



COMMUNITY MARINE ASSOCIATION OF CRUZINHA DA GARÇA

Republic of Cape Verde



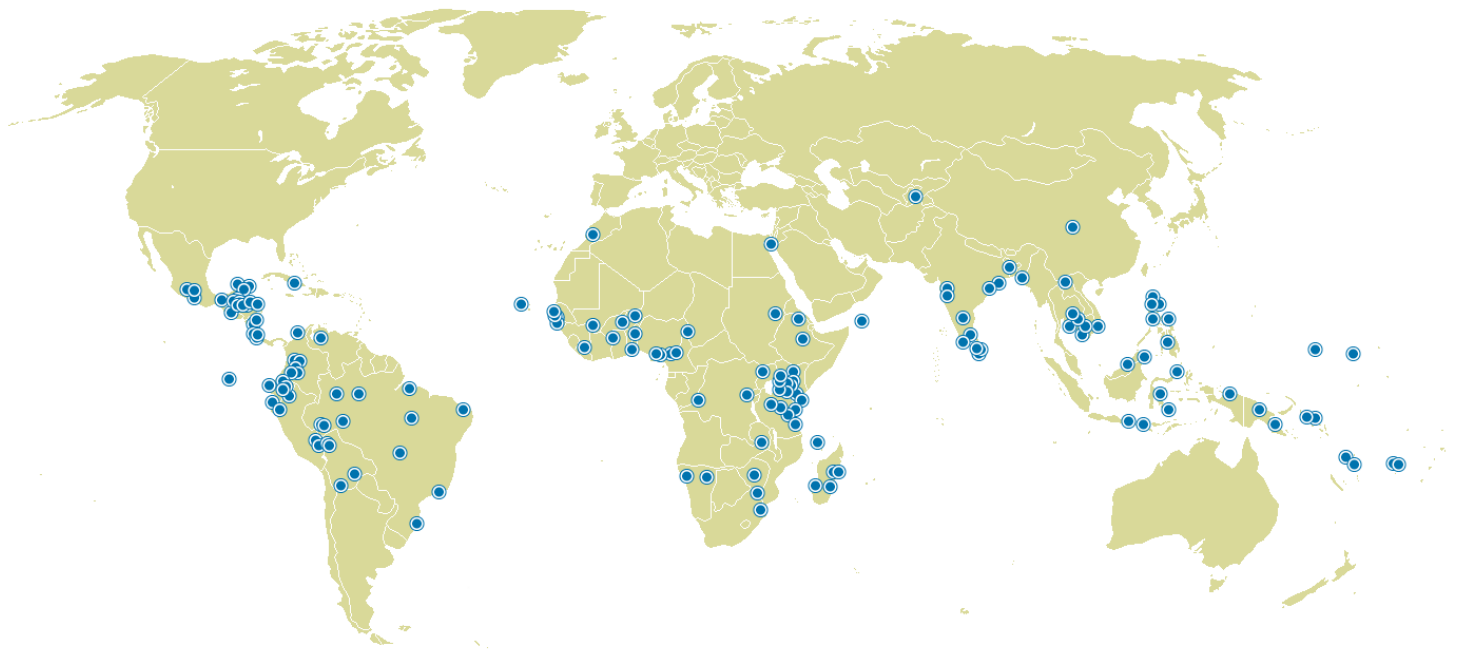
Equator Initiative Case Studies

Local sustainable development solutions for people, nature, and resilient communities

UNDP EQUATOR INITIATIVE CASE STUDY SERIES

Local and indigenous communities across the world are advancing innovative sustainable development solutions that work for people and for nature. Few publications or case studies tell the full story of how such initiatives evolve, the breadth of their impacts, or how they change over time. Fewer still have undertaken to tell these stories with community practitioners themselves guiding the narrative.

To mark its 10-year anniversary, the Equator Initiative aims to fill this gap. The following case study is one in a growing series that details the work of Equator Prize winners – vetted and peer-reviewed best practices in community-based environmental conservation and sustainable livelihoods. These cases are intended to inspire the policy dialogue needed to take local success to scale, to improve the global knowledge base on local environment and development solutions, and to serve as models for replication. Case studies are best viewed and understood with reference to *'The Power of Local Action: Lessons from 10 Years of the Equator Prize'*, a compendium of lessons learned and policy guidance that draws from the case material.



