Equator Initiative Case Studies
Local sustainable development solutions for people, nature, and resilient communities
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. The Equator Initiative aims to fill that gap.

The Equator Initiative, supported by generous funding from the Government of Norway, awarded the Equator Prize 2015 to 21 outstanding local community and indigenous peoples initiatives to reduce poverty, protect nature, and strengthen resilience in the face of climate change. Selected from 1,461 nominations from across 126 countries, the winners were recognized for their achievements at a prize ceremony held in conjunction with the United Nations Convention on Climate Change (COP21) in Paris. Special emphasis was placed on the protection, restoration, and sustainable management of forests; securing and protecting rights to communal lands, territories, and natural resources; community-based adaptation to climate change; and activism for environmental justice. The following case study is one in a growing series that describes vetted and peer-reviewed best practices 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.
PROJECT SUMMARY

Over the last 30 years, Comité para la Defensa y Desarrollo de la Flora y Fauna del Golfo de Fonseca (CODDEFFAGOLF) has been a positive force for change in a coastal region of southern Honduras with one of the highest poverty rates in Latin America, faced with acute environmental threats created by shrimp farming, sugarcane production, commercial fishing, mining, and adverse effects by laws aiming to improve economic development. The organization has pioneered the construction of artificial reefs designed to serve as fish aggregation sites in the Gulf of Fonseca Archipelago Marine National Park in order to protect and restore mangroves and coastal biodiversity threatened by deforestation. CODDEFFAGOLF has also carried out direct planting of seeds to restore and regenerate coastal mangrove forests. Fish populations have grown by 36 percent at sites where reefs have been installed, and more than 1,200 hectares of mangroves have been reforested. These achievements have improved fishing stocks and brought benefits to more than 7,000 families, mostly in marginalized communities in the Gulf of Fonseca who depend on fishing and other ecosystem resources for their subsistence. The restored mangroves act as ‘green infrastructure’, protecting coastal communities from climate-related storm surges and flooding. A radio programme has helped the organization raise awareness about climate change, ecosystem health, and the power of community action. CODDEFFAGOLF has been successful in campaigning to support the establishment of nine protected areas, the declaration of a Ramsar site comprising 69,711 hectares of wetlands, and the creation of a vibrant environmental monitoring network with a local governance structure led by men, women and young people.

KEY FACTS

Equator Prize Winner
2015
Founded
1988
Location
The Gulf of Fonseca, located in southern Honduras in the Pacific Ocean and shared by El Salvador and Nicaragua
Beneficiaries
More than 7,000 families in nine coastal municipalities in the Gulf of Fonseca Protected Area Subsystem
Areas of focus
Conservation and sustainable use of terrestrial and/or marine biodiversity; community campaigning in support of environmental justice and climate change solutions; innovative partnerships with government and the private sector to promote sustainable development
Sustainable Development Goals addressed

EQUATOR PRIZE 2015 WINNER FILM

The designations employed and the presentation of material on this map do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations or UNDP concerning the legal status of any country, territory, city or area or its authorities, or concerning the delimitation of its frontiers or boundaries.
The Gulf of Fonseca, whose waters are shared between El Salvador, Honduras and Nicaragua, is an inlet of the Pacific Ocean which hosts a significant range of marine and coastal biodiversity. Its total water surface covers approximately 160,000 hectares, while most of the Gulf is shallow, with an average depth of 15 meters. Most notably, the area contains seven species of mangrove, at least 81 species of birds (mainly coastal) and 74 species of amphibians and reptiles. Its most unique inhabitants include the jabiru (Jabiru mycteria), which is the largest stork in the Americas and dwells in the winter lagoons, and the olive ridley (Lepidochelys olivacea), the smallest sea turtle species. Both species are at risk of extinction in the Central American Pacific. Along the coastline of the Gulf of Fonseca are the spawning grounds for four of the world’s seven extant sea turtle species, which use its waters as habitats for foraging, migration and reproduction. These species are the hawksbill turtle (Eretmochelys imbricata), the leatherback sea turtle (Dermochelys coriacea), the green sea turtle (Chelonia mydas), and the olive ridley (Lepidochelys olivacea) — the olive ridley being the most common and the most frequently recorded.

The main economic activities pursued in the Gulf of Fonseca are aquaculture, artisanal fishing and agriculture. Open-sea fishing dominates in the marine and coastal zone, taking place in estuaries, beach areas and winter lagoons, supplemented by the cultivation of staple crops (corn and beans). Both of these activities are carried out for subsistence and market ends.

