

#6: MADAGASCAR

Sustainably Managing Small-scale Fisheries in Partnership with Communities

In southwest Madagascar, the beginnings of a Green Economy are being built on the sustainable management of small-scale fisheries by traditional fishing communities. Seafood exporters, government and marine conservation NGOs have worked with these fishers over the last decade to establish locally-managed marine areas as the building blocks of this management process.

Background on the Project

In 2004, traditional fishers in the small, isolated village of Vezo in southwest Madagascar took the first step towards creating a regional Green Economy. For seven months they closed part of their octopus fishing grounds to all fishing. On re-opening these finishing grounds they found that the size of their catches increased dramatically.

Neighbouring villages witnessed the higher catches, and that same year, three more groups enacted their own temporary closures. The following year, there were yet more. The idea spread along the coast and to date, traditional fishers have carried out more than 250 temporary closures over about 450 km of coastline.

The importance of this cannot be understated: Octopus fishing is a critical part of the economy in southwest Madagascar. For most traditional fisherwoman, it is the only way to earn money. The Vezo fishers of southwest Madagascar are among the poorest coastal people in the world. They live in an arid region where their isolation means many have no other livelihood other than fishing. The livelihoods of many of the 80,000 local fishers, as well as middlemen and other downstream actors in the local value chain, depend on the sustainability of the industry. Copefrito – the principal buyer and exporter of octopus – is the single largest formal employer in the province.

Most Vezo fishers must fish daily to feed their families. Individuals thus find it difficult to take action to manage their fisheries because they depend on the daily food and income they derive from fishing. The temporary closure of only a part of the fishing grounds for a whole village, for a short period, is a more practical solution. Closures covered approximately 20 per cent of each village’s fished area and lasted between two to seven months. By targeting a fast growing species – this particular species of octopus almost doubles in weight every month – the short-term closures resulted in improved catches and greater income.

This is further backed up by eight years of data on octopus catches which demonstrates that the economic benefits from increased catches outweigh the costs of foregone catches during the closures.

In turn, the success of the short-term closures inspired these communities to carry out more far-reaching actions. With the help of conservation NGOs, they established community-led Marine Protected Areas (MPAs) or Locally-Managed Marine Areas (LMMAs): areas of sea and coastal habitats under formal community management. The LMMAs constitute a broader management approach in which destructive and industrial fishing are outlawed. Communities decide on a zoning of the LMMA into different uses that allows them to pursue their fishing livelihoods, but that also sets aside fishing grounds for temporary





closures. In addition, areas of key habitats are designated for permanent protection where no fishing or extraction is allowed.

Results

The network of LMMAs now includes about 85 fishing villages along the southwest Madagascar coast, involving 60,000 people. Many of these LMMAs are still in their infancy, but the formal framework for community management is in place.

This successful community-based management means the octopus fisheries are on track to gain the Marine Stewardship Council sustainable fishery certification. The added market value that this should bring will further incentivize sustainable management. To this end, the stakeholders are currently developing a Fisheries Improvement Plan.

The success of the temporary closures carried out by traditional fishers also inspired the government to establish a national annual closure of the fishery.

The success of LMMAs has culminated in the Government of Madagascar's Sydney Vision – which aims to greatly expand the area of protected marine habitats, as well as to strengthen the management rights of small-

scale fishers through expansion of a system of community-managed Marine Protected Areas.

NGOs and the principal seafood exporter, Copefrito, recognise that fishers cannot depend on octopus alone. Together they have worked to create new livelihoods for fishers through seaweed and sea cucumber aquaculture.

Enabling Conditions

The vision to develop a local Green Economy based on the sustainable use of the sea grew out of an alignment of the needs of fishers, the private sector and conservation NGOs. It was built on:

- a recognition by local fishers of a dramatic decline in their catches
- Copefrito's long-term business vision based on husbanding their natural capital
- the presence of Blue Ventures in the field to broker an arrangement that worked for both fishers and the private sector

The success of the temporary fishing closures proved that a common management approach could meet all these needs.

This case provides a strong argument for the value of locally-based management in Blue Economy initiatives. Without government subsidies or strong regulation, seafood

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exporters and fishers had to act themselves, through local management, to develop a sustainable industry.

Government policy was another enabling factor. Fishing communities used local traditional laws – *dina* - to govern the temporary closures, and subsequently the LMMAs, at a local level. The *dina* were drawn up through a process of consensus, beginning at the level of individual villages, then groupings of neighbouring villages, and finally by all of the villages within the respective LMMAs. These local traditional laws are legalised in formal courts and so gain the backing of the national judiciary.

Madagascar's national law allows the creation of MPAs, where management is formally delegated to communities. The government also established an agency to support the creation of a national network of MPAs. While formally recognizing MPAs has been an expensive process beyond the means of fishing communities, the national-level recognition it brings has been critical in ensuring that the efforts of local communities are taken into account in broader planning. Through community-managed MPAs, fishers have secured formal rights to manage their fisheries where previously they had none. This will play a critical role in further building rights-based management and safeguarding these rights into the future.

Blue Ventures, together with the Wildlife Conservation Society and WWF, and the Madagascar Marine Research Institute (IHSM), provided the technical and material support necessary for making local management a reality. This included: helping fishers to establish and manage the closures and LMMAs; formalising

the *dinas* and LMMAs; facilitating village exchange trips so that fishers could teach each other and share experiences; liaising between the private sector and fishing communities; and bringing diverse actors together to form a common vision and management body for the fishery industry. NGOs and the IHSM have also carried out applied research to inform rational management decisions.

The role of the seafood export companies - Copefrito and Murex - has been critical. As the main buyers of octopus in the villages, their clear support for the temporary closures from the very beginning was crucial to the success of the project. They also pay a premium for octopus from temporary fishing closures, leveraging a contribution from the value chain to support downstream sustainable management.

The Way Forward and Lessons Learned

The experiences of southwest Madagascar prove that the needs and interests of fishers, the seafood companies and marine conservation are not in conflict. Rather, the three can work together to successfully manage the natural capital underpinning livelihoods, business and marine biodiversity. The support of the private sector, a favourable policy environment, and Blue Venture's financial and technical support, has allowed common management by the fishers to succeed. Community-managed MPAs or LMMAs are the framework through which this management can be formally recognised.

The project has also shown that small, practicable actions (such as temporary fishing closures) can catalyse far greater ones – making a regional Green Economy a reality.