PROJECT TITLE:	Integrated Biodiversity Conservation Project
EXECUTING ORGAIZATION:	Bondo Community Development Programme
PROJECT AREA:	East Yimbo, North Yimbo, Central Yimbo
TARGET GROUP:	Women Groups, Youth Groups, and Self- Help Groups & Societies
CONTACT PERSON:	Nicholas O. Ayimba P. O. Box 52937 00200 Nairobi, Kenya Tel: +254 722 863 729
Email:	bcdpkenya@yahoo.com OR nayimba@gmail.com
NO. OF BENEFICIARIES:	4000 People (Women, Youth, Children &Men) Livestock
PHYSICAL PROJECT ADDRESS:	Bondo Community Development Resource Center Nyamonye Market East Yimbo Location Bondo District
FUNDING REQUEST:	US\$ 200,000
LOCAL CONTRIBUTION:	US\$ 16,000
FUNDING REQUEST:	to all well-wishers, Foundations and Potential donors
PROJECT DURATION:	24 Months
DATE OF SUBMISSION:	27 <sup>™</sup> May 2008

#### 2.0 SUMMARY

Residents of Bondo District are faced with a dilemma because of high poverty levels caused by over exploitation of the environment. At the same time, the continuous unsustainable use of biological resources in the region has continued to increase poverty levels. The region now holds land that has been over utilized due to overgrazing and unsustainable agricultural methods.

Natural Vegetations are on the verge of extinction. Most of the land is now prone to soil erosion. Water levels in Lake Victoria have greatly dropped and hyacinth has covered most parts of water collection points at the beaches. The Lake water is contaminated and has turned green due to the presence of hyacinth. Most members of the community have no toilets, and resort to using the bush, thereby causing more pollution to lake water, and causing spread of water borne diseases such as typhoid and diarrhea. Water bodies no longer boost the numerous fish species and thus the general water system has very few aquatic species.

Past efforts to improve the situation have not been fruitful and viable because of lack of knowledge and resources among the community. Similarly, there has been lack of leadership and will power to bring change in the right direction.

While the proportions of the problem have similarly overwhelmed the traditional methods of conservation, the general situation spells a doom to the future generation.

Major threats facing the Ramogi Hill, Yala swamp and Lake Victoria ecology and its environs include:

- Over exploitation of forests especially indiscriminate harvesting of trees for timber, firewood, and charcoal.
- Lower adoption of agro forestry and over reliance of forest resources.
- Lack of community awareness on the values of forests, Swamps, and lakes or the consequences of their destructions.
- Overgrazing in the area leading to loss of herbs and shrubs, stripping trees off-bark and destruction of tree seedlings.
- Contamination of the lake by water hyacinth and solid waste disposals leading to waterborne diseases among community members
- Poor farming practices leading to soil erosion and mineral depletion resulting to many turns of solid and silt settling in Lake Victoria which is of high economic value.
- Lack of local community participation and involvement in management, protection, and improvement of the natural vegetation.
- Lack of local community incentives to protect the forestland, wetlands, and its resources.
- Over fishing and use of wrong fishing gears.

#### Proposed interventions strategies include:

- To enhance availability and accessibility of fresh piped water to the community through the implementation of the proposed Nyamonye Water and Sanitation project to cover East Yimbo Location.
- Establishment of community tree nurseries. The seedlings will be planted on degraded sites and on individual farms.

- Increase on-farm vegetation cover on small-scale farms in Usigu Division villages through afforestation and agro-forestry development.
- Enhance sustainable fishing practices.
- Lobbying for formation of an effective multi sectoral/institutional structure through which long-term conservation of Yala Swamp, Ramogi Hill and Lake Victoria ecology would be addressed.
- Introduction of fruit farming as an income generating activity for the local community and a way of controlling soil erosions/reducing dependency on forest resources.
- Introduction and promotion of energy saving cooking stoves.
- Community sensitization and capacity building on environmental conservation.
- Promote and build community capacity on the commercial development of alloy poducts as an income generating activity.
- Provide farmers with technical and financial assistance/incentives to implement the desired programmes.

