

Supporting Communities to Manage their Environment

Community Action - Global Impact



Environmental Conservation for Sustainable Development

Putting People First

Published by GEF Small Grants programme

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Overview

The Global Environmental Facility

The Global Environmental Facility (GEF) is a financing mechanism structured as a Trust Fund that provides grants to developing countries for projects that benefit the global environment and promote sustainable livelihoods in local communities. It forges international cooperation and finances actions to address six critical threats to the global environment:

- Biodiversity loss,
- Climate change,
- Degradation of international waters,
- Ozone depletion,
- Land degradation, and
- Persistent organic pollutants.

GEF SGP at a glance

The Small Grants Programme (SGP) is a corporate programme of the Global Environment Facility (GEF) implemented by the United Nations Development Programme (UNDP) on behalf of the other GEF Implementing Agencies. Launched in 1992, SGP disburses grants directly to communities through registered Non-Governmental Organizations (NGOs) and Community-Based Organizations (CBOs) for initiatives that produce global environmental benefits while enhancing the well-being and livelihoods of the communities.

Since its establishment, SGP has worked with over 10,000 CBOs and NGOs in 120 developing countries across the globe. It operates in a decentralized, democratic and transparent manner through National Coordinators (NCs) and National Steering Committees (NSCs). The NSC provides the SGP with a truly country-driven character and is composed of representatives from the United Nations, government, civil society (NGOs, CBOs), academic institutions and the private sector. In addition, the NSC ensures participatory, impartial, and transparent procedures for project review, approval and implementation.

The maximum grant amount awarded per project is USD 50,000, with an average of about USD 35,000. Projects are therefore relatively small in size and meant to demonstrate innovative approaches of addressing environmental problems at the community level.

Preface

It is with great pleasure that we present to you this booklet that highlights some of the activities and achievements of the Global Environment Facility Small Grants Programme (**GEF SGP**). The SGP receives its funding from the GEF, and is implemented by UNDP on behalf of other GEF implementing agencies. The Kenya Country Office UNDP manages and works closely with the SGP, and is proud to be associated with the interventions made at grassroots level to conserve natural resources, alleviate poverty and improve livelihoods.

In 2003, UNDP and the GEF/SGP in Kenya entered into a partnership with the German Development Service (DED) to enhance the impact of community implementation of projects. The partnership, which saw the attachment of three Technical Advisors (TAs) to the SGP, was a win-win situation; it enhanced the capacity of the SGP to respond more efficiently and effectively to the needs of the communities; it gave the Technical Advisors an opportunity to apply their skills and gain additional experience in community development. The partnership also provided results that contributed to UNDP's goal of poverty alleviation and sustainable development.

The SGP uses a clustering approach, where several inter-related projects are supported in a geographical or thematic area. This enhances project impact at a regional level and facilitates proper monitoring.

During their tenure at SGP, the Technical Advisors supervised and provided technical advice to projects implemented in the following clusters;

- 1) **Mt. Kenya:** Through the Community Management of Protected Areas (COMPACT) Initiative, GEF SGP forges partnerships with stakeholders to raise awareness that Mt. Kenya is a World Heritage Site, and to promote conservation and sustainable development projects at a landscape level.
- 2) **Lake Jipe:** Initiatives in this cluster assist communities to revive the once "dying" Lake Jipe ecosystem, by constructing dykes to protect springs, desilting canals, stabilizing river banks and planting trees.
- 3) **Land degradation:** GEF SGP worked with several community groups in Kilome Division, Makueni to reduce land degradation by digging cut-off trenches on hill-slopes, constructing check dams and gabions, terracing farms and planting trees.
- 4) **Greening Rusinga Initiative (GRI):** was designed to significantly increase tree cover on Rusinga Island, and also address livelihood needs, especially for improved nutrition, by working with schools, fisherfolk, women groups and farmers.
- 5) **Coast:** The focus at the coast is two-pronged: support to marine conservation initiatives that target mangroves and fisheries; and provision of alternative energy options by empowering communities to produce bio-fuels for lighting and cooking.
- 6) **Community Water Initiative (CWI):** The CWI was established to provide clean water to rural communities, particularly in Arid and Semi Arid lands (ASALs) for domestic use, watering livestock and establishment of kitchen gardens.

The commitment and perseverance of the local communities featured in this booklet depict their determination to improve their well-being by conserving the resources they rely on.

We invite you to read on.



