including the Community Fisheries Council (Conselhos Comunitarios de Pesca - CCP) co-management bodies.<sup>20</sup> Mosquito nets have been shown to yield the highest catch rates as well as value for the small fish they capture, which are valuable when traded dry, likely underscoring their broad use by women.<sup>20</sup> Of particular concern is the predominantly male method of mosquito net deployment, chicocota, in estuaries. When set up in this way these small mesh nets, also often made from discarded commercial shrimp nets, rely on tidal flow to indiscriminately capture a variety of marine species. 68 Mosquito net fisheries represent a key livelihood issue with potential communitylevel impacts on nutrition and food security as well as income. Any intervention will therefore need to engage all stakeholders, consider their role within these fisheries and assess risks as well as current and future opportunities.27

### Gender in ODA allocation for fisheries

Between 2010 and 2019, Mozambique received a total of USD 108.5 million in fisheries Official Development Assistance (ODA), 41% of which was earmarked to support gender equality focused projects (i.e., tagged with gender markers 1 or 2<sup>69</sup>).<sup>70,71</sup> These USD 44.6 million represent 49% of gender-focused fisheries allocation to Sub-Saharan Africa and 14% of total fisheries allocation to the subregion.

Most gender-focused financing was provided by:

Norway

60%

Iceland

36%

Programmes or initiatives aiming to advance gender equality in fisheries

There's been a wide range of initiatives seeking to support the sustainable development of artisanal fisheries in Mozambique over the years, with several activities focused on strengthening the livelihood opportunities and decision-making power of women. Some recent project examples are highlighted below.

Over two decades, the International Fund for Agricultural Development (IFAD) supported two key artisanal fisheries projects, 'Sofala Bank Artisanal Fisheries Project' (SBAFP/PPBAS, 2001-2011) and ProPesca (2011-2018). The former promoted "community-based management with shared responsibility", followed by "a more commercial and entrepreneurial orientation aimed at improving the artisanal fisheries value chain" in the latter.<sup>49</sup> SBAFP/PPABS had, overall, a positive impact on beneficiary household incomes, assets and social capital<sup>48</sup> and was instrumental in setting in motion a process of institutional change and policy reform in the sector that resulted in the adoption of the Strategic Plan for Artisanal Fisheries (PESPA I, 2006-2016, and PESPA II, 2016+).<sup>48</sup> A significant achievement of ProPesca was to consolidate access to accumulative savings and credit associations initiated under SBAFP/PPABS<sup>48</sup> and increase availability of, and access to, finance products to small-scale fishers and traders, in particular women, through the Special Funds of the national Fisheries Development Fund (FFP) that was specially designed for them.<sup>49</sup>

The World-Bank provided finance over a period of 6 years (2015-2021) to Mozambique through its Southwest Indian Ocean Fisheries (SWIOFish) Governance and Shared Growth Project. The project's broader remit was to improve the management effectiveness of selected priority fisheries at regional, national, and community level. As part of the project, support was directed at fishing associations in-country, helping fishers, especially women, save some of their earnings, borrow money and grow their businesses.<sup>72</sup>

Given women's reliance on octopus fisheries as an important revenue generating activity, several projects have investigated how they might, together with local stakeholders, support the establishment of seasonal octopus closures to improve fisheries productivity and women's livelihoods. Examples include efforts led between 2013 and 2016 by Associação do Meio Ambiente (AMA) and Bioclimate funded by the UK Department for International Development.<sup>23,73</sup> Another, led by RARE's Fish Forever programme, has been working with six communities to strengthen community-based coastal fisheries management, and to embed fully protected reserves and community-managed access areas into the national management framework. Impacts of these efforts have included supporting 22 Savings Clubs, comprising over 400 members, 68% of whom are women.<sup>74</sup>