#### Specific requests include:

- Provision of clean-piped water for the communities living along the polluted beaches of Lake Victoria.
- Conducting consultative planning workshops.
- Building the capacity of the local community to understand the concept of environmental conservation and the consequences of environmental pollution through sensitization workshops and open forums.
- Training women groups, youth groups, and other self-help groups on benefits of environmental conservation and benefits of agro-forestry.
- Enhance the capacity of the community to own and sustain the entire project activities.
- Sensitize and mobilize communities to tackle sanitary problems to reduce pollution of Lake Victoria.
- Provision of a better institutional coordination and information sharing.

If well implemented, this project will protect natural resources and sustainably use the rich biodiversity of Yala Swamp, Ramogi Hill, the Lake Victoria ecology and its environs to prevent further depletion of various endangered species of fauna and flora while creating avenues for sustainable income generation activities for the poor women and youth.

The project intends to build partnership among NGOs, Local government, Local Community groups, and the private sector.

The project further intends to involve and build the capacity of the local communities members in environmental monitoring activities and rehabilitation of Lake Victoria and Yala Swamp ecology thus promote sustainable livelihoods in the project area.

The project will ensure that traditional knowledge on environmental management and community awareness and action on sustainable use of biodiversity is passed to the next generation.

Infrastructure development, poverty alleviation and environmental restoration are some of the problems affecting Bondo District. Despite the measures taken to address the above issues, local Community groups and other stakeholders concur that biodiversity degradation and depletion rate is on the increase.

## 3.0 BACKGROUND & RATIONALE

The proposed project is located at East and West Yimbo in Usigu Division, Bondo district , Kenya. The project covers five villages namely Nyamonye, Usigu, Usenge with an average population of about 10,000 people. The natural attributes of the region, such as humid climate, good vegetation cover and fertile soils, afford this region the potential for tremendous agricultural output. However, a number of interrelated problems inhibit the area's ability to measure up to expectations, in terms of potential agricultural output and biodiversity conservation. Foremost among these is the continued degradation of the natural vegetation through human activities such as charcoal burning, firewood collection, exploitation by commercial investors, localized grazing, vegetation clearing and cutting trees for construction. Deliberate burning of vegetation to clear land for farming is also a clear threat to biodiversity in the area. The need for more land to increase food production and human settlement has led to clearing of vegetation leading to severe loss of biodiversity.

In the last two decades Bondo District has lost more than half of its vegetation and Swamp cover to investors, which now poses as a threat not only to species survival but also to the existence of their way of life.

Road networks are poor and inaccessible in most areas especially during the rainy season.

Social services are similarly not well distributed and over 90%, the people depend on subsistence farming and small-scale fishing for food and income.

Women contribute to 75% of the agricultural labor that mainly targets the subsistence requirement of the family.

Despite the small land holdings of between 0.5 and 2 acres repeatedly cultivated by farmers over generations without nutrient replacement, People have continued with indiscriminative harvesting of trees for construction timber, firewood, and charcoal.

Poor farming methods have led to soil erosions and mineral depletion resulting to silt settling in Lake Victoria.

Overgrazing in the area has led to loss of herbs, shrubs, and destruction of tree seedlings. Water levels in Lake Victoria have greatly dropped and hyacinth has covered most parts of the water collection points along the shores of Kunya Beach. Introduction of a "bug" to control the spread of hyacinth in Lake Victoria has worsened the situation by contaminating the fresh Water lake and turning the water green making it unsuitable for human consumption. Those using the water directly end up being affected by waterborne diseases.

Fishermen have used wrong fish methods and gear resulting to over fishing

#### The above mal practices have led to: -

- Loss of soil nutrients due to excessive soil erosion
- Poor microclimate due to excessive felling of trees leaving the soil bare and exposed to all destructive agents of nature
- Poor climate due to drainage of water sources and felling down of trees
- Pollution Lake Victoria and the environment thus affecting human health.

- Increase of water borne diseases in the region
- Decrease in aquatic and fish species.
- Decrease in bird species along the Swamp

The above factor have led to direct or indirect low agricultural production and reduced per capita income in the region. This situation has worsened in the last few years when food production levels dropped to alarming levels.

The cause of food insecurity is attributed to poor management and overexploitation of the environment hence the problem has been further complicated by poor national agricultural extension services, lack of appropriate training and poor dissemination of better farming practices to farmers.

The proposed project aims at addressing the problem of poor environmental use and management that leads to food insecurity, poor health, and low incomes through the provision of clean-piped water and sanitation facilities, community capacity building through trainings and promotion of sustainable management and use of natural resources as a component of sustainable agriculture.