Aeneas C. Chuma
Resident Representative, UNDP Kenya



Wolfram Jaeckel
Director, German Development Service Kenya

MT. KENYA

Rehabilitating and Protecting a World Heritage Site

Background

At 5,199 meters (17,057 Feet) above sea level, Mount Kenya is the second highest mountain in Africa after Mt. Kilimanjaro. Mt. Kenya straddles the equator and is a vital water catchment area with its rugged glacier-clad summits and forested middle slopes. Mt. Kenya has 13 endemic species, which means that they are found nowhere else in the world, including the endemic mole rat and forest birds such as the green ibis (a local Mount Kenya race), Ayer's hawk eagle, Abyssinian long-eared owl, scaly francolin and numerous sunbirds. Traditionally, the Mountain was sacred to the Kikuyu and Meru communities living in the peripheral zone who believed that *Ngai* (God) dwelled at the peak. Mt. Kenya also played an important role as a hiding place for *Mau Mau* freedom fighters. The hoisting of the Kenyan flag at the peak by Mr. Kiso Munyau on Independence Day, December 12th 1963, further manifests the historical, cultural and religious importance of Mt. Kenya.

Mt. Kenya was gazetted as a National Park in 1949 and designated as a UNESCO Biosphere Reserve in 1978. In 1997, the combined National Park and surrounding Forest Reserve was declared as the Mt. Kenya World Heritage Site.

Despite national and international recognition and protection, Mt. Kenya has been substantially degraded due to poor management and the weak implementation of government policies and laws. An aerial survey conducted by the United Nations Environment Programme (UNEP), Kenya Wildlife

Service (KWS) and the Kenya Forests Working Group (KFWG) in 1999 showed the extent of destruction of the Mt. Kenya, Imenti and Ngare Ndare forests. Human activities including logging of indigenous trees, charcoal production, cattle grazing, landslides and *marijuana* cultivation contributed to the degradation.

The Mt. Kenya COMPACT Initiative

Based on the findings of the aerial survey and the Mt. Kenya Baseline Assessment, UNDP and GEF-SGP established the Community Management of Protected Areas Conservation (COMPACT) programme in Mt. Kenya in 2001.

The COMPACT programme is an initiative of GEF/SGP, the United Nations Foundation (UNF) and other partners that seeks to demonstrate how community-based initiatives can significantly increase the effectiveness of biodiversity conservation in globally significant protected areas, such as World Heritage Sites.

In order to promote a common understanding of the linkages between destructive practices and the loss of biodiversity, COMPACT organized a series of workshops targeted at members of the surrounding communities, protected area managers, such as KWS and the Kenya Forests Service (KFS - formerly Forest Department) officers, international donors, research institutions and the private sector.

GEF SGP has built partnerships with stakeholders through the COMPACT Initiative to promote awareness that Mt. Kenya is a World Heritage Site. By partnering with the local communities, COMPACT has initiated projects that aim at reducing pressure on the mountain's natural resources as well as providing alternative income sources for the forest communities.

Operating under the theme – “To contribute to the conservation of the Mt. Kenya World Heritage Site” the stakeholders agreed to assist communities to identify and develop income-generating activities to reduce the need to over-exploit the Mt. Kenya forests and to create awareness about the local, national and international importance of Mt. Kenya which is a World Heritage Site.

The Mt. Kenya Donor/Partner Forum and the Mt. Kenya Grantees Network were created to promote the exchange of information and facilitate greater coordination of the activities of various stakeholders working in the region.



Cultural ceremonies are used to restore sacred sites rich in biodiversity

Programme Activities

Since its inception in 2001, COMPACT has supported 67 projects through grants to community groups and NGOs amounting to over \$2 million, while the communities have contributed over \$1.1 million as co-financing in cash and in kind to the various projects. These projects have helped communities participate in forest restoration processes, protect endangered wildlife and develop alternative livelihood activities that reduce pressure on the resources within the Mt. Kenya forest.

Through COMPACT, over 600 hectares of indigenous forest have been rehabilitated and individuals who illegally harvested forest resources in the past have been converted to become protectors of the mountain and its resources. Clean and renewable sources of energy have been developed and promoted including micro-hydropower, wind

Over 600 hectares of indigenous forest have been rehabilitated and individuals who illegally harvested forest resources in the past have been converted to become protectors of the mountain and its resources.



Trout Farm in Eastern Mt Kenya



A community Agro-Tourism venture at Chogoria



Using art to promote conservation

energy and biogas. Further, these projects have created jobs while contributing to improving the living standards of rural communities.

