

**Environmental Management and Biodiversity Conservation of Forests,
Woodlands, and Wetlands of the Rufiji Delta and Floodplain**

World Environment Day 2003



**‘Water – two billion people are dying for it –
conserve water and protect water catchments’**

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¹ The Rufiji District Council implements Rufiji Environment Management Project with technical assistance from IUCN – The World Conservation Union, and funding from the Royal Netherlands Embassy.

Rufiji Environment Management Project – REMP

Project Goal: To promote the long-term conservation through ‘wise use’ of the lower Rufiji forests, woodlands and wetlands, such that biodiversity is conserved, critical ecological functions are maintained, renewable natural resources are used sustainably and the livelihoods of the area’s inhabitants are secured and enhanced.

Objectives

- To promote the integration of environmental conservation and sustainable development through environmental planning within the Rufiji Delta and Floodplain.
- To promote the sustainable use of natural resources and enhance the livelihoods of local communities by implementing sustainable pilot development activities based on wise use principles.
- To promote awareness of the values of forests, woodlands and wetlands and the importance of wise use at village, district, regional and central government levels, and to influence national policies on natural resource management.

Project Area

The project area is within Rufiji District in the ecosystems affected by the flooding of the river (floodplain and delta), downstream of the Selous Game Reserve and also including several upland forests of special importance.

Project Implementation

The project is run from the district Headquarters in Utete by the Rufiji District Administration through a district Environmental Management Team coordinated by the District Executive Director. The Project Manager is employed by the project and two Technical Advisers are employed by IUCN.

Project partners, particularly NEMC, the Coast Region, RUBADA, The Royal Netherlands Embassy and the Ministry of Natural Resources and Tourism, collaborate formally through their participation in the Project Steering Committee and also informally.

Project Outputs

At the end of the first five –year phase (1998-2003) of the project the expected outputs are:

An Environmental Management Plan: an integrated plan for the management of the ecosystems (forests, woodlands and wetlands) and natural resources of the project area that has been tested and revised so that it can be assured of success - especially through development hand-in-hand with the District council and the people of Rufiji.

Village (or community) Natural Resource Management Plans: These will be produced in pilot villages to facilitate village planning for natural resource management. The project will support the implementation of these plans by researching the legislation, providing training and some support for zoning, mapping and gazettement of reserves.

Established Wise Use Activities: These will consist of the successful sustainable development activities that are being tried and tested with pilot village and communities and are shown to be sustainable

Key forests will be conserved: Forests in Rufiji District that have shown high levels of plant biodiversity, endemism or other valuable biodiversity characteristics will be conserved by gazettement, forest management for conservation, and /or awareness-raising with their traditional owners.

Summary

World Environment Day 2003, was a lively, interactive and informative celebration. Many people attended and participated in the event. Problems encountered were mostly due to time constraints as a result of late initiation of planning activities. Improved organisation and delegation of responsibilities can overcome most of the difficulties encountered. Perhaps the biggest success is the fact that much of the on the ground preparations were carried out by Mohoro Villagers themselves, proving again that there is enormous capacity at the village level for environmental activities such as this. It is hoped that by encouraging local communities to plan and implement celebrations such WED 2003 the ideas will be spread further among communities. Mtanza Msona Village demonstrated this by organising their own WED celebrations and inviting neighbouring villages to attend.

Details of activities are presented together with photographs of the events.

The following recommendations are made:

