

SGP The GEF
Small Grants
Programme



*Empowered lives.
Resilient nations.*

A woman in traditional, colorful attire is seen from the back, carrying a large basket of harvested crops on her head. She stands in a field of tall grass, looking out over a vast landscape of rolling hills and mountains under a dramatic sunset sky. The sun is low on the horizon, casting a warm, golden glow over the scene.

WOMEN

AS ENVIRONMENTAL STEWARDS:
THE EXPERIENCE OF THE SMALL GRANTS PROGRAMME

Contents

Foreword	2
Message from the Global Manager	4
Introduction	6
Biodiversity	11
Armenia: Preserving threatened species of wild berries	12
China: Saving the Asian honey bee while empowering women	16
Morocco: Medicinal and aromatic plants are conserved by rural women	20
Peru: Recovering native species of cotton using traditional knowledge	24
Climate Change	30
Uganda: Promoting energy efficient cookstoves and sustainable agriculture	31
Mauritius: Pioneering clean energy and protecting biodiversity	36
Land Degradation	40
Paraguay: Preventing land degradation through agro-forestry	41
Colombia: Conserving molluscs and mangroves	46
India: Mountain bounties prevent land degradation in India	50
International Waters	54
Belize: Conserving corals, maintaining mangroves and increasing resilience	55
The Gambia: Oyster harvesting and wetland conservation	60
Turkey: Empowering women fishers in Turkey	64
Chemicals and Waste Management	68
Viet Nam: Revolutionizing waste management in Hoi An City	69
Lessons learned	73
Conclusions	74

Foreword



Adriana Dinu



Françoise Clottes

Women in developing countries are often the first responders in natural resource management. From collecting water for cooking and cleaning, using land for farming and livestock, gathering food in rivers and on the reef, and collecting fuel in the form of firewood or dung, women all over the globe use and interact with natural resources and ecosystems on a daily basis. They are often the first to notice when deforestation or drought sends them farther afield for firewood and water, or when the reef yields less and less seafood.

Yet gender inequality and social exclusion continue to increase the negative effects of unsustainable and destructive environmental management on women and girls. Persistent gender-discriminatory social and cultural norms such as unequal access to land, water and productive assets, and decision-making persist, despite recent promising policy reforms. Discrimination against women and girls continue to constrain women from equally participating in, contributing to, and benefiting from sustainable natural resource management, as well as sustainable development.

In this publication, the GEF Small Grants Programme, implemented by UNDP, features women as environmental stewards in case studies about biodiversity conservation, climate change, land degradation, international waters and chemicals and waste management. These examples show action from the ground up and demonstrate the importance of investing in women's leadership and technical skills for improved environmental benefits and sustainable development, while challenging traditional gender norms that often prevent women from taking leadership roles or from having access and control over the natural resources they help preserve.

For example, in Colombia and Gambia, a reduction in the amount of molluscs available for harvest led women to change their harvesting practices, protect mangroves, and become leaders in sustainable natural resource management in their communities. In Peru, women were able to revive nearly extinct native varieties of cotton and are now national experts in the field. In Viet Nam, women waste pickers developed a waste management system for Hoi An that transformed the sector and is being scaled up by other municipalities.

These thirteen practical examples of women led projects provide evidence that investing in women pays off not just in producing global environmental benefits and sustainable development, but also by improving the wellbeing and sustainable practices of the communities they live in.

We hope these examples will inspire further innovation from the local to the global level, support the implementation of the GEF's new Policy on Gender Equality and the UNDP Gender Strategy, and boost interest in and resources for gender equality and women empowerment. We also hope that these examples will help contribute to achieve not only the Sustainable Development Goal 5 on Gender Equality but all the others that benefit when women are empowered and have equal opportunities to contribute to society. These stories demonstrate that when women are empowered and have equal opportunities to contribute to sustainable development, it leads to concrete benefits for people and planet.



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



Françoise Clottes
Director, GEPP

Message of the Global Manager



Gender equality is a fundamental human right and an important prerequisite for environmental conservation and the successful implementation of multilateral environmental agreements and the 2030 Agenda for Sustainable Development.

The GEF Small Grants Programme (SGP), implemented by UNDP, is committed to social inclusion in its work, with a special emphasis on gender equality and women's empowerment. SGP has been proactively working for years to ensure its projects are gender responsive and promote women's leadership and participation. As such, of the 3,182 projects completed between July 2014 and June 2018, 29 percent were led by women.

The 13 projects highlighted in this publication, ranging from women's groups engaged in sustainable oyster harvesting in the Gambia to the conservation of medicinal plants in Morocco, provide concrete cases showing that investing in women is not only good for the environment, but also contributes to sustainable development of their communities. The recent evaluation conducted by the GEF Independent Evaluation Office also recognized the concrete contribution of the SGP in supporting gender equality and women's empowerment.

SGP uses two complementary approaches to achieve its gender equality and women's empowerment objectives. It mainstreams gender in projects by using various mechanisms, including gender analysis, to ensure that its portfolio addresses the needs of both men and women and consequently both benefit from project results. SGP also carries out projects that specifically target and empower women, including actively promoting women-led projects and supporting the development of women's leadership.

I hope the examples in this publication inspire local communities and partners to invest in women as a path towards improved global environment and sustainable development. Together with partners at the global, national and local levels, and in line with GEF and UNDP policies on gender equality, SGP will further enhance its work and contribute to gender equality and women's empowerment by promoting innovation and focusing on results.


Yoko Watanabe
Global Manager
GEF Small Grants Programme





Introduction

Gender equality and women's empowerment are critical objectives of the Small Grants Programme (SGP) at the global and local levels. Women make up half of the world's population and are fundamental to the achievement of global environmental benefits and the Sustainable Development Goals. As primary caretakers of households and communities, women have highly specialized and valuable knowledge for the conservation and management of natural resources. At the same time, they are often the most impacted by environmental degradation and climate-related events. At its core, SGP believes that women are important agents of change and should be meaningfully involved in environmental programming.

This publication is based on years of experience promoting gender equality and women's empowerment. It is an effort to document good practices featuring women as environmental stewards and focuses exclusively on projects led and implemented by women. Information on gender mainstreaming in SGP projects is available in other publications.

The compendium is the result of a portfolio review of projects supported by SGP, financed by the Global Environment Facility (GEF) and implemented by the United Nations Development Programme (UNDP). Examples were selected from projects reported by the SGP country programmes in the annual monitoring reports and other

projects recommended by staff, with priority given to projects that have won awards, or whose practices have been scaled up, replicated or influenced policy. The selection also ensures that all focal areas and regions in which SGP works were included.

The publication is divided by chapters featuring examples under each GEF focal area, namely biodiversity, climate change, land degradation, international waters and chemicals and waste.

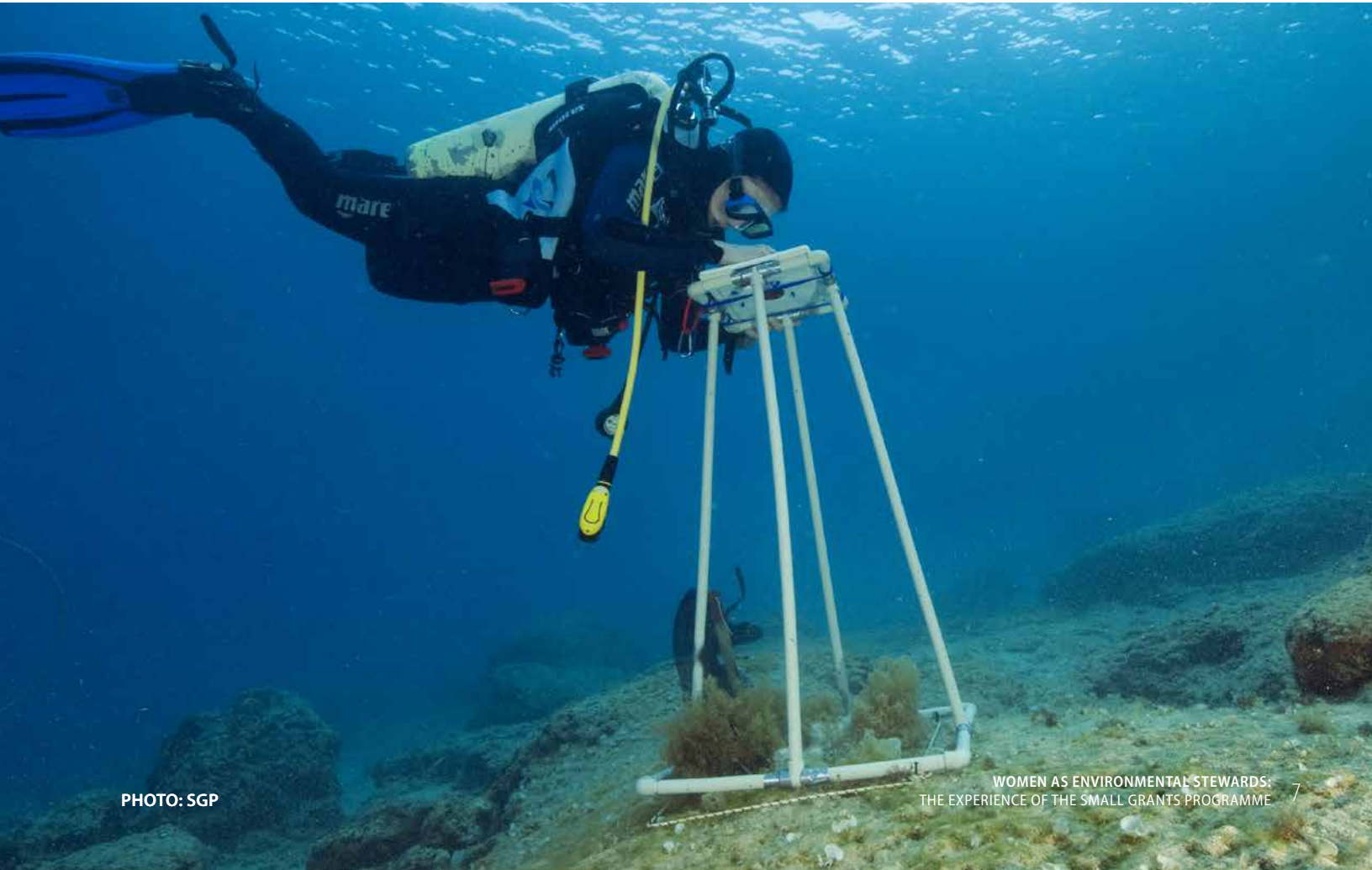
SGP has always been ahead of the curve when considering gender issues and has mainstreamed gender consideration in its portfolio since 2006. These strong foundations keep SGP firmly on the map of gender equality and it reviews and updates its gender strategy to contribute to the GEF and UNDP strategies.

In November 2017, during the 53rd GEF Council Meeting, the Council approved a new Policy on Gender Equality¹. The policy introduces new principles and requirements to mainstream gender in the design, implementation and evaluation of GEF projects and programmes.

It marks a distinct shift in the facility's approach to gender mainstreaming from a gender-aware do-no-harm to a gender-responsive do-good approach to ensure that GEF more strategically seizes opportunities to address gender gaps critical to the achievement of global environmental benefits.

Similarly the new UNDP gender equality strategy, 2018-2021 specifies specific outcomes for mainstreaming gender equality throughout all areas of work of the organization, focusing on four key priority areas: removing structural barriers to women's economic empowerment, including women's disproportionate burden of unpaid work; preventing and responding to gender-based violence; promoting women's participation and leadership in all forms of decision-making; and strengthening gender-responsive strategies in crises (conflicts and disaster) prevention, preparedness and recovery.

To achieve its gender equality and women's empowerment objectives, SGP uses two complementary approaches. First, it mainstreams gender at the project, national and global levels, using various mechanisms



to ensure its portfolio addresses the needs of both men and women and consequently, both benefit from the results of the projects. Some of the mechanisms used by SGP include the requirement to include a section on gender in the project proposal template where potential grantees analyse and explain the roles of both women and men in the community and in the project, and how the project will benefit them both.

SGP requires a section on gender in the Country Programme Strategies, the key documents outlining what SGP aims to achieve with its grantmaking and other services for each operational phase in each country. In addition, every National Steering Committee, the voluntary and multisectoral bodies in charge of decision-making about which projects will be supported at the country level, has a gender focal point that ensures selected

projects include and respond to gender considerations. SGP has produced a checklist to help these committees review projects with a gender lens.

The second approach used by SGP is to carry out programmes and projects that specifically target and empower women by offering them access to financial and technical resources. Activities to promote women's empowerment focus primarily on capacity-building including technical training, increasing financial access, ownership and control over natural resources, and improved livelihoods. SGP also actively promotes women-led projects and the inclusion of women in the leadership teams of the projects and organizations. Box 1 synthesizes SGP's guidelines to mainstream gender in its portfolio.