Bondo District is a custodian of aloe plant species, which are of high medicinal value but are commercially unexploited to benefit the local population. Development of aloe products and the subsequent wide range of use is a clear demonstration to this. Eth-pharmacology research reveals that aloe is traditionally used to cure a wide range of ailments including intestinal disorders, massage, wounds, and ear and nose problems.

Aloe is also used as a curative medicine for livestock ailment, cosmetic products, soil conservation, and foreign exchange earner through export of byproducts.

The full potentials of the resources are yet to be exploited to the benefits of the local communities although their exploitations are in the increase.

A network of Stakeholders in the Kenya Aloe sector who have interest in the development of conservation and management of aloe resources in the country have formed a working group to develop the aloe sector in the country to become vibrant, commercially viable enterprise providing opportunities to the poor and marginalized communities.

Objectives of the Kenya Aloe Working group are -

- Development of regulatory guidelines and norms for guiding actors and stake holders in the sector
- To lobby relevant stake holders and government agencies for support in the development of the aloe sectors a significant employment creator
- Branding of Kenyan aloe products and marketing the same to compete with internationally recognized aloe brand names
- Mobilizing the rural communities living in aloe prevalent areas of Kenya to be able to produce and market aloe products.

It is therefore on the above basis that this project proposes a structured approach to exploit wild aloe, which has dominated the project area for generating income to the community while improving the ecological integrity.

Aloes are xerophytic plants that survive on limited amount of moisture, assist in rehabilitation of degraded lands, and assist in generation of other tree species despite providing bee forage, which boost honey production.

# 4.0 DESCRIPTION OF THE PROPOSED PROJECT

### 4.1.1. Project Broad Goals:

Promote sustainable conservation and management of threatened biodiversity resources and lake Victoria ecology in Bondo District.

### 4.1.2. Project Aims:

- Promote proper use and management of environment / natural resources in order to improve food security and alleviate poverty at among the Bondo community.
- Improve Community health through the provision of clean-piped water and improved sanitation facilities.
- Promote commercial development of aloe products for enhancement of community livelihoods within the project area.
- Improve on a sustainable basis the livelihoods of fisher folks living along Bondo beaches through integration of traditional and modern fishing technology and management.
- Build the capacity of Bondo Communities to understand the concept of environmental conservation and the consequences of environmental pollution in Lake Victoria.
- Build partnership among NGOs, Local Authorities, local Communities, Community Based Organizations, and the private sector to rehabilitate several polluted Lake Victoria beaches for an improved ecology.
- Restore the integrity of Yala swamp by promoting eco-tourism.
- Enhance the role of local communities and resources in wealth creation, employment generation, and sustainable biodiversity conservation.
- Explore avenues that will develop sustainable finance mechanisms that dedicates long term funding for yala Swamp, Ramogi Hill and Lake Victoria Echo System

### 4.1.3. Specific Objectives:

- 1. Promote Community Mobilization, awareness, Participation and action in the conservation and sustainable use of biodiversity in the project area and rehabilitation of Lake Victoria and Yala Swamp ecology.
- 2. Conducting a participatory Community needs assessment
- **3.** Enhance availability and accessibility to clean water for Rageng'ni use through implementation of Kunya Water Project.
- **4.** Create avenues for sustainable income generation and entrepreneurship skills for poor rural women in the project area through enhanced sustainable exploitation of wild aloes for commercial development.
- **5.** Enhance sustainable fishing practices
- Increase on-farm vegetation cover on small scale farms through afforestration and agroforestry development through profitable forest – related conservation interventions like tree-crop growing and fruit production

- 7. Reduce encroachment on forests and reduce felling of trees for wood fuel by promoting energy conservation practices
- 8. Build the capacity of Bondo Communities to understand the concept of environmental conservation and the consequences of environmental pollution [especially regarding lake Victoria]
- **9.** To alleviate poverty and improve the local community food security that has resulted from poor farming methods and ecological changes of Lake Victoria.
- **10.** To alleviate poverty and improve the local community food security that has resulted from poor farming methods and ecological changes of Lake Victoria.
- **11.** Promote wider stakeholder and women involvement and collaboration in the conservation and management of biodiversity within Lake Victoria Yala Swamp ecosystem.