- District Departments, Projects, NGO's and other sectors should include WED celebrations into their annual budgets.
- National level media efforts should be increased to allow better publicity and coverage.
- The diversity of exhibits and participants should be increased. (Private sector were notably absent from the exhibitions)
- Organisation of WED through information provision should start much earlier in the year, (probably mid-February).
- **Content of Performers acts.** Some of the performers, (e.g. Mohoro Primary School and the Poets) incorporated a clear environmental message into their performance, others however did not. It would be beneficial to discuss in detail with performers the content of their act and where necessary, suggest improvements to environmental messages. It is possible for comic dramatic artists to incorporate environmental messages into their comedy, as was seen at World Wetlands Day, 2003.
- **Prize-giving.** Due to short notice, many of the prize winners were not present to collect their prizes. In future ensure that judging takes place early enough to allow time for letters to be sent to winners early. Also it might help if a list of prize winners giving detailed explanation of why they had been chosen is posted in prominent places in participating villages (beautification of the environment is not an adequate explanation).
It also came to light after the event that some villages had not received the information announcing the competition, leading to suspicions of favoritism. It is essential that where valuable prizes are being awarded, the competition be run fairly and transparently. Central to this is allowing plenty of time for announcing, submitting entries and deciding winners of the competition. It is also noted that the same individual responsible for organising WED was responsible for organising the CEAS competition, creating a lot of work for one person. In future roles should be delegated to more people.
- **Exhibition.** Due to short notice, some exhibitors failed to bring items to exhibit. Again allowing plenty of time to organise events like WED should be allowed, and preparations such as issuing letters of invitation should take place well in advance of the event. It is also recommended that pilot villages prepare exhibits that can be taken to events such as WED 2003, these can then be stored for future use.
- **Who is the event for?** This question needs to be carefully considered at all stages of the planning and implementation. There is a tendency for exhibits and activities to be seen as first and foremost for the 'honourable guests', limiting participation of other visitors and guests. Celebrations such as WED are an opportunity for EVERYBODY to learn and enjoy.

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List of Abbreviations and Acronyms

REMP	Rufiji Environment Management Project
MUMARU (Swahili for REMP)	Mradi wa Usimamizi wa Mazingira Rufiji
WCST	Wildlife Conservation Society of Tanzania
IUCN	World Conservation Union
Div. Sec	Divisional Secretary
MMP	Mangrove Management Project
WED	World Environment Day
RC	Regional Commissioner
DC	District Commissioner
RUBEP	Rufiji Beekeeping Project
NGOs	Non Governmental Organisation
ITV	Independent Television
EMT	Environmental Management Team.
WED	World Environment Day
DED	District Executive Director

1 Introduction

1.1 Background to World Environment Day

“World Environment Day, (WED) established by the United Nations General Assembly in 1972, is a people's event with governments, individuals and community groups organizing various activities to improve the environment. In many countries, this annual event is used to enhance political attention and action. Heads of state prime ministers and ministers of the environment deliver statements and commit themselves to care for the Earth. More serious pledges are made which lead to the establishment of permanent governmental structures dealing with environmental management and economic planning.” Tarimo *et al*, (2001).

“The World Environment Day is an annual event which is celebrated in many ways worldwide with events such as street rallies, bicycle parades, green concerts, essay competitions in schools; tree planting as well as recycling and clean up activities. The World Environment Day is a multimedia event, which inspires thousands of journalists to write and report on the environment. It is a visual event with television documentaries, photo exhibits and poster displays. It is also an intellectual event for those who organize and participate in seminars, round table meetings and symposia. Broadly, the World Environment Day agenda is to give a human face to environmental issues, empower people to become active agents of sustainable and equitable development; promote an understanding that communities are pivotal to changing attitudes towards environmental issues; and advocate partnership which will ensure all nations and peoples enjoy a safe and more prosperous future. All in all World Environment Day serves to enhance public and political attention and action for the environment.” Tarimo *et al*, (2001).

Theme for WED 2003 was ‘**Water – two billion people are dying for it – conserve water and protect water catchments**’. This theme seeks to emphasise the point that water is essential for life and that its sources need to be protected and water used wisely. This theme also focuses attention on the interdependence of habitats for water catchment. This theme is particularly appropriate in Rufiji a district dominated by the Rufiji River with wide scale dependence on the Rufiji floodplain and delta for livelihoods.

1.2 WED and other Celebrations in Rufiji District

The first major celebration of WED in Rufiji was held in Ikwiriri in June 2001, details of this ground-breaking event can be found in REMP Technical Report 22 (Tarimo, B.D., Hogan, A.R. and Ndasi, F., 2001). This was a large-scale event in which many national and regional organisations took part. In 2002, WED celebrations were smaller in scale. In February 2003, a similar event, World Wetlands Day, was celebrated in Utete. This successful celebration involved many people from Utete but few from other areas of the district, details of this event can be found in REMP Technical Report 33 (Doody *et al* 2003).

Having now staged several events, Rufiji District Staff have some experience of organising, facilitating and staging such celebrations.

1.3 Aim of WED 2003

The overall aim the of the World Environment Day event at Rufiji was to:

Arouse public awareness through experience, information and knowledge-sharing that encourages attitude change towards sustainable environmental management.