BOX 1. GUIDELINES FOR GENDER MAINSTREAMING AND WOMEN EMPOWERMENT IN SGP

- Gender is one of the main criteria considered for the approval of grants.
- Promotion of gender mainstreaming at the earliest stages of the project cycle starting with carrying gender analysis where men and women analyse their roles in the community and project, and participate in project conception, approval, implementation and monitoring. This helps minimize conflict among different stakeholders during and after the project cycle with respect to roles in project activities and sharing of project benefits.
- Document the contribution of women to project activities in key areas where women already figure prominently (e.g., biodiversity management, in situ conservation of agrobiodiversity, conservation of medicinal plants, etc.). This contributes significantly to enhanced integration of gender considerations in current and future projects.
- SGP National Steering Committees employ a checklist and criteria to assess and screen projects for how they mainstream gender. Moreover, some SGP countries have developed gender guidelines to mainstream gender into the project cycle.
- SGP's demand-driven approach at the local level increases the likelihood of receiving proposals from women and marginalized groups.
- SGP holds "proposal writing workshops" and accepts project proposals in local languages and even in oral formats through participatory video proposals. Thus encouraging maximum participation by women, indigenous peoples and youth.
- SGP encourages women stand-alone projects in line with the GEF focal areas.
- Grantees are encouraged to participate in the global peer-learning network.
- Field evaluation, including monitoring and evaluation and participatory appraisals, incorporates gender-based indicators to track the status of gender mainstreaming in projects.
- Gender-focused training and sensitization workshops are provided for National Coordinators at the regional level and for grantees at the national level.
- National Steering Committees—a voluntary body that makes all decisions on grant making—are required to include a gender specialist.
- National Coordinators performance is explicitly assessed with respect to results achieved in promotion of gender equality and women's empowerment.



Other mechanisms used by SGP country programmes to improve gender equality and women’s empowerment include partnering with national gender organizations, supporting the networking and creation of women’s organizations at the national level, connecting women’s groups with regional and global networks, and producing knowledge and guidance materials. Box 2 below shows the number of countries using these strategies as per last year’s Annual Monitoring Report.

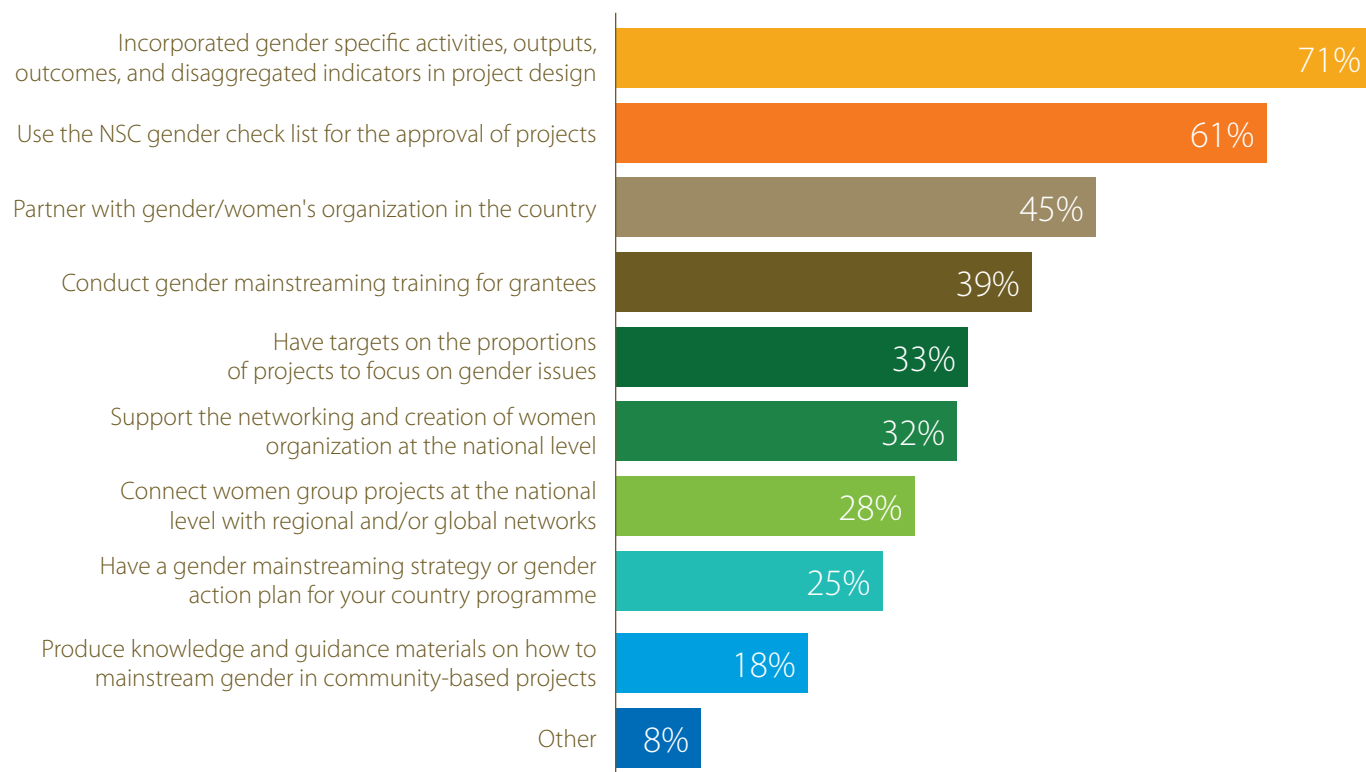
These efforts have led to concrete results. The **2nd Joint GEF-UNDP independent Evaluation of the Small Grants Programme**² aimed at responding to the question: does the SGP contribute to gender equality and women’s empowerment? To answer that question the evaluation team hired a gender specialist to look at gender issues in depth and the findings were included at length. One main finding of the evaluation is that “actual results on the ground in terms of promoting gender equality and contributing to gender empowerment are evident. Of the 103 grant projects that were assessed with respect to gender, more than half were found to have benefited women and men equally, or to have disproportionately benefited women. Many other

projects benefited women, although not to the same extent as men. These benefits to women take different forms—for example, access to microcredit, increases in income, greater livelihood security, access to water and energy, or time savings from a new technology.”

Other findings include increases in women’s empowerment with women in “new leadership roles in projects, which subsequently extended to their greater participation in other community activities, including decision making.” In addition, 60 percent of the national stakeholders interviewed by the evaluation found the SGP selection process includes consideration of gender equality to a great extent, 47 percent of grants have effectively contributed to gender equality and women’s empowerment, and national coordinators and national steering committees are perceived to have gender expertise.

Furthermore, according to the cumulative results of the SGP annual monitoring reports in the last three years, 31 percent of the SGP portfolio of active projects were led by women and 89 percent of completed projects were gender responsive.

BOX 2. SGP MECHANISMS TO IMPROVE GENDER EQUALITY AND WOMEN’S EMPOWERMENT



² 2015, UNDP, JOINT GEF-UNDP EVALUATION OF THE SMALL GRANTS PROGRAMME, <http://web.undp.org/evaluation/evaluations/thematic/sgp.shtml>

BIODIVERSITY





ARMENIA

Preserving threatened species of wild berries



GRANTEE

Berd Women's Resource Center Foundation



LOCATION

Berd, Tavush, Republic of Armenia



BACKGROUND

Located 1,200m above sea level in the north-eastern mountainous region of Tavush, Armenia, the town of Berd encompasses 16 rural communities and is unique for its fertile land. For many years, local women have been engaged in harvesting wild berries and herbs to use for food and medicine, and to generate an income. The Tavush region has the highest rates of unemployment among local women in Armenia. Additionally, the post-Soviet breakdown, followed by an energy crisis in the early 1990s, resulted in massive deforestation due to illegal logging. This negatively affected the habitat of local wild plant species.

Since 2011, the Berd Women's Resource Center Foundation (BWRC) has been working with local

women's groups to address environmental degradation in the Tavush region with a particular focus on gender equality and women's unemployment. According to the *Women's Socio-Economic Situation Analysis in the Berd Region* by C. Lucas and A. Badalyan, about 60 percent of local women are unemployed and their land plots remain largely uncultivated. The foundation promotes women's empowerment and self-employment opportunities by engaging local women in the sustainable harvesting of wild plants. It teaches them how to process the plants and sell them as a means of income-generation. Some of these plants, such as wild mint, thyme, blueberry, barberry and hawthorn, have become very popular in recent years as superfoods.

GOALS AND KEY ACTIVITIES

Since 2016, with technical and financial support from SGP, BWRC has been working to introduce sustainable practices for harvesting plants in the wild and to preserve three species of concern: blueberry (*Vaccinium uliginosum* L.), hawthorn (*Crataegus microphylla* K.Koch and *Tournefortii* Griseb) and barberry (*Berberis vulgaris* L.). In order to reduce pressure on the plants in the wild, the project also focused on cultivating wild berry plants from the local forests in the women's gardens.

The Berd Berry project aims to conserve these valuable plant genetic resources in the Navur, Itsakar, Verin Karmiraghbyur and Berd communities in the Tavush region, while also securing employment opportunities for local women, particularly, focusing on women from economically disadvantaged communities.

A key component of the project was to improve the women's knowledge of biodiversity conservation and sustainable agriculture. Through capacity-building workshops, women learned how to harvest wild berries sustainably. The project participants had a chance to visit training and resource centres outside their communities to obtain additional knowledge and experience in wild berry cultivation.

The women realized that in order to focus on environmental conservation and sustainable practices in the long run, it was important to create a successful business making jams and teas from wild berries that enabled them to sustain such practices. To increase the population of wild blueberry, barberry and black hawthorn and reduce the increasing pressure on ecosystems, the women planted 1,500 new seedlings in their gardens. Given that the first harvest from these planted seedlings will not be ready for a few years, the women also planted fruit-bearing plants such as currant, blackberry and raspberry, which would yield harvest in the first year. This will ensure a prompt income for beneficiary families and lessen the burden on the wild plants. To further ensure sustainable harvesting practices, six practical trainings and eco-camps were organized to provide guidance on harvesting methods that allow for strong regrowth.



PHOTO: SGP ARMENIA

“Being a journalist, I always focused on environmental issues, but it's different when you write about it and deal with those issues in your everyday life as it was with the "Berd Berry" project. During two years of project implementation I became both an agronomist and an environmentalist, trying to share skills, knowledge and experience with rural women's groups especially in terms of the conservation of Berd area's biodiversity and effective berry cultivation.”

ANAHIT BADALIAN, PROJECT MANAGER

ENVIRONMENTAL RESULTS

Around 2,000 young shrubs (900 wild and 1,100 cultivated scions) were planted on 3,600m² in 25 household backyards in the Navur, Itsaqar, Verin Karmiraghbyur and Berd communities. These 25 backyards will serve as demonstration sites for knowledge sharing and a basis for developing a future community agritourism initiative. The project held special training sessions for rural women on sustainable collection from the wild based on maintaining natural reproduction capacities without affecting natural regeneration, and on-farm cultivation techniques and practices, including drip irrigation and organic fertilizing, drying, packaging and other methods.

Blueberries are in high demand in the region and beyond, and cultivation requires special skills and significant effort. To increase motivation among the project beneficiaries, a competition for the best backyard garden was announced. The awards for winners included essential small farm tools and equipment, mini tiller cultivation machinery, ground irrigation water tanks, and fruit dryers. Furthermore, it is planned to create a women-farmers' association to enhance the production volumes and ensure sustainability and scale-up of the initiative beyond the project's funding.



PHOTO: SGP ARMENIA

GENDER AND SOCIO-ECONOMIC RESULTS

The project involves 25 women as direct beneficiaries, who have land available for berry cultivation and are engaged in jam and herbal tea assortment production. Another 80 women have benefited indirectly through participation in the trainings and workshops within the frame of the Berd Berry project and can become potential participants engaged in sustainable wild collection and processing of herbs and berries.

The project established an experimental production of wild berry jams and jellies for sale, which in the first year resulted in an increase of US\$300-400 in annual income for the participants. It is estimated that for the following year it will reach US\$1,200.

An eco-camp was organized for local women and girls to exchange practical knowledge and skills on collection and cultivation in the wild, and to build entrepreneurial and marketing abilities. A three-year business plan, including a wide scope of forecasts and surveys for wild berry production, jams and dried berry tea assortment marketing, was developed.

The establishment of an eco-centre is underway, as a result of the eco-camp. The objective of the eco-centre is to serve as a centre of expertise and knowledge sharing, as well as an eco-tourism attraction. A promotional video was produced and broadcast on the internet and local TV channels, aiming to advertize the Berd Berry product brand.



PHOTO: SGP ARMENIA

POLICY INFLUENCE, REPLICATION AND SCALING UP

The on-farm cultivation of wild berries has already proven its scalability potential as around 1,000 followers of the Berd Berry Facebook page have expressed interest in getting involved in the project activities. Furthermore, an online platform for cooperation, knowledge sharing and trade has been established through BWRC's Facebook and web pages to bring the project beneficiaries, stakeholders, local and international experts, traders and other interested parties together. It is anticipated that this e-commerce platform will facilitate the exchange of information and enhance the trade of jams, tea assortments and other eco-products, as well as the replication of the project results.

The Berd Berry project participated in the Tavush Economic Forum in September 2018 which aimed to unite local producers, farmer groups and community organizations for the future development of the Berd region's economy through the creation of local economic platforms. At this important event, the Berd Berry project was selected, together with four other projects, to be presented at the economic meeting with Tavush region Governor Ghularian and Prime Minister Pashinyan. Since the project just finished in June 2018, it is expected that the results of this project will, over time, inform policy on the role of women as environmental stewards.



CHINA

Saving the Asian honey bee while empowering women



GRANTEE

Minhe Star-light Relief Association



LOCATION

Minhe County,
Qinghai Province



BACKGROUND

The Asian honey bee (*Apis cerana Fabricius*) plays an important and indispensable role in maintaining the local ecological balance and is a critical component of the local ecosystem as it pollinates crops. The bee is especially critical for plants growing at low temperatures in high-altitude areas. In recent years, the Asian honey bee has been on the verge of extinction due to human

activity and degradation of its local environment. The introduction of western bees to China, in addition to climate change, intensive agriculture, pesticides, biodiversity loss, and pollution, has resulted in a 75 percent reduction of its range, as well as an 80 percent reduction in population.

