

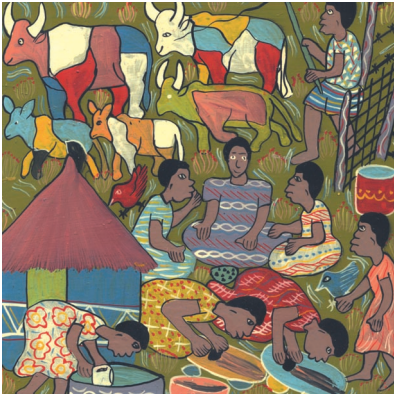


The project has managed to win the hearts of the people through education and capacity building programmes. A community based participatory learning programme under the theme "The Changing Environment" helped the community members to realise the importance of the natural resources around them. For example, with the realisation that wildlife in the area can be a source of income through tourism, they have ventured into tourism by establishing a cultural village.

According to Julius Chongwe, a ZAWA project extension officer in the area, the cultural village is promoting ecotourism. "The village has a collection of artefacts, traditional relics and handicrafts of the local Bisa speaking people on sale. It also provides the tourists with

opportunities to spend nights in Muwele and share the experiences of the local people," he says. He further said the feud that existed between the local people and the tour operators and wildlife policy is now history. "In fact the cultural village is in the process of joining forces with some of the local tour operators in order to benefit from their marketing efforts and contacts with overseas clients. At least there are indications that some of the tour operators are willing to help the culture village find clients," he says.

Unconfirmed reports show that incidents of poaching are on the decrease since the people started participating in the education and capacity building programmes offered by the WWF-Zambia Education Project.



# SUCCESS STORIES

EDUCATION AND CAPACITY BUILDING IN AFRICA

This document was made possible by the contributions from many WWF projects in the Africa and Madagascar Programme. WWF International wishes to thank all the people who made this publication possible. The organisation is indebted to the WWF-Zambia Education Project for putting initial ideas for the stories together.

Published In 2002 by WWF International  
Avenue du Mont-blanc  
1196 Gland  
Switzerland  
Tel: + 41 22 364 91 11  
Fax: + 41 22 364 53 58

Any reproduction in full or in part of this publication must mention the title and credit the above mentioned publisher.  
The opinions expressed are those of the authors and do not necessarily reflect the views of WWF.

(C) 2002 copyright WWF



Illustrations: Tendai Chirwa - Zimbabwe  
Produced by Alex Hetherington Media

Printed on recycled post-consumer waste



2

Editorial	
"Education At Stake"	4
Nigeria	
Water Hyacinth: The Waste To Wealth Project	5
South Africa	
Schools Action For Freshwater	6
Tanzania	
Alternatives To Wood Charcoal	8
Madagascar	
Books Work Wonders In Conserving Nature	9
Zambia	
Wildlife Conservation Through Village Tourism	11

Contributors

- Madagascar: Mrs Aimee Rabodomalala   arabodomalala@wwfnet.org
- Nigeria: Mrs Toun Mohammed   ncf@hyperia.com
- South Africa: Mrs Hettie Gets   hgets@wwfsa.org.za
- Tanzania: Mrs Mary Shuma   teeptz@raha.com
- Zambia: Mr George Muwowo   wwfzeep@zamnet.zm
- Zambia: Mr Justin Lupele   wwfzeep@zamnet.zm
- Zambia: Mr Jonathan Chisaka   wwfzeep@zamnet.zm
- UK: Mr Hamish Aitchison   haitchison@wwf.org.uk
- International: Mr Athanase Karayenga   akarayenga@wwfint.org
- International: Mr Luc P. Deslarzes   ldeslarzes@wwfint.org

# Wildlife Conserving through Village Tourism



THE INTERNATIONAL ECOTOURISM SOCIETY DEFINES ECOTOURISM AS RESPONSIBLE TRAVEL TO NATURAL AREAS THAT CONSERVES THE ENVIRONMENT AND SUSTAINS THE WELL-BEING OF LOCAL PEOPLE. MUWELE CULTURAL VILLAGE IN THE NORTHERN PROVINCE OF ZAMBIA IS HELPING WITH CONSERVATION THROUGH THIS PHENOMENON - ECOTOURISM. POORLY DRESSED AND MALNOURISHED CHILDREN STAND AT THE ROADSIDE, WAVING AT TOURISTS PERCHED ON TOP OF TOUR VEHICLES AS THEY PASS BY. A SHORT DISTANCE FROM WHERE THE CHILDREN STAND, A GROUP OF ELDERS GATHER, SIPPING FROM THE GOURDS OF LOCAL BREW.