Through joint programming and advocacy, the CARE-WWF Alliance worked with government authorities in the designation of a new protected area between 2012 and 2016. Primeiras and Segundas Environmental Protection Area (PSEPA) was the first nature reserve in Mozambique to formalize co-management with communities. Through joint research, the Alliance and the Ministry of Sea, Inland Waters and Fisheries co-produced evidence that community-managed no-take zones serve as effective fish nurseries. The enabling policy framework, paired with empowering community-based organizations to participate in management, has led to improved participatory natural resource governance in PSEPA.75 The Alliance also established Farmer's Field and Business Schools to promote climate-resilient agriculture practices in communities dependent on both fisheries and crop agriculture. Participating farmers and fishers increased crop yields and secured access to adequate food 10.6 months each year, compared to 9.2 months just two years earlier. A 2018 survey found that households in communities with Field Schools were 13% more likely to experience year-round food security than households without this intervention. Similarly, while households in communities without no-take zones saw their weekly seafood consumption drop from an average of five to four days a week between 2014 and 2018, households in villages near

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these community-managed areas experienced stable seafood consumption levels over the same period. This work also included the establishment of Village Savings and Loan Associations<sup>76</sup>, where men and women save and lend together - building social and economic capital. Results are helping families put children through schools, cover health care costs and invest in new businesses.<sup>77</sup>

The Coastal Resilience to Climate Change (CRCC) initiative (2017-2021), funded by the Swedish Embassy in Maputo, and jointly implemented by the Mozambique Ministry of Sea, Inland Water and Fisheries, IUCN and RARE, focused on empowering coastal communities to respond to climate change by supporting restoration efforts and providing funding for community activities with the aim to increase community resilience and improve household income. Projects implemented under this initiative responded to the needs of both women and men; with women's participation standing at 58%, 53% and 37% in Inhassoro, Memba and Dondo districts respectively in 2020.<sup>78</sup>

The International Climate Initiative (IKI)-funded Locally Empowered Area of Protection (LEAP) four-year project (2019-2023), implemented by IUCN in partnership with Nature Seychelles, Associação do Meio Ambiente (AMA) and Coastal Oceans Research and Development - Indian Ocean (CORDIO) is helping to build artisanal fishers' capacity to improve their livelihoods while reducing pressure on natural resources.79 Activities include engaging both women and men from local communities through gender-responsive planning in the design of sustainable management approaches, such as the creation of permanent and temporary community reserves, the creation of mangrove nurseries, and the promotion of replanting in degraded areas. In Cabo Delgado Province (Mecufi District), this same project equipped the Village Savings and Loans Association (VSLA) groups with saving kits and agricultural inputs for horticulture groups which gave women fishers and coastal community members income streams during the COVID pandemic, reducing pressure on fishery resources. Out of the 118 members involved in the five VSLAs established, 76% are women.79 This has also translated into an increase in women's access to and control over agricultural inputs. In Cabo Delgado, the initiative has also supported the creation of 11 community-based management groups with increased participation from women: 205 out of the 249 members are women (82%).80

"E€OFISH has facilitated access to training and technical support for women in fisheries."

E€OFISH<sup>81</sup> is a new programme promoted and funded by the European Union between 2018 and 2024 to enhance equitable economic growth by promoting sustainable fisheries across East Africa, Southern Africa and the Indian Ocean region. <sup>82</sup> In Mozambique, it is being implemented by the local organisation Ajuda de Desenvolvimento de Povo para Povo (ADPP) (an NGO that works across Quality Education, Health and Well-being, Sustainable Agriculture, and the Environment) and focused on the promotion of sustainable small-scale fisheries in Cahora-Bassa and Mogoe Districts, Tete Province. Its main objectives are to empower and build capacity within fishing communities, improve integration of fishing groups into value chains and increase access to drinking water and sanitation. To date, the project has supported the establishment of several fishing clubs that include participation by women, enabling them easier access to training and technical support, and has conducted a gender study, resulting in the formulation of an action plan and production of training material. <sup>83</sup>

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A fisherwoman catching an octopus. Photo: © Adaoma Wosu