2 Organisation and Planning

The Rufiji District Environment Management Team (EMT) initiated planning of WED 2003, with encouragement from two sources. Firstly celebrations such as WED are an important aspect of the REMP awareness programme and secondly the District Administrative Director received a letter from the Vice-Presidents Office requesting that the District organize WED celebrations. Stakeholders were invited to this preliminary planning meeting to discuss which types of events should take place. It was decided:

- To celebrate WED from the 1st – 5th June 2003;
- For every village to celebrate in their own area;
- The climax of the celebrations would be on the 5th June in Mohoro;
- Brig. Gen. Sylvester Hemed (Rufiji District Commissioner) would be invited to attend as the guest of honour.

Letters were distributed to village Ward Executive Officers, followed with meetings with the local Government in Mohoro. During these meetings the concept was explained and ideas shared on how best to organise the event, activities were proposed and a tentative budget agreed.

A further preparatory meeting was undertaken in Mohoro with the Division Leader, village leaders and other resource people, in which assistance to run the event was offered and roles and responsibilities required for a successful event established. Other people from the village were involved according to their abilities and time available.

Tasks identified included:

- Creating a performance area
- Decorating village and exhibition area
- Publicity (through radio, TV, press release, posters and public address system)
- Logistics (accommodation and food)
- Issuing invitations
- Building shade banda for guest of honour.

The following committees were established in Mohoro to oversee various planning aspects assisted by the Environmental Committee: Organising Committee, Decorating Committee, Reception Committee, Exhibition Committee, Food Committee and Security Committee. Teachers, students, local people and health workers all assisted in the preparations for activities on the 5th June.

2.1 Budget and sources of funds

Having established a budget for the event, funds were secured from a variety of sources.

The District Executive Director (DED) pledged money from District Council funds that covered the costs of participation and attendance of District Staff at the event.

REMP provided funds to meet other costs such as construction of shade banda for guests, publicity, technical advice, food, transport, exhibitions, stationary and allowances for representatives from pilot villages.

Mangrove Management Project (MMP) provided transportation for the traditional drama and drumming group.

2.2 Publicity

- Press Releases were made on Uhuru Radio
- ITV Television were invited to record the event.
- Drummers toured the village on the evening of the 4th June announcing the following days event.

- EMT meetings were used to spread information about WED to staff and other district departments.
- Heads of District departments were invited by letter to the celebration.
- A public address system was used to announce a public invitation to participate in the celebration.

2.3 Mtanza Msona Celebrations

The village of Mtanza Msona planned and held their own WED celebrations, and invited adjacent villages to join the celebration. People from Mtanza Msona created displays about wise use of natural resources, village environment management planning and also performed environmental songs during the event. This event was particularly successful given that relatively little district support was given.

3 WED Activities

Between the 1st and 5th of June several activities were undertaken in and around Mohoro including tree planting on water catchments and a clean-up of the local environment. In addition many people (including lots of students) were involved in preparation of materials for the activities and exhibition on the 5th June 2003.

Activities on the 5th June were as follows:



Figure 2: Students decorate Mohoro Village for WED Celebrations

3.1 Procession

June 5th, the climax of celebrations, started with a procession led by the Kibiti MMP drumming group, this led a large number of people to the exhibition ground and served to open the days events. Later after visitors had explored the exhibition rooms the band led the procession to the village center where performances, speeches and prize-giving were undertaken.



Figure 4: Crowds Arrive at the Exhibition Ground in Mohoro

Guests were able to see first hand the uses of the wetland; in addition threats to the wetlands were easily visible. Due to the dryness of the season, crops had been planted right up to the waters edge on the banks of the wetland, destroying much of the natural vegetation, which is likely to increase run-off and erosion in the area. This walk provided visitors the chance to participate in



Figure 1: Students prepare decorations for Mohoro Village WED Celebrations



Figure 3: Student prepares banner advertising WED 2003

3.2 Wetland Walk

Having arrived at the exhibition ground and been welcomed by the reception committee guests of honour and a small group of people walked to the near-by wetland, Sunga Pond. At the wetland local people explained to the guests the historical and current importance of Sunga Pond to the villagers of Mohoro as a water source.

‘environmental experiential learning’ a cornerstone of the environmental education programme of REMP.

3.3 Exhibition Ground

Exhibits were displayed at Mohoro Primary School. Villagers, teachers and students worked hard preparing the school and exhibits. The exhibits and activities were designed to appeal to all age groups and literacy levels. As preparing exhibits offers a learning opportunity (often it is the person who created a poster that learns the most) efforts were made to incorporate as many young people as possible in preparing exhibition materials and activities.