They sing praises for their Chief and rich wildlife resources in the flood plains of the Bangweulu Basin. The basin is rich in bird life (including the famous shoebill stork) and commercial species of ducks and geese. It is also home to the semi aquatic antelope species of sitatunga (*Tragelophus spekeii*) and black lechwe (*Kobus leche smithemani*). The rich biodiversity of the area contrasts with the life of the people of Muwele, who live in abject poverty.

The people who were once traditional hunters now rely on a rapidly diminishing natural resource base. Most households are without husbands as they are serving prison sentences for poaching. Hostility between the local people and the law enforcers in the area is rife. The local people feel the outsiders - safari hunters, tourists and wildlife police - are "stealing their resources." Often, they see animals carcasses in the hunters' vehicles, cruising past the village.

"Hunters and tourists leave nothing to benefit us," they moan.

This scenario has a lot of telling influence on the attitude of the people of Muwele. Wide spread vandalism to the natural resources and resentment is the order of the day.

However, since WWF-Zambia Education Project entered the area with the concept of environmental education four years ago, there has been more harmony among the people. The relationship between the community on one hand and Zambia Wildlife Authority (ZAWA) and tour operators on the other has been improving. A sense of goodwill towards WWF has been established.

The people now have a better understanding of conservation issues and feel empowered enough to participate in decision-making related to natural resource management.





"Ny Voaary" aims at developing behaviour, which is favourable to the conservation of nature. Teachers use the book to help stimulate their pupils' awareness as regards the environment and guide the latter through practical activities. At home, parents - by means of the "Ny Voaary" - support this initiative in teaching their children why and how to protect nature. By illustration, in one primary public school of Idanda/Fianarantsoa, in the southern part of Madagascar, young pupils develop practice lessons drawn from "Ny Voaary": the school now owns a tree nursery and a botanical garden. It regularly takes part in reforestation campaigns and provides the public with plants.

The Cultural and Educational Centres for the Environment use "Ny Voaary" in their training programmes. At present, people in the military who attended training in those centres turn to the protection of the environment. For example the Armed Forces, men with red berets in the Military Region 2, restored a former military camp into a green space, and actively buckle down to reforestation activities.

"VINTSY", A CHALLENGE

In a strong position because of its experience of "Ny Voaary", the Education Programme of WWF in Madagascar later launched "Vintsy", a magazine which has proved effective in the conservation of the remaining forest in the southern arid region of Madagascar in Toliara Province.

According to Maksim Lucien Godefroy, editor of the magazine, the region in the south of Madagascar is arid and the deciduous forest has been overexploited. He says a lot of effort has been made by various conservation organisations to make the region green again, through

afforestation, but to no avail. However, when "Vintsy" published two articles on the devastating impact, the overexploitation of the forestry resources would have on the semi-desert region, the Forestry Commission made a commitment to stop logging activities in Toliara Province.

"Three weeks after the publication of the two articles, the Forestry Commission reassured WWF that foreign operators will not be authorised to exploit forestry resources in the area," Godefroy said. He further says: " the articles pleaded with the commission to help in preserving the remaining forest in the province".

"Vintsy" has become so popular in Madagascar that readers view it as a voice that should be included in all political, economical and social decisions which may affect the environment. The magazine is widely read in Madagascar, with a circulation of 18 000 copies per issue. The magazine had, throughout its success, generated the creation of "Vintsy" Clubs, which are associations of secondary school students. They work in their immediate environment, at school and as well as at home. Most of these "Vintsy" Clubs have their own arboretum within their school domain.

Others, such as the Joel Sylvain High School in Ambalavao/Fianarantsoa have used the school ground for tree planting. These clubs take part in different environmental events and activities jointly organised with partners.

The two converging actions of "Ny Voaary" and "Vintsy" serve as catalysts, which are helping with better management of the Malagasy environment by the children of today, the future managers of nature.