Over the last 20 years, the depth of the Gulf of Fonseca in Honduras has been significantly reduced due to the effects of Hurricane Mitch (1999), such as erosion of vegetation cover and increased sediments in rivers, as well as pressures from large-scale human activities such as shrimp farming, overfishing and the sugarcane industry. This has led to a severe drop (43 percent) in fish and mollusc yields, and has intensified the effects of climate change through changes in coastal dynamics.

As a community-based organization, CODDEFFAGOLF has initiated the construction of artificial reefs to serve as fish aggregation sites, and the regeneration and restoration of mangrove forest through both direct planting and the use of nurseries in places where the red mangrove (Rizophora mangle) has deteriorated or shrunk. The main achievements have been increasing fish populations by up to 36 percent in the installed reefs, and regenerating and replanting 1,200 hectares of mangrove forest, using innovative methods to improve the quality of propagules (mangrove seedlings) with community involvement.

These activities have benefited more than 7,000 families in nine coastal municipalities. In addition, the organization has mobilized hundreds of local people, training them in innovative resource management practices. In 1999, thanks to the work of CODDEFFAGOLF in coordination with government agencies and civil society, 82,591.86 hectares were declared protected under the new Southern Honduras Protected Area Subsystem, of which 69,700 hectares form a Ramsar site of international importance called the Sistema de Humedales de la Zona Sur de Honduras (Southern Honduras Wetland System) — designated as site 1,000 worldwide.

After these protected areas were declared, CODDEFFAGOLF was included in a Co-management Agreement for the Gulf of Fonseca Protected Area Subsystem signed between the National Institute for Forest Conservation and Development (ICF), nine municipal governments and CODDEFFAGOLF.

Having been awarded the Equator Prize in 2015, CODDEFFAGOLF is in the process of investing the prize money as its own seed capital for an organizational venture to develop and operate a shop selling fishing equipment. Furthermore, it is currently engaged in a number of economic initiatives to benefit the local population, through micro-businesses in agriculture, artisanal fishing and ecotourism.
Origin and structure

CODDEFFAGOLF emerged in 1988 as a social movement fighting the emerging shrimp industry and the associated impacts on coastal wetlands in the Gulf. From its beginnings, it has since shifted its stance from organizing protests towards proposing solutions. The organization has undertaken significant conservation work to support local development and has managed to strike a vital balance in negotiation.

In response to the problems facing the Gulf of Fonseca, CODDEFFAGOLF has systematically developed a number of pertinent programmes, including:

1. Permanent regeneration of mangrove forests.

2. The installation of artificial reefs in areas where fishing is less intensive and which meet established technical criteria.

3. Participating and providing civil society leadership in the formulation of a holistic management plan for the Honduran Gulf of Fonseca, funded by the private sector.

Major challenges have included achieving a confluence of interests between the public and private sectors and civil society, working with communities and establishing a satisfactory cost-benefit ratio between conservation and local development that proves beneficial for local people.

The organization's current strategic objectives are:

1. To have an impact in local, regional, national and international decision-making, in order to promote respect for human rights and a fair and equitable application of environmental legislation, encourage the creation and/or consolidation of networks and establish partnerships or conflict resolution tools as mechanisms for advocacy.

2. To provide effective and sustainable biodiversity management in natural and protected areas, with active participation from communities, local government and the general population, through appropriate co-management practices, effective environmental risk management and integrated river basin management.

3. To contribute to regional socioeconomic development (with special emphasis on communities in the departments of Valle and Choluteca), through rural business development and a focus on livelihoods and food sovereignty, while managing governance and local empowerment in the organization's area of influence.

4. To promote economic, political and social sustainability of CODDEFFAGOLF through project management, institutional capacity-building, entrepreneurial initiatives based on resource use and a suitable system for communicating and raising awareness of its work both inside and outside of the organization.

5. To strengthen legal, organizational, environmental, social and economic capacity among the grassroots groups that make up CODDEFFAGOLF, by focusing on social inclusion, gender equality, generational replacement and self-development, with the aim of consolidating the organization in a meaningful and sustainable way.