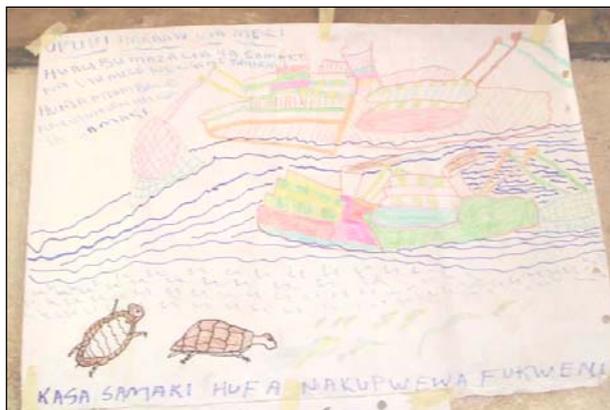
The exhibits are described and briefly evaluated below.

3.3.1 Jaja and Twasalie - REMP Pilot Villages

Representatives from Jaja and Twasalie exhibited posters and props demonstrating the benefits from and process of village environmental management planning. Exhibits included honey (from beekeepers), mangrove seedlings, furniture made from local products and mats and baskets made from local materials. Posters explained village environment management plans and described the benefits and importance of natural resources. These exhibits were very popular with participants and the village representatives were busy discussing issues raised by their exhibition. The exhibits and interest created by them were excellent. It is hoped the discussions held will be prove particularly valuable.



Figure 5: Jaja Exhibit - Uses of Fruit Trees
Figure 6: Jaja Exhibit – Problems with



Trawler Fishing Boats

Part of the Jaja exhibit focused on current environmental problems they are experiencing with trawling vessels fishing close to shore.

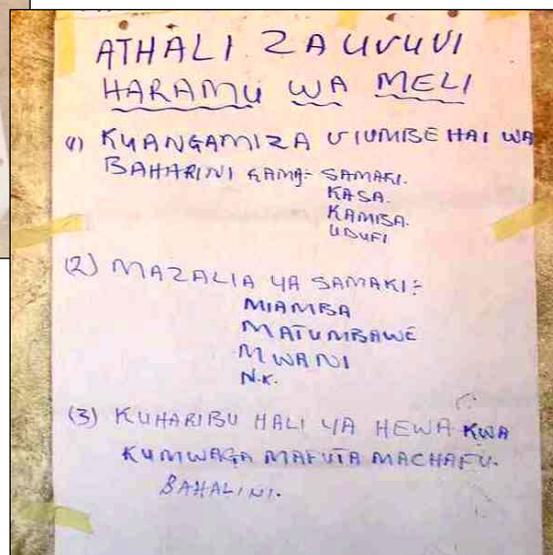




Figure 7: Jaja Exhibits - Honey, Mangrove Seedlings and Posters

3.3.2 Mohoro Village

A representative from Mohoro Village exhibited furniture made from local products, and discussed the importance of wetlands in providing materials for such items.

3.3.3 Chumbi Village

A representative from Chumbi Village exhibited posters explaining the benefits of cashew farming to the environment, and how to manage cashew nut trees.

3.3.4 Water Cycle Game

This game had a poster showing a slice of a hillside, with trees, a lake at the bottom, a river, rain clouds and the sun. The object of the game is to stick on arrows showing where the water moves through the water cycle, then if the participants were able they were asked to stick on labels showing the names of these processes e.g. rain, evaporation etc.

Two students did an excellent job of explaining the game to participants and helping them (particularly younger children) to understand the task and learn about the Water Cycle.



Figure 8: Student prepares Water Cycle Poster for Exhibition Room

3.3.5 What Am I?

This poster was a game in which participants had to guess what was hidden under the flap at the bottom of the poster from 9 clues revealed in sequence. If the participant managed to guess what the picture was without looking at the picture they were said to have won. The clues given for each picture are listed in Appendix 1. This game was explained and facilitated by two students who managed the groups excellently.

3.3.6 Safe Drinking Water demonstration

A demonstration table showing how to prepare and store safe drinking water was the main exhibit of room 2. The following principles were demonstrated by boiling water on a kerosene stove in a sufria with a lid:

- Always boil water for at least 20 minutes to kill parasites and bacteria
- Always boil water with a lid covering the pan to reduce fuel consumption.
- Allow water to cool and store in a sealed clean container to prevent re-infection.

