

## **PRELIMINARY REPORT**

**Project Title:** Community Environmental Conservation Project for Anyiko wetlands, Siaya County,  
Kenya

**Project ID:** 17532-2

**2<sup>nd</sup> RSG Award**

**Project Period:** June 2015-May 2016

### **Compiled by:**

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### **Project Funded by**

Rufford Small Grants for Nature Conservation

[www.rufford.org](http://www.rufford.org)



Amount of Award; £5000

**Project Update Period (period for this preliminary report/update)**

June-December 2015

**Date: 08<sup>th</sup> February 2016**

### **Background Information.**

The Project is in its second phase and is funded by Rufford Small Grants for Nature Conservation (Second RSG), being implemented by Zephaniah Migeni. Anyiko-wetlands is a permanent riverine wetland measuring 3000ha, sitting in North East Ugenya, Siaya County, Kenya. It's one of several smaller wetlands draining into Nzoia River and is longish shaped with an average length of 10Km by 700m width at the widest point. From the comprehensive wetland monitoring conducted in pilot phase (Rufford Small Grants), it's inhabited by over 67 wetland endemic birds some of which are listed on the IUCN Red List of Threatened species like Papyrus Gonolek (*Laniarius mufumbiri*), Sitatunga (*Tragelaphus spekei*) and the African endemic wetland plant Papyrus (*Cyperus Papyrus*) that immensely contributes to both uniqueness and importance of the wetland as it features one-of-a-kind living habitats for wildlife. The wetlands serve numerous ecological functions. However, it still faces anthropogenic caused damage as, overgrazing, farming encroachment, pollution, unsustainable papyrus harvesting in upper sections and surrounding plants are also being cut and left behind as "bycatch" destroying an interdependent healthy ecosystem. From the pilot project, we were able to achieve tremendous development on community positive receptivity, wetland zoning and formation of Community Mobilizers team. However, much still needs to be done like upper sections zoning, capacity building, proper waste management, initiation of sustainable alternative livelihoods amongst many others.

Photos of Anyiko Wetlands



Fig a) Controlled Harvest zone revegetated from wild fires in 2014    Fig b) Currently authorized harvesting zone in upper zone

### **Executive Summary of the Second RSG Project:**

Create Papyrus harvest zones in upper sections of the wetland for controlled harvesting, establish 3 Village Agroforestry Centre (VAC) for multipurpose indigenous tree seedlings production for habitat restoration and Income Generation, Install 2 Ecosan units as demonstration plots for human manure generation in organic farming, install 5 proper waste management structures in nearby schools, establish 3 Site Support Groups, Conduct community capacity building on sustainable papyrus harvesting and value addition, and Environmental education on sustainable wetlands management and linked in topics. The project will be implemented by Tembea under partnership and proactive involvement of community members for success and sustainability.

### **Outcomes**

#### Expected Outcomes

- Increased levels of awareness and knowledge on the wetland conservation and protection initiatives for increased participation of the community members in line with the Kenyan Environment Management and Co-Ordination Act of 1999 and Ramsar Convention
- Increased engagement of key partners/stakeholders and policy makers for the exploration of Policy options and innovative approaches in the protection and conservation of Anyiko wetlands
- Improved understanding on community involvement in wetlands rehabilitation through agroforestry to ensure revegetation and sustainability
- Increased community knowledge and understanding on the use of Agroforestry as Alternative Livelihoods.
- Promotion of community-based alternative livelihood initiatives and co-ordinating structures to ensure sustainability;
- Increased knowledge amongst the participating communities on organic farming through introduction of eco-san units in the agriculturally dominated wetland.
- Increased levels of awareness and knowledge on the wetlands hygiene promotion for improved livelihoods and community health
- Improved knowledge by the communities on proper waste management methods in line with the Kenyan Government Waste Management Act.
- Quality monitoring and evaluation techniques applied and recording in order to facilitate replicability.