Communities have been facilitated to form Water Resource Users Associations and Community Forestry Associations that are engaged in managing these critical resources in collaboration with the relevant government agencies for the benefit of all. Others communities are implementing eco-tourism ventures that promote positive cultural practices while enhancing conservation. COMPACT is also supporting various nature-based income generating activities and the branding of farm products that are responsibly produced around the Mt. Kenya World Heritage Site. Environmental education and capacity development activities are also being implemented targeting various age-groups and socio-economic strata of the community.

As a result of the activities supported by COMPACT, there is now greater consciousness of environmental issues in general and greater participation of local communities in the conservation of the Mt. Kenya World Heritage Site.



LAKE JIPE

Restoration Initiative

Background

Lake Jipe is a small, shallow lake of between 2-3 meters deep covering an area of 28 km² astride the Kenya-Tanzania border in the districts of Taveta and Mwanga, respectively. The Lake is fed mainly by Lumi River which emanates from Mt. Kilimanjaro, the highest mountain in Africa. Another source of water for Lake Jipe is the Pare Mountains, also in Tanzania, whose streams flow either above or below ground, with some only flowing during the wet season. The main outlet for the Lake is the Ruwu River, which passes through an extensive swampy area that forms the administrative boundary of Kenya and Tanzania, before flowing into the *Nyumba ya Mungu* reservoir that joins with waters from the southern and western slopes of Mt. Kilimanjaro and from Mt. Meru to become the Pangani River.

Lake Jipe is important to both Kenya and Tanzania for agriculture, fisheries and biodiversity. Until the 1950s, Lake Jipe had a fairly well established fishing industry dominated mainly by tilapia and catfish species. It has two endemic fish species, *Oreochromis jipe* and *Oreochromis grigan*. However by the late 1960s, the fishery began to decline following invasion by the *Typhas domingensis* and papyrus weeds, which made fishing difficult. Many fishermen thereby migrated to the *Nyumba ya Mungu* Dam, about 30km south east of the Lake on the Tanzania side.

Straddled along the Kenya/Tanzania border, Lake Jipe was once considered a “dying” lake. In collaboration with several stakeholders, GEF SGP partnered with the communities to revive the Lake Jipe ecosystem, by constructing dykes to protect springs, de-silting canals, stabilizing river banks and planting trees.

Lake Jipe has a variety of birds including many migrant waders and water birds. It used to be famous for abundant water lilies that supported a thriving population of pygmy geese. With the disappearance of the water lilies, blamed on the high siltation levels, the pygmy geese also virtually disappeared. The Lake is an important feeding and watering resource for wild animals from the Tsavo West National Park, such as elephants, buffaloes, zebra, giraffe and oryx.

The Problem

Lake Jipe almost dried up in 2001 as a result of the accumulated impacts of unsustainable land use and water management practices including the clearing of vegetation for farming, charcoal production, timber extraction, over grazing and

unregulated diversion of water for irrigation. Canals that were designed to control siltation into the lake had been destroyed, resulting in the silting up of the mouth of River Lumi; this in turn diverted water directly into the River Ruvu, thereby cutting off the lake’s recharge water. The canals that silted up included the Mguru, Grogan, Njoro Kubwa canal (now Njoro Kubwa river), Kamleza and Block C. Farming close to the river, coupled with destruction of the banks by hippos, caused River Lumi to frequently burst its banks.

Impacts on Livelihoods and Environment

Over 25,000 people depend on the Lake Jipe ecosystem. The drying up of Lake Jipe adversely affected the fisherfolk and increased conflicts between people and wildlife and also between farmers and pastoralists. Further, the lake water generally became unfit for human consumption, thereby denying people use of its water for domestic purposes.

Project Activities

Project activities to address the environmental and livelihood problems of Lake Jipe and the River Lumi basin started in 2003 with the Conservation Education Project funded by the European Union through the Biodiversity Conservation Project of the Community Development Trust Fund (CDTF-



Dyke rehabilitation to protect Njoro springs

BCP). This project also implemented emergency activities to desilt the mouth of River Lumi, that led to the recharge of the Lake.

As a result of the environmental education, the community identified priority areas they wanted to address, and with support from the UNDP-GEF/SGP, a cluster of 7 projects was implemented, collectively known as the Lake Jipe Restoration Initiative. The priority activities included desilting canals, stabilizing the banks of River Lumi, protecting springs, constructing water pans to reduce human-wildlife conflict and increase access to water for domestic use, establishing sustainable nature-based enterprises, such as bee keeping, fish farming, agro-forestry and environmental education to enhance advocacy and community governance.

The community based organizations (CBOs) that implemented the various activities were; Reu Reu Environmental CBO, the Jipe Farmers Association, Kimorigho River Lumi Rehabilitation Works Group, the Lake Jipe Youth Group, the Mrunganyiko Women Fish Farmers Association and the Tugurane Women Group. The East African Wildlife Society played a coordination role.



