



SCALING UP COMMUNITY
ACTIONS FOR INTERNATIONAL
WATERS MANAGEMENT

EXPERIENCES FROM
THE GEF SMALL
GRANTS PROGRAMME



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The Global Environment Facility (GEF) was established on the eve of the 1992 Rio Earth Summit, to help tackle our planet's most pressing environmental problems. Since then, the GEF has provided \$14.5 billion in grants and mobilized \$75.4 billion in additional financing for almost 4,000 projects. The GEF has become an international partnership of 183 countries, international institutions, civil society organizations, and private sector to address global environmental issues.

The GEF's 18 implementing partners are: Asian Development Bank (ADB), African Development Bank (AFDB), Development Bank of Latin America (CAF), Conservation International (CI), Development Bank of Southern Africa (DBSA), European Bank for Reconstruction and Development (EBRD), Foreign Economic Cooperation Office - Ministry of Environmental Protection of China (FECO), Food and Agriculture Organization of the United Nations (FAO), Fundo Brasileiro para a Biodiversidade (FUNBIO), Inter-American Development Bank (IDB), International Fund for Agricultural Development (IFAD), International Union for Conservation of Nature (IUCN), United Nations Development Programme (UNDP), United Nations Environment Programme (UNEP), United Nations Industrial Development Organization (UNIDO), West African Development Bank (BOAD), World Bank Group (WBG), World Wildlife Fund U.S. (WWF).



The Small Grants Programme (SGP) is a corporate programme of the Global Environment Facility (GEF) implemented by the United Nations Development Programme (UNDP) since 1992. SGP grantmaking in over 125 countries promotes community-based innovation, capacity development, and empowerment through sustainable development projects of local civil society organizations with special consideration for indigenous peoples, women, and youth. SGP has supported over 20,000 community-based projects in biodiversity conservation, climate change mitigation and adaptation, prevention of land degradation, protection of international waters, and reduction of the impact of chemicals, while generating sustainable livelihoods.

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CONTENTS

FOREWORD BY ADRIANA DINU, UNDP	3
FOREWORD BY GUSTAVO FONSECA, GEF	5
INTRODUCTION	7
CASES	14
CASE 1. Sustainable Seaweed Production, Belize	14
CASE 2. Developing Ecotourism in Salamansa, Cape Verde	18
CASE 3. Mangrove Conservation and Sustainable Fisheries in Playa Florida, Cuba	22
CASE 4. Forest Conservation for Water Resource Management, China	26
CASE 5. Community-based Coastal Conservation in Belitung, Indonesia	30
CASE 6. Reducing Sea Turtle Bycatch, Malaysia	34
CASE 7. Marine Biodiversity Conservation in Tun Mustapha Park, Malaysia	38
CASE 8. Integrated Fisheries and Marine Reserve Management, Mauritius	42
CASE 9. Sustainable Fisheries in Lake Victoria, Tanzania	48
CASE 10. Communities Management of Marine Protected Areas, Turkey	52
CONCLUSIONS: Experiences and Lessons Learnt	57
REFERENCES	62
ACRONYMS	64
ACKNOWLEDGEMENTS	66
LIST OF PROJECTS	67





FOREWORD

BY ADRIANA DINU

The world today is facing unprecedented environment and development challenges, among which is the need for sustainable management and protection of water resources and oceans. Yet, these challenges come with great opportunities to halt and even reverse the trends, with the adoption by heads of states of the Sustainable Development Goals. Never before have governments, civil society organizations, donors, scientists and other actors been so united in realizing the severity of the environmental degradation and its impact on human and other life forms on earth, and resolute in taking urgent actions at all levels, from the community to global.

In its partnership with the Global Environment Facility, UNDP has been at the forefront of efforts to support and promote the sustainable management of the world's fresh water and marine resources. UNDP is proud to have served as the Implementing Agency for the GEF Small Grants Programme (SGP) for the last quarter century, bringing to light the important perspectives and knowledge of grassroots communities, and helping to catalyze local action to protect the world's fragile water and ocean resources. Communities who rely on the water and natural resources, as well on the many ecosystem services and benefits provided by international rivers, lakes, and seas have a tremendous stake in the process and are often among the first to clamor for environmental protection. Since they see firsthand the effects of degradation of fragile ecosystems, the loss of fisheries, reductions in water quantity, and the degradation of water quality on their livelihoods and health, local communities are among the strongest advocates for environmental action.

SGP takes an integrated approach to tackle environment and development issues at the community level in a holistic way by addressing the crucial dimensions of environmental protection and sustainable livelihoods. SGP has supported the implementation of regional Strategic Action Programmes with 1,027 small grant projects in more than forty transboundary waterbodies around the World. Our experiences show that communities when empowered to take action can implement



concrete measures to reverse environmental degradation trends. The ten cases in this publication further highlight the way in which diverse communities from Cuba to Cape Verde, and Mauritius to Malaysia have tackled critical water and ecosystem management challenges with limited resources, to achieve environmental protection hand in hand with crucial benefits to local livelihoods, health and wellbeing. The local alliances and coalitions developed through these small grants have laid the foundations for wider advocacy through the demonstration of workable and effective solutions, which have in turn led to the mobilization of expanded partnerships for barrier removal and investment of additional resources.

The lessons learned presented in this publication provide valuable guidance on supporting community innovations and then their eventual scaling up through multiple partnerships and links with larger projects. Complementing the global and regional aspects of International Waters work with local elements that empower and sustain is what we need to do if we are to achieve SDG 14 – our “Life Below Water” goal.

Adriana Dinu
Executive Coordinator
UNDP Global Environmental Finance Unit
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Bureau for Policy and Programme Support
UNDP



FOREWORD

BY GUSTAVO FONSECA

Water is the key ingredient for life. It is therefore not surprising that most communities have historically thrived along river basins, lakes and coastal areas. As a result, they not only have a great stake in the sustainability of these waterbodies and their associated resources, but have also accumulated knowledge and information required for their effective management, including more recently on how to deal with a rapidly changing climate.

The GEF Small Grants Programme (SGP), implemented by UNDP on behalf of the GEF partnership, was launched in 1992. It is rooted in the belief that local communities, when empowered, can be the best stewards of natural resources and ecosystems they depend on. With its vision of “local action, global impact”, SGP has supported more than 1,000 community-based projects dedicated to the protection and sustainable management of international waters – meaning transboundary freshwater basins and rivers, as well as coastal marine resources. These actions have strengthened the control of development decisions and resources to local and often vulnerable communities which is a requirement for the long-term improvement of local livelihoods. Many of the accounts documented in this publication highlight that they have been not only highly successful at the local scale but have led to wider and broader results through their advocacy, demonstration impact, and potential for scaling up.

This publication offers experiences and lessons learnt from SGP in upscaling community development from 10 community initiatives in managing international waters. Scaling-up takes different forms, pathways and mechanisms, and varies in the extent, coverage and results on the ground. It also requires working with long time horizons, maintaining a focus on continuous support to expand the reach of the interventions, and finally influencing policies and changing people’s behaviors.



Ultimately, successful upscaling and mainstreaming is achieved through partnerships, at the local, national and regional levels. I hope this publication will inspire communities, civil society organizations, governments, development agencies and other actors to work together in planning, fostering and nurturing scaling up systematically and patiently. I look forward to working with SGP and all GEF partners to promote integration, growth and scaling up of community experiences in addressing global environment and development issues.

A handwritten signature in black ink, consisting of several overlapping, fluid strokes.

Gustavo Fonseca
Director of Programs
Global Environment Facility



INTRODUCTION

CHALLENGES OF INTERNATIONAL WATERS

Water is essential for life on earth. It not only serves as the basis of human life, but also supports the ecosystems which provide food, energy and natural resources for human society. International waters, including oceans and coastal areas, rivers, lakes and underground aquifers, have undergone serious environmental degradation. Up to 90 per cent of wastewater in developing countries flows untreated into rivers, lakes and highly productive coastal zones threatening health, food security and access to safe drinking water and basic sanitation. Every day, 2 million tons of human waste are disposed of in water courses (UN Water, 2014). Every year, more people die from unsafe water than from all forms of violence, including war. The most significant sources of water pollution are lack of inadequate treatment of human waste and inadequately managed and treated industrial and agricultural waste.

As much as 40 per cent of the world's oceans are heavily affected by human activities, including loss of coastal habitats, pollution, and depleted fisheries. Mangroves are important coastal ecosystems that provide multiple services and enhance resilience to coastal erosion and climate change impacts, yet mangroves are being depleted due to coastal development as well as habitat conversion to shrimp aquaculture (FAO, 2007). Approximately 75 percent of the world's coral reefs are currently threatened by a combination of local and global pressures (WRI, 2011). Coral reefs are threatened by a multitude of human activities, such as overfishing and destructive fishing, coastal development, agricultural and industrial runoff, marine pollution, and tourism. It is estimated that seagrass captures 27.4 million tons of carbon each year, and seagrass ecosystems are lost globally at a rate of 1.5 percent per year (Fourqurean, 2012).

The United Nations Food and Agriculture Organization (FAO) estimates fully fished stocks accounted for 61.3 percent, and After 1990, the number of stocks fished at unsustainable

levels continued to increase, albeit more slowly, and peaked at 32.5 percent in 2008 before declining slightly to 28.8 percent in 2011 (FAO, 2014). Destructive fishing practices, including blast and poison fishing as well as bottom trawling in sensitive areas, have affected most parts of the world (UNEP, 2006).

Global problems faced by international waters result from cumulative actions of individuals, families, small groups, private firms, and local, regional and national governments. Faced with great environmental degradation trends in international waters, communities who live by them and depend on their resources and ecosystem services have a great stake in the process and should be empowered to reverse the environmental degradation trends by working together with the government, donors and other partners. The solutions that are evolved by local people have a chance of being more imaginative and better ways of solving these problems (Elinor Ostrom, 2012).

THE ROLE OF COMMUNITIES

The Small Grants Programme is a corporate programme funded by the Global Environment Facility (GEF) and implemented by the United Nations Development Programme (UNDP) since 1992 to support local action to address global environmental challenges. SGP provides financial and technical support to communities and civil society organizations for projects that protect the global environment with grants of up to \$50,000 per project. The SGP also provides strategic grants of up to \$150,000 for exceptional projects that demonstrate significant potential for scaling up. Areas of work include biodiversity conservation, mitigation and adaptation to climate change, protection of international waters, and reduction of land degradation, chemicals and waste management.



For community work to effectively address transboundary challenges and contribute to overall governance of shared international waterbodies, SGP works in close coordination with multiple actors at different levels (national, regional and international). SGP has established close partnerships with several GEF full-sized international waters projects to support the community implementation of regional Strategic Action Programmes (SAPs) (Chen, Pernetta and Duda, 2013; Chen and Ganapin, 2016). SGP supports grant projects in the international waters focal area that are informed by regional considerations and help address issues identified as regional priorities. To support these linkages SGP develops guidance notes specific to different waterbodies, which inform SGP grantees and country teams on downscaled local actions that can contribute to SAP implementation. SGP's global team coordinates closely with the GEF Secretariat and GEF Agencies, while country staff are able to link with government focal points, partner agencies and multiple stakeholders involved in international waters projects implementation at the national level.

SGP also plays a role in sharing and exchange of community knowledge and experience on innovative solutions from the ground up. SGP's global network is a key for promoting south-south exchanges of best practices from one country to another. In addition, SGP provides inputs to regional scientific studies and decision-making at the national and regional level. This is done through collaboration with regional projects or initiatives, and by linking communities among themselves and with regional inter-governmental forums for knowledge sharing and exchange. Through close coordination and exchange of information, SGP supports participation of key local stakeholders to share perspectives and benefit from capacity building activities of larger scale international water projects.

There are two types of environmental benefits that SGP intends to achieve: 1) *direct global environmental benefits* – which lead to the improvement in environmental state, the reduction of stress to the ecosystems, or reduced rate of environmental degradation; and 2) *indirect global*

Understanding that environmental problems are not limited by national boundaries, especially where international waters are concerned, SGP uses a bottom-up approach and works in partnership with civil society organizations, governments, private companies, academics, international donors and other stakeholders to halt environmental degradation trends and promote sustainable development. Actions taken on the ground by local communities to address transboundary water issues often act as catalysts to compel coordination among actors at national and international actors beyond national boundaries. Local communities across borders can play a key role in advocating for better water resources management and environmental protection, often generating the momentum for policy makers and decision makers to tackle the issues.

environmental benefits – which contribute methods, mechanisms, and processes that will eventually facilitate the achievement of global environmental benefits. Due to its nature and in line with its mandate, SGP not only contributes to actions that result in direct global environmental benefits, but also promotes innovation, testing and demonstration approaches, modalities, and management processes that, through upscaling, replication, and mainstreaming, will eventually lead to direct global environmental benefits. The latter aspect is particularly relevant in the international waters focal area because of the vast coverage of a waterbody in comparison with the small scope of individual community projects – as the results achieved by projects can be amplified through the creation of knowledge, demonstration of solutions, and exchange of experience within a larger framework for action.

SGP INTERNATIONAL WATERS PORTFOLIO

Since 1992, SGP has funded 1,027 community projects with approximately \$26 million invested in GEF funding and having generated an additional \$38 million in co-financing for the protection of international waters. SGP’s international waters portfolio has focused on addressing issues and priorities identified in SAPs. While the overall level of funding is modest when viewed globally and cumulatively

over time, the impact of these SGP projects stretches across many regions and relates to many waterbodies and critical ecosystems. Table 1 shows the distribution of SGP’s international waters portfolio by region.

Figure 1 shows the spread of SGP’s international waters portfolio distribution around the world in relation to larger waterbody based interventions and programmes.

SGP projects have mainly focused on the following categories of activities:

- conservation and rehabilitation of coastal ecosystems and habitats;
- prevention and reduction of land-based pollution;
- freshwater resources management;
- fisheries, land and forest and other natural resources management;
- capacity development, networking, knowledge sharing and learning

During the past five years (2011-2016), SGP supported 265 communities and civil society organizations in 83 countries to avoid or reduce 167,199 tons of waste from entering waterbodies; and supported the sustainable management of 164,169 hectares of marine and coastal

TABLE 1
Distribution of SGP International Waters Portfolio by Region

REGION	NUMBER OF PROJECTS	TOTAL GRANT AMOUNT	TOTAL CO-FINANCING AMOUNT	CASH CO-FINANCING	IN-KIND CO-FINANCING
Africa	349	\$9,446,327	\$16,323,770	\$6,022,306	\$10,301,464
Arab States	91	\$2,946,897	\$3,672,884	\$2,102,597	\$1,570,288
Asia and the Pacific	373	\$8,921,314	\$10,306,608	\$2,382,740	\$7,923,868
Europe and the Commonwealth of Independent States	108	\$2,361,850	\$3,523,517	\$2,339,907	\$1,183,610
Latin America and the Caribbean	106	\$2,738,710	\$4,343,898	\$1,462,815	\$2,881,083
Total	1027	\$26,415,098	\$38,170,677	\$14,310,365	\$23,860,313

areas and fishing grounds, and 264,822 hectares of river and lake basins through community interventions. In addition to direct global environmental benefits, SGP has worked to change the attitudes and behaviours of local communities and helped them adopt good practices, influence government policy and catalyse further investment in environment and sustainable development. Such indirect global environmental benefits are often manifested in the process of scaling up, which takes different forms and follows different processes in different project contexts. The ten cases in this publication provide a snapshot of the range of experiences in scaling up global environmental benefits through community action.