#### **Expected Outputs**

- Identification of key persisting challenges still hindering the conservation of Anyiko wetlands and how can they be overcome
- 2 Ecosan units installed
- 3 Conservation Support Groups formed
- 3 Village Agroforestry Centres packed with indigenous tree species established
- At least 30,000 indigenous trees planted
- At least 90% of the target Community members (9000) actively participating in the project

- Reeds harvesting restricted to marked parts of the upper section of the wetland
- Local schools, community groups and leaders sensitized and engaged in conservation process
- 5 waste collection bins installed in 5 surrounding schools
- Community Environmental Site Action Plans developed
- Regular bird walks carried out
- Recommendations for upscaling and replicating wetland environment conservation actions within framework of national development programmes

### **Progress of the Project from June 2015 to December 2015**

#### **Activities**

- **Village Agroforestry Centres Establishment (VAC)**

The Project in its third month, facilitated the establishment of three Village Agroforestry Centers in Anyiko Primary School, Siror Primary School, Muhwayo Primary School and at Tembea. The indigenous tree seedlings species selected were *Grevillea Robusta*, *Moringa Oleifera*, *Melia Volkensii*, *Melia Azerdirachta* and *Olea Africana*. These tree species plays very crucial roles in bank stabilization as well as provision of timber and soil fertility regeneration for derelict lands. A total of 186 Environmental Club members in the respective schools and 26 Teachers have been trained on Agroforestry Practices (Nursery management, tree propagation and marketing). The main purpose of establishing the VACs is to facilitate transfer of knowledge for production of indigenous tree seedlings for the restoration of the degraded wetland areas and also, as an Alternative Livelihoods Improvement initiative through sale for Income Generation by the beneficiary schools hence reducing pressure on the overreliance on wetland products. The projects budget was squeezed to allow Tembea establish a Community Tree Nursery, which is a referral point for the community learning on alternative livelihood promotion to papyrus harvesting. In conclusion, a total of 46,097 indigenous tree seedlings have been nurtured in the four tree nurseries are shown in the table below:-

<b>Site Name</b>	<b>No of seedlings</b>	<b>Number Planted</b>	<b>Remaining on site</b>
Anyiko Pri School Nursery	12,024	5081	6943
Siror Pri School Nursery	11,686	6712	4974
Muhwayo Pri School Nursery	10,108	7253	2855
Tembea Tree Nursery Site	12,279	4678	7601
<b>Total number of seedlings/specie</b>	<b>46,097</b>	<b>23,724</b>	<b>22,373</b>



Fig c) Anyiko school Env't club during on-site tree nursery establishment training, Fig d) Jane, a volunteer at Tembea-Community tree nursery

**Tree Plantings:** There have been long rains in the project region, mostly referred to as the El-nino in its light form, and this provided a perfect climate for tree seedlings planting in the degraded areas along the wetland and the riparian. Together with the schools and community groups, we were able to plant 23, 724 trees within three months. This called for massive mobilization and identification of rehabilitation sites. In the 11 planting sessions, we were able to work with 1347 volunteer community members from the area and planted more than 9 kilometers of the area along the wetlands boundary as well as in schools and along the Mid-Lower Nzoia River, at Ulumba bridge. The remaining seedlings at the different sites will be sold by the beneficiaries for Income generation and self-continuity of the project as outlined in the project document presented to Rufford Foundation.



e) Muhwayo school kids during tree planting at the Anyiko wetland f) Nyaruoth W.G uring volunteer tree planting day at Anyiko wetland

