

Biodiversity Conservation Through Sustainable Farming and Fishing Practices in Mount Kenya

Project Description

The Sagana Women's Group was formed in 1977 by a group of women who wanted to address basic issues that affect them and their families, such as housing, water supply, education and poverty alleviation. The main objectives of this project were to engage the local community in environmental conservation activities and improve livelihoods by establishing a sustainable environmental conservation enterprise. In particular, the project aimed to create measurable improvements to the condition of the nearby forests by introducing sustainable farming and fishing practices.

Trough the establishment of tree nurseries and a tree-planting initiative, the group is attempting to rehabilitate degraded sections of the forest as well as helping to monitor human settlement and the extraction of timber from the forest. In addition, in a leased section of the forest, the community constructed fish ponds for the raising of tilapia.

Background

Located 200 km to the north east of Nairobi, Mount Kenya is the second highest mountain in Africa, after Mt. Kilimanjaro. Its highest peaks reach 5,199 meters above sea level. It is home to a variety of flora and fauna, including several endemic species. In 1997, Mount Kenya was named a UNESCO World Heritage Site. However, in the last two decades it has experienced deforestation from over-exploitation of timber and fuel wood; land degradation and conversion of forest parts into farmland; and water pollution due to the lack of proper sanitation and waste disposal facilities.



Implementing Organization: Sagana Fish and Bee-Keeping Women's Group

Location: Mt. Kenya, UNESCO World Heritage Site, Kenya

SGP Contribution: US\$ \$32,171 (initial grant) and US\$16,920 (second grant)

In Cash Co-financing: US\$16,184

In Kind Co-financing: US\$6,000

Number of Beneficiaries: 40 families, 240 persons approx.

Duration: December 2003 – December 2005;

August 2008 – March 2010

Awards and Recognition:

The project has been recognized by government officers, donors and community groups as one of the most promising community fish farming projects in the country, and consequently, many groups organise exchange visits to learn and be inspired. The project has also been featured on radio programs and aired on some of thnational TV stations.

To address these environmental threats, the Mount Kenya COMPACT Initiative commenced in 2001 with the objective to protect the biodiversity of Mount Kenya and help maintain its status as a World Heritage Site and Natural Reserve while improving the livelihoods of the surrounding communities through 70 community-based conservation projects. As biological diversity is a global asset of tremendous value to present and future generations, reduced deforestation helps preserve forests and all of the benefits they provide, such as a healthy ecosystem and maintenance of water quality.

Implementation



Key activities during project implementation are:

- Development of a tree nursery to supply seedlings for tree planting in the Hombe Forest to rehabilitate degraded forest areas and riparian areas.
- Planting of over 60,000 indigenous trees in degraded parts of the nearby Hombe forest and in riparian areas along the Sagana River.
- Improving the three existing fish ponds and construction of seven additional fish ponds with stone lining to prevent soil erosion
- Stocking the new fish ponds.
- Construction of a 170mm lined channel to provide water to the fish ponds from the Sagana River and to prevent soil erosion.
- Improving marketing of the fish stock.
- Construction of a cold storage facility for harvested fish as a result of increased production and need to store fish before shipments to customers.
- Construction of fencing around the ponds and overhead netting to keep predators (e.g., rodents and birds) away from the fish ponds.
- Construction of a community training center for community seminars related to fish farming, water users associations, community forest associations, HIV/AIDS and other health-related issues, and agriculture.

Environmental Impact

The Sagana Women's Group through a facilitation grant from SGP COMPACT planted over 60,000 trees in the degraded parts of the forest, reducing land degradation and deforestation; and rehabilitating the water catchment area.

In addition, the fish stock have been increased from 600 to 33,000 annually over the last five years through the expansion and upgrading of the group's fish farm which are located on a communally managed plot of land leased from the nearby government forest.

To accompany this process, build capacity of the local community and increase awareness, the Sagana Women's Group also built a Community Training Center which has hosted about 20 training seminars and meetings on environmental conservation and fish farming.

The project demonstrates that communities living near forests can use forest products effectively by practicing sustainable farming and fishing practices. The conservation site is now safe from the environmental degradation caused by overexploitation of natural resources, thus helping to preserve the diversity of flora and fauna of this UNESCO World Heritage Site.

Socio-Economic Impact

Due to the improvement of sanitation and waste disposal facilities, reforestation of degraded riparian and forest areas and to the construction of a stone channel for water provision, the women improved the quality of the water. The fish ponds use fresh water from the forest for fish rearing, ensuring the health of the population that consume the fish for food.

As one of the aims of the project is to improve women's livelihood, 50% of the profits from the sale of fish are reinvested to support the group's conservation activities while the rest is divided among the member households as dividends.

Policy Impacts

Integrating fish farming into the National Poverty Alleviation Policy of the country.



Gender Empowerment

Improvement and expansion of women-owned and managed fish farming enterprise.

The Community Training Center has been training local women in farming enterprises and participatory farming management, which has given the women an active role in the participatory

Contribution to the MDGs



- Created additional income for the women of the community.



- Women-led and managed.
- Women are empowered and respected in the community, which is reflected in their participation in the community planning sessions where they identify priorities for intervention.
- Built the capacity of local women by providing training in farming practices and participatory farming management.



- Introduced the use of sustainable forest practices.
- Eased the pressure on forests due to overexploitation.
- Improved conservation activities to preserve flora and fauna in the UNESCO World Heritage Site.
- Actively engaged in re-afforestation effort for degraded parts of the South Western part of the Mt Kenya Forest.

planning sessions within the community. In addition, the project has introduced several ways to support women in conservation and creating income-generating activities, such as training in fish farming and marketing.

The creation of a Community Training Center has created more opportunities for local women through group project meetings as well as other community meetings and events to access training and information sessions related to fish farming, agriculture, and HIV/AIDS and other health issues.

Replication and Upscaling

Future projects of the group include mentoring other neighboring communities about the advantages of fish farming and integrating fish farming into the National Poverty Alleviation Policy of the country.

Sustainability

Lessons Learned

- The community is able to profitably take up adjacent forest land under some lease agreement with the government authority and turn it into a conservation enterprise. This benefits local households while also generating income to pay for labour and cost of land.
- A conservation enterprise in a rural setting can generate much more benefits than just income to rural households and act as catalyst to conservation of important heritage sites and watersheds.
- Even in high density highland settlement area, communities can still engage in communal land based conservation enterprises profitably.
- Government authorities alone cannot fully protect the entire area of the UNESCO Heritage Site and success will depend on the collaboration between neighboring communities around the Site, other local actors and the active participation of the government by incorporating the Site as a priority in their national policy.



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Community Global Impact