PATHWAYS TO SCALING UP

Scaling up means expanding, adapting and sustaining successful policies, programs and projects in different places and over time to reach a greater number of people (Hartmann and Linn, 2008). SGP has worked with a number of GEF full-sized projects to enhance coordination and linkages for scaling up. These projects include UNEP-GEF South China Sea Project, UNEP IW Eco project in the Caribbean, UNDP East Asian Seas PEMSEA project, World Bank led Nile Transboundary Environmental Action Project, UNDP Pacific Integrated Water Resource Management Project, and UNEP Wiolab project and others.

From SGP's experience, scaling up, replication, and mainstreaming of project benefits can be achieved through the following mechanisms:

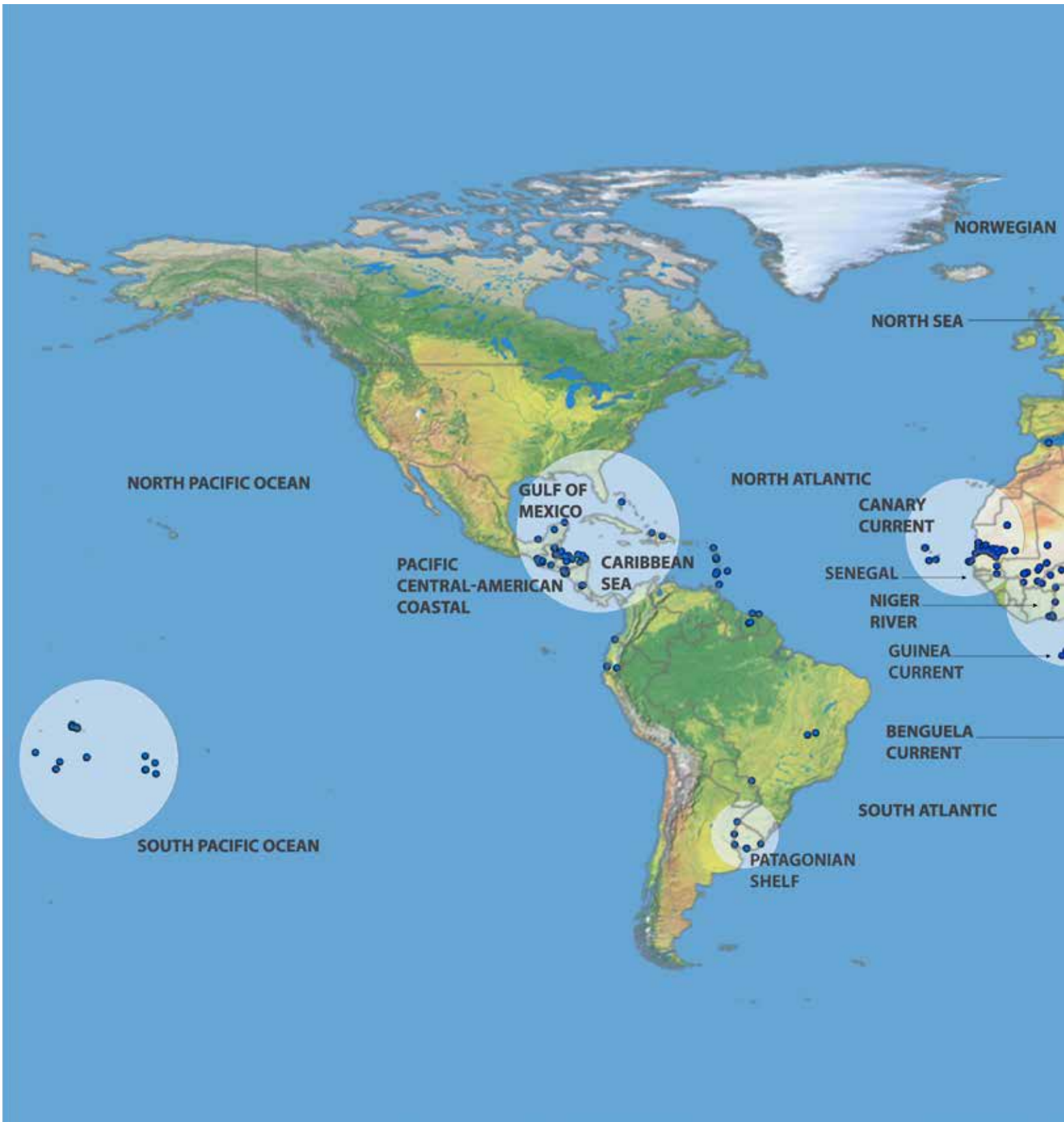
- Selection of projects with geographic focus and planned activities in support of the implementation of the regional international waters Strategic Action Programmes
- Development of joint projects with partners at local, national, regional and global levels
- Promotion of synergies, linkages and partnerships
- Advocating to influence or change government policy
- Transforming community thinking, attitudes and behaviors through knowledge sharing, learning, and networking

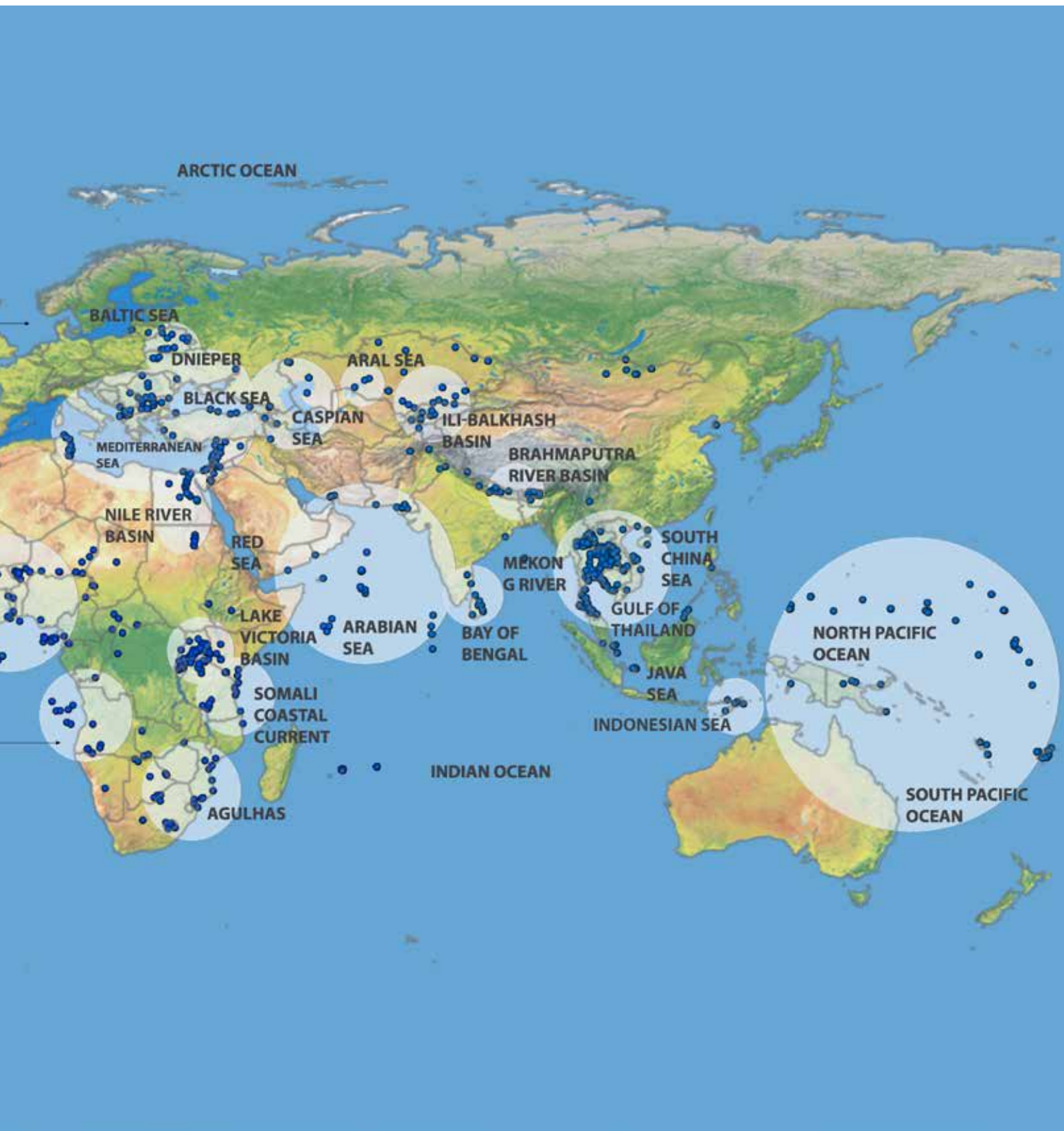
The ten cases in the publication demonstrate that small scale actions by communities, coupled with efforts of governments, the private sector, donors and other key stakeholders, can lead to achievement of results at a greater scale beyond the originally targeted communities. As the different cases will show, these community projects have led to continuing action beyond the time-frame of the initial projects, often to investment of further resources and funding, as well as in some cases to implementation of policy change and mainstreaming of critical environmental management measures.





FIGURE 1
SGP International Waters Projects Around the World





	GRANTEE Placencia Producers Cooperative Society Limited	
	WATERBODY Caribbean Sea Large Marine Ecosystem	
	PROJECT DURATION Sep. 2010 – Mar. 2012 and Sep. 2013 – Oct. 2014	
	AMOUNT US\$95,000	COFINANCING US\$186,906

CASE 1

Sustainable Seaweed Production, Belize¹

PROJECT CONTEXT

Belize's marine biodiversity is characterized as being globally significant. Belize's marine protected areas (MPAs) are home to seven United Nations Educational, Scientific, and Cultural Organization (UNESCO) designated protected areas that make up the Belize Barrier Reef Reserve System, which is also a World Heritage Site (UNESCO, 2015).² The world heritage site totals 96,300 hectares (ha) and is home to over 500 species of fish, 65 scleraetinian corals, 45 hydroids, and 350 mollusks plus a great diversity of sponges, marine worms, and crustaceans. The area has one of the largest populations (300-700 individuals) of West Indian manatee (*Trichechus manatus*) in the world and its coastal zone is home to two species of threatened crocodiles (*Crocodylus acutus* and *C. moreletii*) (UNESCO, 2015).

Belize's biodiversity is exposed to various direct anthropogenic and natural threats system. Over the last three decades the forest cover in Belize has decreased steadily due to the expansion of economic activities, such as large-scale agriculture and aquaculture. Rapid and uncontrolled coastal development has resulted in increased habitat loss in the coastal zone. It is estimated that about 75-80% of all coastal land in Belize has been purchased for the development of tourism and residential areas, posing a serious threat to mangroves, coastal wetlands, and other coastal ecosystems (Young, 2008). Overfishing and illegal fishing continue to put stress on the ecosystems.

¹ The case was first published in a journal article of the lead author entitled "Polycentric coastal and ocean management in the Caribbean Sea: Harnessing community-based actions to implement regional frameworks" in the journal of *Environmental Development* (2016).

² The Belize Barrier Reef Reserve System includes seven protected areas: Bacalar Chico National Park and Marine Reserve, Blue Hole Natural Monument, Half Moon Caye Natural Monument, South Water Caye Marine Reserve, Glover's Reef Marine Reserve, Laughing Bird Caye National Park and Sapodilla Cayes Marine Reserve.



PROJECT IMPLEMENTATION

To reduce fishing pressures in and around the Belize Barrier Reef Reserve System, the UNDP implemented GEF Small Grants Programme (SGP) provided technical and financial support to the Placencia Producers Cooperative Society Limited (PPCSL), under a special initiative called the Community Management of Protected Areas Conservation (COMPACT) co-financed by the United Nations Foundation. The project introduced local fishers and tour guides to sustainable seaweed production, provided technical assistance, procured necessary materials, and established seaweed farms. The first project focused on the area in Placencia and the second project was implemented to expand the initiative in Gladden Spit and Silk Cayes Marine Reserve.

The local community provided support in ensuring that all activities such as preparation of ropes, buoys, anchors, and the transportation of materials to sites were carried out properly. Community members also participated in focus group meetings and were actively involved in the planting and monitoring of the seaweed farms as well as in seaweed harvesting. As a result of the community involvement, 43 seaweed farms were established, doubling the original 20 seaweed farms envisioned in the two project proposals.

RESULTS AND SCALING UP

The projects created and continue to support the first and only sustainable seaweed farming in the country and have helped reduced the fishing pressure by 6% (measured by the number of fishers) in and around the Belize Barrier Reef Reserve System. The project provides 50 fishermen and eight tour guides with additional income to sustain their families without engaging in more fishing activities.

Dried seaweed is packaged and sold locally at the PPCSL office in different weight sizes: from one ounce which sells for three Belize dollars (BZ\$) (BZ\$1 is approximately equivalent to US\$1.50) to 16 ounce which sells for BZ\$30. To date over BZ\$15,000 worth has been sold and current



production stands at over 500 pounds of dried seaweed. Project funds have been used for continued monitoring and harvesting of seaweed farms, and to provide fuel and boat transportation to and from the seaweed farms. Funds were also used to provide a small stipend for the seaweed farmers, providing them with extra income during the monitoring and harvesting period. During the slow tourist season in Placencia, seaweed harvesting and monitoring provides jobs and income for members of the seaweed farming community.

Dried seaweed has also attracted foreign visitors who buy the product and take it back home. Currently, the cooperative exports seaweed to a buyer in Los Angeles and a local company developed a seaweed soap that has been sold in the cooperative's office. A US-based company has shown interest in developing other brands of soaps and oils from the seaweed.