Bank stabilization along River Lumi



Njoro Springs that feed Lake Jipe



Halima Mruttu, a woman leader and environmental campaigner, makes a point at a Baraza

Project Achievements

The groups have successfully implemented various activities including the desilting and rehabilitating of 36 kms of canals, constructing dykes to protect the springs from siltation, stabilizing the banks of River Lumi and constructing the Sombasomba flood control drain and a permanent bridge across the drain. Reduced siltation and increased flow of water into Lake Jipe has contributed to the revival of the fish industry, with incomes from fishing going up to an average gross income of Ksh. 12,000 (\$160) per month. Farmers are also able to grow and harvest their crops without fear of them being destroyed by regular flooding.

The community has received training and raised over 20,000 seedlings in four project nurseries and purchased 50,000 from other nurseries. They have also been trained in modern bee-keeping techniques and facilitated to acquire beehives and processing equipment such as a centrifuge machine for extracting honey.

One group was supported to construct a fish pond and a fish holding ground at Mata Village after being trained and visiting fish farming groups in Sagana and Nyeri. Water pans and dams have been constructed to improve access to water for domestic use and to reduce human-wildlife conflict. The groups are also involved in environmental campaigns and in enhancing community environmental governance.



KILOME

Community Participation In Rehabilitating Degraded Lands

Background

Approximately 100 kilometers east of Nairobi is an area of about 40 km² in Kilome Division of Kibwezi District (formerly part of Makueni District) that was heavily degraded. This land was previously part of a cattle ranch that was bought by the current occupants through a land buying company and later sub-divided among the members. The area is semi-arid and smallholder farming has resulted in the degradation of the land.

In 2004, ten CBOs got together under the umbrella of a local NGO to undertake a series of small complementary projects aimed at halting the further degradation of the land in the area. The Kenya Initiatives for Development (KID) is the coordinating NGO and the ten CBOs are; Aimi ma Kavuko FFS SHG, Kiumoni/Kilome Environment Rehabilitation Project; Kyundu Pollen Youth Group; Meko ma kwa Nduuka Women Group; Thome wa Kima Self Help Group; Wasya wa Tuvilani Women Group;



CBO members dig a cut-off trench to reduce soil erosion

Wema Self Help Group; Kavuko Youth Group; Ndaatai Community Based Organisation; and Kavuko Self Help Group.

The three zones that make up the 40 km² area are; the degraded Kavuko hills which has huge gullies of up to nine kms long that measure upto 18 meters deep and 20 meters wide at some points; the seasonal Usi-Unene River that runs for about five kilometers along a rocky area with low human settlement along its course; and the drying Kaketa River that originates from the 148 hectares gazetted Kilome Forest Block and that runs for 15 km along a heavily settled agricultural area.

The Project Activities

Rehabilitation activities focus on reversing land degradation such as digging of cut off trenches, constructing check and earth dams, establishing tree nurseries and planting trees and sisal to control soil erosion. Other activities are beekeeping, constructing a community hall and training the communities to understand the causes of land degradation and how to reverse it.

About 30 kms of cut-off trenches have been dug on 6 hill sides both in privately owned land and in the gazetted forest block. The flow of rain water is effectively slowed down, resulting in increased filtration into the ground which has in turn encouraged the re-growth of trees and grasses on the hills. In some areas, additional trees and grasses have been planted on the trenches. The excess water that runs off through the gullies is intercepted by gabions, check dams and weirs.

A total of 23 weirs (check dams) have been constructed across various sections of the rivers and in the gulleys. For example two check dams have been constructed along the Usi-Unene River and one along the Kaketa River. A gabion has been constructed along the Kwa Kikwu gully and two weirs along the Nduyuni gully. Three earth dams were desilted to hold run off water, with a total of 108,000 sisal plants planted to stabilize the soil within and along the gulleys resulting in a reduction in soil erosion and increased water for livestock and domestic use.

During the prolonged drought of 2009, the 400 pupils of Mukaa Girls High School depended entirely on the Kwa Nduuka check dam while the Usi-Unene dams supplied enough water for the communities and their livestock throughout the dry season. The excess water from the Kavuko hills filled the expanded Mbuu dam which supplies water to the community.

The Kilome/Kaketa riverine sub-ecosystem and the Kavuko hills of Kilome Division, are characterized by degraded farms, large gullies and eroded hillslopes. GEF SGP works with several community groups in the area to reduce land degradation by digging cut-off trenches on hill-slopes, constructing check dams and gabions, terracing farms and planting trees.