### 5.0 DETAILED DESCRIPTION OF ACTIVITIES / PROCEDURES [BY OBJECTIVES]:

TASK	DESCRIPTION	RESPONSIBILITY
Action Launch	This will entail media/publicity Of the launch at the District and Community level	BCDP, Community Based Organizations involved in the Action, All NGOs, Private sectors & Government Institutions involved in the Project
Objective 1 Community mobilization, awareness creation and Involvement in the action	<ul> <li>Open forums</li> <li>Promotion workshops</li> <li>Use of IEC materials Capturing relevant Massages</li> </ul>	BCDP in collaboration with With relevant stakeholders and Community Based Organizations participating in the Action
Objective 2 Community needs assessment	Conduct a participatory needs assessment	BCDP will facilitate the assessment in collaboration with relevant stakeholders while Community Based Organizations will form part of respondents base for the assessment
Objective 3 Accessibility to clean water for domestic use	Implementation of Kunya water & sanitation project through the provision of intake works, suction pipe, pump house, diesel pump, storage pump, composite filtration unit, storage tank, distribution lines, water kiosks, VIP latrines	Well wishers to provide funds for materials and skilled labor BCDP to provide training on operation & maintenance plus Sanitation and hygiene Community members to provide Project designs, local materials and unskilled labor
Objective 4 Exploitation of wild aloes for	Community mobilization     and capacity development	KWS [registration of group to Kenya Aloe working Group]

### DETAILED DESCRIPTION OF ACTIVITIES

commercial development	<ul> <li>Establishment of alloy nurseries</li> <li>Development of aloe products on commercial basis</li> <li>Marketing of aloe products</li> <li>Development of guidelines</li> </ul>	BCDP in collaboration with CBOs[community mobilization] SNV [capacity building] Bridge Africa for Dev. Concerns[capacity building] KEFRI[research] Practical Action[development of aloe products]
Objective 5 Enhance sustainable fishing Practices	<ul> <li>Conduct a baseline survey</li> <li>Empowerment of fisher folk households to integrated traditional and modern fishing practices in a way that sustainably improves their livelihoods through training on application of new techniques</li> <li>Use of participatory monitoring techniques to gather data for Local monitoring</li> </ul>	Lake Basin Development Authority[capacity building] LVEMP in collaboration with BCDP and CBOs[baseline survey]
Objective 6 Increase on-farm vegetation cover on small-scale farms through afforestration & agro- forestry	<ul> <li>Mobilization and Sensitization of local community groups on sustainable management and use of natural resources through sensitization workshops</li> <li>Conduct consultative planning meetings</li> <li>Train Women groups and house holds on environmental conservation</li> <li>Train women and youth groups insetting up village tree and fruit nurseries</li> <li>Train progressive farmers to equip them with skills and knowledge in sustainable use and management of the environment</li> <li>Train farmers in group</li> </ul>	BCDP in collaboration with LVEMP and LBDA[capacity building on environmental issues] Practical Action[training on construction of energy cooking stove and sustainable farming methods] LBDA[training on setting up tree & fruit nurseries] BCDP[training on group dynamics and development, record keeping & simple book keeping]

	dynamics and development, record keeping, simple book keeping	
Objective 7 Train women, youth groups and households on energy conservation and construction of energy saving cooking stove	Train women, youth groups and households on energy conservation and construction of energy saving cooking stove	Practical Action[training on construction of energy cooking stove and sustainable farming methods]
Objective 8 Build the capacity of Bondo Communities to understand the concept of environmental conservation and the consequences of environmental pollution [especially regarding lake Victoria]	Train Rageng'ni Community groups to understand the concept of environmental conservation and the consequences of environmental pollution [especially regarding lake Victoria]	LVEMP[training on environmental pollution]
Objective 9 To alleviate poverty and improve the local community food security that has resulted from poor farming methods and ecological changes of Lake Victoria.	Train Community groups on modern farming methods	Practical Action[training on modern farming]
OBJECTIVE 10 Promote wider stakeholder and women involvement and collaboration in the conservation and management of biodiversity within Lake Victoria ecosystem.	<ul> <li>Empower women to fully participate in all project activities</li> <li>Involve as many stake holders as possible including the private sector</li> </ul>	BCDP to facilitate the partnerships