

2014 Annual Report

Identification

Non-profit association marinecultures.org, Ottikerstrasse 53, 8006 Zürich, Switzerland, www.marinecultures.org, info@marinecultures.org

Beneficiaries

Our projects solely benefit families and individuals in Jambiani and Mtende, two larger fishing villages at Zanzibar's east and south coasts. Local small businesses benefit from work such as car and boat transports, and the production of farm utensils. Six local employees are currently receiving a regular salary including social benefits. Numerous other residents benefit from casual work opportunities.

Outline

Our goal at marinecultures.org is to improve the quality of life for coastal communities. We develop novel sustainable strategies to harness the sea. Initiatives such as sustainable and ecological aquafarming may substantially add to safeguarding the ecological equilibrium while introducing local communities to alternative sources of income. Our community-oriented projects aim to create new jobs and the quickest possible way to self-employment.

Ecological aquafarming has the potential to stimulate a stable food supply, healthy economic growth, as well as a reduction of the pressure on the environment and endangered wildlife stock in regions depending on the sea as their principal resource. Our proposed community and family-based business models will, whenever possible, specifically support women. We integrate the knowledge and experience of local communities to jointly develop attractive, regionally focused solutions.

We operate marine conservation projects to safeguard not only the local ecology but also current and future jobs that depend on healthy oceans. Awareness training among the local communities is an integral part of each of our marine conservation projects.

Overview of 2014

2014 was an intense and successful year. We were able to reach most of the objectives set for this period and even outperformed in some aspects. Exciting new projects were launched within both of marinecultures.org's areas of activity, the development of sustainable aquaculture and marine conservation.

Arrangements made in 2014 will for the first time this year allow two of our employees to become independent sponge farmers. In parallel we started to extend our second sponge farm, which we plan to complement with a new, third farm by the end of 2015.

Our new coral farming project has had a good start in 2014 and our first experiences hold a lot of promise. We are particularly happy about the synergies that have arisen between the coral farming and the artificial reef (Reef Balls) project on which we cooperate with the local NGO Mwambo. Implanting corals onto Reef Balls will teach our coral farming team how to build artificial and how to restock damaged reefs.

The Reef Ball project has been pivotal in strengthening marinecultures.org's roots in the local community and has inspired us to complement our projects with a broad awareness training initiative.

Objectives

Main objective. Poverty reduction and the creation of alternative, stable sources of income for the population of Zanzibar's coastal regions through sustainable aquaculture farming.

Objective 1. Further development of existing aquaculture farms and product range to secure income for current farm workers.

Objective 2. Establishing additional aquaculture farms to generate new jobs.

Objective 3. Reduction of damage in lagoons, at outer reefs and in existing marine protection zones around Zanzibar by means of furthering the awareness of local communities for marine protection as well as tangible activities to reduce anchor damage and to monitor/control pests.

Activities undertaken in 2014

The table below lists activities in each project area (sponge and coral farming) undertaken in 2014 and their respective degrees of completion.

* Estimated degrees of completion by the end of 2015

Sponge farming	2014	2015*
Expansion of the sponge production farm to approx. 3000 sponges. Continuous harvesting starting 2014 to ensure stable income for farmers.	100%	-
Independence / completely independent structures for farmers working in the Jambiani farm.	0%	100%
Search, localization and identification of additional endemic sponge species of commercial value. Stepping up search for further natural populations of species currently cultivated in the production farm.	50%	100%
Evaluating the feasibility of setting up additional production farms without putting natural populations at risk. If possible, installation of additional independent farms.	100%	100%

Coral farming	2014	2015*
Finalization of the authorization process for exporting live animals (CITES permission). Negotiating partnerships with airlines for exporting live corals. Clarification of import regulations and obtaining necessary permits for the countries of destination.	10%	50%
Construction of a coral farm for test and training purposes. Acquisition of basic knowledge for the management of independent coral farms.	100%	-
Evaluation of suitable coral and other invertebrate species and cultivation tests thereof. Start of production provided sufficient demand and initial tests prove successful.	50%	90%
Training of local coral farmers and knowledge transfer. Continuing education of training staff. Annual roadshows in relevant villages.	75%	100%