# Education at stake.....



EDUCATION HAS BEEN A PART OF WWF'S ACTIVITIES SINCE THE ORGANISATION'S INCEPTION MORE THAN 40 YEARS AGO. THE WWF NETWORK CURRENTLY CONDUCTS ONE OF THE LARGEST, MORE DIVERSIFIED AND WIDESPREAD PROGRAMMES OF EDUCATION BY AN INTERNATIONAL ORGANISATION. FOUNDED ON NEGOTIATED AND SHARED OBJECTIVES, STAKEHOLDERS PARTICIPATE AT ALL STAGES IN WWF EDUCATION AND CAPACITY BUILDING PROGRAMME DEVELOPMENT AND IMPLEMENTATION TO ENSURE BUY IN AND OWNERSHIP. EDUCATION PROGRAMMES INITIATED BY WWF IN THE AFRICA REGION, EMPOWER AND MOTIVATE PARTNERS AND LOCAL COMMUNITIES, WHO TAKE THEM ON AS AN INTEGRAL PART OF THEIR ACTIVITIES.

educational visits to different areas of the country where he demonstrates how to make and use the charcoal. This alternative to charcoal is not only seen as saving trees but also as a positive measure to the search for firewood. Other greening programmes are being replicated in schools and communities in selected districts in the country through the greening manual put together (in Swahili) by TEEP.

Meanwhile, TEEP has helped build a social context for conservation in the WWF Tanzania's Integrated Conservation and Development Projects (ICDPs).

These successes have been as a result of the synergy between education and conservation projects within the WWF Tanzania Programme.

"Through education, people participate actively in the learning process, they then understand better their relationship with the environment around them in order to improve their livelihoods and achieve conservation targets."

The project believes that education gives people choices which ultimately helps them conserve resources.

## MADAGASCAR

# Book Works Wonders in Conserving Nature



IN MADAGASCAR, TWO BOOKS HAVE ESTABLISHED THEIR PEDIGREES IN THE EDUCATION SPHERE: "NY VOAARY" FOR THE PRIMARY SCHOOL AND "VINTSY" FOR THE SECONDARY SCHOOL. THIS IS A FIRST IN WWF ACTIVITIES FOR THE CONSERVATION OF NATURE.

"NY VOAARY", ON A RUN...

"Ny Voaary" Didactic Material Project was launched with the aim of enabling students, teachers and the population to have access to ecological and environmental information and knowledge. "Ny Voaary" in this way allows a user to exploit techniques of expression, communication and skills for the realisation of activities relating to the conservation of nature and the protection of the environment.



The participation of stakeholders in the design and implementation of the programmes in each country ensures that they are appropriate to the cultural context in which they are set and are not imported from other cultures.

These programmes engender the realisation that there can be wide choices and opportunities for living a more tolerable life. People are empowered to develop and recognise the alternatives that can exist in the use of their resources. The programmes are directed at key players who can effectively multiply outcomes within a range of systems of education in any specific country. They also encourage interaction between communities at the local level to spread best practice.

Through the use of participatory and capacity building methodologies, local communities are encouraged to take ownership of their own learning processes. This empowers

them to take part in problem-solving and informed decision-making about their environmental concerns.

WWF seeks the sustainability of programme outputs and impacts. It is envisaged that through the implementation of education and capacity building programmes, partners and stakeholders can have the capacity to achieve these outputs and impacts, long after WWF's involvement has come to an end. Ongoing participatory monitoring and evaluation at all levels forms an integral part of every WWF supported education and capacity building programme, in order to meet strategic objectives.

This publication carries some success stories of how education is shaping the conservation goals of WWF. From the stories, it is clear that education has a vital role to play in conservation in Africa.





TANZANIA

NIGERIA

Alternatives To Wood Charcoal.....