Today, CODDEFFAGOLF has a General Assembly (its highest level of authority) comprising 76 representatives and a Management Board of 11 members, one from each of its community-based branch groups in the Gulf of Fonseca. The Management Board delegates action to a technical team, also made up of 11 members. Three of these members play a managerial role, the rest being field technicians with diverse experience in the following specialist areas: economics, social issues, gender, agricultural science, fishing, the environment and local development.
Mangrove deforestation

The Pacific coast of Honduras is dominated by tropical mangrove vegetation. Mangrove forest represents 0.7 percent of total forest cover in Honduras. This is a unique, irreplaceable and highly biodiverse ecosystem, and one of the most productive in the world. The mangrove forest’s aerial roots rise up from the salty waters of coastal areas, estuaries and deltas, which host a great variety of wildlife (fish, molluscs, crustaceans, etc.) that humans rely on for subsistence.

In addition to mangroves, the Gulf of Fonseca contains some major vegetation types that are poorly represented in the National System of Protected Areas. These include short-grass sub-montane savannah, lowland deciduous forest and semi-deciduous sub-montane forest.

Particularly in the Gulf of Fonseca, mangrove ecosystems have been significantly reduced due to the expansion of shrimp farming. Similarly, the accelerated and uncoordinated rise in population in this area, accompanied by a dispersed settlement pattern — especially in forest border areas —, is intensifying forest loss.

Shrimp farming

The Gulf of Fonseca is the principal setting for industrial shrimp farming in Honduras. To this end, large numbers of larvae are extracted from coastal estuary waters, although regular fishing in the Pacific Ocean is small in scale.

At least 300 hectares of mangrove and white-sand beach are lost every year in southern Honduras due to the encroachment of shrimp ponds, with an ensuing loss of the environmental goods and services provided by these ecosystems. There is significant pressure from the demands of small- and medium-scale shrimp farmers for government authorization to pursue aquaculture in mangrove and beach environments.

Equally critical concerns are siltation in the Gulf of Fonseca and diversions to canals and estuaries. Government bodies responsible for environmental justice or legally charged with managing the country’s natural resources are struggling to fulfil their missions, and one of the main problems facing southern Honduras is the dearth of prosecution for violations of environmental norms and standards.

Overfishing

Fishermen and women are largely excluded groups with regard to government policy; there are no mechanisms for job security and they cannot obtain credit, because the sea is a public and common good for which they can show no ownership.

Artisanal fishing is becoming more and more difficult to sustain for a number of reasons — including loss of access to fishing sites as a consequence of the sprawling shrimp industry, ocean overheating, a lack of organization, unemployment, and unsuitable fishing techniques, which have contributed to the intensification of overfishing in the Gulf of Fonseca — to the extent that many return empty-handed from gruelling days on the water. As fish populations have decreased, artisanal fishermen have responded to the crisis by turning to more aggressive fishing methods in order to obtain similar yields.
Climate change

The importance of the mangroves for the coastal and marine zone of the Gulf of Fonseca is particularly clear given that, according to the organization Germanwatch’s ‘Global Climate Risk Index’, Honduras is the country most affected by climate change in the world for the 1997-2016. In southern Honduras, the most severe impacts of climate change are drought, ocean overheating, tidal surges, high temperatures and the spread of mosquito-borne diseases. Specific impacts reported by CODDEFFAGOLF and local communities include poor health of mangrove ecosystems (with more frequent infestations, like algae growth and red tides), the loss of biodiversity and associated wildlife, and food insecurity. This is compounded by sea level rise in mangrove ecosystems and increased sediment elevation, both of which cause changes in coastal dynamics.

Government centralization

Government authorities award permits for a wide range of productive activities. However, government agencies such as the National Institute for Forest Conservation and Development (ICF), the General Directorate of Fisheries and Aquaculture (DIGEPESCA) and the Secretariat of Environment and Natural Resources (SERNA), now the Secretariat of Energy, Natural Resources, Environment and Mines (MIAMBIENTE), no longer maintain the technical personnel or resources they need to operate at the local level. Their scant technical staff are eager to take action, but lack the necessary means to do so, including responding actively to complaints. In addition, decisions concerning permits and licences are taken centrally, not at the local level, further contributing to illegal actions in the Gulf being possible and poorly sanctioned.
Reforestation using red mangrove

Mangroves help regulate the tides and provide sheltering spots where molluscs can take refuge from the high temperatures of shallow waters in the Gulf of Fonseca. Common economic uses of mangrove forests include timber for firewood and building homes, and mollusc harvesting. In response to the pressures facing the mangroves, CODDEFFAGOLF has worked towards the regeneration and restoration of the mangrove forest, through both direct planting and the use of nurseries, in places where the red mangrove (*Rizophora mangle*) has deteriorated or shrunk.