Women selling fish on the beach at Inhambane. Photo: © Suzannah Walmsley



Fisherwomen looking for octopus in the intertidal. Photo: ©  $\bf Adaoma\ Wosu$ 



Fisherwomen on shore, processing their catches. Photo: ©  $\bf Adaoma\,Wosu$ 

#### **Endnotes and references**

- Domingo (2022) Mozambique: 92% of fisheries production comes from artisanal fishers. https://clubofmozambique.com/news/mozambique-92-of-fisheriesproduction-comes-from-artisanal-fishers-223135/
- Marine fisheries statistics are derived from catch reconstruction under the Sea Around Us. http://www.seaaroundus.org/data/#/eez The approach utilized builds on national statistics and accounts for discards as well as sectoral catch data that often is not included in official datasets (e.g., artisanal or recreational catches). The Sea Around Us data is also utilized here as a consistent frame of reference for and to facilitate comparison across the set of countries for which fact sheets were developed as part of this project. Sea Around Us data are distinguished according to the following categories: large-scale (i.e., industrial) and small-scale (i.e., artisanal, subsistence and recreational) fisheries catches. Recreational catches were not considered here.
- FAO (2020) The State of World Fisheries and Aquaculture 2020. Sustainability in action. Rome, Italy.
- World-Bank (2018) Communities livelihoods fisheries: fisheries governance and shared growth in Mozambique. bit.ly/2VgizT7
- The term "apparent" refers to the average food available for consumption, which for several reasons (for example, waste at the household level), is not equal to average food intake or average food consumption. The amount is calculated as production + imports - exports - non-food uses, +/- stocks variations and divided by number of people partaking of it.
- FAO (2022) Food balances 2010–2019: Global, regional and country trends. FAOSTAT. https://www.fao.org/faostat/en/#data/FBS 6.
- Souto, M. (2014) South-West Indian Ocean Fisheries Governance and Shared Growth in Mozambique. Maputo, Mozambique
- Rádio Moçambique (2018) Mozambique: Fisheries sector contributes 10.3 percent to GDP. https://clubofmozambique.com/news/mozambique-fisheries-sectorcontributes-10-3-percent-to-gdp/
- Benkenstein A. (2013) Small-scale fisheries in a modernizing economy: Opportunities and challenges in Mozambique. Research Report No. 13. South African Institute of International Affairs.
- Nhantumbo E and B. Gaile (2020) Shallow water shrimp fishery in Mozambique: who benefits from fiscal reform? IIED, London. pubs.iied.org/16670IIED 10.
- WWF (2017) A sustainable shrimp fishery for Mozambique. https://www.fishforward.eu/wp-content/uploads/2017/11/WWF\_Factsheet\_Mo%C3%A7ambique-EN.pdf
- UNCTAD (2017) Fishery exports and the economic development of least developed countries: Bangladesh, Cambodia, the Comoros, Mozambique, Myanmar and Uganda. Geneva, Switzerland and New York, USA.
- Estimates calculated based on labour force surveys as part of the Illuminating Hidden Harvests initiative.
- This includes 393.3 thousand employed in small and large-scale fisheries and 169.8 thousand people in subsistence fishing.
- According to IHH estimates, 2.4 million people belong to household where at least one person engage in fisheries or in subsistence fishing.
- Estimates calculated based on labour force surveys as part of the Illuminating Hidden Harvests initiative.
- Brugere C. and B. Maal (2014) Study of fisheries and aquaculture value chains in Mozambique: how to reduce gender discrimination in the fisheries and aquaculture sectors. NORAD Report 4/2014. Soulfish Research & Consultancy/Stockholm Environment Institute/Norwegian Agency for Development Cooperation. https://bit.ly/2wnwhey
- Nhantumbo E. and B. Gaile (2020) Shallow water shrimp fishery in Mozambique: who benefits from fiscal reform? IIED Working Paper, IIED, London.
- Gleaning is a fishing method typically done by hand and used in shallow coastal waters or habitats exposed during low tide, as well as estuarine and freshwater environments.
- Samoilys M. A., Osuka K., Mussa J., Rosendo S., Riddell M., Diade M., ... and H. Koldewey (2019) An integrated assessment of coastal fisheries in Mozambique for 20 conservation planning. Ocean & Coastal Management 182: 104924.
- Chitará-Nhandimo S., Chissico A., Mubai M. E., Cabral A. D. S., Guissamulo A. and S. Bandeira (2022) Seagrass Invertebrate Fisheries, Their Value Chains and the Role of LMMAs in Sustainability of the Coastal Communities—Case of Southern Mozambique. Diversity 14(3): 170.