Fisheries Department for a Special Development Area to be designated within the marine protected area. The main objective was to establish a commercial seaweed farming initiative within the reserve to Provide further income diversification alternatives for fishers while reducing fishing pressures on the Belize Barrier Reef Reserve System World Heritage Site. A seaweed revolving fund has also been established as a long term strategy for financing community enterprises. The PPCSL will sign an MOU with Projects Abroad to attract volunteers to cultivate seaweed as a means to ensuring long term sustainability of the investment in the project.

Other stakeholders have shown interest in learning about the project and the PPCSL is actively training fishers from other coastal communities. A Seaweed Documentary and Manual was developed as part of the project which is being used by other communities to scale up this innovative practice. A grant of US\$35,000 from The Nature Conservancy was recently awarded to the PPCSL to co-finance the ongoing SGP/COMPACT project to support the development of a seaweed training curriculum. The project has also been visited by high level officials who want to learn about it including the Fisheries Department, the Oak Foundation, the Mesoamerican Reef Leadership Program, the Cooperatives Department, the Minister of Forestry, Fisheries and Sustainable Development, and UNDP officials. The Fisheries Department is also providing technical assistance for the replication of the seaweed initiative in other marine protected areas including the South Water Caye Marine Reserve and Turneffe Atoll Marine Reserve. In addition, the Protected Areas Conservation Trust recently approved funding for a seaweed cultivation project in partnership with the Sarteneja Fishermen Association. All these processes have led the Fisheries Department to promote Seaweed cultivation for the country and the PPCSL is fully engaged in this process.

In addition, the project's activities have benefited the entire community which no longer relies solely on the extraction of naturally occurring seaweed and has been able to use the end product (dried seaweed) as a food supplement for local consumption.

A Memorandum of Understanding was signed by the Ministry of Forest, Fisheries and Sustainable Development, the Southern Environmental Association, PPCSL, and the

EXPERIENCES AND LESSONS LEARNT

Capacity development was key to the success of project design and implementation. Community participants and members of the project were trained on the execution of the project and awareness raising activities were promoted to enhance public understanding. During the initial stages of the project a planning grant enabled the community to establish clear and common goals and objectives; as well as a better understanding of the activities needed to be carried out during the implementation of the project. It provided them with a map of best practices and helped them identify setbacks at an early stage and ways to overcome them.

During project implementation, the community cooperative faced a number of challenges. In particular, the project was not able to acquire a long-term lease for the seaweed bed site where the seaweed farms were established. Instead, it got a one year research permit from the Fisheries Department for use of the sea bed area. On the logistics side, there was not enough funding to acquire a boat dedicated to transporting participants to the area for the monitoring and harvesting of the farms. However, the project was eventually able to secure the assistance of the Southern Environmental Association to facilitate logistical arrangements for transportation to and from the project site.

LEARNING ACROSS BORDERS

This project has served as a learning and demonstration site for fishers beyond Belize. In 2015, SGP Belize collaborated with Colombia in a South-South cooperation effort aimed at improving seaweed cultivation, harvesting and processing techniques. The peer-to-peer exchange, funded by the Colombian Government, took place in January 2015 and allowed 6 fishers (2 women and 4 men) from the Old Providence and Santa Catalina Fishing and Farming Cooperative in Providencia Island, in Colombia to visit an SGP project in the Gladden Spit and Silk Cayes Marine Reserve in Belize. The Colombian fishers received training and certification from PPCSL on sustainable seaweed farming, processing and marketing.

This cooperation continued in July 2015 when a delegation from PPCSL visited Colombia to train the Colombian cooperative on other innovative sustainable fishing approaches, such as use of lobster shades as anchors for the seaweed farms; and new cultivation techniques using sewn nets from the banned shrimp trawler boats in Belize. As a result 10 fishers benefited from the exchange and learned about seaweed farming as well as soap making and production of seaweed punch.





GRANTEE
Associação dos Pescadores
de Salamansa



WATERBODY
Canary Current Large Marine Ecosystem



PROJECT DURATION
July 2010-June 2011



AMOUNT | **COFINANCING**
US\$16,138 | US\$10,079

CASE 2

Developing Ecotourism in Salamansa, Cape Verde

PROJECT CONTEXT

Cape Verde is an archipelago of ten islands, nine of which are inhabited, and thirteen islets located 500 kilometers west of Senegal in Africa.

The country has a land area of 4,033 km², and a population of 545,993 inhabitants (World Bank, 2016). Salamansa is a fishing village in Cape Verde with approximately 1,170 inhabitants. It is located north of the island of São Vicente near the city of Mindelo (see figure 2) and it is a rural area where half of the population is primarily engaged in artisanal fishing for their livelihoods. The artisanal fishing community includes about 148 fishermen and 10 fish merchants, who also practice other socio-economic activities such as animal husbandry, agriculture (during the rainy season), and small scale trade.

With the aim to create alternative livelihoods, reduce the pressure on the ecosystem and reactivate the first underwater trail for ecotourism, the Associação dos Pescadores de Salamansa received technical and financial support from the GEF Small Grants Programme in Cape Verde in 2010. The construction of the underwater trail in Baía das Gatas was the result of an initial partnership between Worldwide Fund for Nature (WWF) Cape Verde, WWF Germany, and the German Agency for Nature Conservation.



FIGURE 2
Map of Cape Verde and its geographical location

CAPE VERDE



4,033 km²
land area



545,993
inhabitants



10 islands + 13 islets



SÃO VICENTE ISLAND



1,170
inhabitants



148
fishermen



10
fish merchants

PROJECT IMPLEMENTATION

The goal of this project demonstrate community-based ecotourism as a tool for biodiversity conservation and improvement of local livelihoods using the underwater trail as an example. To operationalize the underwater trail, the association carried out a number of key activities including the development of a marketing strategy to promote the trail, preparation of a code of conduct for its use, and selection and training of key staff to manage the trail.

The second phase of the project involved the establishment of a community-based maintenance and monitoring plan for the underwater trail and an awareness raising campaign within the community about the benefits of the sustainable use of marine resources. Once everything was in place, the trail was opened to the public, excursions were promoted and organized, and the Associação dos Pescadores de Salamansa, established a fund to collect and manage trail admission fees for maintaining the trail.

RESULTS AND SCALING UP

The project succeeded in operationalizing the underwater trail and establishing it as an eco-tourism site while also building the capacity and knowledge of the local community about ecotourism and conservation management. The code of conduct for the use of the trail and the maintenance and monitoring plan for the underwater trail were key results of the project and were instrumental in the success of the initiative and its long term sustainability. Fifty three local students participated in marine environmental awareness activities, including marine turtle and coral conservation and 73 members of the fishers association were involved in the implementation of the project.

As a result of the capacity development component of the project, 125 community members from Salamansa benefitted from training activities, four youths undertook recycling training in partnership with local NGO Atelier Mar, 14 fishers were trained as snorkeling instructors, and support staff were trained as tour guides. Snorkeling instructors and tour guides also received training in marine environmental awareness. The management staff of the

Salamansa fishermen association received administrative and financial training in partnership with the Associação de Amigos do Calhau. The project was in line with and contributed to the implementation of several national strategies and plans, including the National Action Plan for the Environment, National Biodiversity Strategy, the Bi-annual Fisheries Plan, and the Marine Turtle Action Plan.

As part of the environmental awareness raising measures of the project, ten educational trail plaques were installed in the underwater trail. Each plaque served an educational purpose and was constructed with a special cement mixture, with the embedded information covered with acrylic (see pictures below).

Despite the initial success of the project in building capacity of the community and demonstrating sustainable livelihood activities based on ecotourism, the underwater trail developed by the Associação dos Pescadores de Salamansa was eventually deactivated in 2014 due to funding issues and decreasing requests for visits. Further promotion of the site was needed to attract more tourists in order to continue the activities, while additional support was still required to overcome the market barriers.

Underwater trail educational plaques



Incorporating some of the results demonstrated by the SGP funded project, a new sustainable tourism initiative was launched in the area in late 2015 with a grant of € 500,000 Euros from the European Union in Cape Verde. The project was led by a consortium of key partners including the Associação dos Amigos da Natureza, Associação dos Amigos do Calhau, the Municipality of São Vicente, and the Centro de Estudios Rurales y de Agricultura Internacional (CERAI). The project is expected to continue for three years and will support the continuation of tourism activities, including the re-activation of the underwater trail, as well as the creation of a new trail closer to the Salamansa fishermen’s village. With this enhanced support from the European Union, and continued involvement of several partners, it is hoped that the initial efforts to establish ecotourism in the area will become viable and sustainable over time.

EXPERIENCES AND LESSONS LEARNT

The foundational work undertaken by WWF-Cape Verde together with local communities was important in raising awareness and building the capacity of local community members on natural resource management and it was important for the early stages of the project. The local community and fishers participated in discussions and in the development of the maintenance plan and code of conduct of the trail. Fishers also participated in awareness activities and other training sessions, and eventually took tourists on underwater trail tours.

Over time, however, the Salamansa fishers faced challenges related to their capacity to manage the underwater trail, in organizing enough trail visits to make it viable, and in sustaining the funding for trail maintenance. Some of the lessons learned are that promotion of ecotourism activities takes time and that financial support or subsidies for running the operations are needed for at least one year or more while the activities become self-sufficient and the community develops new livelihood alternatives. Small amounts of funding with limited duration was not adequate to generate enough visits to generate and sustain ecotourism activities in the area. It is expected that with the EU funding the ecotourism sector will be further developed and will attract enough tourists to sustain the activities.





GRANTEE
Comunidad La Gloria



WATERBODY
Caribbean Sea Large Marine Ecosystem



PROJECT DURATION
Jun. 2009 – Dec. 2014



AMOUNT
US\$43,431

COFINANCING
US\$48,475

CASE 3

Mangrove Conservation and Sustainable Fisheries in Playa Florida, Cuba

PROJECT CONTEXT

Playa Florida is a coastal village in the south of Cuba adjacent to one of the most delicate and rich marine eco-systems in the Caribbean. This area is also one of the most vulnerable to the effects of climate change and the local communities have had to evacuate during storms (such as Ike and Paloma in 2008).

The loss of the mangroves poses a risk to the local population by shortening the shoreline, increasing erosion and their vulnerability to floods, surges and storms. In terms of biodiversity, the damage to the mangrove ecosystem also reduces water quality and destroys the natural habitat of fish and crustacean species.

PROJECT IMPLEMENTATION

In 2009, with the support of the GEF Small Grants Programme (SGP) and the technical advice from the Ministry of Science, Technology and Environment, the community of Playa Florida set out to restore the coastal and mangrove ecosystem in Playa Florida. To achieve this goal the community started an awareness raising campaign on the importance of the mangrove ecosystem for the health of marine resources and as an adaptation tool to address climate change. The community also worked with fisher folk to improve their fishing practices and livelihood opportunities and reduce the pressure on the ecosystem. The project also provided better fishing gear and training on sustainable fishing practices



FIGURE 3

Google Earth image showing the section of mangrove that was regenerated (yellow line). The three arrows in red show where the water passes were constructed.



such as the use of wider fishing nets to reduce bycatch, promoting compliance and respect for fishing bans, and developing sustainable fishing plans. The project also worked with fisher folk to create a union that would enable them to get better prices.

In order to reduce mangrove deforestation, the community limited the use of mangroves for firewood and engaged the fishers in tracking the results of the mangrove restoration process. The community also partnered with government agencies to address the challenges caused by a 4 km elevated road which interrupted the flow of water to the wetland causing death to a large part of the mangrove to the east of the road. Specifically, the community identified the location of sea passes, along the road, to allow the flow of water into the eastern part of the mangrove and helped to construct them with funds from the local government.

RESULTS AND SCALING UP

As a result of the project, three kilometers of coastal and mangrove ecosystems have been significantly restored and local species of birds have started to appear including pink flamingos, gulls, frigate birds, pelicans, white and blue herons and zarapicos. Notably flocks of flamingos have returned to the area after a 15 year hiatus. Similarly, local fish species such as juvenile snappers, biajaibas, lisetas, caballeroes, horse mackerel, snapper and tarpon have been seen in the ecosystem.

The improvement in water flow and health of the mangrove ecosystem has also increased the resilience of the local community to climate change effects. In terms of livelihoods, the families of local fisher folk benefitted from a 20% annual income increase as a result of the creation of the fishing cooperative and by adopting improved fishing practices.



In terms of capacity development, the project has been instrumental in helping the community to continue their efforts by facilitating access to other funds and donors, including funding from the European Union.

BROADER ADOPTION

Since the SGP project, the Ministry of Science Technology and Environment together with COSPE, an NGO supported by the Italian Ministry of Foreign Affairs and the European Union have provided six times the original funding of the SGP grant to continue the community's efforts in the area. The experience of the SGP project has been shared, by documenting the good practices and disseminating them through these partner networks and reaching students, citizens, media and other institutions. Alternative livelihood options for the community have been further expanded, especially in terms of sustainable agriculture. Today, the Playa Florida community is participating in the co-management planning process for two nearby protected areas and has influenced the design of large regional projects on how to involve communities in biodiversity and adaptation projects.

Information sharing between similar communities supported by SGP projects has allowed officials whose jurisdiction spans these governance zones to promote the spread of successful models to other nearby communities. This has resulted in a demand for projects on similar themes in multiple communities within the same governance region. In Playa Florida, the town delegate, who also is the President of the SGP Project Board, reports on the results of the project in municipal meetings held four times a year, as well as at the municipal assembly. This generated interest in neighboring fishing communities became interested in implementing Playa Florida's improved fishing practices. Following knowledge exchanges with the community of Playa Florida two fishing communities have replicated the participatory planning process to improve the management of their natural resources and livelihood opportunities.

The community representatives also participated in the 9th and 10th International Conferences on Environment that took place in 2013 and 2015 increasing their visibility and outreach. The project also conducted empowerment activities that allowed women to improve their socio-economic status.

Following the mangrove ecosystem restoration activities and sharing of project results with key stakeholders, including the media, the Playa Florida beach started to attract more tourists. This created additional opportunities for small businesses such as housing rentals, restaurants and other services which have contributed to reducing pressure on fisheries.

EXPERIENCES AND LESSONS LEARNT

Among the main lessons from SGP's experience in Playa Florida (Metzel 2015) is that early integration of diverse actors in planning processes is key to achieving results. SGP's co-financing requirements necessitated the formation of an early broad coalition of funding support to fill funding gaps. Reliance on government co-funding in the construction of Playa Florida's water passes was among the factors changing the way the municipality did its budgeting, which in turn increased its flexibility for funding community projects.

The group decision-making processes for allocation of project benefits created a sense of shared responsibility to the group and the community among those who received direct benefits from SGP projects. In Playa Florida, SGP and the communities decided that the grant would fund tools for repairing boats instead of provision of new boats, to allow for a more equitable distribution of benefits and greater cost efficiency in use of grant funds.