As a result of these efforts, the forests are less vulnerable and coastal populations are becoming more resilient. This is linked to an environmental education programme on the benefits of mangroves conducted with teachers, parents and children at schools in these communities, delivered through presentations, science fairs and exchanges.

Through this initiative, priority has been placed on the massive reforestation of areas adjacent to the habitats of endangered species like the jabiru (*Jabiru mycteria*), the largest stork in the Americas. In winter, the jabiru migrates to wet grasslands along the Honduran coast, close to the mangroves of the three protected winter lagoons. No more than 52 individuals have been recorded in Central America and just seven in Honduras. The jabiru stork comes to the Gulf of Fonseca in search of food, and with improvements to its habitats it is hoped that populations will at least remain at their current levels.

Another species that has experienced positive impacts is the *Anadara grandis*, a bivalve known locally as *casco de burro*, which is also endangered and subject to trapping restrictions. To support its recovery, an ambitious pilot project was carried out using cultivation plots, combining local knowledge with the skills of professionals recruited in partnership with CODDEFFAGOLF, international aid agencies, and the Honduran General Directorate of Fisheries.

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**KEY IMPACTS**

**Reforestation using red mangrove**

- An area of 1,200 hectares of mangrove forest has been replanted, including 230 hectares in Ramsar Site No. 1,000 (Southern Honduras Wetland System), which will be used sustainably under management plans produced by the ICF, local communities and CODDEFFAGOLF to manage and harness existing natural and social capital for the benefit of thousands of coastal families.
- A monitoring protocol for the mangrove forest has been developed.
- There have been improvements in the local economy and the livelihoods of at least 7,000 families. CODDEFFAGOLF has carried out a study entitled *Caracterización de los arrecifes artificiales* (*Profile of the Artificial Reefs*), which demonstrates the growth in artisanal hook fishing as a source of livelihood for local fishermen and women.
There has been a reduction in flooding over the last decade, predominantly affecting the Bahía Chismuyo area, where CODDEFFAGOLF’s mangrove restoration work has been most extensive.

Based on the visual perceptions of coastal communities, populations of Anadara grandis appear to have grown over the last ten years — the result of habitat improvements brought by the reforestation of critical zones of mangrove forest. These efforts were led by CODDEFFAGOLF with the participation of its community leaders, organized into their 11 branch groups. CODDEFFAGOLF has no research on the population increase and health of this bivalve.

**Artificial reef construction**

To promote the conservation of certain marine species in the Gulf of Fonseca, CODDEFFAGOLF constructed five artificial reefs, intended to mitigate the effects of climate change on fisheries and provide refuge and aggregation sites for fish. This work was supported by Ingeniería sin Fronteras (the Spanish branch of Engineers without Borders) and other partners. The artificial reefs are made using concrete moulds with holes through which corals can protrude while their bases remain protected.

**KEY IMPACTS**

**Artificial reef construction**

- Fish stocks at the sites where the artificial reefs are located have increased by 36 percent — a direct positive impact for the fishing economy.
- This has brought benefits to more than 500 men and women who practise artisanal fishing.
- In 2017, CODDEFFAGOLF conducted the first profiling study of artisanal hand line fishing at the various locations where artificial reefs are in place, in order to describe each fishing community’s degree of effort, identify the species caught, determine the social and economic role of fishing for fishing communities in the study area, understand artisanal fishermen and women’s perceptions of the artificial reefs and produce a profile of these artificial reef zones.

**Scientific research on marine and coastal ecosystems**

With the aim of fostering evidence-based decision-making, CODDEFFAGOLF, supported by Germany’s Federal Ministry for Economic Collaboration and Development and GESPA e.V., launched a research programme focusing on protected areas of marine and coastal ecosystems in 2017. As part of its execution, construction began on the Centro de Investigación Marino Costero (Marine and Coastal Research Centre, or CIM by its acronym in Spanish). The centre will conduct research on the different Strategic Axes defined in the Research Protocols, focusing on the priority issues established in the Management Plan for the Subsystem of Protected Areas of the Gulf of Fonseca and related to the following critical conservation targets: mangrove forest, overexploited species with significant commercial value, nesting beaches for the olive ridley, resident and migratory birds, water quality in the mangrove hydrological system, and socio-environmental studies, among others.
KEY IMPACTS

Scientific research on marine and coastal ecosystems

- The CIM will contribute scientific solutions to social demands, helping improve quality of life for local communities and monitoring ecosystem health.
- It will also be a space for environmental education, providing seminars and discussions on the various environmental issues affecting the region. It will offer learning modules to students of all levels and to a range of organizations, institutions and businesses.
- Due to its location, the centre will be an excellent site for observing the impacts of climate change in the region and studying its effects on natural communities and on the local population.

