

PROJECT TITLE; ENVIRONMENTAL
CONSERVATION SCHOOL EDUCATION
PROGRAMME IN DUNGA WETLAND AREA OF
KISUMU-KENYA, EAST AFRICA

**GRANT RECIPIENT; LAKE VICTORIA SUNSET
BIRDERS**

REPORTING PERIOD; 1ST JUNE 2005 – APRIL 2006

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ACKNOWLEDGEMENT

We acknowledge first and foremost the great support of the **Maurice Leing** foundation through the **Rufford small grants** for their financial support towards this project. The support of the RSG contributed to more than **75%** of the entire project.

We also are grateful to Nature Kenya who is actually LVSB senior facilitators. We thank NK for technical input and advice offered towards this project and the support they gave towards training LVSB members in preparation towards this project. We specifically want to thank **Mr.Enock Kanyanya**, the **Conservation program manager Nature Kenya**.

Gratitude also to **Mr. Wilson Busienei** the **Kisumu District Environment officer** for his advice and contribution of posters towards the project and his willingness to grace many of the program's occasions when we asked him to.

We also acknowledge the support of **Mr. Bernard Obera**, the **assistant Environment Director Kisumu city council** for assisting many times like providing free transport during ceremonies of project.

We thank the Wildlife clubs of Kenya western region office especially Mr. Edward Mwendwa for their great support in terms of technical advice on issues relating to the project.

Thanks to all the school patrons, headteachers, wildlife club pupils and LVSB members who availed themselves to do the work to ensure that the objectives of the project are fully met.

We also thank the people assigned to different kinds of work that aided the facilitation like the making of the dustbins, design work for the materials used and many others for doing their work in good time. We look forward to working together again.

INTRODUCTION

Lake Victoria sunset birders are a recipient of the **Rufford Small Grants** to carry out a project titled Environmental Education to Schools around Dunga Wetland. The project aims to create awareness about Dunga swamp as one of the 60 important bio-diversity areas in Kenya for conservation of important species of birds endemic to the papyrus wetland and many other animal species like the endangered swamp antelope the *Sitatunga*. The project also aims to create awareness about the wetland as an important buffer zone, acting as a filter to water entering Lake Victoria. It is also known to be a breeding zone for most indigenous Lake Victoria fishes like the haplochromis. The awareness creation process has been done to six schools around Dunga area by LVSB since the project begun on 22nd July 2005. The awareness, which targeted the school environmental and wildlife clubs focused on three main areas i.e;

- Introduction to birds and wetlands.
- Waste management in schools.
- Trees and afforestation as a way of environmental conservation.

To achieve the above goal, the following specific objectives had been

- i) Create awareness to SIX surrounding schools about the importance of conserving Dunga wetland, its status as an **Important Bird area** and its potentiality as a tourist destination within the first 4 weeks of the project.
- ii) Help plant 50 seedlings within the project period and encourage setting up of a tree nursery in the 6 project schools within the TWO school terms of the project.
- iii) The project also aims to help the pupils and patrons learn proper ways of managing different types of wastes and help in setting up and managing a good dumping site for each of the 6 project schools within the middle of project.
- iv) Teach the pupils in the project schools about birds their importance to environment, why they should be conserved and how to help in conserving them within the second month of the project.

This report describes the stages followed since the project begun in July 2005 to the final activities and also makes recommendations on what should be done to sustain the activities done to ensure that the aim of the project is achieved.

PROGRESS/ACTIVITIES.

Lake Victoria Sunset Birders (**LVSB**) managed to carry out some activities with five schools in the previous Rufford small grants funded project as a process of ensuring the sustainability of the project. The activities are follows:

1. Project publicity

The project funds were received on 1st June 2005. The project team then embarked on setting base for the project through the following activities:

- Visiting project schools to introduce the project. This was done within the first week of receipt of the funds 1st June and 10th June 2005. Ten schools were visited around Dunga area and all were willing to participate in the project. We opted for more schools than the initially proposed because we wanted to develop an environmental education guide for schools around Lake Victoria wetlands at the initial stage and we believed that the guide would be more effective if we involved more schools.
- The visit also aimed to acquaint us with the schools that already had clubs formed and the ones that needed formation of new clubs or revival of old ones.
- During these visits, we identified eight school patrons from eight schools, i.e. St. Marks Nyabera, St. Vitalis Nanga, Joel Omino, Central, Xaverian, Kasagam, Sigh Saba primary schools.
- Seeking assistance in facilitating the guide development workshop. We got the assistance from the WILDLIFE CLUBS OF KENYA education officer Mr. Edward Mwendwa.
- Purchase of project equipment to prepare for the school outreach program when the school new term begins. Some of the equipment purchased during this initial stage are;
 - A digital camera.
 - Television and video machine
 - Conservation handbooks
 - Two phones
 - A bicycle
 - Printer and cartridges