GOALS AND KEY ACTIVITIES

The main objective of this project, is to promote the conservation of the Asian honey bee in Minhe County, Qinghai Province through sustainable beekeeping. However, it has another significant aim which is to empower a group of women known locally as *left behind women*, by supporting an alternative source of revenue for them with the conservation activities. *Left behind women* in China are women from rural communities whose husbands have relocated to more densely populated areas and cities in search of job opportunities. These women generally have low income, poor education and limited access to healthcare services. The project also included seven men with disabilities.

The first step of the project was to determine the Asian honey bee's ability to survive and its cultivation status locally. Thus, a survey was concluded in 47 hamlets of 11 villages including Bazhou, Dazhuang, Gandou, Hetaozhaung, Lierpu, Manping, Maying, Qianhe, Xiamen, Xinmin and Zhuandao.

The survey revealed two types of bees cultivated in Minhe County: the Italian bee (*Apis mellifera ligustica*) and the Asian honey bee. Identifying the presence of the Italian bee in the project area was important as it is an invasive species that displaces the local species. The survey also revealed that 43 percent of the local bee keepers boil the honey comb to obtain the honey, thereby killing the bees. Other threats to the conservation of the Asian honey bee included disease and use of pesticides.

Once the initial results were analysed 62 women and seven disabled men were trained in apiculture and Asian honey bee husbandry. From November 2013 to June 2014, participants discussed technical issues such as the purchase of beehives, honey extractors, bees and Chinese herbal medicine to treat the bees. They also received training on biodiversity conservation and how to prevent and treat frequently occurring diseases in the Asian honey bee population. As part of the project, other members of the community had access to awareness-raising activities and the dissemination of knowledge on environmental protection and beekeeping technologies.

After the training, the participants and their families received support to become beekeepers and, most importantly, conservationists.



“As an illiterate rural woman (...) now I can take care of the five children of my son and daughter while breeding bees. I earn even more than my husband going out for work.”

Now that I have mastered the skill, I can bring everyone together to breed and protect the Asian Honey bees. I like them very much. We can't let them disappear.”

MA AXIYE, A VILLAGER OF THE SALAPO VILLAGE
IN MANPING TOWN, MINHE COUNTY

ENVIRONMENTAL RESULTS

The emergence of the women as beekeepers and environmental stewards in their communities resulted in an increase of 60 percent in the Asian honey bee population in the Minhe region. Through this project, the bee colony has increased to over 350 groups with 20,000 to 30,000 bees in each group.

Another important result is the reduction in use of chemicals by local farmers. The women disseminated information about the project in the surrounding area to reduce the use of a pesticide that is lethal to the Asian honey bee.

The project also addresses the threat posed by the Italian bees and strove to zone the fields to allow for the presence of both the Italian and the Asian honey bees.

Furthermore, the project carried an awareness-raising campaign that reached approximately 130,000 people in the area improving their knowledge of the importance of the Asian honey bee, biodiversity conservation and the link to sustainable livelihoods.



PHOTO: SGP CHINA

GENDER AND SOCIO-ECONOMIC RESULTS

The income of the women and men participating in the project increased from US\$290 to US\$980 in the first year of beekeeping and they sold a total of 107 kilogrammes of bee products. The social and economic status of the participating left behind women has improved significantly in the community.

In November 2013, Minhe started a communications campaign in the 35 villages where the project was being executed. Twenty-one primary schools were visited and through an environmental protection course and accompanying games, the school children were educated about their local environment. This effort raised the awareness of approximately 3,668 teachers and school children.



PHOTO: SGP CHINA

POLICY INFLUENCE, REPLICATION AND SCALING UP

The project managers worked with the media to help replicate its good practices and local television broadcast the training sessions and information about the project. More than 130,000 people saw the broadcasts and learned about these practices. Over 3,000 pamphlets on the Asian honey bee, its protection and the project activities were disseminated. In total, more than 350,000 people learned about the project and its benefit for the local community and environment through blogs, social media and the news media.

At the end of the project, a conference was held to disseminate the results and lessons learned. It was held in November 2014 and attended by 99 interested stakeholders, who shared experiences of the project and made plans to continue the project activities.

3

MOROCCO

Medicinal and aromatic plants are conserved by rural women



GRANTEE

Association Marocaine Pour le Développement des Plantes Arom (ADEPAM)



LOCATION

Tlad Ben Idder,
Morocco

BACKGROUND

Morocco has a wealth of medicinal and aromatic plants with more than 800 different species. According to the United Nations Industrial Development Organization, medicinal plants are the richest bio-resource for traditional systems and modern medicine, while aromatic plants are a source of fragrance and flavour. These plants are traded in bulk from many developing countries to developed countries, yet there are missed opportunities for significant income generation at the local level.

Traditionally, medicinal and aromatic plants have offered a complementary source of income for rural families, especially for women who actively participate in the seasonal harvesting of wild plants, such as the women of Tlad Ben Idder in northern Morocco. Tlad Ben Idder is home to Ben Karrich, a site of biological and ecological interest. Successive years of drought, pressures from overgrazing, and unsustainable harvest methods, including pulling the plants up with their roots, have resulted in the increasing rarity of these plants in the area.



PHOTO: SGP MOROCCO

GOALS AND KEY ACTIVITIES

Support from SGP and the Association Marocaine Pour le Développement des Plantes Aromatiques et Médicinales (ADEPAM) championed the rural women in Tlad Ben Idder in their efforts to protect and promote the use of medicinal and aromatic plants of Ben Karrich. The project site is rich in plants such as myrtle, pennyroyal, thyme and bay laurel. However, these plants were exposed to overexploitation by farmers who were not using sustainable harvesting methods, hence preventing regeneration.

Gaps in the legislative framework governing the management of these plants and a lack of specifications for sustainable harvest methods left the plants vulnerable. Additionally, the local women who sold these plants for very low economic return were not aware of the value of the plants, which they sold to intermediaries at very low prices.

The project goals aimed to respond to these two concerns by safeguarding the medicinal and aromatic plants in Ben Karrich and empowering the local women who harvest and sell them. The key activities included a survey to identify local medicinal and aromatic plants and determine threat levels to these plants, and training for ten women. These women shared their knowledge on sustainable harvesting methods with fifty women from

“Thanks to the sustainable use of the medicinal and aromatic plants, the women found their way toward economic self-sufficiency.”

MS. SAADIA ZRIRA, PRESIDENT OF ADEPAM

the community, focusing on plant regeneration and valorization.

A pilot experiment to cultivate three important plants—laurel, sage and oregano—was established on two hectares of land. This incorporated post-harvest processing, including drying, extraction of essential oils, production of floral water and packaging. The women established a community cooperative, Cooperative Azhar, to structure their harvest schedule and planting. They acquired marketing skills and subsequently participated in exhibitions and fairs at regional and national levels. Some also learned to read and write, and increased their capacity in awareness-raising of the biological and ecological wealth of Ben Karrich and the threats that the ecosystem faces.

ENVIRONMENTAL RESULTS

The participatory mapping helped identify 27 medicinal and aromatic plants including mugwort, thyme, rosemary, carob, bay laurel, myrtle and pennywort. The conservation status of the plants, harvesting period, different uses and techniques used by women to collect these plants were also defined.

An important result of the project was the identification of threatened native species and targeting these for conservation. The women designed a participatory management plan

to ensure sustainable management of the plants and the forest, using sustainable harvesting techniques. A pilot for cultivation and a processing facility were also established.

Through the adoption of sustainable harvesting techniques, 12 plant species, four of which are threatened, have been protected in Tlad Beni Idder, and 500 hectares of forest are sustainably managed.



PHOTO: SGP MOROCCO

GENDER AND SOCIO-ECONOMIC RESULTS

The project provided capacity-building for 50 local women, strengthening their knowledge of sustainable harvesting, marketing and business management as well as biodiversity and the value of their products. The cooperative's annual income increased from approximately US\$500 to US\$8,000-10,000 per year, of which about 80 percent is distributed to the women and 20 percent is used to cover the cooperative's operational costs. The activities secured the economic empowerment of the participating women and benefited their households and families. Due to literacy training provided, their literacy rate has increased.

The training and mentoring provided by ADEPAM allowed women to take charge of the management of their cooperative and sell their products directly in local markets and through fairs and exhibitions, without giving a portion of the proceeds to intermediaries. ADEPAM

organized practical training sessions on plant valorization, administrative and financial management, marketing, customer service and networking, and facilitated networking between the cooperative and the local government to negotiate access to regional and national markets. The participation of women in fairs has developed their self-confidence, and improved their negotiation and decision-making skills. Ms. Zohra El Baghourri, a member of the Cooperative Azhar said "the Aromatic and Medical Plants project improved our incomes and living conditions for us and our families. It enabled us to open up to the outside world. The project empowered us to participate more in achieving sustainable socio-economic development and environment safeguarding."

Women are now participating in and influencing local politics, with benefits for their families who have improved access to healthcare services and education.



PHOTO: SGP MOROCCO

POLICY INFLUENCE, REPLICATION AND SCALING UP

Sustainable management standards for medicinal and aromatic plants in Ben Karrich have been incorporated into local municipal policy. The women successfully demonstrated to government partners that they are active contributors to the preservation of natural resources, while improving the living conditions of the community.

In 2014, the United States-Middle East Partnership Initiative selected Cooperative Azhar to join an economic interest group called *Rif Medicinal and Aromatic Plants*, whose main objective is to support the economic empowerment of women in the Rif and the Middle Atlas. This allowed the women to collaborate with four other women's groups and empowered them through sustainable support and technical and managerial training.

The project has been replicated in other regions. For example, a similar project was set up in the region of Tangier with financial support from the Spanish Agency for International Development Cooperation. It was also replicated in a full-size GEF project in the southern High Atlas on the transhumance for biodiversity conservation. Lessons learned have been used to design and implement a UNDP-supported GEF-financed medium-size project on medicinal and aromatic plants. This has established an action plan for the protection of 20 medicinal and aromatic plants between 2015 and 2024 and scaled up support for women harvesting the plants and women's cooperatives groups to sell directly to companies.

4

PERU Recovering native species of cotton using traditional knowledge



GRANTEE

Asociación de Artesanas de Arbolsol y Huaca de Barro del distrito de Mórrope-Lambayeque



LOCATION

Mórrope District, Peru



BACKGROUND

The Mórrope District in the region of Lambayeque in northern Peru is home to the Moche people, one of the most important indigenous communities dating back to pre-Incan times. Cotton has played an important role for local livelihoods in this region, both because of its cultural significance and because of its high value as a cash crop. Economically, the district has one of the highest levels of poverty in the country.

In 1949, the Ministry of Agriculture undertook campaigns to eradicate hotbeds of plant diseases, plague insects and other animals dangerous to the crops. These policies prohibited the local native cotton species, threatening them with near-extinction. The pre-Incan traditional knowledge regarding the use of cotton was also at risk of dying out. A side effect of the prohibition was the reduction in income for many families in the region, women in particular



PHOTO: SGP PERU

GOALS AND KEY ACTIVITIES

In 2003 SGP supported a project by a group of indigenous women in San Pedro in the Mórrope District aiming to conserve native varieties of naturally coloured cotton endemic to the region. With SGP financial and technical support the group of women artisans formed the Asociación de Artesanas de Arbolsol y Huaca de Barro del distrito de Mórrope-Lambayeque (hereafter the association). The objectives of the association were to recover and harvest native cotton species, improve water supply, revive traditional knowledge—including the art of weaving on a back-strap loom—and improve the overall socio-economic situation of the community.

When the project started, the women artisans had no legal status and were not well-organized. The first grant, coupled with technical support, secured legal recognition of the association. The women lacked the capacity to effectively lobby for the conservation of the cotton, so SGP facilitated the discussion with the regional government and provided a lawyer.

The women in the association connected with a female engineer who acted as a project manager and was able to guide and train the artisans on cotton cultivation and processing, and other crafts. A second SGP project grant was awarded in 2004, and through this project the artisans planted four native cotton varieties by collecting seeds from the few plants that remained in forgotten crop fields or that they had used as fences in their gardens.

However, the native cotton regulation framework was still enforced and the National Agrarian Health Service (SENASA) asked the association to cut and burn the native cotton plants. The association invited a technical coordinator from SENASA to oversee the work with the promise of cutting down the plants if there was any evidence that they housed an insect infestation. The visit was successful but the Government was initially reluctant to waive the legal standards due to the economic interests associated with commercial cotton.

Step by step, the project demonstrated the cultural and economic value of these endangered species and other organizations became interested in cultivating native cotton varieties. It is noteworthy that the value of cotton is closely related to the area's cultural identity that is reflected in their dresses and customs, as well as in the indigenous folklore. For example, women and men use belts from native coloured cotton and clothes were ancestrally woven on a back-strap loom, a weaving technique that was slowly being forgotten.

Meanwhile, native coloured cotton had lost its economic value as the textile industry focused on the export quality of Pima and Tangüis cotton. At the local level, however, the association achieved an increase in value of native cotton as a source of employment for the artisans, generating complementary income for families.

ENVIRONMENTAL RESULTS

As a result of the second project, eight hectares of native cotton were successfully planted, and back-strap looms for each of the women artisans and pedal looms to improve the quality of the weaving techniques were acquired. The women experimented with different cultivation techniques, such as vermiculture and the application of natural fertilizers and pesticides.

Initially, four colours of native cotton were recovered from extinction: *fffo*, white, red and brown. This colour palette is found in traditional Peruvian clothing, blankets, fishing nets, and accessories. One of the characteristics of native cotton varieties is their very short fibres, in contrast to the long fibres of the commercial cotton varieties. The artisans developed new methods of weaving to spin short fibres, recreated iconographies of the Moche culture and started weaving the fabric on both sides, constituting a new and very precise technique.