SGP's interactive application process promoted the selection of proven informal and formal leaders in the community. Two of the members of the Playa Florida Project Board are key people in organizing their community in their comparatively frequent storm evacuations to the mainland. These leaders have played an important role in mobilizing the community and ensuring participation.

The different levels and ways for community members to benefit directly and indirectly contributed to the informal diffusion of ideas. In particular, the presence of diverse benefits facilitated collaboration by a broad coalition of stakeholders. While one component of the project was very conservation-focused with intangible, long-term benefits like mangrove conservation, tangible individual benefits like provision of fishing supplies provided the "hook" that allowed for the space for the larger long-term environmental conversation.





GRANTEE
Shanshui Conservation Center



WATERBODY
Mekong River Basin



PROJECT DURATION
Oct. 2012 - Nov. 2014



AMOUNT
US\$46,987

COFINANCING
US\$51,351

CASE 4

Forest Conservation for Water Resource Management, China

PROJECT CONTEXT

Tianchi Lake is located in the western Yunlong County, part of the Dali Bai Autonomous Prefecture in the southern Yunnan Province. This picturesque lake, covering an area of 14,475 hectares, sits at a high elevation and is flanked by hills on every side. Tianchi nature reserve is located in the Lancangjiang or Mekong River catchment. The reserve covers most of the vertical valleys and hillsides of the Hengduan Mountain in Southwest China. This area is a World Heritage Site, comprising three parallel rivers and acting as the epicenter of China's biodiversity. 26 species of fish belonging to nineteen genera are found in Tianchi nature reserve and its neighborhood in Yunlong of Yunnan Province (Fu, 2008).

Tianchi lake is the biggest natural alpine lake in the Yunnan Province, and provides drinking water for Yunlong town and its total population of about 210,000 people, including members of the Lisu and Bai ethnic groups. Their livelihoods mainly rely on the natural resources found in the reserve, and historically they have served as the main guardians of this area.

In the past decade, severe degradation of forests due to large scale forest activity that has replaced natural forest with fast growing and high yield single-species of forest; as well as the degradation of wetlands have produced a negative impact in the ecological functions of the ecosystems

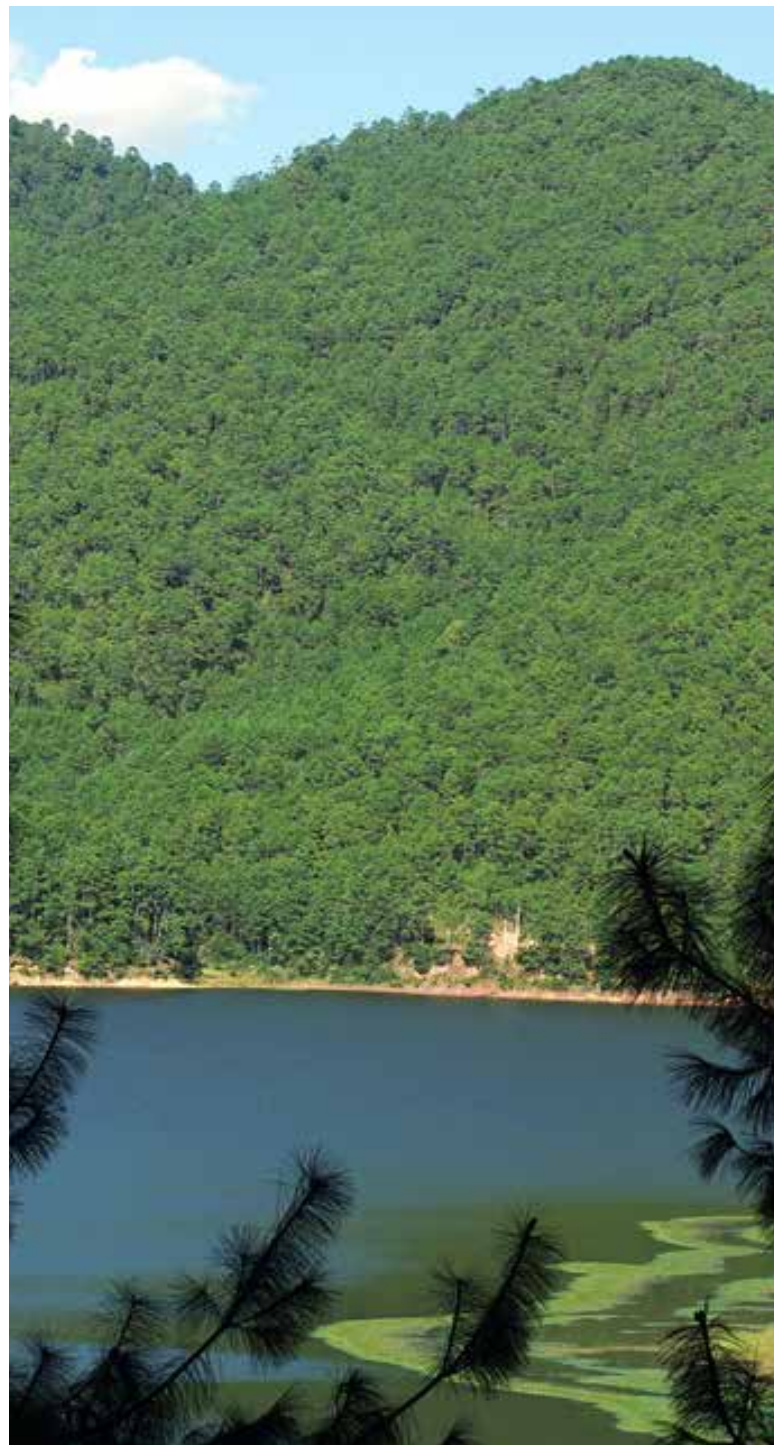


and reduced its resilience to extreme weather events in the Lancangjiang-Mekong River basin. Research on climate change impacts on the river basin ecosystems predicts that precipitation in winter and spring will decrease and cause more frequent droughts in the area.

ACTIVITIES AND IMPLEMENTATION

With the aim to protect the forest and wetland ecosystems that regulate and maintain water resources in the region, the Shanshui Conservation Center started a project that promotes sustainable water resource management at the community level. The project received technical and financial support from the GEF Small Grants Programme (SGP) implemented by UNDP in China in 2012 and carried out the following activities:

- Protection of 100 hectares of forest through outreach, training and establishment of water conservation and forest monitoring groups. For this purpose, conservation agreements were signed between local communities and the Yunlong Tianchi National Nature Reserve Administration.
- Construction of water supply facilities for 30 households in Yunlong Tianchi National Nature Reserve, ensuring drinking water for 130 community members.
- Plantation of 2,000 stands of willow trees along the major creek to fortify the banks and prevent soil erosion.
- Demonstration of alternative livelihoods by supporting five households in *planting Paris polyphylla*, a medicinal herb used for treating burns, wounds, fevers and headaches. The expected income from this livelihood activity in the reserve is 5600 yuan per household annually, for each of the four households.
- Knowledge sharing through the production of a video documentary and participation in international exchanges with NGOs from other Mekong River countries.



RESULTS AND SCALING UP

After receiving support from SGP, representatives from the Shanshui Conservation Center participated in the inception meeting and training workshop for new grantee partners organized by SGP China. At the event they saw the need to replicate SGP's modality of support to local NGOs and communities in their region and presented a proposal to the MacArthur Foundation. The specific objectives of the proposal were to: a) set up an SGP-like small grants mechanism to support local NGOs and communities' projects; and b) initiate a long-term funding mechanism in Lancangjiang-Mekong River basin partnering with government and other foundations to provide long-term funding to local NGOs.

As a result, the Shanshui Conservation Center received \$3.5 million in funding from the MacArthur Foundation to launch the Lancangjiang River Conservation Fund. The fund replicates SGP's modality, guidelines and procedures, and leverages additional resources to expand and sustain the activities initiated by the original SGP demonstration

project. From 2014-2017, the Fund, implemented by Shanshui Conservation Center, will provide direct financial and technical support to local communities, NGOs, social enterprises, and educational or academic institutions for conservation activities that promote ecological and cultural diversity along the upstream areas of Lancangjiang River including in Yunnan and Qinghai Provinces in China. Grants range from \$10,000 to \$40,000.

During its first phase from 2014 to 2015, the Fund supported 46 projects including 20 projects implemented by NGOs, 7 projects implemented by local communities, and 19 implemented by academic institutions, individuals, and social enterprises. Project activities include conducting biodiversity baseline surveys, plant and wildlife conservation measures, community based conservation, outreach and training, cultural protection activities, policy advocacy and ecosystem conservation. As the implementation of the Fund is still on-going, the quantitative estimates for environmental or socio-economic impacts are not available at present.



EXPERIENCES AND LESSONS LEARNT

The SGP project was instrumental in building the capacity of a local NGO, the Shanshui Conservation Center, to secure and effectively utilize international conservation funds in Langcanjiang-Mekong basin. This has benefitted and empowered local NGOs and communities to propose and take conservation measures in this important catchment area.

As an upstream country of the Mekong River, China has been pressured to give due consideration to the environmental impact on downstream countries when undertaking development activities. Thus, the enabling actions of partners such as the Shanshui Conservation Center and its grantees are an important step towards sustainable river catchment management. Similarly, this experience can help to pave the way for better government-CSO relations.

Through its experience in the course of the SGP project, the Shanshui Conservation Center strengthened its status, recognition, and legitimacy by successfully implementing the grant. This helped the Center to gain more governmental and international support. The demonstration project supported by SGP helped to remove the political, technical, and operational barriers for a larger initiative funded by the MacArthur Foundation. Without SGP's pioneering support, the MacArthur Foundation would likely incur more challenges and difficulties to launch its programme due to the risks, political sensitivity, limited technical capacity, and lack of working models and mechanisms to channel the funding to local communities.





GRANTEE
Kelompok Peduli Lingkungan Belitung



WATERBODY
Indonesia Sea Large Marine Ecosystem



PROJECT DURATION
Oct. 2008 – Mar. 2010



AMOUNT | **COFINANCING**
US\$50,000 | US\$144,473

CASE 5

Community-based Coastal Conservation in Belitung, Indonesia

PROJECT CONTEXT

Belitung is a small archipelago situated on the east coast of Sumatra, Indonesia. It comprises one main island and several small islands, and is part of Bangka Belitung Islands Province. Due to its rich deposits of tin, Belitung experienced the development of a massive tin mining business that started in the colonial period around the 1850s. The expansion of mining activities on the island led to rapid environmental degradation, eventually damaging 80% of the mangrove forest in Selat Nasik Coast, and producing negative impacts on the livelihoods of the local fisher folks.

The Belitung Coastal Community Group (BCCG) was established in 1998 with the mission to combat the environmental threats caused by mining activities and to implement sustainable coastal ecosystem management. In particular, BCCG aims to rehabilitate, protect and manage marine and coastal resources, while also reducing poverty and improving the livelihoods of the communities on Belitung Island.

PROJECT IMPLEMENTATION

Since 2008, the UNDP implemented GEF Small Grants Programme (SGP) in Indonesia has worked closely with the Belitung Coastal Community Group – BCCG (*Kelompok Pemuda Lingkungan Belitung* – or KPLB in Bahasa Indonesia), to implement an innovative island conservation model in Tanjung Binga, Belitung Island and Kepayang Island.



At the outset, the project aimed at creating a model for the sustainable management of coral reef ecosystems that would enable the rehabilitation and protection of key natural resources while also reducing poverty and improving the livelihoods of the community in Belitung Island. To achieve this objective, BCCG organized activities to raise awareness in the community about the threats faced by coral reef ecosystems, started a coral reef transplantation programme to improve the quality and variety of coral reef, and conducted participatory education and training in order to implement effective and sustainable coral reef management. BCCG also created a network to support the work of fishers and other key stakeholders engaged in conservation activities. To improve livelihoods and reduce the pressure on the ecosystems, the group also initiated sustainable ornamental fishery and ecotourism activities. This project improved the coral ecosystem, engaged the community in conservation activities and increased the income and quality of life of the local population.

In 2011 in recognition of the good results achieved by the Belitung project, the Government of Indonesia allowed BCCG to lead a pilot project to develop Kepayang Island as a conservation site using ecotourism. To achieve this goal, BCCG created three conservation programs:

1. the Kepayang Island Conservation Center for training, education and turtle conservation;
2. the Mendanau Mangrove Conservation Center to protect the tropical forest and mangroves; and
3. the Batu Mentas Nature Reserve and Tarsius Sanctuary that aims to protect the tarsius monkey.

The community was directly involved in running most ecotourism activities including mangrove and fishing tours, scuba diving, and *tarsius* expeditions, among others, to improve the livelihoods of the local population and reduce the pressure on the ecosystems.



RESULTS AND SCALING UP

The project conservation activities have produced significant results on the overall ecosystems of the islands. The coral conservation programme reduced the damage to the ecosystem caused by potassium, bombing, and the use of trawls for fishing. The turtle protection programme reduced the number of turtle egg poachers, protecting natural nesting sites, and resulting in the release of more than 12,000 baby turtles in the past three years. To protect the rainforest and mangroves, the group has planted more than 45,000 mangrove trees and oversees community nurseries that cultivate 20,000 seedlings.

Throughout the years, BCCG has made efforts to scale up the project at many levels by engaging the local government and mobilizing more stakeholders for



further support. The programme in Tanjung Binga funded by SGP was adopted as a local programme and included in the Strategic Development Plan (Renstra) of the district and became a prominent part of the annual Sail Indonesia agenda.

In addition to developing an innovative island conservation model that has been used as a model for other islands; the project was instrumental for the creation of a regional

marine conservation plan that includes specific conservation areas such as no-take and sustainable fishing zones. Since 2006, BCCG has requested the local government bodies and the Ministry of Marine Fisheries to declare Tanjung Binga as a Coastal and Small Islands Conservation Zone (KKP3K). This continuous effort took years and involved multiple stakeholders until the resolution was finally adopted on April 1st, 2011 during the celebration of National Coral Day that took place in Belitung.

The area designated for the establishment of the Coastal and Small Islands Conservation Zone consists of:

1. **Main Zone** (Lengkuas, Piling, and Pelma Islands): the islands, coastal, and marine area is considered as protected area due to its ecological, economical, and social conditions
2. **Sustainable Fisheries Zone** (islands and sea areas in Sijuk sub-district and Selat Nasik sub-district): an open area for fishing under certain regulations
3. **Utilization Zone**: the buffer zone between the previous two zones

At present, BCCG continues to facilitate the process at the national level in order to strengthen the regulations, and is working with the government towards the development of a GEF medium or full size project to continue to build on these efforts. The government is also in the process of declaring a KKP3K Conservation Zone in Selat Nasik.