Examination of coral reefs around Zanzibar and identification of local species suitable for the aquarium trade.	75%	100%
Development of cultivation methods for at least 10 species that show potential for the aquarium trade.	100%	-
Training of selected individuals in cultivation methods and knowledge transfer to selected local communities.	75%	100%

Test transports and setting-up guidelines for the transport of live corals from Zanzibar to countries of destination.	0%	0%
---	----	----

Sponge Farming Project

>> <http://www.marinecultures.org/de/projekteuebersicht/korallenzucht/>

2014 saw our sponge farms recover from the debilitating disease that had decimated them in the previous year. The loss of 50% of the sponges was significant. However, owing to extensive expansion efforts, we were able to grow our production farm in Jambiani to approximately 3000 sponges by the end of 2014. We also improved quality control, and the additional work generated by the larger farm allowed us to hire a new employee - a single mother from the village.

As of early 2015, our efforts have yielded some great results: we have sold more than \$1,000 worth of sponges – an amount that covers the cost of employing our first sponge farmer. In addition, through the continuous trimming of sponges, we were able to not only satisfy our own demand for seedlings but to produce an excess, which will contribute to our ability to develop additional farms and create additional jobs. This also demonstrates that our cultivation of sponges is fully sustainable, an achievement that is likely unprecedented worldwide, as other farms - even those that have achieved sustainability - obtain their seedlings from the ocean rather than through cultivation.



Key with a harvest



Sponges in our Jambiani farm

In the not too distant future – as soon as the farm consistently generates \$300-\$400 in monthly sales - we will be able to transition our first two farmers to self-employment. The two women and their families will be able to live comfortably on this income. However, even after this transition, we will continue to assist to these two farmers and intervene if quality control so requires.

Our sponge farm in Mtende continues to face significant challenges, including slow growth, disease, and decimation. We are regardless proceeding with our plan to expand the farm to approximately 3,000 sponges, up from our current sponge count of 600. Once the farm generates more maintenance work than Suleiman, our young sponge farmer, can manage, we will be able to hire a second worker from the community.

This year we are planning to launch a new, third farm. We are already raising seedlings in our breeding farm to supply the Mtende farm and additional farms. However, it is not possible to grow farms very quickly. This is the price to be paid for sustainability. But as the number of sponge farms in Zanzibar grows, the more quickly they will multiply, thus allowing more and more members of the local community to benefit from this new source of income.



Products on sale at Seaweed Center Paje



Christmas sale at Blue Oyster Hotel

In 2014, we for the first time produced more sponges than we were able to sell locally, thus presenting an opportunity to expand our sales efforts. The local market has the advantage of allowing farmers to supply sponges to customers independently and without our support. We are training Okala in sales work to equip him with the skills necessary to sell our unique product to additional shops in Zanzibartown and the many new hotels and resorts across the island. Once the local market is saturated we will export the excess production to Europe. With a view to this, we have launched a test initiative with a shop in Zurich and additional shops, including the gift shop at Ozeanium Basel, have expressed interest.

Coral Farming Project

>> <http://www.marinecultures.org/de/projekteuebersicht/korallenzucht/>

The current boom of the home aquarium market has led to a regrettable increase in poaching activity in Zanzibar and beyond. Our goal at marinecultures.org is to confront this problem while at the same time using the high demand to create sustainable products and jobs. Thanks in part to the generous financial support from the City of Basel we were able to begin to cultivate corals for the home aquarium market in 2014.

Simon Ellis from MERIP, another longstanding recipient of support from the City of Basel, has given us an excellent workshop session on coral farming. Simon taught us everything we need to know about cultivation methods, the aquarium trade, care, and which corals are most suitable for sale. He was also quite impressed with the strong diversity of beautiful coral species in Zanzibar and saw great potential for marinecultures.org to bring several very special coral species to the market if we manage to overcome the challenges facing our coral cultivation. With coral farming, we should be able to create jobs faster than with sponge farming. This was one of the lessons MERIP learned in Micronesia.



Simon Ellis links and Okala rechts during the workshop



Part of the new coral farm in Jambiani

Our goal for 2015 is to develop breeding stock to allow the farmers to draw their seedlings exclusively from it. Additionally, for us to develop ten high-quality products for larger-scale production by the end of 2015, the individual cultivation methods will need to be adapted to local conditions and refined for each seedling species. By early 2016 we are aiming to have evaluated potential buyers so as to start the production and sale of soft corals. For hard corals, a CITE export permit is required. To obtain this permit, the development of breeding stock is of crucial importance, for only if we are able to document our ability to produce corals sustainably will the necessary export permit be approved.