Well-maintained terraces on farmland



Community members plant trees to stabilise soil within the terraces

The Konza Ranching Society donated land for constructing the Community Assembly Centre that has a hall capable of hosting 300 people, a boardroom, four offices and a three roomed house that is used to process and package honey. Also at the Centre is a nursery with various indigenous and fruit seedlings. The Centre also houses models of water harvesting technologies for demonstration, including ground and roof tanks, some of which are made from soil-cement stabilized bricks.

More than 100 bee hives were set up on the Kyundu hillside and although the drought of 2009 had a devastating effect on the bee colonies, it is anticipated that the situation will improve with the rains.

Each of the ten CBOs has plans to initiate one or more income generating activities, with one of them already benefiting from selling water extended from the main Kilimanjaro-Nairobi pipeline to the Kyundu hillside.



RUSINGA

Greening Rusinga Island Initiative

Background

Rusinga Island lies on the eastern part of Lake Victoria, the world's second largest freshwater lake. The Island is approximately 16 kilometers (10 miles) long and about five km (three miles) at its widest point. Rusinga Island is part of Suba District and is linked by a causeway to Mbita Point on the mainland. The Island is notable as the family home and burial site of the renowned Kenyan politician, Tom Mboya who was assassinated in 1969.

The island has a population of about 20,000 people who mainly engage in subsistence agriculture and fishing. The main fish species caught are the native tilapia species and the Nile perch that was introduced into the lake in the 1950s.

The Greening Rusinga Initiative was designed to significantly increase tree cover on the Island, and also to address livelihood needs. Schools, fishermen, women groups and farmers planted over one million seedlings in school compounds, beaches, hilltops and farms. In addition, they planted high value crops, started a silk-farming project, and cleaned the beaches.

Many years of environmental degradation had resulted in extensive soil erosion with inhabitants experiencing scarcity of wood and timber. The forest cover had also dwindled to a mere 5% of the total land area.

Project Activities

The Greening Rusinga Initiative was launched in 2003 with the aim of growing indigenous trees. The project was implemented through a consortium of organizations, including

NGOs, research institutions, community based organizations, relevant government ministries, the Local Authority, primary and secondary schools



An established woodlot ensures a steady supply of seeds for afforestation and building poles



Beautifully branded community transport on Rusinga island

and individual members of the community. The NGO, Africa Now, coordinated the project. The World Agroforestry Centre, in collaboration with six women groups, raised one million seedlings while Africa Now provided an additional 250,000 seedlings.

Victoria Youth Group planted 60,000 seedlings along the gazetted beaches. Njakare Women Group and CARE Kenya planted 90,000 and 120,000 seedlings on farm woodlots, respectively. Pupils in the Island's primary schools planted 300,000 seedlings in schools and on the Island's hills. Secondary schools pupils planted 50,000 seedlings in arboreta and along the Rusinga ring road. The other trees were planted by members of the community. The tree cover has increased considerably from the estimated 5% .

The overall environment of Rusinga Island has improved due to lots of trees on people's farms and along the beaches. The trees have stabilized the



School children participate in a tree planting event



High value food crops to complement tree planting

soils and reduced soil erosion. Women have a steady supply of fuel wood from their woodlots for both domestic use and for sale to supplement household incomes, with some farmers collecting and selling tree seeds. The woodlots also supply fuel wood for processing fish either by smoking or frying.

Two hundred and thirty households planted fruit trees and other horticultural crops, such as tomatoes, vegetables and water melons, which are contributing to improved nutrition.

In 2006, UN-Habitat recognized the Greening Rusinga Island Initiative in a colourful ceremony where it was awarded the first runners up position in the innovations category in a tough competition in which more than 40 NGOs and CBOs participated.



Photo: MCCAG Mida creek

COAST

Terrestrial and Marine Conservation

Terrestrial and Marine Conservation

Kenya has a coastline of over 600km, which hosts highly productive and valuable ecosystems that play a crucial role in the economic and social development of the country. The coastal habitats include lowland coastal forests, mangrove swamps, estuarine mudflats, seagrass meadows and coral reefs.

The portfolio of community-based interventions funded by GEF SGP at the coast addresses both terrestrial and marine conservation issues.