With this formal regulation, the earlier conservation status of the areas has been strengthened and protected against future ecological challenges arising from tin mining and its environmentally destructive mining ships. Furthermore, the project has become a learning site and is visited by local governments as well as universities such as the Bogor Agricultural University, Padjadjaran University, Indonesia University of Education, Islamic University of Indonesia and Bina Nusantara University.

BCCG received the Coastal Award, a prestigious biennial award presented by the Ministry of Marine Affairs and Fisheries in Indonesia in collaboration with the Association of Indonesian Coastal Experts, in 2012 to honor their remarkable efforts in developing Kepayang Island as a conservation site and was invited to share their experience during the International Seminar on Marine Tourism in 2011 in Belitung. In 2015, BCCG also received the prestigious Equator Prize and shared their experience at the UNFCCC Climate change Conference of the Parties in Paris.

EXPERIENCES AND LESSONS LEARNED

One of the key lessons from the experience of BCCG is that the most challenging part of the scaling up process is to change the mindset of the relevant stakeholders towards environmental dialogue. It requires time and perseverance to demonstrate that natural resources should be valued for the services they can provide and not be considered as a free for all that leads to environmental degradation. Another lesson is that it is difficult to engage stakeholders and work using an integrated approach, as people usually prefer to work on their own. These types of interventions require time, coordination, and sustained education and awareness raising activities to develop trust in the local community and key stakeholders, and to get them to work together with a shared vision.

The main strategy used by BCCG to alter the mindset of stakeholders was to create concrete examples such as the three conservation programmes, to provide income generating activities and livelihoods to the local population and to promote the sharing of results with the public, the tourism network, and the local government. Promotion through the media was also important to mobilize the public, promote the ecotourism programmes and the overall concept of sustainable coastal management. These outreach strategies also invited and involved the government and eventually were successful in changing the mindsets of diverse stakeholders towards environment protection.





GRANTEE
The Registered Trustees of
The Marine Research Foundation



WATERBODY
South China Sea Large Marine Ecosystem



START DATE
14 April 2014



AMOUNT US\$148,000	COFINANCING US\$75,000
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CASE 6

Reducing Sea Turtle Bycatch, Malaysia

PROJECT CONTEXT

In Malaysia, various state and national laws protect marine sea turtles; and four species have been identified for conservation purposes. However, the once abundant leatherback turtle is now functionally extinct. The olive ridley is down to just tens of nests per year. The hawksbill hangs on precariously. Only green turtle numbers remain stable, with several hundred turtles nesting regularly at a few rookeries and some 5,000 nests annually off Sandakan, in Sabah (Borneo).

While green turtles are abundant, they face exceptional challenges and the greatest of these is accidental capture in commercial and artisanal fisheries. Sea turtles share habitats with certain shrimp and fish species and are put at risk by shrimp trawling. As the nets roll along the seabed they indiscriminately catch and drown numerous sea turtles – estimated at some 3,000 to 4,000 each year in Sabah alone.

Until recently, there were limited ecosystem-based fishery management measures in Malaysia, and scant involvement of local fishing communities in fishery management decision-making and policy. Because of this, bycatch remained a serious concern – not only of smaller juvenile and trash fish but also of endangered large marine species such as marine turtles. The lack of protection of turtles (and other marine life) limits Malaysia's shrimp export due to legal restrictions in importing countries, and turtle populations have continued to decline at alarming rates.



PROJECT IMPLEMENTATION

The GEF Small Grants Programme (SGP), implemented by UNDP, supported the Marine Research Foundation (MRF) to develop and implement a long-term national bycatch reduction programme in partnership with the Department of Fisheries of Malaysia (DOFM). The programme had an ecosystem-based approach to fisheries to improve the conservation status of sea turtles and their habitats in Malaysia. This was achieved through the use of Turtle Excluder Devices (TEDs), which are oval metal grids affixed in the narrow portion of the net, allowing fish and shrimp to pass through to the cod end while ejecting large objects, such as turtles, through a net webbing 'trapdoor'.

TEDs improve the quality of the catch, as large objects such as logs and large animals do not crush it, and the reduction of debris in the back of the net saves fuel, which is a benefit to fishers. Although TEDs have many advantages, fishers were wary of using them because of the large exit 'trapdoor' in the net that allows turtles and debris to escape, and they were concerned that their target catch would be lost through this opening.

The strategic objective of this project was the conservation of sea turtles by working with local fishing communities and the government to achieve the adoption of TED technology. To this end, the project worked on removing knowledge barriers, promoting national and state mainstreaming activities, and fostering community-based stewardship among fishers. The project worked directly with fishing communities in six key states in the country (Kelantan, Terengganu, Pahang, Johor, Sarawak and Sabah) and with the Department of Fisheries in Malaysia to introduce TEDs in coastal communities using demonstration trials, practical TED construction workshops, knowledge exchange sessions, and at-sea comparison trials, data gathering and sharing.



The project also helped Malaysia to achieve key commitments under international agreements including the Convention of Biological Diversity, the IOSEA Turtle MoU (reduction of bycatch, reduction of direct turtle mortality), the Coral Triangle Initiative (Ecosystem Approaches to Fishery Management and conservation of threatened marine fauna), and the Sulu Sulawesi Seascape programme. The current project builds on several years of project implementation experience in the course of two SGP grants and leveraging co-financing from several other donors.



This project has had a profound impact on fisheries and bycatch reduction policy in Malaysia and has led to the development of a medium-size proposal (\$1.25 million) submitted to the GEF by DOFM, requesting the large scale funding for bycatch reduction in Malaysian fisheries.

Furthermore, because of the project there is now a dialogue between the Governments of Malaysia and the United States, through which Malaysia intends to seek a Section 609 certification from the US State Department that would allow export of shrimp fishery products to US markets. The first visit of the US State Department officials to meet with Malaysian Fishery Department officials was scheduled for late April 2016.

EXPERIENCES AND LESSONS LEARNT

This project has been replicating activities as it expanded from port to port and State to State, using processes developed during SGP-funded Phases I and II. The project continues to build on the success of this and other TED project components. The project has developed a replicable system in collaboration with DOFM with the standard printed and electronic documentation disseminated in many national workshops. It is envisaged that this process will continue building momentum as it progresses into the final phase of project activities.

Upscaling has not happened accidentally, it was intended and nurtured through ten years of continuous effort working with different partners. In 2007, the first bycatch project started with an SGP grant, and co-financing from the United States National Oceanic and Atmospheric Administration-NOAA and Conservation International. In 2009, MRF received a second SGP grant to continue to expand on the key activities and results of the first project. Over time, MRF continued to develop the programme, raised additional co-financing and submitted a strategic project to SGP to scale up the efforts. This last grant received two matching grants from NOAA.

RESULTS AND UPSCALING

Prior to the project, Malaysia did not have any laws or regulations that protected sea turtles from mechanized fishing fleets. This project has led to the establishment of a TED Implementation Task Force at the national level and to the commitment from the Department of Fisheries of Malaysia to make TEDs mandatory with legislation to this effect to exist as of 2017. By November 2016, all 184 vessels licensed along the east coast of Peninsular Malaysia will be TED compliant. Major ports in Sabah will follow, where TED uptake is already underway. Additional efforts are needed in Sarawak.

During this time and following extensive collaboration with DOFM, MRF developed a larger scale medium-size GEF grant application to expand both the scope and the thoroughness of the bycatch deduction process.

With regards to upscaling, SGP's continued support to the work of MRF was instrumental in persuading and empowering the DOFM to submit a proposal for a GEF Medium sized project. In the evolution

from a small NGO-led initiative in six states to National Government-led programme across all major shrimp trawling states in the country, regulations have been adopted to govern TED use and licensing.



**GRANTEE**

World Wide Fund for Nature (WWF)
Malaysia

**WATERBODY**

South China Sea Large Marine Ecosystem

**PROJECT DURATION**

May 2014 – October 2016

**AMOUNT**

US\$149,259

COFINANCING

US\$451,599

CASE 7

Marine Biodiversity Conservation in the Tun Mustapha Park, Sabah, Malaysia

PROJECT CONTEXT

In March 2003, the Government of Sabah announced its approval of the proposed Tun Mustapha Park (TMP), a marine area covering 1.02 million hectares in the northern part of Sabah. The marine protected area (MPA) was previously known as the Kudat-Banggi Priority Conservation Area, and is one of the priority areas identified under the Sulu-Sulawesi Marine Ecoregion (SSME) as being globally significant for its high biodiversity and rich natural resources. Geographically, the area is located within the Coral Triangle and is home to some of the richest marine flora and fauna complexes in the world (WWF-Malaysia, 2011)

The proposed Tun Mustapha Park will be the largest marine protected area in Malaysia once it is formally designated in government gazettes. Due to its size and the commercial activities that occur in the region, a multidisciplinary and collaborative management system is necessary to administer it. An interim steering committee was established in 2011 to guide the preparation of a management plan for the park, and community consultation is on-going to gather feedback for a comprehensive draft of the zoning and management plan.



PROJECT IMPLEMENTATION

This is a strategic project supported by the UNDP implemented GEF Small Grants Programme (SGP). The project is implemented by the World Wildlife Fund for Nature in Malaysia (WWF Malaysia) aiming to scale up interventions for marine biodiversity conservation in Tun Mustapha Park. The project includes the following four components for community based marine biodiversity conservation: 1) building capacity and empowering local communities and stakeholders to conduct patrolling and collaborative enforcement, 2) promoting environmental stewardship, 3) developing conservation enterprises linked to resource management, 4) building capacity for the implementation of an ecosystem approach to fisheries management. (WWF, 2014)

To promote capacity development and community empowerment, a series of community consultations have been undertaken. Community members have also received training in reef assessment and monitoring. To patrol the park, in order to enforce lawful use, the project collaborated with local government enforcement agencies and local communities in establishing regular joint patrolling activities. The project also hosted session to share the experiences and lessons learned by the community groups, and discussed strategies to ensure the sustainable management of the park. To promote environmental stewardship, the project focused on raising awareness among youth groups on the merits of sustainable marine management. In terms conservation enterprises, the communities decided to further develop sustainable sea cucumber production, mangrove conservation for ecotourism, and traditional natural farming as alternative livelihood activities. In fisheries management, the project has focused on capacity development for the implementation of an ecosystem approach to fisheries management. Training materials were developed and training was conducted with participants from the local communities.



RESULTS AND UPSCALING

The project has supported the scaling up of community participation in resource management and capacity building to advocate for the establishment of the TMP, and facilitate livelihood improvement as emphasised in the TMP proposal. Capacity building has been important in ensuring the involvement and participation of the communities in sustainably and collaboratively managing their resources, especially in the designated Community Use Zones in the Tun Mustapha Park.

This project also strengthened the formation of a coalition of all the existing community based organizations in the Tun Mustapha area, which resulted in the founding of the Tun Mustapha Park Community Conservation Group (TMPCCG). This group has as its objective to be the voice



of the park. The focus on capacity building in conservation enterprise was another step to this end and to ensure that the communities' livelihoods were sustainable for the community and the marine ecosystem. It should be noted that SGP has also funded several other projects that have contributed to the integrated management of Tun Mustapha Park, and towards the preparations for the park to be officially designated as a national park by the government.

EXPERIENCES AND LESSONS LEARNT

Community engagement and consultations take time at all sites. Communities and the areas they reside in all have particular types of natural resources, social dynamics, and different level of receptiveness to getting involved in the management of Community Use Zones within the protected area. As a result, the approaches, types, and dynamics of community engagement and consultations vary. In this sense, replication does not mean repetition, but reflects the adaptive and broader adoption of tried and tested practices.

Community-based organizations, such as the Banggi Youth Club and Kudat Turtle Conservation Society are important partners and allies in providing lessons learnt and testimonials, and in building support within the community for project engagement. At the local government level, the government appointed community leaders in administrative roles to provide guidance about traditional customs and law. These individuals are also key partners and allies in providing credibility to the project. At the state government level, partnership with Sabah Parks, Sabah Wildlife Department, Sabah Fisheries Department, Malaysia's Maritime Enforcement Agencies, and the Marine Police among others, are important to ensure the issues raised by the communities are given the proper attention and response. These government agencies, being the authorized management agencies, are critical in the success of the capacity building in collaborative enforcement and community empowerment.

and representative of the communities in MPA at the park management level and in the governing body of the park that will be formed once the park is fully operational. The formation of TMPCCG was a result of the active engagement of all communities supported by the project.

The scaling up is planned and facilitated through this strategic project of SGP to expand the areas of coverage and increase the number of sites and people involved in biodiversity conservation in the park. The rationale for increasing the number of sites and community engagement was to ensure that the communities dependent on the protected area for their livelihoods have the capacity and are able to take part in the management

Table 2 outlines the different projects funded by SGP that contributed to the preparedness of local community towards the official establishment of Tun Mustapha Park, which is expected in 2017.