Anchor Damage Prevention Project

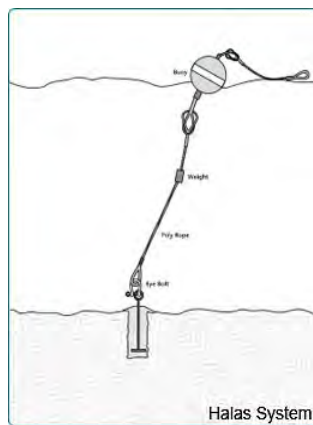
>> <http://www.marinecultures.org/de/projekteuebersicht/ankerboyen/>

Our third goal is the mitigation of damage in the lagoons, the outer reef and Zanzibar's already existing protection zones. Our strategy to this end is to raise public awareness of marine protection, to reduce anchor damage and to monitor and control parasites.

Our objective for the 2013 pilot phase was to develop stable anchors for buoys and to determine to what extent buoys reduce the practice of throwing out anchors and whether an awareness campaign will be necessary to increase uptake. The result was very encouraging: in 2014, the buoys were frequently used by dive boats and dows transporting tourists. We also learned that boatmen often reprimand and educate colleagues who do not use the buoys. Our educational work in this regard has been a success.



Likely anchor damage



Professional anchoring



Buoy in use by a dive boat

In light of this success, we received a larger project budget for 2015 and will after consultation with the region's dive organizations be able to install buoys in Mnemba Island Marine Park, if we receive the necessary permits. As soon as our budget allows, the project will also be

expanded to the neighboring islands of Pemba and Mafia and, potentially, to the coast of Tanzania.

Artificial Reef Project

>> http://www.marinecultures.org/de/projekteuebersicht/kuenstliches_riff/

In 2014, the Zanzibar NGO Mwambao Coastal Community Network (<http://www.mwambao.or.tz/>) requested our collaboration on a community-based reef ball project. Thanks to our experience in coral farming, our network and our knowledgeable team we became project partners and have since taken the lead in the project. This reef ball project is the first of its kind in Africa.

Reef balls are hollow concrete balls with holes that approximate the texture of reefs. They are used to revitalize dead reefs or to revive a sandy, lifeless seabed with an artificial coral reef. More than 500,000 reef balls have been put in place so far in 55 countries around the world. (See www.reefballs.org)

In collaboration with the Kibigija fishery committee, our local partners and a training crew from the United States, we built 86 reef balls of various sizes over the course of 8 days and sank them in a carefully selected location in the lagoon. The fishermen involved are now planning to declare the area a No Take Zone. We welcome their initiative and will assist in marking the zone with buoys. The enforcement of the protective zone will be up to the fishery committee. We are looking forward to following their efforts.



Reef ball production in collaboration with fishermen



Drying before deployment

The artificial reef project has also proven an excellent platform from which to educate the local community on topics such as pollution and the importance of coral reefs for the preservation of biodiversity. Because they are built on land and can be seen and touched, the reef balls – or “fish houses,” as the villagers call them - provide a particularly engaging opportunity for education. After conducting promising first awareness events for fishermen and school children, we decided to expand these efforts. Our Dutch funding partner coralfreecare.com has generously pledged additional funds for a continuing awareness campaign of this kind.



Reef ball placement



Awareness event at the local secondary school.

While planting the reef balls our coral farming team learned how to reforest damaged reefs. In light of the still widespread and deleterious practice of dynamite fishing on the coast of mainland Tanzania, the development of reforestation knowhow is an important investment. The reef balls will be monitored over the course of three years to verify their effectiveness. Our local partner, the Institute for Marine Science (IMS) in Zanzibar, is currently seeking a student who will conduct a research study on the reef ball project.

Further notable activities

Safety / Development

Our two sponge farmers received swimming lessons this year. Like most women in Zanzibar, neither of them previously knew how to swim. Our coral farmers and the boat crew received PADI diving, oxygen and first aid training.