A third and fourth grant were given to the project to build on the success of the initial phases. The association was able to diversify the models of clothing reflecting the Moche's culture and to perfect the work

of the artisans in weaving with back-strap and pedal looms. They were also able to recover a fifth colour, *uyco*. This coloured cotton was thought to be lost but the artisans remembered that old pillows were filled with cotton balls, including the seed. They opened the pillows and recovered the seeds, which were verified suitable for sowing and thus they were able to recover this additional colour of native cotton. The association grew from 15 women to a total of 45 women, and they cultivated 10 additional hectares with the native cotton varieties.

Native cotton presents a number of environmental advantages over hybrid cottons and is more resistant. The women developed techniques to prepare manure to fertilize the plants and used traditional knowledge to control pests in cotton and other crops organically. Craft wells or water wheels were built to ensure the availability of water for the irrigation of the parcels of native cotton, and to improve the quality of the supply of water for human consumption.

The women artisans realizing this project received the Equator Prize in 2008 for their work.



GENDER AND SOCIO-ECONOMIC RESULTS

The association is the first and only women's organization in the community. It has achieved successful results in empowering women and promoting gender equality. With the reintroduction of native cotton crops, local women have been able to pursue value added income generation. They have gained confidence and are now selling their products at local and national trade fairs and to outside distributors. The women's influence has trickled into the local community and their expertise is sought regionally.

As expert practitioners of cotton conservation, the women explain the conservation activities to consumers, policymakers and other communities. They have developed competence in management and the authorities recognize their contributions to the community, demonstrating this by granting them a space in the city centre to sell their products. The group of women now plays a mentoring role to other regional organizations who want to replicate their model and learn their skills.

The project has boosted the women's income and provided access to other financial mechanisms, enabling local women to purchase the materials needed to make crafts. Local women direct the production process, thereby controlling costs and protecting them from price fluctuations in external supply markets.

Families earn money by producing organic fertilizer and selling it to different producers in their villages. The artisans are hired to weave textiles for prestigious regional events and the success of this project led the women to train local secondary education teachers to use the back-strap loom. Knowledge that is now being taught to students in the schools.

Thanks to the project, women have ownership of and can now pay for household expenses, balancing the power dynamics in the households and increasing their authority.

Yolanda is an example of the immense socio-economic impact of the project. At the onset of the project, Yolanda, one of the female artisans, did not have enough money for her children to attend school. Through the project, she has transformed her life.

The income she earned by selling her crafts made it possible for her children to get an education. Today, her daughter Jacqueline is a technical nurse and her son Pierre is studying at a high school, and Yolanda is proud to support her husband by paying for his medical expenses.



POLICY INFLUENCE, REPLICATION AND SCALING UP

The women's active participation in market fairs and regional events spread the word of their native cotton cultivation nationally. Government officials often attend the women's events and learn about the benefits of native cotton. Eventually, the regional Government of Lambayeque declared native cotton as a regional natural product. Consequently, many regional organizations became interested in the conservation and transformation of native cotton. As of 2013, more than 10 other associations have been working on the preservation and use of native cotton in Peru. This is a significant upscaling of the project.

Finally, due to the dissemination of the achievements of the project, the replication of this model by other organizations, and the support of the regional Governments of Lambayeque and Piura, a law was enacted stating that native cotton species are a natural heritage and ordaining the need to promote the rescue, recovery, conservation and promotion of the native coloured cotton at the national level. This allowed the lifting of the ban that prohibited the planting of native cotton.





CLIMATE CHANGE



AM NO LONGER
MY MONEY
IS MY HUSBAND

AS FRIENDLY
AS THE BEES.
THEY GIVE HONEY,
THEY GIVE ME MONEY

FOR ME A
COOK-STOVE
I WILL GIVE YOU
FOR EVER

I AM EMPOWERED
WITH MY OWN
MONEY FROM MY OWN
SAVINGS

RURAL COUNTRY DEVELOPMENT
SUSTAINABLE ENVIRONMENT
FOR IMPROVEMENT
RUCODE
Town Council Plot
#256

5

UGANDA

Promoting energy efficient cookstoves and sustainable agriculture



GRANTEE

Rural Country Development Organization



LOCATION

Kamuli District, Uganda



BACKGROUND

In Uganda, reliance on inefficient cookstoves leads to an enormous burden on families' livelihoods, especially for women and girls. For the most part, cooking remains a woman's responsibility in Uganda, and women bear the burden not only of cooking for their families, but also of gathering the fuel necessary to cook the family's meal. Women and girls can spend 20 or more hours per week on long, exhaustive walks in dangerous and isolated areas in order to collect fuel. Not only is fuel collection a strenuous endeavour, but time spent collecting fuel often leaves less time to work in the fields, start a small

business, or engage in other pursuits that can bring much needed money into the household.

Young girls are often called on to assist their mothers in the physically demanding fuel collection and cooking activities, preventing them from regular school attendance and the benefits of a nutritious midday meal that some schools provide. Ultimately, women and girls pay the highest toll for the community's reliance on inefficient cooking practices.



PHOTO: SGP UGANDA

GOALS AND KEY ACTIVITIES

To tackle these issues, SGP implemented two projects with the Rural Country Development Organization (RUCODE) and women took a leading role. The first project started in 2010 and aimed to reduce the encroachment of a 15km² wetland in Namasagali in Kamuli district and save it from extinction. The wetland, named Nalwekomba, is a tributary to the Nile river and plays a significant role in the local ecosystem. However, it was under threat due to unsustainable farming practices that had resulted in land degradation and soil depletion. The local communities had resorted to using the wetland for their agricultural production, as well as fuel collection for cooking.

To save the wetland, RUCODE, with support from SGP, created 35 women's groups and offered them capacity-building in natural resource and financial management empowering them and enabling them to become environmental guardians. By saving their income and investing it in climate-smart agriculture, the women benefited their communities, protected and conserved their local environment and secured their livelihoods.

Another key aspect of the project, was to prevent further deforestation due to the use of fuel wood. To address this issue, RUCODE worked with the women to create clean cookstoves. The project designed clean cookstoves with direct feedback and involvement by the

“RUCODE enlightened me about leadership, decision-making, and business management. This increased my confidence as a woman to be a leader in my life. After three weeks, I was selected by RUCODE as a trainer and mobilizer for my village Nankulyaku, and I am now a field based staff and Community Based trainer (CBT) for RUCODE.”

BIRGUNI, NANKULYAKU VILLAGE, KAMULI DISTRICT, UGANDA

women, and provided training on their installation, use and maintenance, directly contributing to a reduction in carbon emissions.

RUCODE facilitated the creation of an association of women-led groups with the aim of establishing a fund by collecting individual savings of at least US\$1 weekly. Through the association, women would be able to borrow from the fund and invest in income-generating activities that address climate change, including land planning, agro-forestry and soil conservation practices, and to invest in the purchase and installation of clean and efficient cookstoves. This fund is self-sustaining and grows annually, to the benefit of more women.

The second project aimed at reducing land degradation, promoting sustainable land and forest management activities that enhance climate resilience by working primarily with women, but also involved the men, as landowners. The goals and key activities of this project included conducting a baseline assessment of land degradation, mentoring of community environment management groups and associations, training, promotion of renewable solar energy, and soil and water conservation. It also included the creation of community saving groups and associations.

ENVIRONMENTAL RESULTS

As a result of the project, the women of RUCODE have conserved more than 1,800 hectares of wetland over the last five years, with the families shifting away from the wetland areas to pursue alternative income-generating activities on the upland using high yielding crop varieties and backyard farming of business enterprises.

The second project has introduced sustainable land use practices on 125,648 hectares of production landscapes and seascapes, and five significant tree species have maintained and improved their conservation status. The total value of biodiversity products and ecosystem services is about US\$16.8 million.

Through the project, 37,765 women joined 1,260 associations which have improved actions and practices to reduce negative impacts on land uses.

The women now apply sustainable land management practices and have reduced land degradation on 56,645 hectares.

The women constructed over 34,000 clean energy cookstoves in thousands of homes, and helped avoid greenhouse gas emissions.

Overall, women now have greater resilience to the negative impacts of climate change with 218,294 women having access to clean water, 253,644 women farmers earning an income from value-chain agricultural production and marketing, 1,835 women using solar energy, and 135 women's groups active in apiculture and earning an income of US\$150-250 per person from honey sales annually.



GENDER AND SOCIO-ECONOMIC RESULTS

Gender was an important part of the first project from the start and influenced group formation and the membership policy of the general assembly. The management committee is composed of five people, three of whom must be women. Of the general assembly's 30 members, three-quarters must be women. About 99.5 percent of the chairpersons and association leaders are women and 100 percent of keepers of the savings boxes are women. This is written in their guiding bylaws, and constitutions. Of the 44,430 members participating in the project 37,765 are female and 6,665 are male.

The association of women-led groups numbers more than 1,600 members who have pooled a total of US\$2.8 million. This fund benefits the participating women who are able to borrow from the funds, and to invest into other adaptation and resilience activities to

the benefit of their communities; 198,640 women were able to improve their family's nutrition and more than 250,000 women have achieved increased economic independence. By strengthening their socio-economic status, the women have now increased their participation in their communities and have more influence and decision-making power. Additionally, approximately 182,000 women now own and control the land that they use, and nearly 250,000 women own property and are able to generate, on average, a monthly income of US\$300.

The use of clean energy cookstoves, has improved women's respiratory health and they spend less time on fuel collection. The girls now prioritize staying in school. Financial savings engendered by the use of the cookstoves frees up some of the family budget to buy chickens for eggs or to start a small businesses.





PHOTO: SGP UGANDA

POLICY INFLUENCE, REPLICATION AND SCALING UP

Once RUCODE saw the high demand among women and youth for capacity development and training, the project managers approached Plan International and Care International for technical support and mentoring, to scale up the initiative.

The first project attracted a lot of demand from the communities seeking training and this led to scaling up and replicating activities in neighbouring parishes, sub-counties, districts and regions. Through the careful planning and use of community village agents and volunteer trainers, the involvement of sub-county and district community social workers and local council women representatives, the project was able to scale

up by 22,674 beneficiaries, reforest an additional 1,640 hectares of land and reduce an additional 15 percent in emissions.

The project influenced policies at the local level in sub-county and district councils and lobbied representative members of parliament in the project area to influence the Government on the issues of land ownership by women, land inheritance by girls, mapping of wetlands, and integration of sustainable land use practices into local government planning.



MAURITIUS

Pioneering clean energy and protecting biodiversity



GRANTEE

Association Pour l'Éducation des Enfants Défavorisés



LOCATION

Chemin Grenier

BACKGROUND

In the 1980s during the textile boom in Mauritius, Anooradah Pooran was working as a consultant in a textile factory that employed women. Ms. Pooran noticed that these women often had to balance hard physical work and domestic chores, to keep poverty at bay. When the textile factories closed, life became very hard for some of the women and their families. Due to the loss of income, the affected families could no longer send their children to school. In response to this situation, Ms. Pooran founded the Association Pour l'Éducation des Enfants Défavorisés (APEDED) in 1996, as a school

for disadvantaged children, to give them access to an education previously unavailable to them.

With the foundation of a free pre-primary school, the children of the community were able to go to school, but their mothers were still unemployed and lacked access to income-generating activities. In 2006, Ms. Pooran met with twenty mothers and learned that the women had a wealth of traditional knowledge about conservation and medicinal plants. The women in the community could use this knowledge to conserve the natural biodiversity of the area and improve their livelihoods.



PHOTO: SGP MAURITIUS

GOALS AND KEY ACTIVITIES

In 2007, the organization received support from SGP, to establish a medicinal plant nursery on the roof of the school to protect endemic and native plant species that women could cultivate and use as a stable source of income. The women were trained by the Government Agricultural Research and Extension Unit in nursery management and cultivation of medicinal plants, harvesting and dehydration techniques, as well as packaging and marketing of the plant products.

A dehydrator was installed in the school's small kitchen. In the mornings the mothers came to water the plants and after school hours they returned to dehydrate the leaves and package tea. The brand Grandma's Secret was born as a result and is the first copyrighted Mauritian brand of local medicinal and herbal teas. At first the group sold seedlings, plants, and herbal tea in fairs and by word of mouth. In 2011, they got their first international contract with a Chinese company and since then, the orders have continued to increase.

Due to the success of the first project, the organization saw an increase in energy use and APEPED received another grant from SGP. A second floor of the existing building was self-financed and the project used the grant to purchase and install photovoltaic solar panels. The Central Electricity Board (CEB) granted the association permission to produce its own electricity through a government scheme. Thanks to this initiative, as the association faces an increase in demand for

"I had no job and when I started working in the herbal tea nursery, I was living in a 2 rooms house of corrugated iron sheet with my family. Through this project I was able to work in the plant nursery and earn an income that has allowed me to take care of my children and to extend the size of my house which now has 5 rooms, one is even made of concrete. After one year I was appointed as a supervisor in the processing unit."

FABIOLA NUMAH, CHEMIN GRENIER, MAURITIUS

its medicinal and herbal teas, it is able to reduce its production costs while decreasing its impact on climate change. The association can further increase its revenue by selling the surplus electricity produced to the CEB.

ENVIRONMENTAL RESULTS

As a result of the first project, APEDED is cultivating and helping protect diverse medicinal plants that are endemic and native to the island, and raising awareness of their biodiversity and medicinal value, which had been forgotten.

Grandma's Secret herbal teas are mixed with 35 other medicinal plants. Community members in the village are progressively becoming more health conscious and increasingly aware of the beneficial effects of medicinal plants for treating different conditions. In response to a growing product demand, Grandma's Secret established a Buy Back Leaves system and

supports 45 women across Mauritius who buy seedlings, cultivate them, and sell them back for herbal tea production. Another 16 women sell the tea, both nationally and internationally.