TABLE 2
Outcomes from projects funded by SGP that contributed to the preparedness of local communities towards establishment of Tun Mustapha Park

PROJECTS	GRANTEE PARTNER	START AND END DATE	FUNDING (US\$)	FOCUSED OUTCOMES
Community based resource management and conservation of marine biodiversity in the proposed Tun Mustapha Park (TMP), Sabah, Malaysia. (Strategic Project)	WWF-Malaysia	May 2014 – Dec 2016	150,000	<ul style="list-style-type: none"> Improved the reef status through participation of patrolling from community and enforcement agencies Established 5 local associations and community groups to contribute to conservation activities and support the establishment of TMP Developed the capacity of 50 community members to be involved in livelihood programme that contributes to conservation Fisheries management of TMP using ecosystem approach through capacity building
Raise Awareness of the Local Community to the Plight of the Sea Turtle Population of the Kudat Area	Persatuan Pemuliharaan Penyu Daerah Kudat, Sabah	Dec. 2013 – Jan. 2016	50,000	<ul style="list-style-type: none"> Conservation of turtle through turtle hatchery management training. Improved local livelihood through ecotourism Demonstration of micro-credit projects for establishment of coral nursery, handicraft development and organic farming
Protection of Marine Resources Through Environmental Awareness Program and Patrolling	Banggi Youth Club, Kudata, Sabah	Oct. 2014 – Jun. 2016	25,000	<ul style="list-style-type: none"> Youth participation in sea patrolling, coral restoration and mangrove replanting Awareness raising and supporting of establishment of TMP
The Development and Replication of Handicraft As an Alternative Livelihood in Maliangin Within Proposed Tun Mustapha Park	Persatuan Penduduk Pulau Maliangin, Banggi, Kudat, Sabah	Nov. 2014 – Jan. 2016	10,000	<ul style="list-style-type: none"> Capacity building in natural resource management through development of livelihood programme Promote sustainable livelihood through handicraft development and marketing

**GRANTEE**

Shoals Rodrigues Association, Ocean Tribe, Association des Pecheurs du Parc Marin du Sud, Association des Pecheurs de Riviere Banane, Ter-Mer Rodriguez

**WATERBODY**

Aghulas Current Large Marine Ecosystem

**PROJECT DURATION**

2001-Present

**AMOUNT**

US\$475,468

COFINANCING

US\$404,699

CASE 8

Integrated Fisheries and Marine Reserve Management, Mauritius

PROJECT CONTEXT

Rodrigues is a semi-autonomous dependency of the Republic of Mauritius, situated within the Mascarene Archipelago, a recognized global biodiversity hotspot. The island is of volcanic origin and is encompassed by an extensive fringing reef, with a wide shallow lagoon that covers an area of 240 km². Fisheries are a vital source of employment, income and subsistence livelihoods in Rodrigues and play an important role in the local culture and traditions, and therefore their sustainable management is a priority. The fisheries of Rodrigues are highly diverse with over 100 fish species from a range of families recorded in fisheries sampling so far. In addition a variety of invertebrate species are also exploited. However, through the years, intensive fishing pressure in the lagoon has resulted in drastic declines of both finfish and invertebrate landings and degradation of lagoon habitats. Some important commercial species could become rare or even locally extinct if they are not protected. The isolation of Rodrigues also contributes to unusual and perhaps unique marine assemblages, and supports some endemic fish species.

PROJECT IMPLEMENTATION

Since 2001, the GEF Small Grants Programme (SGP) implemented by UNDP has undertaken a programmatic approach to promote integrated coastal and ocean governance in the area. Initially, during the period from 2001 till 2004 SGP supported the project “Sustainable Reef Fisheries Development in the Rodrigues Lagoon”, which became the catalyst for current marine conservation efforts in Rodrigues and resulted in the identification of 4 Marine Reserves in the northern lagoon by the fisher community. During implementation of this



project, an inventory of local fish species was carried out by a team of local and international marine scientists to determine their populations. Several new endemic species of fish and corals were discovered during these surveys, namely “the Rodrigues Damsel” and the “Rodrigues Acropora”, named after the island. These studies and discoveries have been acknowledged in leading scientific journals namely in the UK (Allen & Wright, 2003; Heemstra et al., 2004).

During 2004 till 2006 SGP supported another project “Marine Environmental Education in the Local Community”, which led to the development of the Marine Reserves by raising awareness amongst the local population about the need for protection and sustainable use of the marine environment. Some components in this project have been replicated in Mauritius several times by other NGOs and the Government, for example, the setting up of environmental corners in primary schools.

Two other SGP projects “The development of ecotourism in Rivière Banane as an alternative to fishing” and “Small-scale animal husbandry as a sustainable alternative to fishing” were funded in 2008. These projects supported the development of the Rivière Banane Marine Reserve, reducing the reliance of the local community on fishing and thus reducing illegal fishing within the reserve. The big challenge in these 2 projects has been to encourage fishers to change from a practice of day-to-day earnings towards the management of small community businesses where they have to share monthly incomes and re-invest part of it in running cost. This is still a challenge.

In 2009-2010 the SGP supported grant “Empowering the Southeast Marine Park Association Fisher Community through Ecotourism Development” supported the fisher community of the southern region through the creation of alternative livelihoods and thus limiting the exploitation of the lagoon. This project provided assistance to the fisher communities affected by the establishment of the marine protected area under a UNDP/GEF project.



In 2010-2012 the SGP grant “Improving Management Effectiveness for the Marine Protected Areas of Rodrigues” revitalized support for the Marine Reserves amongst both the local fisher community and the Rodrigues Regional Assembly (RRA). It provided training and support enabling local marine resource users to prepare a joint management plan for the four Marine Reserves.

SGP provided support in 2013 to the project “Alternative livelihoods and support for sustainable marine resource management in Rodrigues”. While previous projects built the momentum for sustainable management of marine resources in Rodrigues, this project is supporting the effective implementation of the Marine Reserves management plan as well as an island-wide octopus fishery closure.



Since 2015 to the present, the SGP grant “Empowerment of Off-Lagoon Fishers of Rodrigues” by Ter-Mer Rodrigues is working to empower fishers and local people for patrolling of illegal fishing and improving surveillance during closure season. The project supports the restoration of beacon lights, training on safety at sea, and distribution of fishing kits, first aids kits, and creation of five off-lagoon fishing co-operatives. It provides training on off-lagoon fishing

techniques and is introducing new and more efficient fishing gear to promote sustainable and economically viable off-lagoon fisheries. The project is implementing a policy initiative for removing tax on fuel for registered off-lagoon fishers. The project is expected to contribute in the development of sustainable off-lagoon fisheries in Rodrigues through empowerment and continuous training of off-lagoon fishers.

RESULTS AND UPSCALING

In the course of over a decade of sustained involvement of SGP, working closely with civil society, communities and local government and other stakeholders, several significant results have been achieved as described below:

Four marine reserves were developed. A final joint marine reserve management plan was developed and adopted for the four new marine reserves in the northern Rodrigues lagoon. This is one of the first management plans in the region that has been written by local marine resource users. The marine protected area network in Rodrigues now covers close to 80 km² of the reef and lagoon and will (once fully implemented) provide a refuge for marine biodiversity and help to restore fish and invertebrate stocks.

Capacity development. A series of training workshops and consultation meetings were also conducted with fishers, fisheries officers and tour operators to ensure that their interests were taken into consideration and addressed in the management actions.

Introduction of annual octopus fishing closure. As a result of the SGP projects, the Rodrigues Regional Assembly (RRA) took a policy decision to ban octopus fishing each year for two months from August to October to allow for their replenishment in the lagoon. In this context, the RRA’s policy is to provide alternative activities to redundant fishers during the octopus fishery closure. SGP supported the initiation and first 2 years of alternative livelihood opportunities to the fishers.

Policy Change. Another policy decision of the RRA was to move from traditional systems of “financial compensation to fishers” to a system of remuneration for carrying out ecosystem services such as forestry works (weeding and removal of exotic and invasive species); rivers and reservoirs cleaning and rehabilitation; pasture and land preparation, drain maintenance; clean-up of paths and trails; clean-up of islets, dredging and deepening of natural lagoon channels, and cleaning and embellishment of public building and space. Following the re-opening of the first octopus fishery closure initiative of 2012, an octopus catch of 294 Tons of octopus was landed during the first 48 days of fishing activities. That was equivalent to the mean annual production of the last six years (288 ton/year). This strongly suggests that the octopus closure is a crucial octopus fishery management measure. An octopus catch of 570.66 Tons was consequently recorded for the year. Four consecutive closures have seen the same trend. Based on these positive impacts, the RRA is now seriously thinking of having a second annual closure, most probably during the months of January and February as these are reportedly the months when the young octopuses which have been hatched during the first closure will grow bigger.

Mainland Mauritius Policy Change. Based on the successful octopus fishery closure in Rodrigues, a small-scale similar voluntary trial closure was carried out in the south-east region of mainland Mauritius in 2015. In 2016, the Ministry of Ocean Economy, Marine Resources, Fisheries, Shipping and Outer Islands has now embarked on a national closure from 15 August to 15 October given the steep decline of octopus fisheries to only 30 tons of octopus catch annually. They are partnering with the SGP and the FAO Smartfish Programme implemented through the Indian Ocean Commission (IOC) to support this closure. A regulation is under preparation and is expected to be passed in Parliament shortly. This initiative shows the transfer of lessons, replication of experience, and upscaling to national level.

EXPERIENCE AND LESSONS LEARNT

During the last 15 years (2001 -2016), in the course of the implementation of the different GEF SGP projects, it became clear that only the combined efforts of the Rodrigues Regional Assembly, conservation NGOs and stakeholder groups could lead to an effective marine resource management in Rodrigues. The scaling up, though not intended, became an evident answer to support the national and local Government objectives of strengthening management of protected areas and reducing fishing pressure in the lagoon. A strategic project was the answer to the challenges raised by the outcomes (policy decisions) of the different projects. It not only sustains a second year of octopus fishery closure but also supports the implementation of the Marine Reserves Management Plan.

Since 2012, the RRA has set up a new collaborative mechanism between the local government and SGP. All projects pertaining to Rodrigues are discussed with the EPMU in order to coordinate and mainstream them into the strategic priorities of the RRA through support to the communities. In turn the EPMU provides support by facilitating administrative procedures and decisions. This gateway to the highest decision making level in Rodrigues has strengthened the partnerships and led to direct support for strategic projects as well as regular SGP grants.

Government support has been key to this upscaling and this was readily obtained from the Rodrigues Regional Assembly. The first closure of the octopus fishery resulted in an increase in catches when fishing could resume, both in size and in quantity. The island was not prepared for this huge increase in terms of storage facilities and price control. These challenges have been tackled since then with several policy measures implemented to support fishers.

TABLE 3

List of SGP funded projects in Rodrigues Island that contributed to the improvement in the management and governance of its coastal and marine ecosystems

PROJECTS	GRANTEE	START AND END DATE	AMOUNT (US\$)	COFINANCING (US\$)	PARTNERS
MAR/01/02 "Sustainable Reef Fisheries Development in the Rodrigues Lagoon"	The Shoals Rodrigues Association (Shoals)	May 2001 – May 2004	42,254	37,490	National Environment Fund National Government, UK Foreign and Commonwealth Office Bilateral, Christensen Fund Foundation, Shoals Rodrigues Association, Rodrigues Underwater Group National NGO
MAR/04/01 "Marine Environmental Education in the Community"	The Shoals Rodrigues Association	Jan. 2005 – Dec. 2006	37,019	47,862	Barclays Bank, New England Biolabs Foundation, North of England Zoological Society, Rufford Award
MAR/SGP/OP4/RAF/07/02 "The Development of Ecotourism in Rivière Banane as an Alternative to Fishing"	Ocean Tribe	Dec. 2007 – Apr. 2009	49,226	23,566	Indian Ocean Commission, Shoals Rodrigues
MAR/SGP/OP4/CORE/07/03 "Small-scale Animal Husbandry as a Sustainable Alternative to Fishing"	Association des Pecheurs de Riviere Banane	Dec. 2007 – Apr. 2009	50,000	40,991	Indian Ocean Commission, Shoals Rodrigues
MAR/SGP/OP4/YR2/RAF/08/03 "Empowering the SEMPA Fisher Community through Ecotourism Development"	Association des Pecheurs du Parc Marin du Sud	Jun. 2009 – Jun. 2010	49,959	17,825	SEMPA
MAR/SGP/OP4/YR3/CORE/09/04 "Improving Management Effectiveness for the Marine Protected Areas of Rodrigues"	The Shoals Rodrigues Association (Shoals)	Jul. 2010 – May 2012	47,010	92,759	British High Commission in Mauritius, RECOMAP, Rodrigues Regional Assembly
MAR/SGP/OP5/Yr2/CORE/BD/13/07 "Alternative livelihoods and support for	The Shoals Rodrigues Association (Shoals)	Jun. 2013 – Oct. 2014	150,000	209,082	British High Commission in Mauritius, Chester Zoo, Decentralised Cooperation Programme Mauritius, ISLANDS - COI in Mauritius, Mauritius Research Council (MRC), Rodrigues Regional Assembly, Smartfish, The Deep Aquarium





GRANTEE
ECOVIC Tanzania



WATERBODY
Lake Victoria Basin



START DATE
January 2014



AMOUNT
US\$48,456

COFINANCING
US\$10,000

CASE 9

Sustainable Fisheries in Lake Victoria, Tanzania

PROJECT CONTEXT

Lake Victoria is Africa's largest inland fresh water sanctuary. It hosts more than 300 endemic fish species, produces more than 300,000 tons of fish, and supports domestic, artisanal and agricultural activities. **Lake Victoria's** fishing sector generates US\$ 300-400 million a year and provides a source of livelihood for three million people (Kayombo and Jorgensen, 2005). However, the lake is also a destination for local waste and sewage disposal.

The wetlands on the fringes of Lake Victoria are productive ecosystems, cleaning and regulating water systems while providing a home for aquatic plants and wildlife. The wetlands also provide raw materials for crafts and construction. The Basin of Lake Victoria contains a wide range of terrestrial ecosystems including rangelands, forests and farmland; and is host to many indigenous plants and animals, including the world's largest concentration of large mammals.

However, Lake Victoria is now considered a dying lake. Strong population growth has contributed to growing environmental degradation, resource conflict and poverty. This environmental deterioration significantly reduces the region's economic productivity, and produces US\$150 million in annual losses. Scientists estimate that about 500 fish species are now locally extinct in Lake Victoria. Factors that cause the slow demise of Lake Victoria include the following; (i) overfishing and illegal fishing, (ii) high levels of pollution, (iii) massive degradation of catchment areas and the shoreline, (iv) climate change.



PROJECT IMPLEMENTATION

The key objective of this project was to contribute to the restoration of Lake Victoria's ecosystem through the promotion of integrated aquaculture and natural resources management, using upscaling and replication approaches.

The project implemented by ECOVIC and supported by the GEF Small Grants Programme (SGP) implemented by UNDP, supported the replication and scaling up of the following key activities:

- Supported villagers in the development of on-land fish farming in order to get alternative sources of fish to reduce fishing pressure inside the Lake Victoria waters. This activity is integrated with crop farming and wetland conservation for sustainable development at the local level.
- Strengthen Beach Management Units (BMUs) to enforce law No. 22 of 2003, which prohibits illegal fishing and degradation of the shoreline. Under this law, fishing through the use of poison, beach seine, trawlers and fish nets with smaller holes are outlawed. This action aimed to prevent further degradation of the shoreline and fish breeding sites; as well as to rehabilitate degraded beaches.
- Establish Field Farmers Schools (FFSs) to train farmers, who live adjacent to the Lake Victoria shores, to refrain from using chemical fertilizers. Instead, farmers were trained to use organic fertilizers, reducing the high level of eutrophication.

In addition, local leaders and politicians were sensitized to make policy statements prohibiting practices that degrade Lake Victoria, and promoted integrated aquaculture including wider replication of on-land fish farming practices.



RESULTS AND SCALING UP

After two years of successful implementation, a critical mass of fish farmers at the level of individual farmers and groups totaling 140 are undertaking on-land fish farming practices. A total number of 125 on-land fish ponds have been established and replication continues. High level government leaders in two target districts have declared that on-land fish farming will be their top priority in terms of policies for the district. It will also be used as a strategy for increasing fish supply from outside the Lake. Councilors

from five Lake Victoria adjacent districts have conducted study visits to the projects with the idea of replicating the initiative in their respective districts.