Outreach and training

Through a radio programme, ‘la Voz de CODDEFFAGOLF’ (the Voice of CODDEFFAGOLF) and an ongoing alliance with the local print media, a successful mass public education campaign has raised awareness among local people on the importance of protecting communities, lands and human rights. This work has fostered social justice and contributed to mitigating the impacts of climate change and improving the living conditions of current and future generations.

Furthermore, the organization has produced and distributed educational material on the importance of the conservation targets within protected areas, solid waste management, sea turtles and fishing techniques. It also runs annual education fairs with schools in coastal municipalities in the Gulf of Fonseca, each attracting 300 pupils and more than 10 teachers. These events are organized with support from local authorities and the Municipal Environmental Unit (UMA by its acronym in Spanish).

KEY IMPACTS

Outreach and training

- More than 35,000 people have been provided with information on the legal frameworks for managing marine and coastal ecosystems in the Gulf of Fonseca.
- Networks of teachers and students in the municipalities of Marcovia, San Lorenzo and Amapala have increased their understanding of the importance of the Gulf’s protected areas.
- More than 2,000 students have been taught about the “three Rs” (reduce – reuse – recycle), to help them reduce the amount of waste or litter they generate.
- Surface and groundwater samples have been taken for the purpose of assessing water quality. Based on the results, measures are being taken at a community level to facilitate access to better-quality water through donations of filters, the restoration of wells used for drinking water, clean-up days and agroecology.
- Five teachers’ networks have been consolidated in more than 20 schools promoting environmental education for young people.
Women’s inclusion

Women were the most numerous and influential participants in the project to propagate *Anadara grandis*, receiving technical training that they now replicate in their own propagation plots. Local communities have maintained these practices without interruption, since they are managing a collective resource.

Currently underway is a project involving 112 shell fisherwomen, entitled Nuevo Modelo de Sistema Participativo de Garantía de Recursos Marinos-Costeros del Municipio de Amapala (New Model for a Participative System to Safeguard the Marine and Coastal Resources of the Municipality of Amapala). Shell fishing refers to the gathering and extraction of sea produce, including clams, *cascos de burro*, mussels and oysters, and to the trapping of sardines for sale in local and regional markets. Those engaged in such activities are organized into legally established Empresas de Servicios Múltiples (Multiple Service Companies, or ESMUs by their acronym in Spanish).

Moreover, CODDEFFAGOLF employs 14 people, four of whom are women. Despite its successes, the NGO acknowledges an unresolved need to develop approaches for tackling the deep-rooted gendered institutional structures and culture as well as the low level of schooling, particularly among women. Women have the power to transform the physical environment. Hence, there is a need for awareness-raising programmes that build on their identity, self-esteem, rights and access to natural resources in order to further their empowerment at both local and national levels.

KEY IMPACTS

Women’s inclusion

- CODDEFFAGOLF currently has a Management Board made up of 16 community leaders grouped into 11 branches, of whom 40 percent are women engaged in fishing. Moreover, technical and administrative roles in the organization are equitably balanced between women and men. The vice-president of the management board is a fisherwoman from Pueblo Nuevo, Marcovia (Choluteca).
- The executive direction, general administration and gender programme are all led by professional women. At present, CODDEFFAGOLF is working intensively on a leadership renewal programme aimed at bringing more women and young people onto the Management Board and increasing its grassroots youth and women leaders.
- In the context of its development projects, CODDEFFAGOLF promotes an equitable distribution of the means of production made available to communities, thus ensuring that it is not only men that benefit, but that women's economic and social activity is also strengthened.
- CODDEFFAGOLF works with four ESMUs (multiple service companies) in Amapala, all staffed entirely by women and young people: ESMUMAR (30 members from the town of Gualorita); Bellas Mar (30 members from Las Pelonas); Nueva Esperanza (22 members from Playa Grande) and Playa Negra (30 members from Playa Negra).
Co-management of protected areas

Based on the Co-management Agreement for the Gulf of Fonseca Protected Area Subsystem, signed between the National Institute for Forest Conservation and Development (ICF by its acronym in Spanish), nine of the region’s municipal governments and CODDEFFAGOLF, a co-management system has gradually taken shape. Its purpose is to facilitate action and supplement the human and financial resources that have driven the initiative’s success.