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PROJECT SUMMARY

Cruzinha da Garça is one of the most important nesting grounds for sea turtles in Cape Verde. The Community Marine Association of Cruzinha da Garça seeks to develop alternative forms of local marine resource use to conserve this endangered species. The project is part of a regional initiative that involves fishing communities in the conservation of marine turtles and their habitat. Conservation and sustainable livelihoods work extends to the islands of São Nicolau, Santo Antao and Sao Vicente.

The association protects spawning loggerhead sea turtles in their natural habitats through beach monitoring, protecting the nesting grounds of the loggerhead sea turtles, and guarding against sand extraction and resulting habitat loss. The local population is engaged in data collection on both species and population growth and is involved in the development of ecotourism ventures.

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KEY FACTS

EQUATOR PRIZE WINNER: 2010

FOUNDED: 2002

LOCATION: Cruzinha da Garça, Santo Antão

BENEFICIARIES: 67 families

BIODIVERSITY: endangered sea turtle species



Background and Context



The community of Cruzinha da Garça

The northwest coast of the island of Santo Antão—the most northwest island in the Cape Verde archipelago—has one of the highest rates of marine biodiversity in Cape Verde. The coastal marine habitat is rich in fishery resources; it is home to a significant population of cetaceans and is the area of breeding, feeding and growth of five species of sea turtles: loggerhead (*Caretta caretta*), hawksbill (*Eretmochelys imbricata*), leatherback (*Dermochelys coriacea*), green (*Chelonia mydas*), and Olive Ridley (*Lepidochelys olivacea*). Of the latter, the zone is of particular national importance as a nesting site for the loggerhead sea turtle.

One community on the coast of Santo Antão, Cruzinha da Garça, is particularly rich in marine resources. It provides fish to the roughly 150,000 residents of Santo Antão and São Vicente islands, what amounts to a third of Cape Verde's national population. Cruzinha da Garça itself has a population of only 274 persons, or 67 families. This impoverished community faces dilapidated housing, poor sanitation and a lack of economic resources and sources of employment. In the absence of local alternatives to secure livelihoods, many community members exert unsustainable pressure on marine biodiversity. The use of explosives for fishing, the hunting of female turtles, and the plundering of turtle eggs directly threaten the survival of important species. The waters surrounding the island house endangered populations of whales and dolphins. The island is also just 60 miles from one of the richest fishing grounds for tuna and deep-sea lobsters in Cape Verde.

The Associação Comunitária Nova Experiência Marítima da Cruzinha da Garça (ACNEMC) was established in 2002 by members of the village of Cruzinha da Garça to combat the unsustainable exploitation of marine life, particularly the sea turtle. The association now consists of 111 members. ACNEMC's mission is to facilitate communication and dialogue between marine resource users, the public, government institutions, and non-governmental organizations active in different

areas of community development. ACNEMC actively strives to conserve and enhance marine biodiversity, while also creating sustainable jobs and sources of income for the local population and raising the quality of life of the region's poorest inhabitants.

Sea turtle conservation

One of the association's primary activities has been a project entitled, "Beauty of the Sea: Conservation of Sea Turtles," which focuses on mobilizing direct community participation in the preservation of marine biodiversity. In response to unrelenting pressure on the fragile marine life on the coast of Santo Antão, the association launched this project in 2006 with the support of the National Institute for Fisheries Development (INDP) and the Municipal Chamber of Ribeira Grande (CMRG). The project emphasizes low-impact ecotourism activities as an economic alternative to fishing techniques which wound or kill sea turtles (such as dynamite fishing) and to the poaching and sale of turtle eggs. This project has found parity with a sister program run by INDP called "Involvement of Fishing Communities in the Conservation of Sea Turtles and their Habitat" which operates in the Barlavento area—São Nicolau, Santo Antão and São Vicente.



Key Activities and Innovations



Raising environmental awareness

ACNEMC undertakes a range of activities which aim to protect the populations of sea turtles which inhabit Cruzinha da Garça coastal waters and beaches. A great deal of emphasis has been placed on awareness-raising amongst the local population as to the threats that face sea turtles as well as economic alternatives to the kinds of activities which have historically placed these populations at risk; namely, dynamite fishing, mature turtle poaching, egg collection, damage to nesting sites, and water pollution.

In particular, ACNEMC has implemented a comprehensive awareness raising campaign targeted specifically at the fisheries sector and those directly involved in marine resource extraction (including local fishermen). The results have been overwhelmingly positive, with the vast majority of community members demonstrating an understanding of the importance of turtle conservation, and the adoption by Cruzinha da Garça of the sea turtle as a flagship symbol.