There has been an increased awareness among local people about the need to keep the lake shores clean by refraining from polluting practices. Target communities have stopped bathing and defecating in the Lake. In addition, applications of chemical fertilizers in the Lake adjacent farms have also stopped. As a result, 60km of lake shores are free from land-based pollution. Two years of project operations have achieved an impressive catch of 60 tons of fish valued at \$836,500,000 Tanzanian shillings (US\$ 418,250). This has proved that the on-land fish farms can be effective sources of fish supply which may reduce fishing pressure in Lake Victoria. Furthermore, this achievement has also demonstrated that fish farms

can be a good source of income for local communities, when you consider the substantial income generated from the catch.

To minimize the long-held belief that harvested fish from ponds was not as tasty as fish caught from the Lake, a harvesting event to raise awareness was organized and the general public was invited. The event generated lots of interest and harvested fish was cooked so the general public could get a taste of the farmed fish. The huge catch from fish ponds and the good taste of fish generated attention among the local population, and all 20 participating farmers repeated the experience and held harvesting events in their respective villages. These events were enough to spark fish farming interest around Lake Victoria.

Men and Women demonstrate on how to fish (left) and fish harvested from one of the fish ponds (right)



A number of individual farmers and farmers groups expressed interest to replicate this project. The participating farmers who had been trained together with the District extension staff assisted early adopters. The early adopters were responsible for the costs of their fish ponds (since the project only covered for the materials of the demonstration fish farms, training of trainers and study visits for critical mass of facilitators). Today, two years on, there are 125 fish farms and the number is growing.

Integrated aquaculture and natural resource management has been adopted as a strategy for conservation of Lake Victoria and improvement of livelihoods in the two lake-side districts of Ukerewe and Magu. This policy position was announced on different occasions by District leaders of the two districts of Ukerewe and Magu. The District commissioners for Magu district pronounced this policy when launching one of the fish ponds, which was established as part of this project. The policy statement for Ukerewe district was communicated by the Chairperson of the District Council when district councilors visited one of the fish dams, which were also established under this project. These policy developments demonstrate that this project has helped to influence policies at the local government level.

EXPERIENCES AND LESSONS LEARNT

Scaling up was planned in order to address the challenges of illegal fishing, pollution, degradation of Lake shores and destruction of fish breeding nurseries, which are found everywhere within Lake Victoria. Therefore, scaling up was aimed at creating a lake-wide impact by using a two-step approach. The first step was to scale up to cover the Tanzanian side of the Lake. The second step was to spread the replication to cover the rest of East Africa, which will bring the project results to a trans-boundary scale.

Local government support was critical to the success of the project. Local government authorities provided space for the project to be implemented after there was common agreement that Lake Victoria was facing serious degradation challenges. They also assigned government experts to SGP during project implementation. This was critical because the project was premised on highly scientific grounds. For replication to take effect, strong local institutions should exist. In this regard, the project provided training in group dynamics to strengthen NGOs, CBOs, and Beach Management Units (BMUs) that participated in the project.

Upscaling happens usually when there are good foundational activities developed over a long time. This project is built upon the experience of a previous inter-agency World Bank led GEF funded project, the Nile Transboundary Environmental Action Project's (NTEAP) Micro Grants Program (MGP). During 2004-2008, UNDP in collaboration with the World Bank and the GEF implemented the MGP in the Nile Basin, which included the Lake Victoria Basin. SGP helped to implement on-the-ground activities under the MGP. Results from this MGP included the integrated aquaculture and natural resource management activities, which provided proven working models and set up the foundational capacity for the scaling up continued by SGP. Therefore, the scaling up was planned and expected to adoption following its earlier success through the Micro Grants Program of the NTEAP.

CASE 10

Communities Management of Marine Protected Areas, Turkey



GRANTEE
Underwater Research Society (SAD)



WATERBODY
Mediterranean Sea Large
Marine Ecosystem



PROJECT DURATION
May 2009 – July 2010



AMOUNT | **COFINANCING**
US\$25,000 | US\$46,887



PROJECT CONTEXT

The Mediterranean Sea, one of the most distinctive enclosed temperate seas recognized in the list of Global Ecoregions produced by the World Wildlife Fund-WWF, is also home to many marine species listed in Red Data Book of IUCN. In May 2008, the Centre for Advanced Studies of Blanes (CEAB) and the Underwater Research Society observed that most of the shallow subtidal macrophytes habitats in the Mediterranean Sea had disappeared affecting hundreds of different species of fishes and invertebrates.

Gökova Bay is one of the most remarkable marine and coastal areas in the Aegean Sea which was designated in 1988 as one of 15 Special Environmental Protected Areas (SEPA) in Turkey, according it ca ritical protection status that requires management plans and coordination among many stakeholders. The bay is home to numerous protected species such as the critically endangered Mediterranean monk seals and sandbar sharks. The ongoing depletion of fish stocks has had a significant impact on the local economy and on the 200 small-scale fishers who depend on the bay for their livelihoods. In particular, over the last 10 years the white grouper – *Ephinephalus aeneus* – had a sharp

decline from 50 kg/year to almost 0 kg/year affecting local fishermen for which this specie represented 70% of their income as it has the highest economic value in the market.

PROJECT IMPLEMENTATION

In order to restore the marine ecosystem, promote sustainable development and improve the livelihoods of local fishers, the Underwater Research Society (SAD), with the support of the GEF Small Grants Programme (SGP) implemented by UNDP, started a project aimed at creating a network of “No Fishing Zones” (NFZ). To achieve this goal, SGP and SAD conducted several awareness raising campaigns, meetings and consultations with the government, local fishers, and other key stakeholders who – at first – were not keen on changing the status of the marine ecosystem.

The Underwater Research Society also organized dialogues between local authorities and NGO leaders around the importance of creating designated protected areas, and conducted high level meetings to advocate for this policy change with government authorities at the national level. To support this effort, SGP Turkey provided technical data and analysis of the results of other SGP projects in the area and helped prepare the official request for the conservation status of the area with the government.

Small scale fisheries and dive centers also contributed to the studies and joined the meetings with the Turkish Environmental Protection Agency for Special Areas (EPASA), the Nature Protection and National Parks General Directorate (NPNPGD), the Turkish Ministry of Agriculture and Rural Affairs (MARA) and SAD in the preparation of integrated marine conservation management plans in the project areas.

In May 2010, the project team participated in a conference organized by The Mediterranean Science Commission in Italy to exchange lessons learned. This encounter was



instrumental in developing a network of advisers and supporters of the initiative that also contributed their research on marine and coastal protection in support of the NTFZ.

RESULTS AND SCALING UP

All the advocacy efforts undertaken with direct community involvement contributed to the designation of the first six no-fishing zones in Turkey. These no fishing zones cover almost 150 km² of marine and coastal areas. Another important result of this initiative was the introduction of a model for marine patrols to be carried out by the local community and developed in close cooperation with the Coast Guard and Fisheries and Aquaculture Departments.



Gökova Bay has one of the highest numbers of fisherwomen in Turkey. These women usually get involved by accompanying their fathers or husbands to fish and are critical in running the business. However, they are usually invisible as men are the ones who belong to the fishing cooperatives. To empower the fisherwomen, SGP carried out capacity development activities to help them get directly involved in the decision-making processes.

To sustain these efforts and expand the conservation activities in the Mediterranean, in August 2012, the project team created a new NGO called the 'Mediterranean Conservation Society' (MCS). It was after the creation of the MCS that a "Community Conservation Marine Ranger Project" was started to control illegal fishing in the area. This initiative was aimed at mitigating the economic impacts on the livelihoods of the fisher folks caused by the introduction of a new conservation designation and to help the government ensure the protection of the NFZs. As a result, the community was engaged in monitoring and law enforcement efforts against illegal fishing by involving local fishermen as volunteer rangers. Nowadays, these community rangers are patrolling the NFZs in cooperation with Coast Guards and other government officials and are considered very effective in the enforcement and monitoring of the marine protected areas by governmental bodies such as the Coast Guard and the General Director for Fisheries and Aquaculture. Currently, MCS is working towards a proposal for legislative change to allow these NGO and community driven ranger structures to operate nation-wide.

In terms of replication, four new NFZs, in addition to the first six, have been officially designated and commemorated with official events. Furthermore, in 2010, the results of this SGP project were integrated in a UNDP/GEF Full Size Project called "Strengthening the Protected Area Network of Turkey: Catalyzing Sustainability of Marine and Coastal Protected

To date, the impact of these marine conservation zones and patrolling activities in Gökova Bay have improved the overall health of the ecosystem and increased the fishing stock, as well as income of the local fishing folks and cooperatives. In particular, the protection of the endangered sandbar sharks has improved due to the establishment of a protected area in Boncuk Cove, their main breeding site in the Mediterranean. To further reduce the pressure on the ecosystem and help provide livelihoods for the local population, the project introduced fishing tourism.

Areas". Through the collaboration between the SGP project and the Full Size project, local communities in the Datça-Bozburun and the Gökova branch of the Environmental Protection Agency for Special Areas are retrieving ghost fishing nets located in no fishing zones of Gökova. The experience of community based environmental management in Gökova Bay provides a model for the other 14 Special Environmental Protected Areas, most of which are located in marine and coastal areas, to replicate.

In May 2013, the Mediterranean Conservation Society (MCS), received the Whitley Award, also known as the "Green Oscar", a prestigious international nature conservation prize, in recognition of their efforts in effectively involving local fishers in the control of the no-fishing zones in the Gökova Special Environmental Protection Area in Turkey. In his speech while accepting the prize, Mr. Zafer Kızılkaya, the Chief Executive Officer of MCS, said: "Today over 200 fishermen and fisherwoman earn their livelihood in Gokova Bay. Thorough our many years of efforts, we developed a community based model to conserve Turkey's first 6 No Fishing Zones and in a few years' time, we can see the benefits in social and economic terms of No Fishing Zones together with the local communities which is a treasure for us."

MCS has continued the important work initiated in Gökova Bay and has worked to promote environmental policy change. Their effects have been recognized at the international level through the prestigious Equator Prize in 2014, and a second Whitley Award in 2015.

EXPERIENCES AND LESSONS LEARNED

One of the key lessons was that community involvement from day one is fundamental in creating policy change and long lasting conservation efforts. At the beginning, the fishing cooperatives and other key stakeholders, including the government were hesitant to the idea of creating

a NFZ and it was after years of continuing involvement at the local level and working to gain their trust that they became strong advocates of the initiative.

Another lesson was the importance of building networks and alliances with key partners as part of the project. Without these partners and their research and advocacy contributions the legislation would probably not have passed or would have taken more time to develop.





CONCLUSIONS

EXPERIENCES AND LESSONS LEARNT

SGP experiences show that scaling up takes different forms, and the pathways and mechanisms to achieve broader adoption of results vary. There is no single approach and every success has its own story of how the impact of the project was extended and achieved scalability. While some ideas spread or were adopted organically, in the majority of cases scaling up of community efforts took planning, nurturing, mobilization of alliances and partnerships, as well as systematic follow-up.

Each of the ten cases presented in this publication offer unique and specific experiences and lessons learnt on community based actions and their results impacting on the management of international waters, Yet there are some broad themes that recur in multiple cases, including the following: 1) community work needs to be “nurtured” in order to achieve sustainable results; 2) achieving and sustaining results requires time; 3) barrier removal and creation of an enabling environment are essential for scaling up; 4) partnerships increase the impact of the project and are key to scaling up; 5) creative and adaptive replication may be an effective way of extending the reach of community efforts related to environmental management and sustainable development.

COMMUNITY WORK NEEDS TO BE “NURTURED” IN ORDER TO ACHIEVE SUSTAINABLE RESULTS

SGP often works in poor and vulnerable communities with limited capacity and resources. To achieve sustainable results, project proponents and partners should have a vision from the beginning (to address a predominant or critical issue); promote innovation and experimentation; create a critical mass for accumulation of successes; offer continuous and long-term funding; and promote partnerships and networking (Hartmann and Linn, 2008).

In Mauritius, over the past fifteen years, SGP supported eight projects including one strategic project of \$150,000 to promote integrated coastal and fisheries management to set up the foundational capacity and create the enabling environment for the establishment of four marine reserves. The Rodrigues experience demonstrated that continued combined efforts of the Rodrigues Regional Assembly, conservation NGOs and stakeholder groups fostered the gradual development and evolution of community conservation around the island. One-off short-term development aid may create temporary results or remain localized in a limited area. Continuous investment with perseverance, communicating achievements and promoting outreach, leads to long-term and expanded results.

ACHIEVING AND SUSTAINING RESULTS REQUIRES INVESTMENT OF TIME

Achieving and sustaining results involves transforming stakeholder’s perspectives and mind-sets towards sustainable development as a first step. Scaling up takes time from the initial foundational stage at the community level to results at large scale beyond originally targeted communities. Time needed for such transformation is often not warranted by the specific and defined time-frames of development projects. On average, each SGP project runs 18-36 months, which is a very short timeframe in comparison to the time needed to change people’s attitudes and behaviours. From the experiences of SGP, it seems that the scaling up process generated from grassroots actions takes up to a decade and sometimes more. However as the cases in this publication show, such bottom up approaches can be more deeply rooted and more likely to be sustainable because of the broad base of support generated in this process. The cases in this publication show that often SGP has continued supporting a community for a long time,



programmatic approach to coordinate and expand the funding over a long time period proves to be an effective development process. In this regard SGP provides the initial seed money to test an idea and remove initial barriers to adoption. The flexible grant making structure of SGP enables continuing support for further efforts in the direction taken as well as the ability to address expanded objectives over time to promote scaling up and out, removal of barriers and policy change.

This programmatic approach requires a systematic strategy for how to scale up a basic set of institutional values and incentives, and ensure that key actors are continuously searching for ways to build on successful interventions to see that they are replicated, expanded, transferred to and adapted in other settings. SGP's country programme strategies often provide the framework for further strategic attention to a priority theme and its scaling up over an operational phase or several phases. Development work should not merely support short-lived, one-time and partial development interventions (Hartmann and Linn, 2005). Instead, then a programmatic approach that starts with some small interventions to pilot and test the approaches, and then should be complemented with comprehensive development solutions that address environment and development challenges holistically.