3.3.7 The Three states of Water Poster

Alongside the safe drinking water demonstration were posters explaining the properties of water showing how water exists in three states, i.e. as a solid (ice), a liquid and a vapour (steam). The diagram also explained why ice floats, (because the molecules are further apart in a rigid lattice making ice less dense than water). This poster complemented the water boiling activity where some of the processes described were easily visible (evaporation). A student was on hand to explain the poster to the participants.



Figure 9: Student prepares poster explaining different states of water

3.3.8 Stick the Lakes on the Map Game

In this game the participants had to stick cut-out cardboard lakes onto the map of the River Rufiji, encouraging participants to think about how many lakes there are in Rufiji, where are they located, how big are they etc. The map was drawn to a 1:50,000 scale and was more than 3m long. Three students facilitated this activity and managed participants excellently.



Figure 10: Map of the Rufiji River onto which 'lakes' are stuck

3.3.9 Colouring Room

Children of all ages were invited to draw or colour pre-prepared pictures showing an animal or habitat. Older children copied the pictures whilst younger children coloured in the cards. Participants could take the cards home with them. This activity was very popular with children of all ages. A teacher maintained order and calm.

3.3.10 Word search

Chemsha Bongo – Word search puzzles (examples are given in Appendix 2) were designed for older children to practise literary skills using environmental words in both English and Swahili.

Mw. Masindu supervised this activity in a separate room. This activity was suitable only for older children, who seemed to enjoy the quiz.

3.3.11 Environment Protection Posters

A series of posters designed by Mohoro Primary School and drawn by a local artist were exhibited. The posters depicted the negative practices of unsustainable resource use, such as cutting down all trees, reckless burning of the environment and pollution of water courses demonstrated activities to avoid, whilst a poster showing a healthy sustainable utilized environment offered a suggestion of what to work towards.



3.3.12 Tides Poster

A student prepared a poster explaining the influence of the moon and the sun on tides with the assistance of a teacher. The student who had prepared the poster explained this complicated phenomenon to participants. This poster is particularly relevant for Mohoro as the river at Mohoro is greatly influenced by the tides.

Figure 11: Student prepares poster explaining the influence of the moon and sun on tides

3.3.13 Who Am I Game

In this game (played outside) the participant has to guess what is on the picture attached to his/her back by asking 10 questions, to which the audience can reply yes or no. This is a fun game in which participants have to think logically and practise skills of classification. It looks easy but is surprisingly difficult when you are the one guessing!

3.3.14 Web of Life Game

This activity is a game (played outside) in which participants are given a small card depicting a feature of the environment, e.g. water, trees, sun, grasses, frog, fish, birds, mosquito, man etc. The participants sit or stand in a circle and then pass between themselves a ball of string representing the connections between each of the participants. Eventually a web is created, whilst all aspects of the environment are functioning the web is strong and taut, this is shown to the participants by asking them to press down gently onto the web. Some aspect of the environment is then removed explaining the reasons why, for example a pollution incident may destroy water quality meaning that all insects and fish die, or an upstream dam may significantly reduce water flow. Other participants must let go of the string as the things they depend on die out. Eventually the web of life collapses. This is an excellent game for demonstrating the inter-relatedness of all things in our environment.

This activity can be used again in many varied situations as it is simple but gets participants thinking about the natural world around them.

3.3.15 Quiz

In this activity participants were given some information and then asked a question based on that information. Participants were invited to answer the question on a piece of paper provided, with their name, age and if applicable class, once completed they posted their answer in a box. The answers were then sorted, discarding those with incorrect answers. The winning correct answer was then selected from the box during the prize giving session. The information given was as follows:

Flow rates for the Rufiji River.

Dry season flow (minimum) – 100 m³/s

Average flow - 900m³/s

Rainy Season flow – 6000m³/s

El Nino floods - 13000 m³/s

1000 litres = 1 m³

Question: On average how much water flows out of the Rufiji in one hour?

Answer:

900 m³/s x 60 seconds = 54, 000, x 60 minutes

= 3,240,000 m³/hour



Figure 12: Quiz Prize Winner Receives his Prize

3.4 Performances

Having looked at the exhibits the participants were led to the village center near the river, where a performance area had been marked off and a banda erected for honourable guests. The choice of location was good, offering shade to spectators and making use of a slope to allow a better view for those at the back of the crowd. The following performances were interspersed with speeches from the honourable guests and prize giving.