FORESTS DISAPPEAR BECAUSE OF CHARCOAL PRODUCTION IN MOST PARTS OF AFRICA. WWF-TANZANIA ENVIRONMENTAL EDUCATION PROGRAMME (TEEP), WORKING WITH A LOCAL SCHOOL IN MOROGORO DISTRICT OF TANZANIA, HAS FOUND AN ALTERNATIVE TO WOOD CHARCOAL. WHEN YOHANA KOMBA, A PRIMARY SCHOOL TEACHER FROM KIROKA SCHOOL IN TANZANIA'S RURAL DISTRICT OF MOROGORO, ATTENDED THE FIRST EVER WWF TANZANIA ENVIRONMENTAL EDUCATION PROGRAMME (TEEP) WORKSHOP IN 1992, IT NEVER OCCURRED TO HIM NOR THE WORKSHOP ORGANISERS THAT HE WOULD ONE DAY CONTRIBUTE TO THE CONSERVATION OF TREES AROUND HIS SCHOOL.

After the workshop and back at school, Komba shared his new acquired knowledge with fellow teachers and pupils. Soon the school started greening activities.

His interest in greening activities led to the invention of an environmentally friendly charcoal, popularly known as green or vegetation charcoal. This has become an alternative to the conventional charcoal from trees. Komba invented the green charcoal in order to address the deforestation problem which had dogged the area for many years. The rate of deforestation was so high at the time that the surrounding hills were left bare. Charcoal burners had been indiscriminately felling trees. According to Komba, the recipe for vegetable charcoal is simple and can be followed by anyone with keen interest.

"Vegetable charcoal is made out of soil, ash and a vegetable known as Mlenda (Kiswahili) or Corchorus

species of the *Tiliaceae* family he says. He says the vegetable is boiled in water until a thick, elastic paste forms. "The paste is mixed with soil and ash (from burnt rubbish). The mixture can then be mould into fist sized nuggets. These are carefully dried under shade for five days before they are ready for use," he says.

Research has shown that drying the nuggets under direct sunlight absorbs carbon from the would-be charcoal.WWF-Tanzania Programme Office analysis of the charcoal, shows that it has no bad side effects, produces an even heat that burns longer than the conventional charcoal. The burning is slow and does not damage pots. From what started as a simple environmental education workshop, a solution to deforestation has been discovered in Kiroka.

WWF- Tanzania office has assisted in popularising the technology by sponsoring Komba. He is taken on

Water Hyacinth: The Waste to Wealth project



THE PROBLEMS ASSOCIATED WITH WATER HYACINTH (EICHORNIA SPP) ARE OF GREAT CONCERN TO THE UNITED NATIONS WATER-WEED PROJECT, THE FEDERAL ENVIRONMENTAL PROTECTION AGENCY, (FEPA) (NIGERIA) AND THE LAGOS STATE ENVIRONMENTAL PROTECTION AGENCY (LASEPA). MILLIONS OF NAIRA HAVE BEEN SPENT TO CURB THE MENACE OF THIS WATER-WEED, WITHOUT MUCH SUCCESS.

Water Hyacinth is a species of water-weed posing a serious environmental threat to the Nigerian environment. The weed hinders navigation on our water bodies, negatively impacts fishing activities, increases the siltation of water bodies and hinders a lot of other economic activities.

It was against this background that the Nigerian Conservation Foundation's School Conservation Club of the Lagos State Model College Kankon, Badagry started a study into the utilisation of this species. Two students, Job Akanni and Vincent Omobolaji and a teacher Mr Ibitoye Ibikunle worked on the Hyacinth weed to make useful materials out of it, thereby turning "Waste to Wealth".

- \* The pulp was used to make paper and textile fibres.
- \* Through anaerobic composting of the plant in a digester, biogas-methane was extracted.
- \* The bud axil was used as animal feed and green manure.

- \* The whole plant was used to treat sewage contaminated with lead.

The paper does not tear easily and is water-resistant. The quantity of biogas produced in one day is sufficient for a few hours cooking and the plant absorbs lead from sewage and polluted water. The water-weed is a good raw material for the paper and textile industry, an anti-pollutant and a source of clean and cheap energy.

The two students represented the country (Nigeria) at the first Worldwide Young Researchers for the Environment WRE in Hanover, Germany and gave a presentation entitled "Water Hyacinth as an Anti-pollutant, Paper, Biogas and Acid-Base Indicator".

The presentation won a prize as one of the best environmental projects of young scientists all over the world.



SOUTH AFRICA

Schools Action For Fresh Water.....