### **Establishment of Site Conservation Groups (SGGs)**

In the second month of the project, three site conservation groups were formed composed of 28 females and 32 men (youths) drawn from the local community through community consultative forums and official expression of interests, and finally vetted by the project team and the local administration. Uhuru SSG, Anyiko SSG and Ugambe SSG have been registered as Self Help Groups committed to ensure the protection and conservation of the wetland through mentorship support from Tembea. The SGG members were taken through two days on-site training covering the following topics: Wetlands mapping methods, Plant and Animals (especially birds) identification methods, Surveillance, wetland monitoring, sustainable farming methods on the wetland, value addition to papyrus products, birdwatching and community outreach management strategies. The trainees engaged in hands on mapping and sketching of the wetland to jog their minds on their areas of coverage with their volunteer conservation work. One of the greatest lessons learnt from the trainees is the fact that for ages, they have never looked at the wetland as an important resource rather they have always looked at it as a wasteland mainly used for fuelwood collection, farming, grazing and fishing. The team has thus joined our Friday birdwalk team and are seriously engaged in learning more about birds and their important values to the ecosystem. They are also engaging the community members on outreaches and conservation education forums.



g) SSG members during field training, holding a sketch map of the wetland h) SSG members on completing the training, at Anyiko wetlands

## Ecosan Units Installation

In the fourth month of the project, two ecosan units were constructed in the nearby Mzee Oduols home and Ka'aokos home. The main aim of constructing these units were to:

- Create a learning centre for the wetland communities and schools on promotion organic farming through use of human manure (enhancing soil fertility and agricultural production)
- Provide a better, safe and environmentally friendly toilet that's suitable for use in wetlands as opposed to careless disposal of human waste on the wetland.
- Reduce the pollution of wetland water body and reduce water-borne related diseases attacks as a result of safe disposal of human waste.
- Ensure habitat protection through enhanced alternative use for excretion as opposed to frequent disturbance of the wetland vegetation by humans seeking places for waste disposal.



j) Ecosan toilet constructed by RSG at Mzee Oduols home



k) Ecosan unit constructed at Kaokos home

The ecosan units were constructed by local artisans sourced from Siaya town. All the 5 artisans who worked on the units had been trained back by the GIZ in 2010, when GIZ was implementing a WASH project in the District. The communities in this process contributed the following:

	<b>Primary School Sirisia</b>	<b>Anyiko Primary School</b>
<b>Type of Unit Constructed</b>	1 Unit with 3 Doors	1 Unit with 4 Doors
<b>Community contribution</b>	500 Locally fired bricks, Space for construction	600 Locally fired bricks, Space for construction
<b>RSG contribution</b>	Funds for labor, capacity building, iron sheets, cement, sand, timber, paint and finishing costs	Funds for labor, capacity building, iron sheets, cement, sand, timber, paint and finishing costs

The community contributions waived the projects units construction costs hence enabled the construction of three and four doored units as opposed to the planned double volts. This was quite impressive as it showed strong community commitment and support to the project. The units have both been completed and are under use now, serving 326 and 410 pupils at Siriasia and Anyiko Primary schools respectively. The two schools have both established their organic farms in readiness for the organic manure that would mature in April, for use in planting vegetables with the short rains in May.

### **Installation of 5 Waste Bins for propose waste management around the wetland area**

This is currently under implementation. Numerous tree planting sessions and December schools closure affected the workplan little bit.

### **Establishment of Papyrus Hravest Zones**

Three controlled papyrus harvest zones were created in the upper sections of the wetland through 6 rigorous stakeholder consultative forums. The key players in the process were drawn from the local wetland user groups, local leaders, Ministry of Environment and the Kenya Forest Service. Points considered during this process were:

- i) Frequency of wetland products extraction or harvesting in the section
- ii) Number of wetland users in the section and households served.
- iii) Wildlife in the point section



l) Community consultative forum at Sihayi on wetlands zoning



(m) Public Comissioning of wetland zoning areas at Anyiko Dispensary

## **Community Capacity Building on Sustainable papyrus harvesting and value addition to papyrus products**

In the second month, 16<sup>th</sup> and 17<sup>th</sup> July 2015, 30 participants, drawn from the local wetland user groups were selected and taken through a two days non-residential training on sustainable papyrus harvesting techniques. Of these participants, mostly drawn from the Northern section of the wetland, 18 of them were women while 12 were men. These people have had wide experience in working in the wetland after fetching their livelihoods in the area for years.