3.4.1 Mkinda Traditional Dance

Being a local Mohoro drumming and dance group, the Mkinda Traditional Dance Group were very popular with the spectators with many people from the crowd joining in the dance. Although the ‘act’ had no definitive environmental message this group made the atmosphere one of a true celebration and thus contributed to the event.



Figure 13: Mkinda Traditional Dance Group Celebrate WED 2003

3.4.2 Kiwamaru – Mikoko Art Group



Kiwamaru combined drumming, dance and song to deliver an upbeat and creative environment message. This well-practiced group was formed for the WED 2001, and since then has continued to entertain and educate about the environment at weddings and celebrations in the district.

Figure 14, 15 and 16: Kiwamaru entertain and educate the spectators with song, dance and drums



3.4.3 Choir of Mohoro Primary School

The well-practiced and charming choir of Mohoro primary school gave the honourable guests and spectators a reminder that sustainably utilising and protecting the environment is necessary to ensure their livelihoods in the future.

The drummers and choir performed well and were popular with the spectators. We hope the simple melody and theme of the song will be remembered in the village.



Figure 17 and 18: Mohoro Primary School Choir and Drummers deliver their environmental message

3.4.4 Poets

Local Poets gave a serious moment to the proceedings as they performed their environmental poems to the spectators. Having completed the poem it was given to the honourable guests so that they may consider its contents more carefully.

Figure 19: A local poet performs his environmental poem to the many spectators

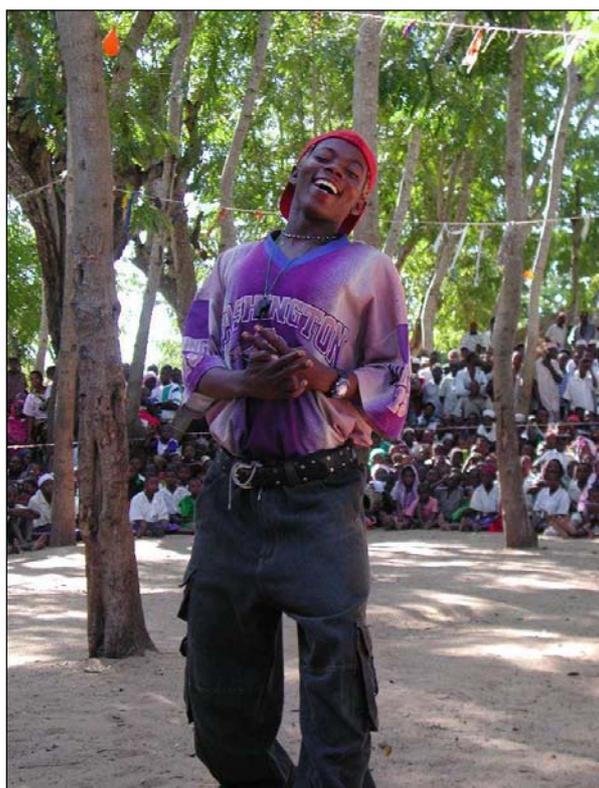
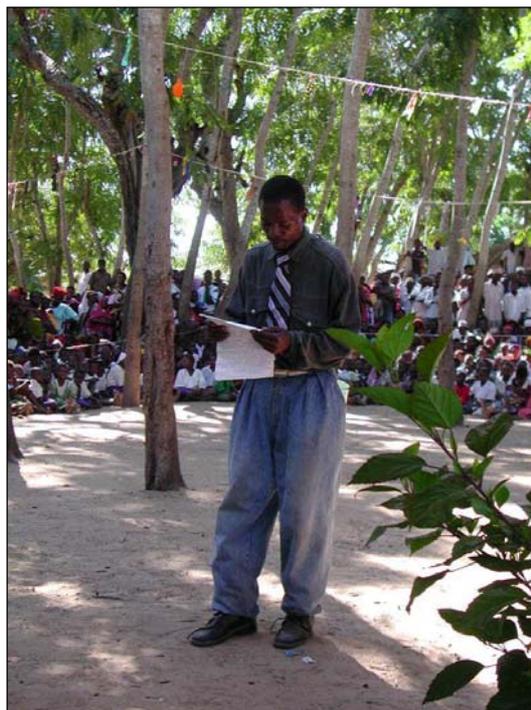


Figure 20: A local comedian entertains the spectators

3.4.5 Comedian

A local comedian entertained the crowd with his rapper/clown dance act, complete with cigarette party tricks. This performance was very entertaining and popular with the spectators. Once again although there was no direct environmental message this act added to the celebratory feel of the event.