2. Workshop for school patrons

The workshop for school patrons was held on **22nd July 2006** at the WILDLIFE CLUBS OF KENYA hall. The aim of the workshop was to generate ideas from the patrons in attendance that would facilitate coming up with a guide for environmental education for schools around Lake Victoria wetlands. This workshop was held during the school holidays. The materials were generated with an idea of using them during the school new term that began in September 5th 2005. From the workshop the following was done:

- **LVSb, WCK** and the school **patrons generated** materials for the guide.
- The responsibility of the schools involved was clarified at the end of the workshop.
- The way forward for the project was discussed.
- It was agreed that school club pupil leaders be involved in future planning workshops.

3. Development of the school environmental education guide

After the materials for the education guide were generated from the workshop, LVSB members had an evaluation meeting to put the materials in order so that the guide could be type set, edited and printed out. One hundred and eighty copies were printed and issued out the patrons and schools that participated in the production of the guide. The guide contained guidelines on three topics of importance with respect to conservation of Lake Victoria wetlands. These are;

- Introduction to birds and wetlands.
- Waste management in schools.
- Trees and forests.
- Practical activities.

4. School outreach program

The awareness creation to project schools by LVSB started on **5th September 2005**. This was done as follows:

- Creation of two teams within LVSB project team to facilitate easy coordination of visits to schools.
- One visit to each of the six schools in a week.
- Use of the environmental education guide to create awareness.
- Practical activities accompanying class lessons.
- The patrons attending each one of the lessons and filling the evaluation forms and making recommendations. This was always done by giving the patrons in attendance a questionnaire that they filled and returned to LVSB facilitators after the lessons.
- Every discussions we had with the pupils had corresponding video shows to facilitate quick understanding by the pupils.
- The target schools were;
 - St. Vitalis Nanga
 - Joel Omino
 - Kasagam
 - St. Marks Nyabera
 - Xaverian
 - Sigh sabha

The following are the topics discussed in the guide and how they were covered:

i) Tree planting and nursery management.

This part was initially designed to encourage tree planting as a way of environmental conservation in schools. Discussions on this topic were done as follows;

- Use of posters and pictures of different forests in Kenya and the world.

- Use of informative materials on importance of trees.
- Video shows on threats facing trees and the role of schools in conserving them.

Between January and late March 2006, Kenya experienced a long period of drought. The tree seedlings we planted in many of the schools in the year 2005 wilted out. Only schools with piped water like Kasagam, Xaverianan and Singh Saba had some of their trees survive.

We thus set out on a mission to **replenish** the burnt out trees in April when the rains were back. Before that, LVSB members had to dedicate most of their time in tending for the tree nursery in preparation to replenish the trees in schools.

We've also worked closely with the Kisumu city council (environment department) in supplying more seeds to the schools through a UNEP sponsored program. We have also started talking to the patrons and pupil leaders on how to successfully manage a tree nursery. Replenishing of tree seedlings in schools was done according to the individual school requirement as follows:

- St. Vitalis Nanga primary school - 25 seedlings
- Joel Omino primary school – 20 seedlings
- Kasagam primary school – 15 seedlings
- St. Marks primary school – 30 seedlings.

Of the species planted the species composition was as follows;

- *Grevillea robusta*
- *Eucalyptus ficifolia*
- *Markhamia lutea*
- *The murunga tree.*

ii) **Awareness about birds and wetlands.**

We have managed to ensure that Wildlife clubs in four schools, **st. Vitalis Nanga, St. Marks, Joel Omino and Kasagam** are properly managing bird feeding troughs. Bird feeding and water troughs are constantly supplied with bird feeds and water to encourage bird watching in schools.

Through the **worlds migratory birds' day** celebrated on the **08/04/2006**, we managed with the support of Nature Kenya to organize a function at the Wildlife Clubs hall, which ended up with three schools attending. Activities on this day involved video watching, talks and games. The talks were mainly based on bird conservation.