Between 2006 and 2008, ACNEMC undertook a number of project activities to escalate the protection offered to resident sea turtles. In 2006, the association marked off and enclosed 10 nesting sites. Access to the coastal zone where the sites were located was controlled in order to prevent the poaching of nests and the removal of eggs. The following year, the association received authorization to monitor local beaches for illegal sand extraction activities, which in turn damage sea turtle nests. Importantly, the association was vested with the authority to levy fines of up to USD 350 to transgressors. In 2008, the association undertook a participatory planning process which produced a community-based conservation growth plan. Elements of the plan include creation of a sea turtle nursery, a treatment center for injured sea turtles, and an environmental education centre.

The association also provides specialized training and capacity building support to community members in order to empower their con-

servation and livelihoods diversification interventions. Seminars, technical support and field studies are combined to provide new knowledge and on-the-ground know-how. Each class (or seminar) is offered to 30 people over a two week period. Each day of training is split into morning and afternoon sessions: the morning is dedicated to conservation theory, the afternoon to practical implementation of conservation activities. Seminars aim not only to strengthen the technical capacity of community members, but to create linkages with local authorities to encourage the participatory management of coastal resources. Seminar themes include the conservation of marine ecosystems, the biology and lifecycle of sea turtles, identification and marking of sea turtle nests, the safe transfer and protection of sea turtle eggs, and caring for injured sea turtles. Exchange visits and peer-to-peer exchanges are also integral parts of ACNEMC work. Local experts from Cruzinha da Garça have visited, hosted and shared information with other community-led conservation initiatives on the islands of Sal and São Vicente. Additionally, conservation education is mainstreamed into local schools through an education outreach team who involve community youth in association activities.

Going beyond conservation

ACNEMC has also branched into ecotourism activities, targeting a very specific population of tourists interested in environmental education and scientific research. The association receives students (and researchers) interested in turtle observation (between June and October) and whale watching (between March and April, and September and October). Community members sell travel products (crafts, t-shirts, etc) and provide tourism services to visiting researchers. Plans are underway to expand into boat, sport fishing, and scuba diving tours. The association also owns and operates a sustainable fishing vessel called "We Dream." The boat provides direct employment for 12 fishermen in the communities of Cruzinha, Tarrafal and Monte Trigo and is committed to environmentally responsible fishing practices which do not damage marine species or ecosystems.

Above and beyond its core activities, ACNEMC has implemented various projects in conjunction with the Municipal Chamber, the National Program for Fighting Poverty and INDP in the areas of social housing, repair and maintenance of local roads, school transportation services, animal husbandry, fish production, and the marketing of locally harvested products.

ACNEMC represents a unique model of participatory marine resource management that involves communities in the design, planning and implementation of conservation actions. The initiative is the only community-based conservation project in Cape Verde that focuses on the conservation of sea turtles. It is also arguably the most embraced conservation project, which speaks to the power and benefits of community ownership and involvement.



“We would like to see greater political will to protect the environment. Laws and legislation that are based on the knowledge and needs of local fishing communities are essential. Local people must be empowered to protect their natural heritage.”

Renato Delgado, ACNEMC

Impacts



BIODIVERSITY IMPACTS

The most critical and impressive biodiversity impact resulting from association interventions has been the full and complete cessation of sea turtle poaching at nesting sites. As a result, female turtles have been protected, and the survival of a threatened species in the region supported. Four neighboring communities – those of Mocho, Ribeira Alta, Garça and Chã da Igreja – were enlisted to achieve this result. Association outreach teams disseminated conservation information and materials to each community, and subsequently recruited students from local schools to participate in nesting site protection.

One of the main determinants of success in this regard is the support ACNEMC has received from local authorities in banning the extraction of sand on beaches in the region. This has served to protect the integrity of sea turtle habitats. Since 2006, the association has held authority and discretion over the issuance of fines of up to USD 350 for the illegal collection of sand. Owing to ACNEMC interventions, the sand banks and beaches are in the process of recovery, which will have only positive impacts on the number of turtle nests that survive. The association also created a turtle nursery in 2008 in order to combat local levels of sea turtle population growth. The nursery has since overseen the release of 200 sea turtle hatchlings into the sea.