Community Bio-fuel project

Over 85% of the local coastal communities use kerosene for lighting, which is expensive, given that the incidence of poverty at the coast is one of the highest in the country. In an effort to mitigate the effects of climate change



Jatropha seeds on a 9-month old plant at Kaya Muhaka



Jatropha oil lamps developed by local artisans



Jatropha nursery at Gogoni

from kerosene consumption and to alleviate poverty, GEF SGP Kenya, in collaboration with the German Development Service (DED) and the World Wildlife Fund (WWF), partnered with nine farmer groups to establish Jatropha biofuel clusters in Malindi, Kwale, Kinango and Msambweni districts. The nine farmer groups are; Golini Mwaluganje Community Conservation Group, Mirmadzo Forest Association, Gongoni Forest Conservation Group, Lima Self Help Group, Kaya Muhakah Forest Conservation Group. Others are Coast Vanilla Jatropha Environment Initiative, Malindi Small Scale Farmers Group, Coast Farm Forestry Association and Munganono wa Wakulima wa Kipepeo (Association of Butterfly Farmers). Close to 80,000 jatropha trees have been planted as a hedge around farms and as a buffer around two kayas forests; Kaya Muhakha and Kaya Dzombo. Kayas are sacred coastal forest of the local Mijikenda communities.

Local artisans have fabricated a manual hydraulic oil press for crushing Jatropha seeds that also produces briquettes from



An example of Jatropha planted as a hedge around farms

the seed cake. One attractive feature of the oil press is that it does not require intense strength, and can therefore be easily operated by women. In 2009, 125 households conducted tests to determine how well and how long the Jatropha oil burns. The initial results are promising; jatropha oil burns twice as long and emits significantly less soot than kerosene.

Since Jatropha oil is up to 30 times thicker than kerosene, it is not possible to use it with the usual lamps and stoves. "Akiba" is the name the community members have given to the new lamp designed by local artisans for use with Jatropha oil. The groups have also established a training and learning center close to Kaya Muhaka to demonstrate the hydraulic press, Jatropha oil and the Akiba lamp.

Marine Conservation

Marine conservation, with a focus on mangroves and fisheries, is high on the SGP agenda. The GEF SGP has provided financial and technical assistance to over 20 groups along the coast to implement marine conservation and management activities.

Mangroves

Mangroves are the only trees that have been remarkably successful in colonizing the inter-tidal zone between land and sea. Mangroves are a source of raw materials for consumer goods and provide benefits of environmental, economic and cultural value. They serve as breeding ground for fish and other fauna, stabilize and protect shorelines, assimilate waste and sequester carbon. In addition, mangroves provide wood for boats, house construction and for furniture.

In Kenya, like in other parts of the world, mangroves are endangered primarily due to over-exploitation. Moreover, poor land use practices up-stream have increased sediment loads into mangroves leading to siltation around the breathing roots.

To contribute to conservation efforts, GEF SGP has awarded grants to communities to rehabilitate pockets of degraded mangroves at Gazi, Vanga and Mida creek. These efforts are complemented by livelihood activities, such as mariculture, eco-tourism and bee-keeping, which not only generate income for the community groups, but also serve as an incentive to conserve. The Kenya Marine and Fisheries Research Institute (KMFRI) provides professional and technical support.

Fisheries

Marine fisheries in Kenya have experienced a worrying decline in recent decades partly due to the increasing numbers of poor people who take up fishing as a livelihood in an already crowded arena. Small, non-motorized boats, which comprise 90% of the vessels used for fishing, are unable to venture into the deep sea, and thus compel fishermen to concentrate their energies within the coral reef. Consequently, the problems of over-fishing, loss of biodiversity and poverty are experienced almost along the entire coast.

GEF SGP has partnered with Coastal Oceans Research and Development in the Indian Ocean (CORDIO), Gazi Women Group and the Kwetu Training Centre to equip local communities with tools and skills to better manage the fisheries. These project activities include, establishing a fishery management plan for the sustainable exploitation of the lobster fishery in Kiunga, which is a key source of livelihood for the local populations. Fishermen in the Vanga- Shimoni area have also been provided with skills in farming to reduce reliance on fishing, while fishermen at Gazi have been trained on mari-culture, specifically on farming fish in ponds using seawater.



Background

The Community Water Initiative (CWI) of UNDP was established in 2003 in response to calls at the World Summit on Sustainable Development (WSSD) for concrete actions to meet global challenges in the areas of water and sanitation. CWI is a funding mechanism for community based water supply, sanitation and watershed management. In Kenya, CWI is implemented by the UNDP/GEF SGP.

The livelihoods of the communities that live in Arid and Semi-arid Lands (ASAL), which make up about 80% of the Kenya's landmass, are affected by water scarcity which in turn contributes to low land productivity and limited options for meeting their daily needs for income and food. Access to clean water is usually a daunting task, especially because the rains are erratic and often insufficient resulting in drought. Other times, heavy rains occur over short periods resulting in flash floods that are a hazard to people, their livestock and that lead to significant soil erosion.