Club renewals to WILDLIFE CLUBS OF KENYA by schools have also enabled us to continue with the school mobile education unit by the WCK. This unit involves

talks and video on Birdlife and other environmental related issues. Four schools, which include Nanga, Joel omino, Xaverian and St.Mark Nyabera have been visited once each for environmental education and video shows by WCK since January 2006.

iii) **Waste management in schools.**

This being one of the important areas in this project, our visits to the project schools involved the use of the provided dustbins and assessing the impacts to the entire school. In our findings at least three schools i.e. St.Marks, Nanga and Kasagam are trying very hard to ensure that proper procedures of waste management are followed, which include, collecting, sorting and dumping. The trickle down effect has been much evident within the above-mentioned schools.

To identify observed mistakes, we talked to school patrons of all the project schools. During organized collective forums like the World Migratory birds day, we also emphasized this to attending representative pupils of every project school. Some of the identified mistakes with waste management in these schools are;

- Amount of wastes accumulated by these schools is very high that most of these schools can't accommodate the excesses. The dustbins provided by the project can't accommodate the excesses generated by the schools.
- There is a problem of waste mixing by most of these schools. The concept of waste separation is still a new idea that will be fully practiced with time.

iv) **Termly quiz.**

During the first phase of this **RSG** funded program, **LVS** through the project set up a shield that would offer a basis for competition among all the six project schools. The competition involves all the project schools. The competition was designed to be a Termly event to encourage information sharing amongst schools on issues concerning the environment for awareness creation purposes. It was designed in form of a Termly quiz in which the winner is to be awarded the shield and other solicited benefits from other Dunga stake holding partners of LVS. The shield was first won by Nanga primary school in **November 2005** at the close of the first phase of the project.

In the **January-April 2006** end term quiz held on 8th April, we organized a quiz with the support of **Nature Kenya** during the World Migratory Birds Day. The quiz was based mainly on migratory birds and Nanga primary school wildlife club, which was the holder of the trophy, emerged the victors taking the trophy again for answering more questions correctly. The quiz was held at the wildlife clubs of Kenya offices.

v) **Organized tours**

After the quiz in November 2005, active wildlife club members from different schools and the winning school of the quiz and the school with the best results from project activities visited Kakamega forest on 19th November 2005. During the visit, the following was undertaken:

- Visit to different points of the forest to admire the canopy cover.
- Learning the history of the forest reserve from the forest guides.
- Learning the uses of various trees in the forest and how the forest is important to the whole country of Kenya.

PROJECT EVALUATION

The project was evaluated through several stages as follow;

- After every school visit, the LVSB project team would have a meeting to examine the filled in questionnaires by the club patrons. Any prompted questions would be discussed and solutions given.
- Weekly meetings were also designed to correct mistakes observed with members during presentations, preparations and other issues related to schoolwork.
- This also involved talking to the club patrons after every class discussions to gauge their feel so that appropriate action is taken in time.

OUTCOME.

- a) Awareness has been created to six schools around Dunga wetland on importance of the wetland as habitat for bio diversity especially papyrus birds, environmental conservation through waste management in schools and tree planting as a way of environmental conservation.
- b) At least 60 seedlings have been planted in each of the project schools and at least averages of 40 of the planted have survived.
- c) Each of the project school has received three dustbins through a donation from the project and the dustbins are being utilized in not only managing wastes but also acting as a case study to the recipient schools and the neighboring schools also on ways of waste management.
- d) The pupils from the club pupils from the project schools are already practicing bird watching in the schools thus encouraging setting up of more activities to encourage the habit. This will in the long term encourage more people to be involved in the activity due to the trickle down effect.
- e) At least two schools, **St.Marks and Nanga primary** have set up a tree nursery as a result of the project. Three schools, **Joel Omino, Kasagam and Xaverian** are still working on the modalities of setting up tree nurseries while one, **Sigh Sabha** lacks the ground for setting up a tree nursery.

- f) Only one of the project schools, **St.Mark primary** has followed up with the **Kisumu city council** to find ways of channeling plastics to disposal areas.
- g) Groups set up in the **wildlife clubs** have managed to set up an average of two more bird-feeding tables in five project schools. The only school that has not done this is Sigh Sabha primary school reasons being in adequate time allocated to club activities by the school administration.
- h) All the six project schools have renewed their membership with the wildlife clubs of Kenya for the year 2006 thus making them liable to wildlife club visits.

