

Community-based aquaculture

Marine conservation through economic development

A CRITICAL NEED FOR LIVELIHOOD ALTERNATIVES

Coastal communities across much of the Indian Ocean depend on healthy marine resources for subsistence, income and cultural identity. Yet marine ecosystems are being degraded at unprecedented rates as a result of human impacts and climate change.

There is an urgent need to diversify coastal livelihoods towards more environmentally sustainable practices.





Aquaculture for livelihood diversification

As part of an integrated conservation and community development programme being pioneered in Madagascar, Blue Ventures is working to develop sustainable alternative income sources for Vezo coastal communities. The Vezo are amongst the poorest and most economically marginalised people in Madagascar, itself one of the world's poorest countries. The Vezo's close cultural attachment to the ocean make aquaculture a natural starting point for economic diversification.

Launched in 2006, communities are now farming sea cucumbers (*Holothuria scabra*) and red seaweed (*Kappaphycus alvarezii*), with technical support and training from Blue Ventures' aquaculture team. These intertidal species offer a number of distinctive benefits for community-based aquaculture:

- Both species thrive in the region's extensive shallow coastal lagoons and are in high demand from lucrative international export markets

- Farming can be initiated with relatively low levels of initial investment and low running costs, with no adverse environmental impacts
- Production methods are simple, requiring minimal initial training for the farmers
- An active network of experienced private sector and research partners provides assured access to markets, as well as additional technical expertise to maximize the economic benefits brought to communities

The introduction of these alternative livelihood practices aims not only to alleviate poverty within Vezo communities, but also to reduce fishing effort and pressures exerted on the region's fragile marine ecosystems.

Connecting local communities to the international market

Sea cucumbers (called trepang when they are processed and ready to be consumed) are in high demand in Asian markets where they are considered a delicacy, while red seaweed is widely used in the food and cosmetic industries for its carrageenan, a texturing agent.

In order to support local communities in accessing these markets, Blue Ventures developed a public-private partnership model in Madagascar, which connects local farmers to international markets through strong partnerships with progressive, well established local fisheries export companies.

These partnerships provide the aquaculture farmers working with Blue Ventures with reliable local market access points. Reinforcing these links between project beneficiaries and private sector partners, while also building the farmers' capacity as entrepreneurs, are integral components of creating an enduring and self-sustaining business model.

Building capacity

Farming sea cucumbers and seaweed is technically simple, and uses an approach that is accessible to many of the coastal communities that Blue Ventures supports. A major challenge for the project lies in improving local business management skills, since the new jobs in aquaculture are a far cry from the traditional day-to-day activities of a Vezo fisherman.

In order to fill this gap, Blue Ventures is focusing on providing training to community farmers in several key areas:

- Basic accounting and financial management
- Business planning and development
- Leadership and team training to assist in managing shared tasks within farming groups.

This combined technical and business management support is critical as we work to build local aquaculture revenues for the long-term sustainability of seaweed and sea cucumber farming in this impoverished region.





Integrated approach

Blue Ventures recognises that supporting coastal communities to diversify their livelihoods is not enough to tackle the numerous and inter-related drivers of marine environmental change. For this reason, we take an integrated approach that includes community and reproductive health programmes, protected area development initiatives, and strong support for education at the primary, secondary and university level. By integrating these diverse activities into a cohesive programme, we are able to improve local ownership of conservation and economic development activities while addressing the root drivers of environmental degradation, thereby improving the long-term effectiveness of our work.

Our partners

Blue Ventures' aquaculture programme is supported by The Royal Norwegian Society for Development (Norges Vel) an international NGO experienced in tropical mariculture development. We also work with a range of local partners including:

- The Velondriake Association: the management body of the Indian Ocean's largest Locally Managed Marine Area (LMMA), a conservation initiative supported by Blue Ventures
- Copefrito and Indian Ocean Trepang: local export companies with an interest in the sustainable management of Madagascar's marine resources
- IHSM: the marine science department of the university of Toliara
- Malagasy regional and national fishery and aquaculture authorities, supporting the project through the development of a relevant legal framework for aquaculture

About Blue Ventures

We are an award-winning marine conservation organisation, dedicated to working with local communities to conserve threatened marine environments. Our acclaimed conservation programmes work with some of the world's poorest coastal people to develop conservation and poverty alleviation initiatives that protect biodiversity and coastal livelihoods. The results of our work help us to propose new ideas to benefit coastal communities everywhere.

Alongside aquaculture technicians our team includes community leaders, marine and fisheries scientists, educators, community organisers, social scientists, environmental economists and policy specialists.

For further information or to discuss partnership opportunities please contact:



Antoine Rougier
Mariculture Development
Coordinator
antoine@blueventures.org
+261 (0)34 444 0141



Winner, Buckminster Fuller Challenge, 2011
For work to protect marine resources and improve the livelihoods of poor coastal communities in Madagascar.



Observer Ethical Awards, runner-up 2010.
Blue Ventures was commended for creating the Indian Ocean's first replicable blueprint for community-centred marine and coastal conservation planning.



Condé Nast Traveler Environmental Award, 2009
For two decades, Condé Nast Traveler has been honouring environmental visionaries around the world who have found innovative solutions to seemingly intractable problems.



Responsible Tourism Awards 2004: highly commended for "Best in a Marine Environment"



Responsible Tourism Awards 2006: highly commended for "Best Volunteering Organisation"



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Responsible Tourism Awards 2009: highly commended for "Best in a marine environment"



Responsible Tourism Awards 2010: Winner for "Best volunteering organisation"



Ashoka & National Geographic Geotourism Challenge 2008: finalist



Changemakers & National Geographic Geotourism Challenge 2010: finalist



United Nations SEED Award 2005: winner, "Madagascar's first experimental community-run MPA"



Enterprise Young Brits 2005 & 2006: highly commended, "Social and Environment"



United Nations Development Programme Equator Prize 2006: the Village of Andavadoaka, winner (in partnership)



Skal Ecotourism Awards 2006: Winner, "General Countryside"