3.5 Speeches

Mr. Mhina, (REMP Project Manager) gave a short speech describing the activities of REMP in Rufiji District and talked about the importance of WED and careful environmental management.

A representative of Mangrove Management Project gave a speech describing the activities of MMP.

Finally, the guest of honour, Mohoro Divisional Secretary delivered a speech on behalf of the District Commissioner who was unable to attend. The speech spoke about WED and its central theme of water and water catchments. He extended his sincere thanks to all the donors for their support to environmental management in Rufiji and congratulated the CEAS prizewinners.

3.6 Prize Giving

The prize-giving ceremony was an important part of the event. The Coastal Environment Award Scheme, organised by GreenCom, gave the prizes. The CEAS asks organizations, private enterprises, institutions, and individuals to submit an entry to the competition. Rufiji District staff judged the entries according to the contribution to protecting the environment. First, second and third prizes were awarded in the different categories. The prizes are substantial, often gifts such as bicycles, tools, or household items, sometimes books and cash. In addition to the prizes, certificates recognizing the contribution made are awarded to each winner. Unfortunately due to a delay in issuing the letters announcing the winners many of the prizewinners were not present and unable to collect their prizes in person.



Figure 21: CEAS Prize Winner collects his Prize

In addition, the Exhibition Quiz prize was awarded to the competition winner.

Prizes were also given to groups that had participated in the celebrations such as Mohoro Primary School, Poets, Mkinda Dance Group, Twasalie and Jaja Village Representatives.

Books bought with a donation from the Hoag Foundation in Ireland were presented to Mchukwi Primary School, Mohoro Primary School, Mkongo Secondary School and Ikwiriri Secondary School.



Figure 22: A member of Mohoro Primary School Choir collects their prize

3.7 Food

After the events had finished, invited guests received an ample lunch at the school. The food was plentiful and of a high standard.

4 Evaluation

WED 2003 celebrations were evaluated by the organising committee in Mohoro with representatives from Rufiji District Staff.

The organising committee decided to evaluate the work of each of the sub-committees and make recommendations and suggestions for future events. (Additional notes in brackets are provided by authors).

Decorating Committee

Responsible for cleaning and decorating the village.

It was felt that this was a lot of work for one group of people and that it would be better to split the tasks between two groups. Students were recruited to help with both tasks.

(The decorations were suitable and appropriate, the bunting made by the schoolchildren was particularly effective. There is no need to decorate the area for the honourable guests to such a great extent.)

Reception Committee

Responsible for welcoming visitors, issuing timetables and directing people around the events.

Due to the non-arrival of the District Commissioner, events started late and made following the timetable difficult.

It was felt that the reception committee would have been better able to perform their role if they have a uniform. Also a recommendation was made to issue name labels next time. (The reception committee placed themselves in a good position in the shade near the entrance to the exhibition area. However there were not enough of them to disperse through the crowd and help everyone.)

Security Committee

Responsible for ensuring a peaceful celebration.

The security committee with the support of the local police, did a good job and there were no problems. They were congratulated for having succeeded in having enough of a presence to be known but not over the top.

Exhibition Committee

Responsible for the Exhibition Rooms

It was felt this committee had done good work. It was noted there was a lot of help from students who were thanked, these were:

Yusufu Mchoro, Pili Ngulangwa, Ibrahimu Kwangaya, Hakumbuki Mtulya, Ashura Mpakwako, Mohamedi Ngunde, Ramadhani Mbonde, Hamisi Omari, Marimu Momba, Salama Ngayunga and Twaha Mgoni. In addition thanks was given to other assistants (local artist and former student) Abdala Sobo, Managi Seif and Abdalama Mkeruke.

(The start of the day was delayed due to the late and then non-arrival of the District Commissioner. During that time students had to wait, it would have been preferable to begin activities, games and open the exhibition rooms. The celebrations were for everyone not only the invited honourable guests. Eventually after much persuasion facilitators started the activities instead of making everyone wait.)

Food Committee

Responsible for providing food after the main event.

It was agreed the food was excellent and plentiful. It was noted as unfortunate that the food was only given to the invited guests, there was nothing available for the public.