Since its inception, CWI has provided funding for community water projects especially in the ASALs.

CWI Activities

The objectives of CWI in Kenya are to promote and develop low-cost rain water catchment technologies so as to provide clean water for domestic



CWI fruit tree nursery in Machakos

use, irrigation and livestock to indigenous and marginalized communities such as the Maasai, Endorois and Ilchamus. The strategies that are used to ensure the sustainability of the Initiatives' projects include, the establishment of income generating activities, financial management plans, networks of stakeholders within the project area and the training of local artisans. The management skills of the community organizations are strengthened, with a focus on women's groups. The projects are also used as entry points for promoting other community-driven initiatives, while synergies are created with other SGP projects.

The projects funded to date focus primarily on rain water harvesting technologies, including rock catchment, roofs, dam/water pan de-silting, gravity-based systems and the protection of springs.

Although all the projects focus primarily on the provision of safe, potable water, the element of sanitation and waste disposal is also addressed. CWI has constructed Ventilated Improved Pit (VIP) latrines at various water points,

to protect the water from contamination and to create awareness on the importance of proper sanitation among community members. Following the implementation of two community water projects in collaboration with the Kenya Rainwater Association, in Cheptolil village in Koibatek and Kailer village in Baringo district, about fifty homesteads have "caught on" and constructed VIP latrines in their compounds and it is anticipated that this number will rise.

Within the project areas, the distance walked by women and children in search of water has been significantly reduced ranging from an average of 4 – 10 kilometers previously to about 0.25 – 3 kms. As a result, time has been freed up to engage in other activities. In Nguu Division, women have used money generated from selling water from the Vololo rock catchment project to buy chickens that they are rearing to generate income. Additionally, incidences of water borne diseases, such as typhoid and bilharzia are reduced. Enrollment rates in a kindergarten and primary schools which are close to a spring in Narok that was protected are reported to have gone up due to these factors.

Each project funded under the CWI allocates a budget for building the capacity and training of the beneficiaries. The training covers aspects of leadership and organizational skills, financial management and record keeping. Other topics covered are land and water management, environmental conservation, health and sanitation, enterprise creation and tree nursery establishment and management. Communities are also trained on how to maintain and operate project facilities while members of water committees are provided with masonry skills.

The establishment of tree nurseries and kitchen gardens is a key component of several of the water projects. The once predominantly pastoralist Maasai community of Maji Moto in Narok district has established small farms around the protected spring using furrow drainage and are cultivating onions, beans and maize for themselves and the local market.

Tree seedlings have been planted around water points, in school compounds and homesteads following training on tree nursery establishment and on the importance of agro-forestry.

In 2003, GEF SGP started implementing the Community Water Initiative (CWI) to provide clean water to rural communities, particularly in the ASALs, for domestic use, watering livestock and establishment of kitchen gardens.

Seedlings that are planted in schools are sold at subsidized prices to the parents of the students.

One of the CWI funded projects, Kamurugu Agricultural Initiatives (KADI) in Mbeere District won the UN Project of the Year Award in 2002 and its then director, Mr. Joseph M'eruaki was declared the UN person of the year. Mr. M'eruaki has taken the lead in involving the community in this drought prone area in income generating activities that improve food security resulting in the residents becoming self-reliant while they previously relied on relief food.

Synergies between SGP and CWI

Several projects demonstrate synergies between the SGP and CWI such as the project in Lembus indigenous forest in Koibatek District. The SGP is providing funding for the afforestation and rehabilitation of the forest using seedlings that are raised by the community. A CWI grant was used to protect five springs, all of which have their source in the Lembus forest. The springs



A newly constructed waterpan fitted with a community draw-off pipe

are providing water not only for domestic use but also for watering seedlings in several locations along the periphery of the forest.

Partnerships

Various partnerships have been established at the community and national levels. At the national level, the SGP through CWI has co-supported four projects in partnership with the Japanese Embassy and two with the German Development Service. At the local level, partnerships are established primarily with Government offices for purposes of technical advice. The offices include the ministries dealing with water, agriculture, environment and natural resources.