With the second project, APEDED became the first non-governmental organization (NGO) in Mauritius to use renewable energy as an electricity source. It installed 48 photovoltaic solar panels covering 72m² of the school roof that currently generate 14,360 kWh of electricity annually, reducing carbon dioxide emissions by 10 tons and saving 52 trees annually.



PHOTO: SGP MAURITIUS

GENDER AND SOCIO-ECONOMIC RESULTS

Today, Grandma's Secret is a small social entrepreneurship company with a big, local impact. They produce 8,000 packets of 24 varieties of tea per month, which they sell nationally and internationally. The women earn US\$110-180 a month for three hours work per day, which helps them pay for school education, healthcare and other expenses.

APEDED is the first NGO in the country to benefit from the Government's Small Independent Power Producers Scheme. The group sells around 10,000 kWh to the grid, which generates US\$6,000 annually.

The women involved in this project now have greater respect in their community and are contributing to the local economy. Their self-confidence, self-reliance, and quality of life has improved significantly. Thanks to the success of the project, many women have also learned how to give interviews to the media and to run awareness campaigns.

POLICY INFLUENCE, REPLICATION AND SCALING UP

APEDED now runs a women-led micro-enterprise that conserves biodiversity, produces its own electricity from renewable sources, earns additional income from the sale of excess energy to the grid and provides green jobs directly to women. It sells its dried herbal and medicinal leaves to international entities engaged in the production of teas and other herbal products under other brand names.

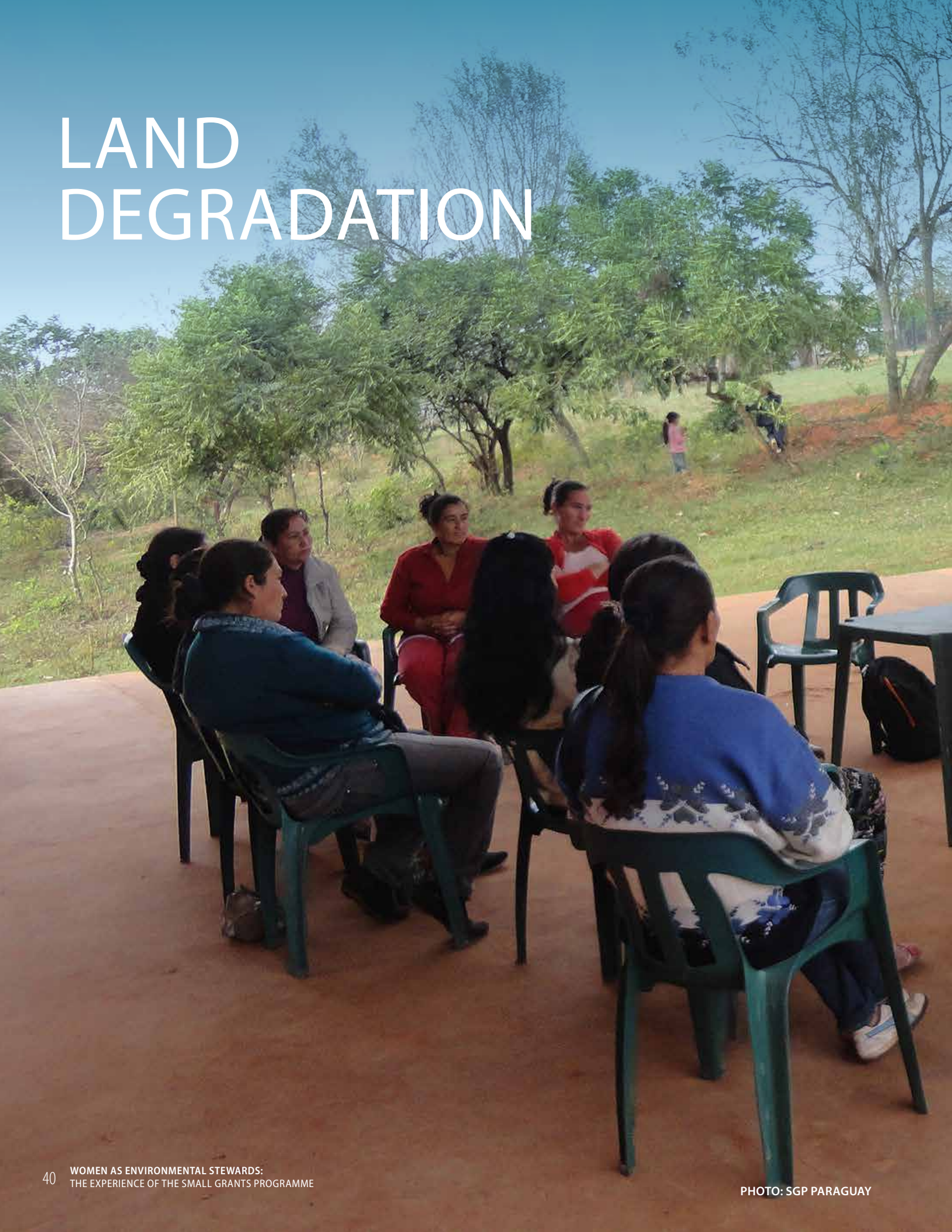
As a result of media awareness on this project, several local stakeholders including the Ministry of Environment and Sustainable Development started donating medicinal plants at their official public

events, and over 10,000 families started to cultivate medicinal plants in a corner of their gardens. The Indian Ocean Commission has funded APEDED to set up medicinal plant gardens in 10 secondary schools in Mauritius. The Rodrigues Regional Assembly have enrolled support from APEDED to train 82 women and eight men on medicinal plant propagation, handling, and usage. This helps conserve the very sensitive biodiversity of the Republic of Mauritius.

APEDED has won numerous national and international awards for its work empowering women and conserving biodiversity.



LAND DEGRADATION





PARAGUAY

Preventing land degradation through agro-forestry



GRANTEE

Fundacion Religiosos para la Salud



LOCATION

Tavaí, Paraguay



BACKGROUND

Agriculture accounts for 28 percent of the gross domestic product (GDP) in Paraguay, and 45 percent of the population depends on agriculture and subsistence farming. Much of the country's GDP is based on the production of soybeans, with negative consequences for the environment, such as deforestation, as entire forests are cut to expand the cultivation of soy. Likewise, the production of coal in the most vulnerable peasant communities contributes to the deforestation of forests and existing forest remnants.

In Tavaí, Paraguay, the local community started noticing damage to their natural environment approximately 40 years ago. A local women's organization, the Tavaí Porã (hereafter, the association), joined forces with the Fundacion Religiosos Para La Salud (FRS Paraguay) to seek funding and technical support from the Community Based REDD+ (CBR+). Their goal was to reduce the detrimental effects of large-scale deforestation on the local ecosystems, and to protect their community's livelihood—the forest.

COMMUNITY-BASED REDD+

The Community-Based REDD+ (CBR+) is a partnership between the UN-REDD Programme and the GEF Small Grants Programme to deliver grants directly to indigenous peoples and communities to empower them to fully engage in the design, implementation and monitoring of REDD+ readiness activities, and develop experiences, lessons, and recommendations at the local level that can feed into national REDD+ processes.

By supporting the protection of forests, and the empowerment of forest communities who live in and depend on them, CBR+ aims to contribute to the fulfilment of broader environmental and social goals, including biodiversity conservation, enhanced food security, improved rights and livelihoods for indigenous peoples and local communities, and climate change adaptation.

CBR+ supports community-level projects that complement UN-REDD National Programmes, national REDD+ readiness processes and/or strategies. Currently

in its pilot phase, CBR+ is being implemented in six countries: Cambodia, Democratic Republic of the Congo, Nigeria, Panama, Paraguay and Sri Lanka.

The objectives of CBR+ are to:

- Support the full and effective participation of indigenous peoples, communities and civil society in national-level processes related to reducing emissions for deforestation and forest degradation;
- Build the capacity and awareness of communities to engage in REDD+ activities and processes;
- Facilitate the integration of community-based activities, knowledge and ideas into national REDD+ processes; and
- Develop and share knowledge and lessons learned from community-based experiences to inform national and international REDD+ policies and practice.



GOALS AND KEY ACTIVITIES

The aim of the project was to establish a forest nursery to reforest the area, while also securing the community's long-term livelihoods. To this end, the association trained 50 women in agro-forestry production methodologies and taught them best practices in sustainable resource management.

The women learned techniques to limit soil erosion, became familiar with biological controls for pests, and how to manage the disposal of fertilizers and pesticides to limit contamination of the natural environment and local water sources.

In rural homes, firewood is the main source of energy for cooking. The women learned to sustainably harvest firewood through controlled pruning, to avoid cooking on an open fire and how to use fuel wood more efficiently. Coupled with the application of pruning and reforestation techniques near their homes, the women are contributing to reforestation and maintaining biomass for their community.

By learning how to sustainably manage their natural resources, the women were guaranteed a source of income in the long-term and learned how to produce food without causing deforestation. With support and guidance from SGP, the association also held workshops on gender equity and marketing training. The marketing workshops were aimed at providing necessary tools for the sale of seedlings in the market. These workshops emphasized the importance of teamwork and self-management, to ensure the sustainability of the nursery, but also to achieve profitability.

Gender equality was an essential theme in the training of women as promoters of good agro-forestry practices and in strengthening their capacities as members of the association and their communities. The gender workshops focused on leadership, personal finances, ecosystem management, and community organization. The establishment of the nursery and the execution of these workshops were aimed at economic, social, and environmental sustainability and empowerment of the women and families who participated.



“One of the most important reasons that led us to choose a nursery was that almost all the trees had been thrown out in our community. We decided to take charge of replacing them, even though we were not responsible for their disappearance because that brought about climate change and diseases. The forests give stability to the climate and give shade, fruit, oxygen, and serve as firewood. Its usefulness is immense.”

LUCÍA TORALES, BENEFICIARY OF THE TAVAÍ PROJECT

ENVIRONMENTAL RESULTS

As a result of the project, women have been trained in agro-forestry techniques and can now promote agro-forestry in their communities. A community tree nursery of 1,052m² was built and a total of 44,880 plants were cultivated. The women implemented agro-forestry practices on their own farms, and planted the land with 33 fruit

and food crop varieties. By co-planting the seedling trees with their agricultural crop, the women increased the resilience of the local ecosystem and, as a result, the crops' resistance to pests and diseases. The participating women now grow organic crops both for consumption and sale.



PHOTO: SGP PARAGUAY

GENDER AND SOCIO-ECONOMIC RESULTS

The income from these sales has been distributed equally according to the level of participation in the management of the nursery. The women have all acquired knowledge and skills on marketing and sales, which has improved their ability to generate an income for the benefit of themselves and their families.

The gender training that the project beneficiaries received allowed them to reflect on their situation in the community, and gave them the opportunity to reflect

on the importance of dialogue between husband and wife, in the family, and in the community. Although the change of attitudes on gender equity in the family and the community will require more work, the women now recognize the need for equality, and the importance of strengthening the association to promote education and improve living standards.



PHOTO: SGP PARAGUAY

POLICY INFLUENCE, REPLICATION AND SCALING UP

Throughout the development of the project the women of the association worked with the local authorities to ensure the sustainability of the nursery. This led to the signing of an agreement between the Municipality of Tavaí and Tavaí Porã. The agreement recognizes the work being carried out by the women in the municipality, and commits to continued collaboration for community development in Tavaí through municipal support to other projects implemented in the district.

As a part of the project activities, a knowledge exchange between leaders and members of grassroots community organizations was carried out, supported by Paraguay SGP and CBR+. The objective of the conference was to exchange knowledge, practices and experiences among peasant organizations, indigenous communities and civil society organizations that act locally to achieve global environmental impacts.



COLOMBIA

Conserving molluscs and mangroves



GRANTEE

Grupo de Mujeres Piangueras del Rio Naya



LOCATION

Rio Naya, Buenaventura,
Colombia



BACKGROUND

The Naya river basin is located in southern Buenaventura. It is the largest Colombian sea port on the Pacific coast, and a hub of commercial shipping activity.

Piangua is the local name of a mollusc that inhabits the roots of mangroves in the Naya river basin, also known as mangrove cockle. Traditionally, Afro-descendant women harvest these cockles for sale at the local market at very low prices. In Bogotá and other large cities, it is considered a delicacy, selling for much higher prices. The *piangueras* noticed a reduction of about 50 percent in their cockle

catch. At the same time, local fishermen had noticed a reduction in their fishing catch, and had taken up cockle harvesting as another income generating activity.

For years, the regional environmental authority—the corporation of Valle del Cauca (CVC)—had been monitoring mangroves along the southern portion of the Colombian Pacific coast and in the basin. In 2007, the women's group Piangueras del Rio Naya was established to address the rampant degradation of these mangroves. The participating women were given training on sustainable management of natural resources associated with the mangrove ecosystem by a CVC technical expert.



PHOTO: SGP COLOMBIA

GOALS AND KEY ACTIVITIES

To address the degradation of the mangroves and its impact on their cockle harvesting, a group of local women *piangueras* from five communities in the Naya River area decided to act and actively protect and sustainably use the natural resource they relied on for their livelihoods— the *piangua*. The women started a project to implement sustainable harvesting of *piangua* and the conservation of the mangroves it inhabits; establish sustainable use agreements in their communities, including harvesting closures and monitoring of cockle populations; develop alternative sustainable production activities to maintain income during harvesting closures and strengthen their own organizational capacities.

The project engaged with the community from the start to create ownership and generate a process of mutual trust and participation. The group of women organized themselves into five subgroups, each of them in charge of carrying out project activities in their communities. The mangrove was zoned accordingly, with each community helping with monitoring and control of a specific zone during the closures. The joint work they had done previously with CVC was further strengthened.