During the two days training, the participants were taken through the following training areas:

- Wetlands plants, animals, threats and counter-measures
- Papyrus plants monitoring and appropriate harvesting techniques and ages.
- Value addition to wetland products e.g. cushions in mat chairs, steam baskets with glass lids to increase the values, market cost and demand.
- Importance of wetlands, conservation measures and their roles in enhancing its conservation
- Discussions on myths, misconceptions and cultural values of the wetland with regards to conservation
- Formation of Anyiko wetlands Papyrus Harvesters Savings and Cooperatives SACCO to control and restrict harvesting of the papyrus as well as the target market

### **Lessons learnt:**

Communities don't destroy the wetland and its resources out self-interest but the said destructive activities occur as a result of lack of knowledge and skills in protecting the wetland by the users.

The training sessions and modules, created a positive perspective and change in attitude by the users as they were now able to appreciate the values and gains of the wetland.

The replication effect of 1:10 ratio deemed realistic as all participants promised to reach out to their neighbors and friends with relevant wetland conservation information, alongside participants reached lists were given to them due for collection in March 2016 for preparation of projects final report.

### **Environmental Education in schools and communities.**

The project has been running monthly and weekly environmental education program in the Ugenya District that hosts the wetland in community groups and schools respectively. So far, 7 monthly community outreach sessions and 21 weekly school outreaches. In total, we have reached out to over 1623 community members and over 1456 primary school kids in 21 schools covered so far. 97% of the communities have been reached in their respective farmer groups while about 3% reached at the Chiefs Barazas covering: Community involvement in the conservation of the wetland, the values and importance of the wetland both to the human and then general ecosystem, what are the sustainable farming activities that can be implemented in the wetland? And Sustainable harvesting of papyrus and other wetlands resources.

In schools, we have been mentoring the participants to form environmental clubs to facilitate a well-organized channel for executing conservation education programs. Alongside, we have been educating the pupils and teachers on:

- (i) What are wetlands? Their roles in the ecosystem? Threats to their declination? Value?
- (ii) What are the roles of students in protecting wetlands? How can the pupils be part and parcel of wetlands restoration and conservation?

- (iii) Alternative livelihoods that promotes wetlands conservation and ensures protection of local culture as well as provide sustainable food generation for users?
- (iv) General environmental management and conservation techniques for various natural resources e.g. rivers, forests, e.t.c
- (v) Strengthening environmental clubs, leadership, identification of conservation activities in the clubs and schools.

The school outreach and community education programs shall continue to run throughout the project period as stipulated in the approved work plan.

It's important to note that we have been able to reach the wider numbers with the help of the newly formed Site Conservation Support Groups, handling community education sessions.

### **Birdwalks**

Birdwalks was initiated in the first phase of the RSG project and beefed up in the second RSG that's currently on-going. In this phase, the team grew from 12 members to 24 members. This shows local community recognition of the project and adoption of project strategies by the beneficiaries. We have conducted 24 Friday bird walk sessions both with the SSG members, volunteers and partner organizations. Our main aim is to continue identifying birds and update the checklist at the end of the project implementation period.

### **Challenges and opportunities**

The project is currently in its 9<sup>th</sup> month of implementation and we are meeting various minor challenges and opportunities, which we are trying to develop coping strategies to enable us deliver successfully and enable a smooth work environment. We are also encountering various opportunities and ideas of how to better implement the gaps being realized as we implement. These will be featured in the projects final report due in May 2016.

### **Financial report**

This will be submitted to the Rufford Foundation at the end of the project period in May 2016.

### **Lessons Learnt and Way forward**

From the already conducted activities, it's very evident for the project team that the project has been highly welcome by the community and therefore that's a success. We are identifying issues of concern from the participants and will make final recommendations at the end of the project running period.

In conclusion, I highly send my gratitude to RSG for accepting to support the project. This project will enhance the conservation of the wetland and its inhabitants as well as improve on the livelihoods of the riparian communities.