  Oteke R. A. (2018) Assessment of Gender Barriers to Marine Resources Access: A Case Study of Inhaca Island, Mozambique. Pan African University (Master's
- 22 thesis).
- Gough C. (2014) Women octopus gleaners and loan sharks in Mozambique. https://blog.blueventures.org/en/women-octopus-gleaners-loan-sharks-in-23. mozambique/
- Paul S.A., Wilson A.M.W., Cachimo R. and M.A. Riddell (2016) Piloting participatory smartphone mapping of intertidal fishing grounds and resources in northern Mozambique: Opportunities and future directions. Ocean & Coastal Management 134: 79-92.
- Rocliffe S. and A. Harris (2016) The status of octopus fishing in the Western Indian Ocean. Blue Ventures. London, UK.
- Instituto de Investigacao de Pescaria (IIP) (2014) Estimativa do Potencail de pesca de polvos de aguas pouco profundas e de reciefes de coral na plataformal continental de Mocambique.
- Short R.E., Mussa J., Hill N.A., Rowcliffe M. and E.J. Milner-Gulland (2020) Challenging assumptions: the gendered nature of mosquito net fishing and the implications for management. Gender, Technology and Development 24(1): 66-88.
- 28. Johnstone R. (2003) A more central role. Yemaya 14: 1-2
- Wosu A.C.L. (2018) Social-ecological dynamics of fisherwomen's behaviour in northern Mozambique. Edinburgh University (Phd thesis).
- Fortnam M., Brown K., Chaigneau T., Crona B., Daw T.M., Gonçalves D., ... and B. Schulte-Herbruggen (2019) The gendered nature of ecosystem services. Ecological Economics 159: 312-325
- Jansen N. and V. Agadjanian (2020) Polygyny and intimate partner violence in Mozambique. Journal of family issues 41(3): 338-358 31.
- Chant S. (2006) Rethinking the feminization of poverty. Journal of human development and capabilities 7(2): 201-220
- Pswarayi-Riddihough I.Z. (2021) Time for bold action to advance gender parity in Mozambique. https://www.worldbank.org/en/news/opinion/2021/03/08/timefor-bold-action-to-advance-gender-parity-in-mozambique
- Aradottir A.G. (2016) Women's land rights under the Mozambican Land Law: An ethnographic study of the matrilineal district of Majune, Niassa province, northern Mozambique. Master thesis. Gothenburg: University of Gothenburg School of Global Studies.
- Van den Brink R.J.E. (2008) Land Reform in Mozambique. Agricultural and Rural Development Notes; No. 43. World Bank: Washington DC, USA.
- Mbabazi D. (2020) Women's rights in Mozambique: A work in progress. https://borgenproject.org/womens-rights-in-mozambique/
- Osorio C. (2005) Political power in Mozambique and women's activism. Chapter 5. In: Santos, B.d.S. (ed.) Democratizing democracy: Beyond the liberal democratic canon. Verso.
- OHCHR (2019) Committee on the Elimination of Discrimination against Women examines reports of Mozambique. https://www.ohchr.org/en/press-releases/2019/07/committee-elimination-discrimination-against-women-examines-reports
- JICA (2015) Country gender profile: Mozambique. https://www.jica.go.jp/english/our\_work/thematic\_issues/gender/background/c8hovmooooanjqj6-att/ 39. mozambique 2015.pdf
- IPU Parline (2022) Monthly ranking of women in national parliaments. https://data.ipu.org/women-ranking?month=11&year=2022
- UN Women (2021) Mozambique. https://data.unwomen.org/country/mozambique
- Government of Mozambique (2019) Beijing 25+ Mozambique report on the implementation of Beijing declaraction and platform for action. https://www. unwomen.org/sites/default/files/Headquarters/Attachments/Sections/CSW/64/National-reviews/Mozambique.pdf
- Kampilipili N. (2018) Revised SADC gender protocol enters into force. https://www.tralac.org/news/article/13380-revised-sadc-gender-protocol-enters-intoforce.html
- Social Institutions and Gender Index. https://www.genderindex.org/
- The 2014 SIGI included son bias as an additional category, which Mozambique scored very low on
- African Development Bank (2020) Africa Gender Index 2019 Methodological and statistical report. Building today, a better Africa tomorrow.
- UNDP (2022) Gender Inequality Index. https://hdr.undp.org/data-center/thematic-composite-indices/gender-inequality-index#/indicies/GII
- IFAD (2016) Republic of Mozambique Impact Evaluation of the Sofala Bank Artisanal Fisheries Project. Document EC 2016/94/. International Fund for Agricultural Development, Rome.
- IFAD (2017) Republic of Mozambique Country strategy and programme evaluation. Document EC 2017/99/W.P.2. International Fund for Agricultural Development, Rome