“Before this project they were like little girls, fighting among themselves. Now, when one of them has an idea they all support her in analysing if its viable and enriching and, if so, they join forces to implement it! We are much more confident and trusting of our capacities.”

ANA FRANCISCA, THE PIANGUERAS PROJECT PARTICIPANT

A key objective of the SGP project was to empower the women in the management of their territory. However, when the women had greater autonomy and leadership it initially generated some discomfort. This slowly disappeared when the results of the protection of the *piangua* became evident.

ENVIRONMENTAL RESULTS

Two main actions were identified for sustainable harvesting. The first was to establish a minimum size for individual *piangua* to be harvested. The second was the definition of the time and length of harvesting closures, including monitoring of the sites that were closed and of the cockle populations in those sites.

The women also agreed on and implemented a *piangua* and mangrove conservation and sustainable use plan in their communities. Based on the analysis

carried out on sustainable harvesting with their communities, the group proposed a voluntary harvest ban to ensure the survival of the cockle resource, which was signed and implemented by the five communities involved. As a result, five species are now under sustainable management and conservation in the Naya river basin, including the mangrove cockle, and four species of mangrove.

As a result, the women are helping conserve and sustainably manage 1,000 hectares of mangrove.



PHOTO: SGP COLOMBIA

GENDER AND SOCIO-ECONOMIC RESULTS

To offset the reduction in income, the women found five alternative sustainable production activities to engage in during harvesting closures. One group established a vegetable garden that has already yielded three rounds of crop harvest, securing food for the community year-round. Three established local bakeries and in one of these, they also established a fish storage facility that uses solar electricity for refrigeration. Santa Cruz also established a bakery, but then decided they would also run a small restaurant, which has proved to be more profitable.

The *piangueras* received support and guidance from the Fundación Activos Culturales Afro (ACUA) and experts from the Fundación Chiyangua to establish three funds for savings, unforeseen expenses, and maintenance of gear and infrastructure in three of the five participating communities. One hundred project beneficiaries learned about business management, negotiations, and accounting with training from the SGP team, Fundación

ACUA, Fundación Chiyangua, and two partner NGOs with experience in gender and strong administrative capacities. The establishment of these funds allowed the businesses to become more profitable and sustainable, as the women now have resources for working capital, and most importantly, for unforeseen events. Two of the women were also trained to be trainers, to ensure the long-term sustainability of this capacity-building exercise.

With regard to income, the US\$66 per month generated by the *piangua* harvest can now be reached in three days of work per week by each of the women. During the harvesting closures (two three-month periods per year), their income is secure and in the other months they have double income from *piangua* harvesting and their alternate activities. As a final step in the process, the group formalized and consolidated their existence as a community-based organization and *Piangueras del Rio Naya* was officially established.

POLICY INFLUENCE, REPLICATION AND SCALING UP

The women of the Naya River basin are now participating in and coordinating with the Environmental Corporation, the Community Councils, and other Pacific organizations, on territorial and institutional discussions about possible alternatives for the conservation and extraction of the *piangua* in the region. The women have demonstrated in practice how to establish alternative productive and to implement closures without resulting economic hardship.

The experience developed by the women can be scaled up in other areas by promoting strengthening of *pianguera* organizations. In fact, other organizations that were part of the Pacific Center are beginning to replicate mechanisms used in the project, including the creation of funding schemes.





INDIA

Mountain bounties prevent land degradation in India



GRANTEE

Jagriti



LOCATION

Himachal Pradesh,
India

BACKGROUND

Jagriti is based in the village of Badah, in the Kull district of India, in the western Himalayas. The village is remote and at times inaccessible by road. People in this area rely heavily on forest resources for their livelihoods and many of them live on income that is below the global poverty line. In the search for alternative sources of income, the farmers here began to plant apple orchards in areas that were formerly used for the farming of mixed crops. Seemingly less valuable native trees were cleared to make way for more profitable fruit trees.

This took a toll on the wild apricot trees (*Prunus armeniaca*). In response to this threat, the local community formed Jagriti, a community-based organization, with the broad objective of promoting sustainable agricultural practices to save these trees. Most of Jagriti's members come from the Scheduled Castes, historically known as Dalits or untouchables, who are among the most disadvantaged socio-economic groups in India. According to a 2014 report to the Ministry of Minority Affairs, over 33.8 percent of Scheduled Caste populations in rural India were living below the poverty line in 2011–12, and they frequently face discrimination.



PHOTO: SGP INDIA

GOALS AND KEY ACTIVITIES

The project was designed to build the capacity of poor women heads of households from the Scheduled Castes to protect the the wild apricot tree and create sustainable livelihoods based on the sustainable use of forest resources. The families that were selected had low literacy rates and incomes of less than US\$600 per year. They had rough-built houses, sometimes shared with their animals.

One of the key aspects of the project was to help the women organize themselves into women saving and credit groups (WSCGs) to plan and carry out commercial activities using readily available natural resources.

Once the WSCGs were created, the project improved their skills on sustainable harvesting practices, marketing of forest products, propagation of threatened species of medicinal plants, and organic compost production. In these small self-help groups, the women were taught how to use the seeds from the wild apricots and other local trees to produce valuable oils, soaps and other products for sale. The women also learned about collecting and grading seeds, how to dry them post-harvest, and how to use cold press oil extraction, as well as how to package the products.

“Being part of the self help group has given me confidence and the benefits of the project raised my respect in the family (...) by selling amranthus seed to Mountain Bounties, my family members are convinced that we should continue to grow traditional grains and value our local food which we were forgetting. Discussions in the group give us a platform for learning new ideas and reviving the old ones.”

SARLI WOMEN SELF HELP GROUP, INDIA

ENVIRONMENTAL RESULTS

As a result of the project, the women now sell oils and other local products as 'mountain bounties' at stands along the roads, at tourist centres and from a website. Through these efforts, these women have been able to protect and sustainably harvest the wild apricot and their surrounding forest. In addition, the women now help conserve threatened medicinal plants like *Aconitum heterophyllum*, *Picrorhiza kurroa*, *Valeriana wallichii*, *Podophyllum*, *Dioscorea deltoidea*, among other by setting up nurseries and raising awareness within the communities about the importance of the sustainable use of natural resources.

To reduce deforestation and the time women spent on firewood collection, the project provided the women with 278 energy efficient cookstoves,

500 water heaters, and 31 solar cookers. According to an analysis carried out by Jagriti in the Gadsa Valley, the time spent on cooking, washing up, and firewood gathering was reduced to a daily total of 5 to 6 hours, from up to 12 hours previously. This also reduced the negative impacts on the local forest ecosystem, by reducing the need for firewood. Additionally, the women's health improved, and carbon emissions were reduced.

Jagriti organized regular meetings of the women's groups on environmental issues like deforestation, biodiversity conservation and sustainable use of local resources, to share experiences and meet with government representatives.



PHOTO: SGP INDIA

GENDER AND SOCIO-ECONOMIC RESULTS

Since becoming an SGP grantee partner in 2004, Jagriti has organized 123 WSCGs with more than 1,228 women members and a total accumulated bank savings of over US\$41,538. Jagriti has linked these groups to local banks to establish savings accounts and improved access to credit facilities. The women were introduced to accounting practices, record keeping, setting up of bank accounts and securing loans, and group management skills. Each group member makes a monthly deposit in the group's joint savings account.

To generate an income, the participants were trained in apricot oil production. Wild apricot and walnut trees have been planted on private and common lands. A decorticator was procured for de-shelling the apricot kernels, which increased the efficiency to 50 kilograms per day per person from 3 kilograms per day per person, and reduced the time involved in the processing operations.

Before the project, the price for apricot kernels was about US\$2 per kilogram. With support from SGP, and access to guidance and training workshops, the women are now able to ask at least US\$12 per kilogram of apricot kernels, which creates the incentive to protect and plant more apricot trees on both private and community lands.

A system for procurement of the wild apricots and peaches was introduced to ensure quality control. By 2008, nearly 20,000 kilograms of seed kernels were collected in a season, producing nearly 400 litres of oil and income of US\$8,600. In 2010, production reached 1,200 litres of oil.

Besides the oils, the women's groups began producing value added products like rosehip mint tea, herb seasonings, and other nature-based products. By 2017, the women had an increased turnover over of US\$64,615 through the sale of their products.

POLICY INFLUENCE, REPLICATION AND SCALING UP

Linking the women's groups to various government programmes gave better visibility to the project, improved the social status of the women, and improved their knowledge of financial management, sustainable agriculture and biodiversity. As a result, the women are now active in decision-making processes. In 2008, Jagriti won a SEED Award for entrepreneurship in sustainable development, and participated in various national and international workshops.

The domestic demand for these niche products has been gradually increasing, which, combined with their export to a well-known cosmetic manufacturer in

France, is buffering the participating women's income. To scale up the project, Jagriti is also working with an organic herbal supply company, Organic Partners, to increase the scale of operations and to add value to the local products by initiating organic and ethical trade certification. This would provide the producers with greater access to international markets. The trade certification could also be expanded to include a wider range of non-timber forest products, thereby adding economic value to the important indigenous plant species that are currently under threat.



INTERNATIONAL WATERS



10

BELIZE

Conserving corals, maintaining mangroves and increasing resilience



GRANTEE

Fragments of Hope



LOCATION

Belize Barrier Reef
Reserve System-World
Heritage Site

BACKGROUND

Laughing Bird Caye is an island about 11 miles off the coast of Placencia Village in Stann Creek, Belize. The island sits on top of an unusually long, narrow ridge of reef, separated from the mainland. Due to the abundance and diversity of the coral and the surrounding marine habitats, it was declared a protected area in 1981, a national park in 1991, and in 1996 it was registered on the World Heritage List. Despite this, the coral reef faces many severe threats, including overfishing, pollution and ocean warming.

Fragments of Hope is a community-based organization located on the Placencia Peninsula. Its founder was the first woman Professional Association of Diving Instructors (PADI) scuba instructor in Placencia, in a male dominated industry. Through her organization, she has inspired other women to follow suit. Their focus is the restoration of coral reef habitats and advocacy for the sustainable management of associated habitats, in close collaboration with regulatory agencies, including the Belize Fisheries Department.



PHOTO: SGP BELIZE

GOALS AND KEY ACTIVITIES

In November 2014, SGP supported a Fragments of Hope project aimed at enhancing mangrove and coral ecosystems of the Belize Barrier Reef Reserve System, a World Heritage Site, and promoting its protection and conservation by community groups, community-based organizations and the public.

The project had three main components: mangrove reforestation and monitoring training; coral restoration, monitoring, and training; and lagoon ecology tour guide training. Participants were trained in each of these components in a sustainable manner. The eco-tour training was available in the evenings to accommodate working women and to facilitate the participation of single and working mothers.

The research and science field is a traditionally male dominated area, yet by providing access to training in the tourism and marine conservation sectors, the organization has unlocked opportunities for local women to earn higher daily wages compared to the domestic or service sectors.

“It has been a big struggle as a single mom, trying to make ends meet, I am very grateful and privileged for the opportunity to get tour guide training certification from the Belize Tourism Board. It`s a life changing experience having better opportunities to put food on the table also getting more involved with the environment.”

MARIKO ELSA WALLEN, PLACENCIA, BELIZE

These activities not only conserve the threatened ecosystems but also help to provide socio-economic stability to the participating coastal communities that depend on mangrove and coral ecosystem services.

ENVIRONMENTAL RESULTS

As a result of the project, 27 women were trained in mangrove restoration. Through their efforts, 126 mangrove seedlings were out-planted then subsequently monitored for survival and growth. Nineteen women were trained in coral restoration and they planted 17,000 new coral fragments on the reefs. Areas receiving nursery grown corals are steadily increasing and reef restoration work has expanded to other protected areas, such as South Water Caye Marine Reserve and Turneffe Atoll Marine Reserve.

Between 2014 and 2017, the work led by Fragments of Hope created 28 gene bank nurseries of the threatened coral species and a genetically diverse coral population has been reestablished, and

spawning has been documented, indicating natural recovery. More than 119,000 corals have been planted out and their thermal tolerance documented. These corals survived their first hurricane in August 2016.

Nineteen eco-tour guides were trained. While it was anticipated that the tour guides would be able to offer small and private lagoon ecology tours through existing tour operators once they completed their training, the plan did not work out. This resulted in the forming and legally registering of a new business—Placencia Ecology Tours—and obtaining a tour operator license in accordance with the requirements of the Belize Tourism Board's.



GENDER AND SOCIO-ECONOMIC RESULTS

Women in the participating coastal communities received training to become tour guides, and through the training were able to receive PADI scuba certification up to dive master level. The lagoon ecology training activity is designed to provide local tour

guides with another source of income, in addition to the standard tours currently offered. The women who received training, earn approximately three times more than national minimum wage.



PHOTO: SGR BELIZE

POLICY INFLUENCE, REPLICATION AND SCALING UP

Local primary schools visited the reef nursery to raise awareness of coral restoration. The teachers received training in mangrove and coral ecosystems and were able to create lesson plans based on the knowledge they acquired and field experience. This strengthened partnerships with the local schools and incorporated a stronger emphasis on marine science in the curriculum.

Fragments of Hope has held trainings in Jamaica, Colombia, and St Barth's to help replicate the success of the project, all of which have coral restoration programmes in place. It has conducted over

15 in-country and regional South South exchanges to disseminate these good practices for coral replenishment and shared its coral restoration methodology with Cuba.

The Belize Barrier Reef Reserve System World Heritage Site has been removed from the UNESCO 'in danger' list.

Fragments of Hope received the UNFCCC Momentum for Change Award for their work in protecting coral reefs in 2017.