As previously mentioned, environmental education, awareness-raising and research constitute key activities of the association which have in no uncertain terms changed local attitudes towards conservation work and sensitized the local population to the challenges facing sea turtles. The association has worked with local and visiting researchers to improve knowledge of local ecology and to produce scientific data on turtle populations. Local knowledge has been combined with scientific monitoring and evaluation techniques to gain valuable insights into sea turtle nesting sites and spawning areas, particularly between the boundaries of Ponta do Sol, Muni-

pality of Ribeira Grande and Tarrafal de Monte Trigo, Municipality of Porto Novo. Further insights have been made into the feeding patterns of juvenile hawksbill turtles, the growth patterns of juvenile green turtles, and the migratory corridors of leatherback and Olive Ridley turtles.

SOCIOECONOMIC IMPACTS

Cruzinha da Garça is an isolated fishing community with precious few natural resources. Cape Verde falls within the affected region of Harmattan, a seasonal dry and dusty wind that makes its way across northwestern Africa every year from November to March. As a consequence, Cruzinha da Garça is strongly affected by the advance of desertification and droughts. The winds also hamper fishing during this period, resulting in stoppages to the primary livelihood activity of the local population. Along with these challenging environmental conditions, severe economic marginalization has resulted in the consistent emigration of young people from the island in search of better opportunities. ACNEMC, however, has been instrumental in promoting sea turtle conservation as a potential source of sustainable livelihoods, as well as a course of community identity and pride around which a new conservation economy can be built.

One of the economic impacts of the initiative has been the connection made between the association and visiting researchers. While only representing the beginning of a much larger and more ambitious suite of planned low-impact ecotourism ventures, the provision of travel services and products (food, accommodations, etc.) to scientists visiting the region has offered local fishermen an alternative source of income. Additionally, local youth and women have found short-term employment providing support on research projects. Between 2006 and 2009, these services resulted in over USD 25,000 in incomes paid out to local community members. The association itself also employs community members in the nighttime work of marking and identifying turtles and turtle nests. While this work is often conducted on a voluntary basis, between 2006 and

2009 over USD 2,600 was paid out to community members in the form of stipends.

Awareness-raising on conservation issues, and the subsequent identification of conservation challenges that will require collaborative solutions between neighboring communities, has fostered a sense of common purpose and served to strengthen relationships in the region. This solidarity has been further cemented through peer-to-peer knowledge exchanges and trainings in the communities of Porto Novo, Paul and Monte Trigo. The use of participatory approaches in monitoring and evaluation, education, the promotion of adaptive management tools and awareness-raising have enabled and facilitated the involvement of all community members. The association retains a commitment to increasing the involvement of local women in the initiative, and in particular the number of women in decision-making roles (currently only 10 percent). Youth are regularly employed as volunteers to monitor trails leading to the beaches.

Jobs have also been created for the local population through a national project of the INDP which aims to enhance the capacity of fishing communities to protect sea turtles through participatory action and research, communication, and (in cooperation with local authorities) the monitoring of local beaches. More local jobs will be created in the near future when the association opens its environmental education centre, which will provide habitat restoration services, observation of cetaceans and turtles, and educational tourism services.

POLICY IMPACTS

According to Cape Verde law, the implementation of conservation policy is the responsibility of the General Environmental Administration (DGA), with the responsibility for environmental awareness raising delegated to the municipal level. Cape Verde law, however, contains no provisions, legislation or guidance on community-based action in this field. There exists then a need to create (legal)

space and provide funding mechanisms for the implementation of community-based conservation policy and local, grassroots management of coastal or marine resources, particularly for fishing communities.

ACNMEC is a pioneering local actor in this regard, offering a model of how community-based natural resource management can be carried out and empowered in cooperation with city councils, municipalities, commissions within the Ministry of Environment, and the maritime authority. By focusing on monitoring and evaluation and quantifying the positive impacts of local management techniques, ACNMEC is building a demonstrative case to argue that communities – with adequate support from local authorities and key stakeholders – are best positioned to protect local biodiversity and to transform conservation action into sustainable livelihood solutions. Results-based management has also increased donor interest (both international donors as well as domestic environmental finance channels such as the General Environmental Board and the General Fisheries Board) in funding community-based initiatives in Cape Verde. ACNMEC has been responsible for ushering in a new development paradigm that includes as a necessary component of policy practice the direct participation and involvement of local communities in natural resource management. The association anticipates that this normative shift will change the landscape of environment and development policy in the region, offering a new model of co-management and coordination between relevant stakeholders.