CWI lead NGOs grantees such as World Concern have gone a step further in sourcing for more funds to increase availability of potable water to schools and for livestock with assistance from the Government's Constituency Development Fund (CDF). The Empura borehole in Narok district was sank with some CWI money and with additional funds from CDF. It benefits an estimated population of 1,500 people and 3,000 livestock. The Arid Lands Resource Management Programme, an arm of a government ministry, has also contributed towards laying of water pipes with the aim of bringing water closer to the consumers. The Catholic and Anglican churches have forged partnerships with CWI grantees and have assisted them to establish several income generating activities. The Kamurugu CWI funded project in Mbeere has worked closely with the Catholic Church and the German Development Service resulting in the introduction of other activities such as beekeeping, rearing of dairy goats, and the cultivation of drought resistant crops.

Conflict Resolution

When water is scarce, conflicts often emerge, between community groups, between people and wildlife, and between livestock and wildlife. However, one of the CWI projects had an interesting twist of events when the availability of water, from dam construction, caused conflicts. Kailer Village Development Committee constructed a dam with funds from CWI for domestic consumption and for livestock. Four months after completion and when the Kailer Village was enjoying and managing its new source of water, a group of people that was running away from cattle rustling and insecurity, came across the newly constructed dam. The group settled within close proximity to the dam, and in total disregard of the laid-down rules of the Kailer Village, began to use their

water. Naturally this situation caused tension and discord between the two groups, and to diffuse it, the Kailer group applied conflict resolution skills that had been taught and imparted by the elders, chiefs and Ministry of Water officials.

Exposure Visits

The SGP facilitates communities to go on exposure visits either to successfully completed CWI projects or to projects funded by other donors. In establishing kitchen gardens using drip irrigation and run-off furrows, the Cheptolil group in Baringo District benefited from a visit to another CWI project in Kailer, in Koibatek whose residents are from the same ethnic community and which has similar dry conditions. The visit was made by 29 people from three villages and included 10 women.

Gender

The primary beneficiaries of a water project that facilitates accessibility and availability of clean potable water are women, followed closely by school-going children. In Kenya, like in many Sub-Saharan countries, the task of looking for water for domestic consumption and carrying it back home falls disproportionately on women. And in ASAL areas, particularly during the dry season, this is an arduous and time-consuming task, which can take up to seven hours a day of walking 10 - 14 km. School children are often asked to carry a five-liter jerry can of water to school to clean either themselves

or the school, or they are asked to fetch water as one of the class activities. Time allocated to their studies is therefore reduced contributing to the poor performance of most schools in the ASAL regions. With water points now closer to the communities, girls can now go to school rather than be relegated



Drip irrigation for enhanced food security



Commissioning of Kailer water project

to performing domestic chores such as trekking for water. Within pastoral communities, men also experience the difficult challenges of water scarcity, particularly during dry season, when they are forced to walk long distances that range between 6 - 14 kms in search of water for their livestock.

Over and above bringing water points closer to the communities, the CWI projects have made an effort to ensure that women participate in training sessions so that they can take up leadership positions within the various committees. For instance World Concern has worked very well with the Maasai communities ensuring that women are included in the water committees. The Empura water committee consists of nine members, including two women. It is a great achievement to have women co-leading with men within the Maasai community, since their culture does not ordinarily permit women to take up a leadership position especially where men are involved.

List of Acronyms

ASALs	Arid and Semi-arid Lands
BCP	Biodiversity Conservation Programme
CBO	Community Based Organisation
CDF	Constituency Development Fund
CDTF	Community Development Trust Fund
COMPACT	Community Management of Protected Areas
CORDIO	Coastal Oceans Research and Development in the Indian Ocean
CWI	Community Water Initiative
DED	German Development Agency
EAWLS	East African Wildlife Society
GEF	Global Environment Facility
GRI	Greening Rusinga Initiative
KFS	Kenya Forests Service
KMFRI	Kenya Marine and Fisheries Research Institute
KWS	Kenya Wildlife Service
NC	National Coordinator
NGO	Non-Governmental Organisation
NSC	National Steering Committee
SGP	Small Grants Programme
SHG	Self Help Group
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNF	United Nations Foundation
UN-Habitat	United Nations Human Settlement Programme
USD	United States Dollars
VIP	Ventilated Improved Pit
WWF	World Wide Fund for Nature

Supporting Communities to Manage their Environment

Community Action - Global Impact

The GEF Small Grants Programme (SGP) is implemented by UNDP on behalf of GEF Implementing Agencies. It provides support in the form of grants, technical assistance and project monitoring to NGOs and CBOs in developing countries for initiatives that result in global environmental benefits while enhancing local well-being and livelihoods

UNDP, GEF-SGP and the German Development Service (DED) entered into a partnership in 2003 to 2009, in which DED Technical Advisors (TAs) were seconded to six clusters of GEF-SGP-funded projects, primarily to support communities in project implementation.

This Booklet highlights the 6 clusters.

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