THE GAMBIA

Oyster harvesting and wetland conservation



GRANTEE

Try Oyster Women Association



LOCATION

Banjul, Gambia



BACKGROUND

Oysters are considered a delicacy in the Gambia and play a central role in the national cuisine. Oyster harvesting has been the domain of poor and vulnerable women, who do not make a fair wage for their difficult work. Due to the oysters' short shelf life and the lack of proper equipment for processing and storage, the harvesters are forced to sell below market value.

Oysters are collected from mangroves in the Tanbi Wetlands Complex, a Ramsar site (wetlands of international importance) covering 6,300 hectares

of wetlands. The harvesting of oysters in Tanbi contributes to deforestation because the mangrove trees are used for firewood and their roots are damaged during the harvest.

Additionally, overharvesting does not allow sufficient time for the oysters themselves to reproduce and regenerate.



GOALS AND KEY ACTIVITIES

In 2011, TRY received SGP technical and financial support to establish a training programme on mangrove reforestation and aquaculture. TRY trained their members on sustainable conservation strategies, management, and how to develop the mangrove ecosystem to sustainably increase oyster and fish production. A feasibility study was conducted in the Tanbi Wetlands to identify suitable locations for the aquaculture component of the project.

Oysters breed on mangrove roots, and traditional oyster harvesting techniques entail cutting the mangrove roots with the oysters attached. The roots with the oysters are then roasted over fire to peel them off for further processing. This is a major factor in mangrove degradation in the Gambia. Innovative methods have been developed in neighbouring Senegal, where oysters breed on racks that are planted along river banks. Seven members of the association visited the Sine Saloum Delta in Senegal for three days to learn about the techniques developed there.

In 2011, the TRY oyster harvesters extended the length of the off-season by limiting their sale of fresh oysters from March to June. The purpose of this moratorium was to extend the period of regeneration, to allow the oysters to grow, reproduce and recover from the harvest.

“We helped to re-orient government policy by lobbying for, and ultimately securing official and exclusive rights to manage and sell the oysters we harvest in the Ramsar wetlands where the women work. Allowing women to make the decisions about how to safeguard their environment and their future for the first time. We improved our physical environment and now have in place formal eco-system management plans that involve replanting the mangroves every year and protecting them from wood-choppers.”

TRY

ENVIRONMENTAL RESULTS

Initially, a total of 22,143 mangrove plants were planted on an area covering a total of seven hectares. In August 2012, TRY planted another 30,000 mangrove seedlings in an area covering 15 hectares. The planted areas have regenerated the mangrove, and it is expected that local ecosystem will be strengthened by improving biodiversity.

When TRY had identified the appropriate sites for its planned activities, oyster aquaculture training sessions were organized at five different sites involving 93 women. These women received training on all aspects of oyster aquaculture, and they constructed 180 oyster breeding racks.

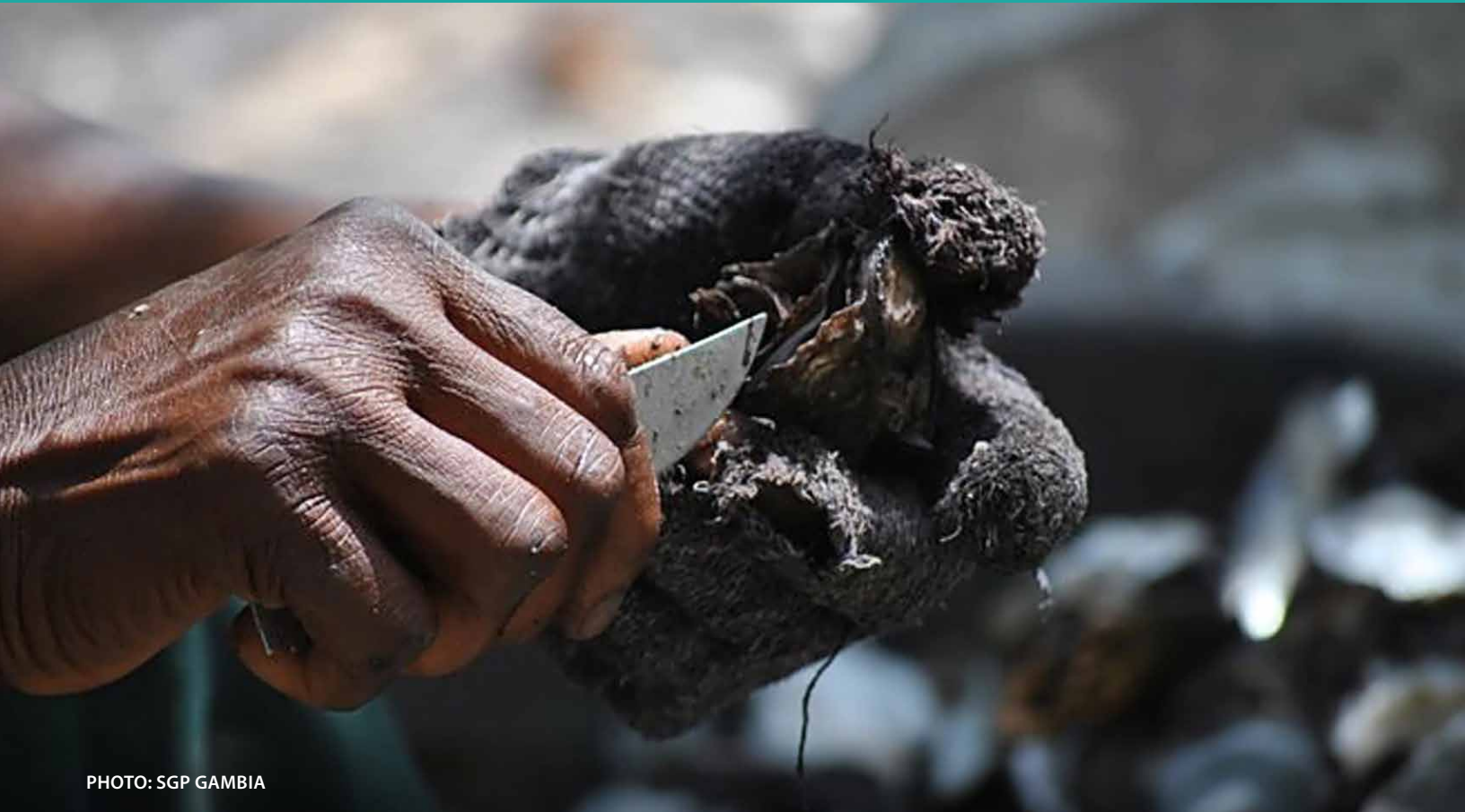


PHOTO: SGP GAMBIA

GENDER AND SOCIO-ECONOMIC RESULTS

After the extended off-season, the women experienced a significant improvement in their income. Due to a considerable increase in the size of the oysters, the women were able to charge 30 percent more for their oysters, as compared to earlier seasons.

In 2010, the group created a micro-financing programme to provide training in financial management and small loans to their members. To participate in the programme, the women have to pay US\$10 to the fund. Then, they receive loans of US\$30 to invest in an existing or new small enterprise. This system has increased the women's capacity to manage their businesses and their personal finances.

The ability to financially plan their lives has been critical for the women to survive in during the off-season (July to February).

Since many of the women are the main breadwinner for their households, the seasonal nature of their business resulted in periods of financial struggle in the past. However, by establishing a financial support system and teaching themselves how to manage their finances, the women have been able to bridge this seasonal gap in their income.

POLICY INFLUENCE, REPLICATION AND SCALING UP

Women have taken steps to protect and develop their product, by managing it more sustainably and increasing harvest yields, and they have successfully collaborated with stakeholders at the local and national level. As a result of the TRY oyster harvesting activities, a co-management plan for the Tanbi Special Management Area was developed in 2012.

The NGO worked with government representatives to create a natural resource management plan that gives the women exclusive rights to the cockle and oyster fishery in the Tanbi wetlands, as well as responsibility for the conservation and sustainable management of the fisheries. For replication purposes, TRY is

collaborating and exchanging knowledge with women in oyster harvesting communities of the Allahein River estuary in Southern Senegal. Additionally, TRY was contracted by the USAID Sustainable Fisheries Management Project in Ghana to host a study tour of women-led civil society organizations and was contracted to provide technical assistance to oyster harvesting communities in Ghana to replicate and adapt the TRY co-management model in the Densu River estuary (a Ramsar site) in Ghana.

As a result of its efforts, TRY was awarded the UNDP Equator Initiative in June 2012.





TURKEY

Empowering women fishers in Turkey



GRANTEE

Underwater Research Society, Mediterranean Conservation Society



LOCATION

Datça-Bozburun peninsula, Turkey



BACKGROUND

The Datça-Bozburun peninsula sits between the Aegean and eastern Mediterranean Seas, which are home to the majority of Turkey's great marine life. With some 5,000 plant and animal species it is impressive in its biodiversity. The peninsula itself encompasses an exceptionally valuable marine and coastal area that is an important nursing ground for several species and a source of rare fauna, including the Mediterranean monk seal (*Monachus monachus*), the loggerhead sea turtle (*Caretta caretta*), and the Sandbar shark (*Carcharhinus plumbeus*), in addition to many species of fish which are economically significant in the area.

Small-scale fisheries have historically been active along the Turkish coasts and make up an important source of livelihood for the local communities living there. However, small-scale fisheries are on the decline due to commercial scale fishing, which frequently puts undue pressure on the maritime environment.

The small-scale fisheries sector in Turkey has traditionally been regarded as a male domain. Much of the women's contribution has been considered a part of domestic work and hence economically undervalued and undocumented. As a result, women's work in small-scale fisheries has been under-represented or overlooked in official statistics.



PHOTO: SGP TURKEY

GOALS AND KEY ACTIVITIES

In 2009, SGP grantee partner, the Underwater Research Society, aimed to tackle issues of overfishing and over-capacity fishing fleets by establishing no take fish zones in the Gökova Bay marine protected area. Through multi-stakeholder consultations, the NGO and the community were able to agree on appropriate measures of monitoring and enforcement to protect the area. This prompted community leaders to reach a voluntary agreement to introduce 10 no take fish zones spanning 3,538 ha within the Gökova and Datça-Bozburun protected areas.

The consultations revealed that women were not accounted for as active fishers in Turkey. Due to this invisibility, the women were not consulted in small-scale fishery governance, nor was there information available on the challenges they face. In 2013, the Mediterranean Conservation Society (MCS) received a grant through the SGP COMDEKS partnership to launch a project to map the numbers of women fishers in the Datça-Bozburun Peninsula, to adequately respond to their needs, and to ensure their inclusion in decision-making processes around sustainable small-scale fisheries and conservation in Turkey.

MCS has pioneered the innovative use of technology for marine conservation and the organization's impressive results are inspiring other communities. MCS has implemented the first SMART-marine software for women marine ranger patrols in the world, developed by the Zoological Society of London. The monitoring and protective enforcement activities enabled by this technology has led to positive results for the

“We attended the fisherwomen training program. To illiterate people like us. It was very useful. We learned from each other and share our experience, create a shared vision, reach a common goal, and develop a plan action for Beyşehir Lake.”

N. GÖRER

community's livelihoods and the environment. Since the no take fish zones were implemented and the communities were able to effectively protect the areas, fish stocks have increased by 800 percent.

In 2015, MCS received a second grant through COMDEKS, to train women in entrepreneurship and personal finance. The goal was to support women in artisanal fisheries through creating alternative sources of income, building an organization model specific to the fisherwomen, and contribute to sustainable fisheries. In 2016, another grant was given to map fisherwomen at the national level in Turkey, through gender-based data collection in fisheries, and determining both the number and locations of fisherwomen. The Gulf of Edremit, Lake Beyşehir, and the Datça-Bozburun peninsula were selected as pilot zones due to artisanal fishing practiced respectively in marine and inland waters.

ENVIRONMENTAL RESULTS

Several ecosystem monitoring and restoration measures have been implemented in the Gökova and Datça-Bozburun protected areas. Since the establishment of the no take fish zones and the marine ranger enforcement system, monitoring data show that the ecosystem has been recovering rapidly. One of the key indicators, average fish biomass, is four times higher within the Gökova Bay protected

area, then it is in surrounding areas. Monk seals are now present in the area and can be observed feeding in the zones, and sandbar sharks are sighted regularly.

Another indicator of recovery is that fish catch sizes and fisheries-related income have increased sharply and steadily in the nine years since the establishment of the no take fish zones.



GENDER AND SOCIO-ECONOMIC RESULTS

The impact of these efforts over time have led to socio-economic benefits. The Akyaka Fisheries Cooperative reported a fourfold increase in their revenue between 2010 and 2016, from 1,422 Turkish liras per boat per month to 6,277.

In terms of women's empowerment, 125 women were trained in sustainable fisheries and 70 through direct communication with local authorities such as the local mayor and the provincial director of Ministry of Food, Agriculture and Livestock. Furthermore, 450 local fishing cooperatives changed their typical practices, to recognize the work of the women, empower them, give them voice in decision-making meetings. Consequently, women were able to solve problems such as lack of recognition, unequal sharing of income, and access to equipment within their own networks.



PHOTO: SGP TURKEY

POLICY INFLUENCE, REPLICATION AND SCALING UP

On the 8th of March, 2015 the fisherwomen made a press statement to highlight their rights and actions. Networking between the different local fishery cooperatives encouraged solidarity among the women, which led them to organize themselves and reach out to fisherwomen in other regions. One very concrete result of this is that they were officially added to the list of eligible groups who can seek microfinance through the Turkey Grameen Micro Credit Program.