- 50. FAO (2015) Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication. FAO. Rome, Italy.
- 51. Governo de Moçambique, Ministério das Pescas / Instituto Nacional de Desenvolvimento da Pesca de Pequena Escala (IDDPE) Estrategia de Genero para o Sub-Sector da Pesca Artesana, 2009-2013.
- 52. FAO (2022) Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security. First revision. Rome, Italy. https://doi.org/10.4060/i2801e
- 53. Eckstein D., Künzel V, and L. Schäfer (2021) Global Climate Risk Index 2021. https://www.germanwatch.org/en/19777
- 54. van der Lingen C. and I. Hampton (2018) Climate Change Impacts, Vulnerabilities and Adaptations: Southeast Atlantic and Southwest Indian Ocean Marine Fisheries. In: M. Barange et al. (Eds.) Impacts of Climate Change on Fisheries and Aquaculture: Synthesis of Current Knowledge, Adaptation and Mitigation Options. FAO Fisheries and Aquaculture Technical Paper 627. Rome: FAO: 219–250.
- 55. Rosendo S., Brown K., Joubert A., Jiddawi, N. and M. Mechisso (2011) A clash of values and approaches: a case study of marine protected area planning in Mozambique. Ocean & Coastal Management 54(1): 55-65.
- 56. IFRC (2022) Mozambique: Tropical Cyclones Idai and Kenneth Emergency Appeal nº MDRMZ014, Final Report.
- 57. Lowcok M. and N. Kanem (2020) The female face of Southern Africa's climate crisis. https://www.thenewhumanitarian.org/opinion/2020/1/14/gender-Southern-Africa-climate-crisis
- 58. Sellers S. (2016) Gender and Climate Change: A Closer Look at Existing Evidence. Global Gender and Climate Alliance.
- 59. Ribeiro N. and A. Chaúque (2010) Gender and climate change: Mozambique case study. Henrich Böll Stiftung
- 60. Huyer S., Acosta M., Gumucio T. and J.I.J Ilham (2020) Can we turn the tide? Confronting gender inequality in climate policy. Gender & Development 28(3): 571-591.
- 61. NDC Partnership (n.d.) How well are NDCs and Climate Policies Integrating Gender? https://unfccc.int/sites/default/files/resource/EH%202\_7\_World%20 Resources%20Institute.pdf
- 62. Government of Mozambique (2021) Update of the First Nationally Determined Contribution to the UN of Mozambique Climate Change Directorate. Ministry of Land and the Environment
- 63. Ministry of Tourism (2004) Mozambique, Strategic Plan for the Development of Tourism in Mozambique (2004-2013). Volume I. Ministry of Tourism, Maputo, Mozambique.
- 64. Zeller D., Vianna G.M., Ansell M., Coulter A., Derrick B., Greer K., ... and D. Pauly (2021) Fishing effort and associated catch per unit effort for small-scale fisheries in the Mozambique Channel region: 1950–2016. Frontiers in Marine Science (8) 707999.
- 65. Blythe J.L., Murray G. and M.S. Flaherty (2013) Historical perspectives and recent trends in the coastal Mozambican fishery. Ecology and Society: 18(4): 65.
- 66. Pereira M., Litulo C., Santos R. and M.C. Leal (2019) Mozambique marine ecosystem review. Centro Terra Viva. bit.ly/2xXyeiu
- 67. BOBLME (Bay of Bengal Large Marine Ecosystem) (2015) Review of impacts of Illegal, Unreported and Unregulated fishing on developing countries in Asia. FAO/BOBLME Secretariat, November 2015.
- 68. Benkenstein A. (2013) Small-scale fisheries in Mozambique. Policy Briefing 72. Governance of Africa's Resources Programme. South African Institute of International Affairs (SAIIA)