In 2015, with funding from the private sector, these institutions produced and achieved the approval of an integrated management plan for the Gulf of Fonseca covering the 12 years between 2015 and 2026. The plan’s overall aim is to delineate actions that support the conservation and sustainable use of the habitats and species found within the Southern Honduras Protected Natural Areas Subsystem, through the design and implementation of a management tool capable of addressing land use planning, climate change, environmental goods and services, and the population’s livelihoods. Drawing on an analysis of the threats facing the conservation targets, participants established a set of objectives and strategies for both conservation and operations. These formed the basis for developing seven management programmes.

KEY IMPACTS

Co-management of protected areas

- Launch of a monitoring system for the mangrove forest in Bahía de Chismuyo.
- Consolidation of the closed season system for sea turtles in three community camps formed by more than 90 community leaders who carry out conservation work and artisanal fishing. Once a year, aided by a range of actors including CODDEFFAGOLF, approximately 40,000 newborn turtles are released, with the exact number depending on climatic events in the Gulf of Fonseca region.
- CODDEFFAGOLF took a visible role as a participant in the various strategic planning mechanisms linked to the Honduras National System of Protected Areas (SINAPH), alongside a number of national bodies such as the ICF and the Administrative Board of the Protected Areas and Wildlife Management Fund (FAPVS by its acronym in Spanish).
- The Environmental Audit and Monitoring Commission (CVC by its acronym in Spanish) for the Gulf of Fonseca was created as a permanent forum to bring together actors from government, civil society, the municipality of Marcovia, and the private sector concerned about the conservation of natural resources.
POLICY IMPACTS

National policy impacts

Following successful community advocacy work, a draft scheme for prioritizing sites where closed seasons should be introduced is currently being negotiated with the General Directorate of Fisheries. The scheme establishes the artificial reefs as areas reserved for hand line fishing. In the past, the fishing community would not have even considered accepting or proposing a closed season. However, local people are now conscious that the waters are heating up and that fish numbers are declining as a result, and the communities have become more aware of the consequences of overfishing.

The situation has been complicated by the approval of a new Fisheries and Aquaculture Law, which has been criticized for opening the door to an influx of industrial capital, and for providing an avenue to privatize resources provided by the ocean, generating further wealth for a few and depriving artisanal fishermen and women of the only resources they have left.

The organization is currently working to generate ideas for establishing a monitoring system for fisheries through regular evaluations of fishing sites. This comes in response to the fishing authority’s lack of institutional presence in the region, and to the release of voluntary guidelines for small-scale fisheries approved by the FAO and pushed forward by the World Forum of Fisher Peoples (WFFP), of which CODDEFFAGOLF is a member.

CODDEFFAGOLF issued a memo containing an analysis of the gaps in the Tourism Development Law but was not invited to take part in the formulation or discussion of this law. However, the organization presides over the Management Board of the Technical Committee on Wetlands, comprising governmental bodies and representatives from civil society and academia. In this capacity, CODDEFFAGOLF has contributed to the development of the country’s wetlands policy and helped organize a wetlands forum.

Contributions to the global agenda

The work of CODDEFFAGOLF is helping support a range of Sustainable Development Goals (SDGs). Both mangrove reforestation and the construction of artificial reefs, for example, are intended to expand the range of livelihood options available to local communities, in line with the SDGs for no poverty (SDG 1), zero hunger (SDG 2), decent work and economic growth (SDG 8), and responsible production and consumption (SDG 12). In turn, these projects address the conservation of terrestrial and marine ecosystems and resilience to climate change, in line with the SDGs for climate action (SDG 13), life below water (SDG 14), and life on land (SDG 15). At the same time, women’s inclusion and a focus on gender are integral to CODDEFFAGOLF’s development strategy, in line with the SDG to promote gender equality (SDG 5); these values were also reinforced through the project to propagate the bivalve Anadara grandis.
Replicability

At the request of artisanal fishermen’s associations, the construction model used for the artificial reefs is now being replicated by other international aid organizations in the Amapala area, an island complex where the waters of the Gulf are deeper.