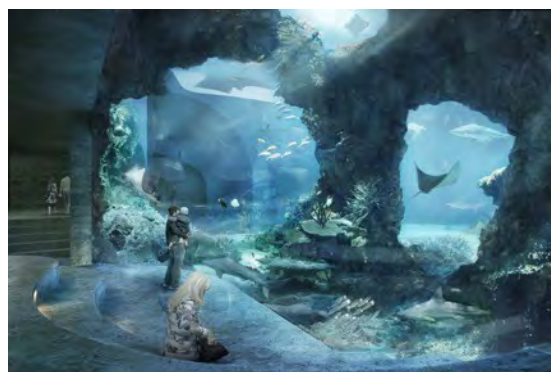
Networking / Fundraising

Ozeanium Basel, Switzerland's first large-scale ocean aquarium, approached us in early 2015 to explore opportunities for collaboration. Ozeanium among other things expressed an interest in selling our sponges in their gift shop and in using our sustainably cultivated corals to populate its underwater worlds. Discussions are ongoing with respect to collaboration on exhibitions and awareness initiatives, and the possibility of Ozeanium supporting marinecultures.org with funding on a recurring annual basis.

In addition, we have entered into a partnership with the Institute for Chemistry and Biology of the Marine Environment (ICBM) at Oldenburg University within the framework of the Coral Diversity Network (CoDivNet). Starting 2015, we will participate in the DAAD Qualitätsnetzwerk Biodiversität (Quality Network on Biodiversity) development programme, an issue-based partnership with institutions of higher education in developing countries with the aim to foster the preservation of biodiversity and research on related subjects. In addition to University of Dar es Saalam Tanzania (the parent organization of our current partner, the Institute of Marine Science Zanzibar (ISM)) the University of Quintana Roo, Mexico is also involved. Among other things, the program aims to explore and test the sexual reproduction of corals – a cultivation method that does not involve the asexual fragmentation process currently used around the world. The collaboration, which is set to last three years, has the potential to have a large impact on our coral cultivation initiative in East Africa.



Oxygen Training & First Aid Course



Ozeanium Basel

Additional information on the above projects and activities can be found here:

- Report: How to Start Coral Farming / Workshop <http://www.marinecultures.org/de/news/>

/id_mod_news/94

- Report: Reef Ball Project Launch / Activities to Raise Awareness
http://www.marinecultures.org/de/news/-/id_mod_news/95
- Product information on our sustainably cultivated sponges
http://www.marinecultures.org/de/naturschwamm_produkinfos/
- 2014 Review and 2015 Outlook / Newsletter
- <http://marincultures.sendaway.ch/m/7135338/>
- Our first sponges have been sold http://www.marinecultures.org/de/news/-/id_mod_news/88
- Fundraising Success / Coral Protection Project Info http://www.marinecultures.org/de/news/-/id_mod_news/89
- Introduction to Quality Management – Product Brochure http://www.marinecultures.org/de/news/-/id_mod_news/91
- Expansion of our production farm and sales http://www.marinecultures.org/de/news/-/id_mod_news/92
- Safety http://www.marinecultures.org/de/news/-/id_mod_news/9

Financial Reporting

All 2014 expenses were made pursuant to our budget for the financial year. The financial condition of our association is currently satisfactory and sufficient funds are available to fund our operations through 2015 and the first quarter of 2016.

We are pleased to have found additional sponsors in 2014. Coralfreecare from the Netherlands, Mwanbao and the Reef Ball Foundation will also be supporting us in 2015. The Lighthouse Foundation and Ozeanium Basel / Basel Zoo are currently exploring the possibility of small, annual contributions to marinecultures.org. However, a decision has not been made in this regard. Fundraising efforts will be reinforced in light of the increased compensation expense incurred in connection with the retention of additional farm workers.

For further information on our 2014 financials, please see the attached financial statements (Bilanz and Erfolgsrechnung 2014) and audit report (Revisionsbericht) prepared by ARGO Treuhand AG. For further information and documentation, please contact c.vaterlaus@marinecultures.org, +255 783 357 357. All our financial and audit reports are publicly available at

<http://www.marinecultures.org/de/organisation/berichte/>.

We would like to express our gratitude to the Governing Council (Regierungsrat) and the Commission for Development Corporation of the Canton of Basel-City. Thanks to the generous support from Basel, we were able to successfully implement the second phase of our sponge farm project and the first phase of our coral farming project. We remain extremely satisfied with our achievements thus far and are confident in the utility and long-term value of our projects.