The effort to map out the number and locations of active women in the small-scale fisheries sector in Turkey yielded results. More than 3,000 fisherwomen are active in inland waters and coastal areas and are

associated with 553 fishery cooperatives in Turkey. The results also revealed that 61 fisherwomen are running their fishing livelihood operations alone, without the support of a husband or another family member. The effort resulted in Turkey's first report on the status of fisherwomen, which was distributed widely to create awareness and improve their conditions.

In 2014, MCS won the Equator Prize due to the unique community-led creation, patrolling and scientific monitoring of a network of no-take zones, which have vastly increased fish abundance and food security, strengthened local livelihoods, and engaged women.

CHEMICALS AND WASTE MANAGEMENT

13

VIET NAM

Revolutionizing waste management in Hoi An City



GRANTEE

Women's Union of Hoi An City



LOCATION

Hoi An, Viet Nam

BACKGROUND

The ancient town of Hoi An is located in Viet Nam's central Quang Nam Province, near the mouth of the Thu Bon River. The city is a UNESCO World Heritage site and is exceptionally well-preserved. Recently, Hoi An has faced huge challenges in environmental management due, among other factors, to the tourism industry. With over 20 million visitors per year, the town is left with the gargantuan task of disposing of 27,000 tons of solid waste per year. The booming tourism industry alone produces 75 tonnes of solid waste per day.

As a result, the city's landscape and waterways were increasingly littered, threatening the environment and the health of communities. Eventually the city's waste finds its way to the ocean, with global environmental ramifications. To address this issue, with the support from SGP, the Hoi An Women's Union created a long-term waste management plan that fosters the sustainable development of the city while preserving its cultural heritage.



PHOTO: SGP VIET NAM

GOALS AND KEY ACTIVITIES

Among the most urgent environmental issues that Hoi An faces is the improper management of solid and liquid waste. Collection capacity only meets 60 percent of the town's demand, due in part to limited accessibility. The sewage system of the town was damaged, with severe consequences during the rainy season, and untreated waste is frequently discharged directly into the rivers and canals. These issues directly impact the health of local residents and visitors alike.

The town's landfill, Cam Ha, spans 2 ha and is at maximum capacity. It is not suitable for proper waste management because there are no liners at the bottom and no system in place to collect and treat landfill leachate which can contaminate both surface and ground water, and pollute the local environment. The waste pickers who come to Cam Ha to do the hazardous collection of waste for recycling are mostly women who collect and sometimes buy waste to sell to recycling agencies, who sell it again for a higher price.

Building on two earlier projects in Hoi An that created a model for domestic waste management, the Women's Union hoped to enhance the capacity of the local community to effectively manage their waste. In 2010, the Hoi An Women's Group, the Ministry of Natural Resources and Environment, and the Ministry of Public Works worked in close coordination to pilot a project to manage the city's solid waste. The goal was to mobilize organizations in Hoi An to participate in waste collection,

“The trolley supported by SGP is very meaningful to my family, I can now collect more waste in trolley and sell for more money. I don't have to carry waste on the shoulder any more. I am proud to contribute to keep Hoi An, WHS cleaner.”

MRS PHAN THI TAI, WASTE PICKER

classification, and treatment. Additionally, they wanted to integrate education on domestic waste management into local social, political, and cultural activities to achieve a broader reach and impact.

The women piloted sorting at five different locations and provided the city's waste pickers with sorting equipment and training on domestic waste collection, sorting, and disposal. A revolving credit scheme was established through the project, which gave loans to members of the groups and allowed the waste management programme to become viable. Advocacy was a critical component of the project and proved to be fundamental to achieving positive environmental impacts.

ENVIRONMENTAL RESULTS

Waste collection is now well organized and managed. The waste collectors' daily waste collection volume increased by 56.1 percent, and their daily sales increased by 39.93 percent, which resulted in a 41.87 percent increase in income. The waste trader

groups were provided with technical and financial assistance to improve their livelihoods. The project conducted 13 training courses in 13 communes/wards on in-house waste classification and household waste processing.



GENDER AND SOCIO-ECONOMIC RESULTS

The revolving credit scheme was able to provide loans for 24 entrepreneurial waste collectors. The borrowers were aware of the loan's purpose and focused on expanding their business activities. The financial support helped the women to increase their income and transition from street vendors to establishing facilities with larger scale business capacity. Through the seed loans, these women were able to increase the amount of recycled waste and reduce the amount of waste disposed to the landfill.

The project beneficiary women participated in communications training. As a result, domestic waste was classified at its source into three main types: biodegradable waste used for producing compost, recycled waste for sale to factories, and persistent waste to be disposed in landfill. The amount of waste at the landfill was reduced by more than 70 percent, reducing overloading and open burning, thus reducing greenhouse gas emissions and the release of persistent organic pollutants into the local environment.



PHOTO: SGP VIET NAM

POLICY INFLUENCE, REPLICATION AND SCALING UP

The project advocated on domestic waste management at local cultural events, through local media, and with a contest on waste collection, sorting, and disposal. The group also organized Green Friday with the residents of Hoi An, who spend one hour every Friday collecting waste. Since October 2011, media programmes on waste separation and environmental protection are broadcast six times per week. Four training sessions on domestic waste management were provided to the project participants and a total of 668 people participated. As a result of the advocacy, the city waste traders estimate that over 80 percent of the city households are sorting their domestic waste.

The pilot in Hoi An has mobilized the whole of society to address local waste management problems. Through surveying and assessing the results and benefits of this model, it is clear that the most significant result of this effort is the cooperation and shared responsibility for waste management in the community, which ensures a clean environment in this valuable heritage site and its surroundings. This helps attract more tourism to Hoi An, which in turn has a positive impact on local livelihoods.

This model is now being scaled up at a provincial level as a key strategy for addressing urban waste.

Lessons learned

The analysis of these projects provides important lessons on what is required for women to participate and play a vital role in environmental conservation. Furthermore, it presents concrete action points for practitioners who are engaged in such activities:

- Recognizing and identifying barriers to women's participation and leadership in projects is fundamental to creating appropriate strategies that can help them overcome these barriers, starting from the design and conceptualization of projects and policies.
- Enhancing the understanding of the co-benefits generated by gender equality and women's empowerment for environmental conservation and the sustainable management of natural resources is key to making the case for investing in women. All the case studies demonstrate that when women are empowered the entire community benefits.
- Developing women's leadership skills through better access to training, information and technology is fundamental to addressing barriers to their access and control over natural resources. When women are informed and equipped with the right skills and information, they are more confident to speak up, take action and contribute effectively to society.
- Providing access to finance and supporting income-generating activities not only reduces pressure on the ecosystems but is an important vehicle towards women's empowerment and gender equality. Women's control over financial resources leads to a balancing of power and transforming social and cultural norms as appropriate in the local context.
- Creating and strengthening women's networks, self-help groups and cooperatives is an effective mechanism to create solidarity, greater understanding of their own needs and to mobilize collective action with positive results for sustainable resource management. Networks also support the scaling-up and sustainability of good practices and overall empowerment of women as agents of change.
- Shining the light on the power of women as environmental stewards and recognizing their contributions paves the way for other women to speak up, participate and act. It helps to create new models of collaboration that are cemented in equal power dynamics and to transition women from the domestic to the public sphere.
- Enabling and facilitating partnerships for women with the Government, private sector, donors and other key stakeholders in the environmental sector enables them to join the conversation, contribute to policymaking, and replicate and scale up their good practices in other development sectors.

Conclusions

Women make up half the world and their role in natural resource management and sustainable development cannot be overstated. Investment in the empowerment, education and participation of women and girls results in important and necessary changes, such as poverty alleviation and eradication, economic growth, and environmentally sound sustainable development.

This publication aims to highlight the role of women as environmental stewards based on SGP's history of promoting gender equality and women's empowerment since its establishment.

These examples and lessons learned from women-led initiatives also demonstrate how SGP contributes to the three key action points highlighted in the GEF 2017 Policy on Gender Equality as key to "unleash women's potential as key agents of change".

CONTRIBUTING TO CLOSING GENDER GAPS IN ACCESS TO AND CONTROL OVER RESOURCES:

Women have been champions of environmental conservation as much as or even more than men. They encounter the natural environment through their daily activities as collectors and managers of water, fuel and food and hence interact with and affect both landscape and seascape. Due to this close interaction with nature, women are also custodians of vast repositories of inherited knowledge about land and water ecosystems.

To fully utilize women's potential as managers for sustainable natural resource management, SGP has been supporting women's groups and civil society organizations to break down the barriers that prevent women's access and control over resources. One of these barriers is access to information, training and technology related to natural resources management. These services often target men and have very limited participation of women. SGP has been targeting women to close this gap and enhance women's technical skills on environmental issues.

For example, in **Peru**, with support of SGP, a group of women used their traditional knowledge of the use of a naturally dyed cotton to recover native cotton species from the brink of extinction and gained control over the harvesting of natural resources.

Similarly, in **Colombia**, women of the Naya River basin were able to implement sustainable harvesting of *piangua* and conserve the mangroves it inhabits by establishing sustainable use agreements in their communities and developing alternative sustainable production activities to maintain income during harvesting. As a result, women are now participating in decision-making about the conservation and extraction of the *piangua* in the region, giving them more control over the use of the natural resources in their ecosystem.

IMPROVING THE PARTICIPATION AND DECISION-MAKING OF WOMEN IN NATURAL RESOURCE GOVERNANCE:

There is significant research and experience to demonstrate that when women are involved in decision-making processes, there are better chances to have sound policies for the good of the people and natural environments that benefit the entire community. A UNESCO report shows that empowering women has positive consequences for the environment and that countries with more women in parliament are more likely to ratify environmental treaties.¹

An example of this is the SGP supported project in **Uganda**, where an NGO established an association consisting of 35 women's groups and offered capacity-building on resource and financial management. As a result, women were better organized and able to influence the Government on women's ownership of lands and, critically, inheritance of land by female children. Today, more than 182,000 women participants in the network are able to own the land they use.

¹ UNESCO, *Global Education Monitoring Report*, 2016.



PHOTO: SGP MAURITIUS

In the **Gambia**, women oyster harvesters joined together in an association called TRY. Together, the oyster harvesters were able to grow a powerful network with an organized leadership, which received government recognition and played a key role in the creation of the Co-Management Plan for the Tanbi Special Management Area – the wetland in which their oyster grows. Through the management plan, TRY was given exclusive rights to the oyster fishery within the special management area.

Finally, SGP's own governance ensures that there is an equal number of women and men, and at least one gender focal point, in the SGP's national steering committee so that project selection and other decision-making elements of the SGP country programmes reflect the diverse points of view of different stakeholders. It also enables gender equality and women's empowerment to be promoted and adequately reflected in SGP's portfolio.

TARGETING SOCIO-ECONOMIC BENEFITS AND SERVICES FOR WOMEN:

Statistics show that a mere 5 percent of all development assistance targeted gender equality as a principal objective

in 2012-2013. When it comes to investing in women's economic empowerment, the percentage even lower at 2 percent.²

SGP's grant making and gender mainstreaming approach demonstrates how women, when given the opportunity and financial and technical support, become key agents for achieving transformative economic, environmental and social change. SGP's experience shows that when women are given access to finance, and manage bank account and savings groups, they are often able to not only sustain their own small enterprise or business, but also transform their community through supporting education and healthcare, and promote long-term sustainability of the initiatives by involving youth.

For example, in **Mauritius**, in response to a rapid decline in the once-booming textile industry, a group of women factory workers organized themselves to find an alternative livelihood option by harvesting endemic medicinal plants with financial support from the SGP. Building on their traditional knowledge, these women built a nursery to grow medicinal plants, applied simple processing methods and started a women-led enterprise called Grandma's Secret Herbal Teas. These teas are now

² Organisation for Economic Co-operation and Development, Development Assistance Committee (OECD-DAC), From commitment to action: *Financing gender equality and women's rights in the implementation of the Sustainable Development Goals*, 2015

internationally exported to eight countries, including the United States and in Europe, and they are sold in duty-free shops. The women's group now has multiple donors and owns the first solar-powered tea processing facility in Mauritius.

In **India**, a local NGO helped women in the community to organize themselves into women's savings and credit groups, to plan and carry out small entrepreneurial activities using available natural resources sustainably. Through their collected savings, the women now offer credit to other women who want to invest in equipment to further improve their businesses, while also offering training on sustainable land management. Some of their products, including essential oils, are now processed and marketed internationally.

In conclusion, as the cases in this publication demonstrate, enabling women's access to and control over natural resources, participation in decision-making and targeted benefits and services, are essential elements in the implementation and achievement of environmental and development targets agreed nationally, regionally and globally.

Building on these good practices and examples, SGP, in line with the GEF, UNDP, and other policies and strategies, will continue its proactive approach to addressing gender equality and empowering women. In particular, SGP will further promote gender parity in its governance and decision making; ensure its policies, strategies, and projects are gender responsive; and continue to support women-led initiatives.





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.



The Global Environment Facility (GEF), established on the eve of the 1992 Rio Earth Summit, is a catalyst for action on the environment — and much more. Through its strategic investments, the GEF works with partners to tackle the planet's biggest environmental issues. Our funding also helps reduce poverty, strengthen governance and achieve greater equality between women and men. As such, we occupy a unique space in the global partnership for a more sustainable planet.



*Empowered lives.
Resilient nations.*

UNDP partners with people at all levels of society to help build nations that can withstand crisis, and drive and sustain the kind of growth that improves the quality of life for everyone. On the ground in 177 countries and territories, we offer global perspective and local insight to help empower lives and build resilient nations. www.undp.org



304 E 45th Street
UNDP, 9th Floor
New York, NY 10017
USA

Email: sgp.info@undp.org
Website: www.sgp.undp.org