Perhaps the most important policy impact from ACNMEC work – though the outcome must be credited to a wide range of advocacy efforts, of which ACNMEC was an essential contributor – was the passing of Regulatory Decree No. 7/2002 of Dec. 30 which provides for the full protection of sea turtles. The association is currently lobbying for a national program for the protection of sea turtles which would build on the lessons learned from their activities and scale-up conservation safeguards.



Sustainability and Replication



SUSTAINABILITY

The foundation of the association's medium-term financial sustainability is a planned ecotourism program that leverages national and international interest (research and recreational) in the region's biodiversity and endemic flagship species. The program will be anchored to research activities being coordinated by the National Institute for Fisheries Development and the University of Kiel (Germany). The association hopes these activities will generate income within the community from payment for services rendered by the local population for visiting researchers. The program will also be expanded to include low-impact tour, scuba and sports fishing services for the more mainstream ecotourism demographic. In the longer-term, the association plans to establish a regional observatory for sea turtles which will be managed by the community but provide the entire region with information and data on conservation priorities.

REPLICATION

The association is working with fishing communities on the islands of Santo Antão, São Vicente, and São Nicolau in the northwest of Barlavento, which also have important populations of sea turtles. Knowledge exchanges and site visits are being carried out to transfer lessons learned and communicate the experiences, challenges, and successes of ACNMEC. Awareness-raising and environmental education outreach conducted by the association reached these neighboring islands and communities, sensitized the local population to the threats facing sea turtles, and created demand for information and knowledge.

PARTNERS

ACNEMC has a diverse, cross-sector partnership. One important partner, which provided seed money to launch awareness-raising activities, volunteer mobilization and environmental education outreach was the GEF/UNDP-Small Grants Programme (SGP). Another central partner is the National Institute for the Development of Fisheries (INDP). The institute has provided ongoing support in the form of project design, financing, training and technical outreach.

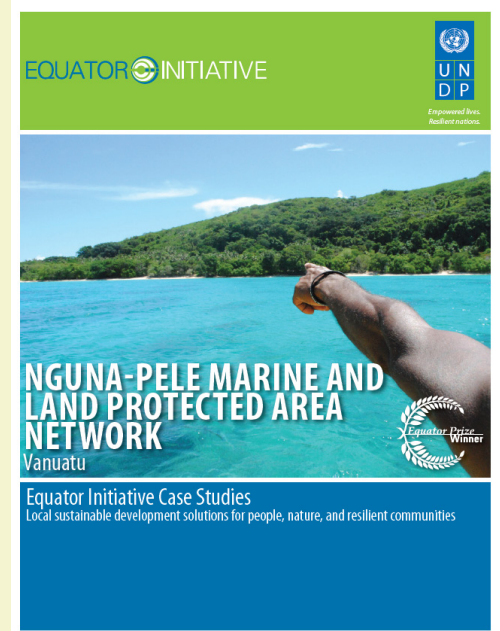
One noteworthy partner has been the Guidance Office of Professional Introduction (GOIP), which has worked with the association to better integrate women into the program. Through this partnership, ACNEMC has provided local women with opportunities for training, professional qualification, and identification of income-generating activities. One of the local women's groups that has emerged from this partnership is in the process of creating a workshop for the production of sweaters that will be sold by a private Brazilian clothing retailer. An additional outcome has been seminars, workshops and outreach campaigns on the issue of domestic violence.

Other partners include: the Municipal Chamber of Ribeira Grande, Santo Antão Island, who provide technical and financial support through their environmental office; the Maritime Port Institute, who assist in beach surveillance activities; IUCN Guinée Bissau, who have supported with a regional environmental education program; Design d'Cor, Mindelo, São Vicente, Cape Verde, who support the development and production of awareness campaign materials; and ADTMA SOS Turtles, who support with training. Research activities are pursued through a scientific partnership between the National Institute of Fisheries Development, the University of Kiel in Germany, the University of East Cuba, and the University of Versailles in France.

FURTHER REFERENCE

- Marine Community Association of Cruzinha da Garça Photo Story (Vimeo) <http://vimeo.com/15749312>
- Marine Community Association of Cruzinha da Garça website <http://blogdastartarugas.blogs.sapo.cv/>
- Additional photos <http://fotos.sapo.pt/tartarugas/perfil>

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