AS SOUTH AFRICA'S WATER RESOURCES ARE SO SCARCE, ENVIRONMENTAL EDUCATION PROGRAMMES AIMED AT WATER EDUCATION ARE VITAL. SCHOOLS ARE NOW RESPONSIBLE FOR PAYING THEIR OWN WATER ACCOUNTS, WHICH MAKES WATER CONSERVATION EVEN MORE IMPORTANT. THE SCHOOLS WATER ACTION PROJECT (SWAP) IN GAUTENG PROVINCE IS FLOWING INTO ACTION.

The programme's goal is to involve educators and learners in hands on water related activities that create an awareness of the critical need to conserve water in South Africa,' says Di Beeton, Executive Officer of the Delta Environmental Centre (DEC), which runs the initiative. 'As water is our most precious resource, we must be dedicated to using water wisely and encouraging young people to be water conservationists,' she adds.

In 1995, at about the same time that SWAP was being introduced, Delta approached Rand Water, the local water utility, to sponsor an activity room in the newly built Discovery centre, and to assist with conducting the tests and interpreting the results. Rand Water took up the challenge and a dynamic partnership has evolved over the years.

Initially, SWAP involved the monitoring of water quality of local rivers, streams and wetlands using a simple field kit containing various tests. Five years later the project has grown to reflect a broader interpretation more in line with the principles of environmental education. SWAP related activities now involve water audits (for both quality and quantity), catchment observation activities, river clean ups, rehabilitation projects and so forth. Using a variety of activity based learning experiences, learners begin to appreciate the value of this precious resource, and since 1995, WWF-SA has stepped in to sponsor some of the activities. This enables teachers to attend water related workshops and school groups from local townships and rural areas to attend environmental education programmes at DEC that have a water theme.

It is these students who are the most important. They have fun learning all about water and its conservation, and then take resource material and activity sheets back to their schools and spread the word. For their part, the teachers are inspired to incorporate new material and ideas into their curricula. This bringing back of information has generated such enthusiasm that schools have come up with their own water policies that they are all the more likely to follow, having proudly developed them themselves.

Conserving water becomes fun and meaningful. Lindi, a Grade 4 pupil from Crawford Preparatory School summed up in awe: 'We were able to touch the water!'

'We must show others that polluting and wasting our water resources harms us all,' says Ronnie Kasrils, the Minister of Water Affairs and Forestry. 'As teachers, we have the special responsibility of turning our young learners into the citizens of the future. And as learners, we have the special responsibility to take the precious knowledge we acquire out into the community.' With its Schools Water Action Project, the Delta Enviromental Centre is ensuring both.

AN EXAMPLE OF A SCHOOL'S WATER POLICY DRAWN UP BY THE ROSHNEE JUNIOR PRIMARY SCHOOL AFTER ATTENDING DEC'S WORKSHOP:

- |  |   |
|--|---|
| <ul style="list-style-type: none"><li>* Our main objective is to teach the pupils the importance of water and how to save water.</li><li>* Lessons taught are focused on saving water at all costs.</li><li>* Taps must be closed tightly.</li><li>* All leaking taps and pipes at the school must be fixed.</li></ul> | <ul style="list-style-type: none"><li>* Jugs are provided for pupils to use in the toilets to save water.</li><li>* Flow of water must be controlled when washing hands.</li><li>* All cases of playing or splashing water unnecessarily have to be reported.</li></ul> |
|--|---|

WHAT OTHER WATERY THINGS ARE DONE BY DELTA?

- \* Rand Water's water-wise education team works closely with the staff of DEC when developing new resources and projects. Two examples of these are an interactive educational play called "For the Love of Water" and a puppet show called "The Treasure". Using the DEC as one of their bases, the team started an active water-wise education programme, which has proved very successful.
- \* Some DEC staff are also involved in water-wise gardening training, offered by Rand Water. In the near future, the centre will be in a position to offer programmes on water-wise gardening to school groups.
- \* A comprehensive educator's pack on waste water is available.
- \* DEC is a partner in the '2020 Vision for Schools' water project of the Department of Water Affairs and Forestry.
- \* DEC is also involved in preparing the editorial for various editions of enviroteach, including editions on 'Water and the Environment'.