- 69. Gender markers are qualitative statistical tools to record development activities that target gender equality as a policy objective. Please consult the metadata and indices factsheet on our website for further details. https://oceanrisk.earth/
- 70. OECD (2022) Detailed aid statistics: Official and private flows. OECD International Development Statistics (database). https://doi.org/10.1787/data-00072-en
- 71. Wabnitz C.C.C., Blasiak R., Harper S., Jouffray J.-B., Tokunaga K. and A.V. Norström (2021) Gender dynamics of ocean risk and resilience in SIDS and coastal LDCs. Ocean Risk and Resilience Action Alliance (ORRAA) Report. https://oceanrisk.earth/
- 72. WorldBank (2014) South West Indian Ocean Fisheries Governance and Shared Growth in Mozambique. SWIOFISH Mozambique (Project P132123).
- 73. Bioclimate Research and Development (2017) Mozambique Women's Intertidal Resource Management Project. GB-SC-044007-GPAF-INN-029. https://aidstream.org/who-is-using/GB-SC-044007/1423
- 74. Lowe Z. (2022) Network of Community Managed MPAs for Inshore Small-Scale Fisheries in Mozambique. https://panorama.solutions/en/solution/network-community-managed-mpas-inshore-small-scale-fisheries-mozambique
- 75. CARE-WWF Alliance and EcoAgriculture Partners (2019) Creating a new kind of Protected Area. https://careclimatechange.org/wp-content/uploads/2019/08/CARE-WWF-Alliance\_learning-brief-4\_Mozambique-Protected-Area\_FINAL.pdf
- 76. Access to and control over credit, capital and savings: Compared to men, women often have unequal access to credit, capital and savings, which are necessary to purchase vital inputs and to start or expand their businesses. Likewise, women often do not have the same control over their income, credit and savings as men as gender norms often dictate that women defer to a spouse or other man on income, credit and savings decisions. Village Savings and Loan Associations (VSLAs) first launched in Niger by CARE in 1991 have been successfully implemented worldwide in vulnerable communities. VSLAs allow members, particularly women, to save together and provide their members with essential access to microcredit.
- 77. WWF (n.d.) Across Mozambique and Tanzania, women show us how to improve communities and protect our planet. https://www.worldwildlife.org/stories/across-mozambique-and-tanzania-women-show-us-how-to-improve-communities-and-protect-our-planet
- IUCN (2020) Women in Mozambique engage in Climate Change action. https://www.iucn.org/news/eastern-and-southern-africa/202003/women-mozambique-engage-climate-change-action
- 79. IUCN (2020) Helping Mozambique fishing communities to help themselves. https://www.iucn.org/news/eastern-and-southern-africa/202008/helping-mozambique-fishing-communities-help-themselves
- 80. Tsotsane T.A. (2021) Women as ocean ambassadors in coastal districts of Mozambique. https://www.iucncongress2020.org/newsroom/all-news/women-ocean-ambassadors-coastal-districts-mozambique
- 81. https://ecofish-programme.org/
- 82. UNDP (2021) E€OFISH: Building sustainable fisheries to transform Africa. https://www.undp.org/mauritius-seychelles/news/e%E2%82%ACofish-building-sustainable-fisheries-transform-africa
- 83. ECOFISH (n.d.) Promotion of sustainable small scale fisheries in Cahora-Bassa and Mogoe Districts, Tete Province, Mozambique. https://ecofish-programme.org/workplan-4-demonstration-projects/adpp-mozambique/









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