The artificial reefs have also been replicated by local fishing groups, the Honduran General Directorate of Fisheries and the Global Environment Facility’s Small Grants Programme (SGP). Replication efforts on the part of communities and institutions have relied on CODDEFFAGOLF’s firm support in sharing systematic technical guidance over time.

Scalability

After 30 years of activities, CODDEFFAGOLF is recognized as a benchmark organization in the defence of protected areas and artisanal fishermen and women in the Gulf of Fonseca. It has shared many insights from its own experiences, including setting up seed banks for local varieties, demarcation and signage in protected areas and alternative models of rural microfinance.

To support local knowledge transfer, the organization is working through a series of ‘schools’. For eight consecutive months, local actors can learn about a range of topics, depending on the type of school being run (agriculture, advocacy, women’s leadership and others). This model has the potential to be scaled up to other parts of the country.

Sustainability

The initiative’s sustainability lies with CODDEFFAGOLF’s grassroots volunteers. Its work is carried out alongside an informed community and the organization does not rely exclusively on the availability of funding.

CODDEFFAGOLF has received grants and project funding from the European Union, the Ayuntamiento de Galicia (Spain), Development & Peace (Canada), the Spanish Agency for International Development Cooperation (AECID), the German Federal Ministry for International Development Cooperation/GESP e.V., Oxfam–Quebec, Engineers Without Borders–Galicia, USAID–IUCN and the Honduras Protected Areas Fund.

In addition, through its institutional capacity-building programme, CODDEFFAGOLF is generating new ways to ensure that its work in the field can sustain itself financially, such as:

1. Selling research and ecotourism services through its own research centre.
2. Creating a local financial institution which boosts and incentivizes local sustainable production through low interest rates while also serving as an economic resource for the organization.
FUTURE PLANS

- Strengthen CODDEFFAGOLF’s governance structures through a leadership training and recruitment programme that addresses the region's current demands and emerging threats.
- Develop a framework for and implement an institutional sustainability plan.
- Modernize the building in which the organization is based and create an environmental information room in San Lorenzio.
- Secure the sustainability of the Centre for Marine and Coastal Research (CIM by its acronym in Spanish).

PARTNERS


- **Ingenieria sin Fronteras and Ayuntamiento de Galicia:** International support for the project to build political advocacy capacity and generate productive and sustainable alternatives for civil society organizations linked to the small-scale fishing and farming sectors in seven coastal municipalities in Region 13 (Gulf of Fonseca, Honduras), focusing on food sovereignty and safeguarding territories (2017–2018).

- **Development & Peace (Canada):** International support for the development of the project to renew and strengthen leadership to further the active advocacy work of the Movimiento Ambientalista Social del Sur por la Vida (Southern Social Environmentalist Movement for Life; MASS-VIDA) (2016–2018).

- **Instituto de Conservación Forestal Áreas Protegidas y Vida Silvestre (Institute of Forest Conservation, Protected Areas and Wildlife — ICF):** Protected Areas Fund/ICF; support for implementing the project aimed at building the capacity of co-management partners to run and regulate the public-use subzone of SAPZSurH (2017–2018).

- **Federal Ministry of Economic Cooperation, Germany and GESPA e.V.:** Support for the project for the Conservation and Sustainable Use of Natural Resources in the Mangroves of the Gulf of Fonseca, currently being implemented in five protected areas (2017–2019).

- **European Union:** International support in implementing the project to strengthen organization, partnerships and agricultural production among rural groups in the interest of better food security.

- **International Union for Conservation of Nature (IUCN):** Together with the United States Agency for International Development (USAID), support in pursuing the project to improve coastal watersheds and livelihoods (ICWL), scheduled to run for three years (2017—2019).

SOURCES AND FURTHER RESOURCES


Ramsar, Annotated List of Wetlands of International Importance. Available online here.


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UNDP partners with people at all levels of society to help build nations that can withstand crisis, and drive and sustain the kind of growth that improves the quality of life for everyone. On the ground in nearly 170 countries and territories, we offer global perspective and local insight to help empower lives and build resilient nations.

The Equator Initiative brings together the United Nations, governments, civil society, businesses and grassroots organizations to recognize and advance local sustainable development solutions for people, nature, and resilient communities.

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