BARRIER REMOVAL AND CREATION OF AN ENABLING ENVIRONMENT ARE ESSENTIAL FOR SCALING UP

Introducing a new idea or an alternative way of managing natural resources can inevitably encounter resistance as people have the natural tendency to stick to their long-formed behaviours and attitudes. Barriers for scaling up include lack of understanding about environmental impacts, and interdependence of natural resource management issues. Coupled with low awareness, lack of capacity, inadequate funding or insufficient policy support are also key barriers. In Malaysia, local fishermen originally believed that the turtle excluder devices would allow fish to escape from the net, hence reducing the overall catch of

building up the experiences and learning over time, or contributed to the expansion of what the community achieved with the support of other donors.

This long time horizon poses great challenges to development efforts as donors may shift priorities, governments change, funding decisions may be based on short term horizons, and managers and staff turnover may result in loss of continuity (Hartmann and Linn, 2008). The long time horizon requires that scaling up efforts are planned, fostered and promoted consistently and systematically, not as a short-term effort. Experiences with successful scaling up programmes have shown the importance of long-term commitment of institutions, donors and individuals (Hartmann and Linn, 2008). A

their fisheries activities. Through numerous demonstration and testing activities, local fishermen were convinced of the effectiveness of the use of the devices in both saving turtles and maintaining the fish catch. To support the establishment of Tun Mustapha Park and the preparedness of local communities for the park, SGP supported four projects working on conservation of marine turtles, patrolling, capacity development and creation of alternative livelihoods. These projects worked on removing barriers to the establishment of Tun Mustapha Park, and contributed eventually to effective management of the park.

In Lake Victoria, local people believed that farmed fish did not taste as good as wild caught fish from the lake. To overcome this sales barrier, the project organized a fish festival in which different ways of cooking of fish were demonstrated and shared to promote the greater adoption of farmed fish. The success of the project builds on prior experiences of the World Bank led GEF funded Nile Transboundary Environmental Action Project's Micro Grants Programme (MGP) in Nile River, which was implemented through the SGP. The MGP programme worked on developing local capacity, tested the models and removed other barriers for the scaling up by SGP project.

Finally, in the case of Belize, land access became a key barrier to scaling up. The grantee partner was only able to negotiate for a land lease to conduct sustainable seaweed farming on a short-term lease arrangement. This would have posed risks to the sustainability of the production. However, the SGP grantee partner is working with the government and other partners to find solutions to remove this barrier.

PARTNERSHIPS INCREASE THE IMPACT OF THE PROJECT AND ARE KEY TO SCALING UP

In SGP's experience, partnerships play a crucial role in expanding service delivery, increasing financing and/or providing policy support for stewardship. In all the ten cases, civil society organizations and communities did not work alone, instead working with a web of actors and stakeholders from local to national levels. To facilitate the dynamic interactions, flexibility, and adaptive engagement are key to successful community engagement and consultation. Communities' prior informed consent was fundamental to the approach to ensure sustainable buy-in and ownership of the project. This has further emphasized the need for flexibility with time and for the activities to be implemented in an effective way through involvement of multiple donors and partners. In the long-run, this manner



of approach ensures that the communities involved will have a large support network and absorb experience and expertise from different partners.

In Cape Verde, the underwater trail, developed in May of 2009 in Baía das Gatas, was the result of an initial partnership between WWF Cape Verde, WWF Germany, and the German Agency for Nature Conservation. This was an effort to promote ecotourism to reduce fishing pressure and enhance local communities' livelihoods. In 2010, SGP joined the effort and supported a project to further develop the underwater trail and continued the work to promote trail. After the completion of the SGP project, the European Union got involved to sustain the initiative and committed to providing 500,000 Euros to further scale up the work.

Such combined and sequenced funding from multiple development donors ensured the continuity of efforts with a common aim from an early stage of community involvement to a broader scale initiative.

In Belitung, Indonesia, the local Belitung Coastal Community Group (BCCG) has managed to scale up the application of their innovative island conservation model by engaging local government and mobilizing additional stakeholders for further support. The success of their efforts brought greater attention, such as through inclusion in the Strategic Development Plan (Renstra) of the district and by linking as a prominent part of the annual Sail Indonesia agenda. Since 2006, BCCG has been advocating the local government bodies and the Ministry of Marine Fisheries to declare Tanjung Binga as a Coastal and Small Islands Conservation Zone (KKP3K). This continuous effort took years and involved multiple stakeholders until the resolution was finally adopted on April 1st, 2011 during the celebration of National Coral Day that took place in Belitung. BCCG was also called upon to expand their experience to other islands and areas.

CREATIVE AND ADAPTIVE REPLICATION MAY BE AN EFFECTIVE WAY OF EXTENDING THE REACH OF COMMUNITY EFFORTS

A decision to scale up a project requires a reflection on the optimal size of the intended intervention. Scale has its limit too. Could a project, programme or policy operate on a local, provincial or national scale? Considerations about desirable size are particularly important for community-based projects managed by local people and based on participatory processes. Because these projects are highly contextual and depend on the trust and processes established in a community, the scope for expansion might be limited initially. Replication often occurs organically where the context is similar, and keeps the size and complexity of interventions manageable for each initiative by communities. However, creative and adaptive ways of extending the experience and communicating the results



of projects can further broaden the scope for replication to occur over geographical areas, as well as over time and at different scales.

In Malaysia's turtle excluder device project, activities were replicated and expanded from port to port and State to State, using processes developed during SGP-funded Phases I and II of the project. In collaboration with Department of Fisheries, the project developed a replicable system with the use of standard printed and electronic documentation which was disseminated in many national workshops to facilitate replication across the country. In the case of Tianchi Nature Reserve project in Yunnan, China, the entire SGP modality was adopted and replicated by another development donor funded programme (McArthur Foundation fund). SGP's basic principles, rules and procedures have been transferred to a program funded by another donor, but with adaption for context-specific decisions and interactions among community members.

SGP'S NICHE

SGP's experience in many of these case studies shows the reliance on its unique country driven structure that allowed for persistent efforts to take root, sometimes spanning a decade or more to bring results to scale. Similarly SGP's close engagement with civil society and ability to leverage CSO's drive and commitment have played a critical role in this longer term and continuous focus on key themes that have been scaled up. SGP was able to foster the convergence of different partners' efforts towards a common goal, which also contributed to addressing the complex and multi-sectoral problems in an integrated way to support barrier removal and creation of an enabling environment in many cases. Finally the presence and supportive pathways provided by SGP's in-country teams, national steering committees, and wider networks, resulted in provision of continuous support to offer not only funding, but also technical assistance, advice, resource mobilization and establishment of crucial linkages and networks needed to sustain efforts and foster the scaling up.



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ACRONYMS

BCCG	Belitung Coastal Community Group
BMU	Beach Management Units
BZ\$	Belize dollar
CBO	Community-based organization
CEAB	Centre for Advanced Studies of Blanes
CERAI	Centro de Estudios Rurales y de Agricultura Internacional
CIS	Commonwealth of Independent States
CITMA	Ministerio de Ciencia, Tecnología y Medio Ambiente (Cuba)
COMPACT	Community Management of Protected Areas Conservation
COSPE	Cooperazione per Sviluppo Paesi Emergenti
DOFM	Department of Fisheries Malaysia
EPASA	Environmental Protection Agency for Special Areas (Turkey)
EPMU	Economic Planning and Monitoring Unit (Mauritius)
FAO	Food and Agriculture Organization of the United Nations
FFS	Field Farmers Schools
GEF	Global Environment Facility
GEF-6	Sixth Operational Phase of the GEF
HA	Hectares
IOC	Indian Ocean Commission
IOSEA	Indian Ocean – South East Asian
IUCN	International Union for Conservation of Nature
IW	International waters
GEF IWECO	Integrating Water, Land and Ecosystem Management in Caribbean Small Island Developing States
KKP3K	Coastal and Small Islands Conservation Zone
KPLB	Kelompok Pemuda Lingkungan Belitung
MARA	Ministry of Agriculture and Rural Affairs (Turkey)
MCS	Mediterranean Conservation Society
MGP	Micro Grants Program
MOU	Memorandum of understanding
MPA	Marine protected area
MRF	Marine Research Foundation
NFZ	No Fishing Zone
NGO	Non-governmental organization
NOAA	National Oceanic and Atmospheric Administration (U.S.)

NPMPGD	Nature Protection and National Parks General Directorate (Turkey)
PACT	Protected Areas Conservation Trust
PEMSEA	Partnerships in Environmental Management for the Seas of East Asia
PPCSL	Placencia Producers Cooperative Society Ltd.
RENSTRA	Strategic Development Plan (Indonesia)
RRA	Rodrigues Regional Assembly
SAD	Underwater Research Society (Turkey)
SAP	Strategic Action Programme
SEPA	Special Environmental Protected Area
SGP	Small Grants Programme
SGP IW	Small Grants Programme International Waters
SSME	Sula-Sulawesi Marine Ecoregion
TED	Turtle excluder device
TMP	Tun Mustapha Park
TMPCCG	Tun Mustapha Park Community Conservation Group
UK	United Kingdom
UN	United Nations
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
US	United States
US\$	United States Dollar
WRI	World Resources Institute
WWF	World Wildlife Fund



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LIST OF PROJECTS

BELIZE BARRIER REEF, BELIZE

- Sustainable and Environmentally Responsible Production of Seaweed (Euchuma isoforme and Gracelaria spp) in the marine areas adjacent to Placencia Village
- Expanding Sustainable and Environmentally Responsible Production of Seaweed (Euchuma Isoforme and Gracelaria spp) into the Gladden Spit and Silk Cayes Marine Reserve

SÃO VICENTE ISLAND, CAPE VERDE

- Development of the Salamansa community through an eco-touristic initiative

PLAYA FLORIDA, CUBA

- Playa Florida community to the rescue of its mangrove ecosystem

TIANCHI, CHINA

- Demonstration Project on Community-based Protection of Water Conservation Forest in Lancangjiang-Mekong River Basin

BELITUNG, INDONESIA

- Improving Coastal Community's Living Standard Through Environmental Friendly and Sustainable Management and Usage of Coral Reef Ecosystem
- "From Ridge To Reef" : The totality of Mangrove Forest Management Strategy in Selat Nasik Island, as efforts to Integrating and sustaining the Ecosystems Management of the Islands and Its Life Resources

SANDAKAN, SABAH, MALAYSIA

- Promoting an ecosystem-based approach to fisheries via Turtle Excluder Devices in Malaysia

TUN MUSTAPHA PARK, SABAH, MALAYSIA

- Please refer to page 41 for a list of the SGP projects related to this case study

RODRIGUES, MAURITIUS

- Please refer to page 46 for a list of the SGP projects related to this case study

LAKE VICTORIA, TANZANIA

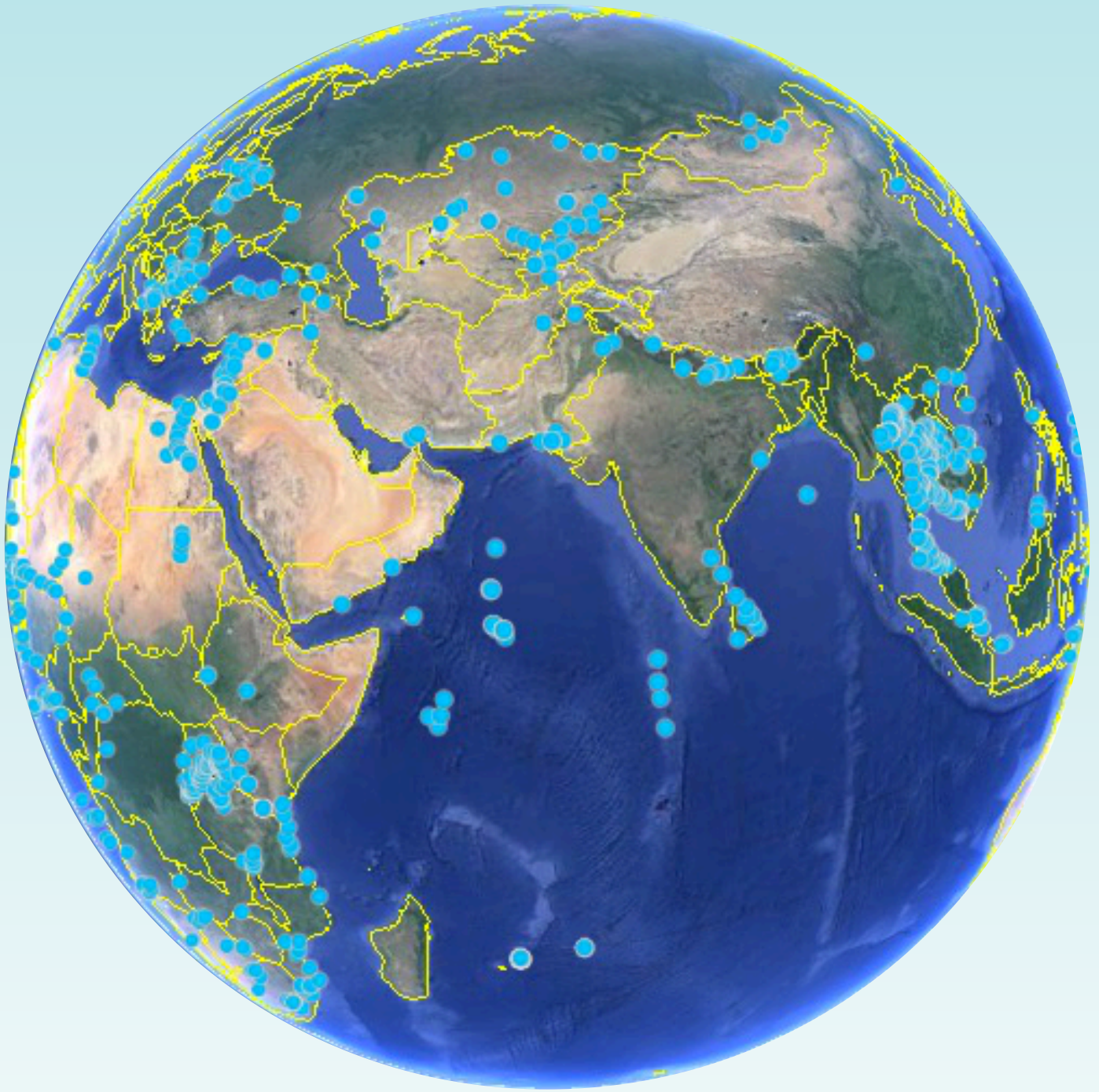
- Promotion of integrated aquaculture and natural resources management for restoring Lake Victoria environmental health, poverty reduction and household food security

GOKOVA BAY, TURKEY

- Rehabilitation of East Mediterranean Algae and Ecosystem via Creating a 'No Take Zone' in Gökova







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