PROBLEMS AND CONSTRAINTS.

- a) Insufficient resources hindered us from following up appropriately with the schools to ensure that they take up the established projects in the schools to enable a sustainable conservation process. We are currently resorting to fundraising in order to ensure that the projects eventually become sustainable.
- b) Two club patrons have since been transferred to other schools. This makes it difficult for carrying on the process and thus waiting for new patrons to be detailed about the projects and this consumes time. This we have tried to resolve by ensuring that each school has an assistant patron supporting them.
- c) Getting one school fully on board has been a problem. The administration staff of Singh Saba provides very short time for the club members to attend activities organized by LVSB thus keeping them behind other project schools.

RECCOMENDATIONS.

- We recommend any form of support towards this program that can facilitate equipping members of the school clubs with knowledge to effectively manage their projects without external support. This can be met through specialized training to the club members.
- We also recommend that LVSB recruit more members through training because the amount of work with the schools has been increasing as the program grows and these might overwhelm the current members.
- We recommend facilitation of a second phase of this project so that sustainability is improved through capacity building of project school members on issues relevant to the school project activities.

FUTURE PLANS.

From a recent LVSB meeting on **12/04/06**, it was resolved that beginning the new school term in may 2006 members should work hard towards ensuring that the school environmental program is sustained within all the project schools.

We have started collaborating with **ICRAF (International Center for Research in Agro forestry)** to assist in developing capacity of project schools in the area of

improving tree cover in the schools. Two schools so far have been reached i.e. Joel Omino and Nanga primary.

We are also in discussion with **Kisumu Collectors Recyclers** regarding waste management. This is with the view of introducing sound waste management processes in the schools through school community involvement.

FINANCIAL STATEMENT

LVSB, Nature Kenya, and Wildlife clubs of Kenya supplemented the support given by **Rufford Small Grants** to this budget. EXCHANGE RATE AT Kshs.140 = £ 1

| ITEM | COST | No. of UNITS | TOTAL |
|---------------------------|-------------------|--------------|----------------|
| TEACHER`S WORKSHOP | | | |
| Transport | 0.68 | 8 | 5.44 |
| Lunch | 1.36 | 14 | 19.04 |
| Stationery | 3.4 | 4 | 13.6 |
| Hand-outs | 1.65 | 180 | 297 |
| TV | 371.76 | 1 | 371.76 |
| DVD | 76.53 | 1 | 76.53 |
| Canon Digital Camera | 200.70 | 1 | 200.70 |
| Camera Pocket | 6 | 1 | 6 |
| Book Shelf | 27 | 1 | 27 |
| Dustbins | 12.24 | 18 | 220.41 |
| Brochures | 0.34 | 18 | 170 |
| Conservation Handbooks | 0.34 | 270 | 31 |
| Air Time | 4.44 | 22 | 24.44 |
| Phones | 91.13 | 2 | 91.13 |
| Printer & Cartridges | 40.80 | 1 | 40.80 |
| ADMINISTRATION | | | |
| Bicycle | 40.80 | 1 | 40.80 |
| Rewritable CD's | 0.94 | 2 | 1.88 |
| AA Batteries | 1.16 | 4 pairs | 4.64 |
| Bank Charges | 34.70 | 17 | 45.20 |
| EDUCATIONAL TRIPS | | | |
| Kakamega | 57.76 | 53 | 189.40 |
| Dunga Swamp | 96.42 x 3 schools | 2 | 192.80 |
| Various | 3.60 x 30 days | 6 | 658 |
| Quiz | 30.70 | 120 | 114 |
| Evaluation | | | 43 |
| TOTAL | | | 2999.84 |

APPENDIX

Pupils From St. Vitalis Nanga, Joel Omino And St. Marks Primary Schools Having A Snack During A Break From The Quiz Time At The Wildlife Clubs Of Kenya Hall On 8th April 2006.



Pupils From Various Schools Watching A Video On The World Migratory Birds Day. Celebration An Event Organised By Lvsb With Support From Nature Kenya.



Lvsb Members Leonard Akwany And Alai Orimba Taking Pupils Through One Of The Sessions Of The Quiz During The World Migratory Birds Day On 8th April 2006.