It was suggested in future that stall-holders are invited to prepare and sell food cheaply at the event. It was also recommended that the village should give the District a budget of expected costs, rather than them guessing amounts.

4.1 Failures

- Many potential exhibitors from outside the area failed to participate.
- No clearly defined budget for government institutions for such important activities.
- Information about WED 2003 reached people too late for them to organise exhibits or attend – particularly true for CEAS prize winners.
- District Commissioner was unable to attend at the last minute, much time was wasted in the morning whilst waiting news/his arrival. Eventually the awkward decision to continue without the DC had to be made.

4.2 Successes

- Large Attendance – it is estimated that more than 500 people attended the event.
- Village leaders and volunteers were actively involved in the organisation of the event.
- Exhibits were interactive and numerous providing many points of interest.

4.3 Recommendations

- District Departments, Projects, NGO's and other sectors should include WED celebrations into their annual budgets.
- National level media efforts should be increased to allow better publicity and coverage.
- The diversity of exhibits and participants should be increased. (Private sector were notably absent from the exhibitions)
- Organisation of WED through information provision should start much earlier in the year, (probably mid-February).
- Content of Performers acts. Some of the performers, (e.g. Mohoro Primary School and the Poets) incorporated a clear environmental message into their performance, others however did not. It would be beneficial to discuss in detail with performers the content of their act and suggest where necessary improvements to the environmental messages. For example it is possible for comic dramatic artists to incorporate environmental messages into their comedy, as was seen at World Wetlands Day, 2003.
- Prize-giving. Due to short notice, many of the prizewinners were not present to collect their prizes. In future ensure that judging takes place early enough to allow time for letters to be sent to winners early. Also it might help if a list of prizewinners giving detailed explanation of why they had been chosen is posted in prominent places in participating villages (beautification of the environment is not an adequate explanation).

It also came to light after the event that some villages had not received the information announcing the competition, leading to suspicions of favoritism. It is essential that where valuable prizes are being awarded, the competition is run fairly and transparently. Key to this is allowing plenty of time for announcing, submitting entries and deciding winners of

the competition. It is also noted that the same individual responsible for organising WED was responsible for organising the CEAS competition, creating a lot of work for one person. In future roles should be delegated to more people.

- Exhibition. Due to short notice, some exhibitors failed to bring items to exhibit. Again allowing plenty of time to organise events like WED should be allowed, and preparations such as issuing letters of invitation should take place well in advance of the event. It is also recommended that pilot villages prepare exhibits that can be taken to events such as WED 2003, these can then be stored for future use.
- Who is the event for? There is a tendency for exhibits and activities to be seen as first and foremost for the 'honourable guests', limiting participation of other visitors and guests. Events such as WED are not only for the honourable guests, such guests are invited not only to learn themselves but also to 'raise the profile' and thus lend their support to an event. In simple terms, part of the role of the honourable guests is to work as celebrities - designed to help pull in the crowds and publicity. Working against the attitude that exhibits/activities are for the honourable guests only is time consuming and not easily achieved. It must be remembered that the 'general public' **are not** invited to view the exhibits as a performance for the honourable guests to see. Celebrations such as WED are an opportunity for EVERYBODY to learn and enjoy.

5 Conclusion

World Environment Day 2003, was a lively, interactive and informative celebration. Many people attended and participated in the event. Problems encountered were mostly due to time constraints as a result of late initiation of planning activities. Improved organisation and delegation of responsibilities can overcome most of the difficulties encountered.

Perhaps the biggest success was the fact that much of the 'on the ground preparations' were carried out by Mohoro Villagers themselves, proving again that there is enormous capacity at the village level for environmental activities such as this. It is hoped that by encouraging local communities to plan and implement celebrations such WED 2003 the ideas will be spread further among communities. Mtanza Msona Village demonstrated this by organising their own WED celebrations and inviting neighbouring villages to attend.

6 References

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7 Appendices

7.1 Appendix 1: Clues for what am I?

What am I? Can you guess what is hidden under the flap at the bottom?

Ideas for Questions

Frog

I am not a plant.

I do not have fur or scales.

I have four legs.

I always live near water but sometimes you'll find me on dry land.

I have to breathe fresh air.

I lay eggs.

I can hop and crawl, and swim very well.

I eat insects.

I do not harm humans.

Insect Bat

I am not a plant.

I live on dry land.

I have fur and give birth to live young.

I can live in buildings, trees and caves.

I eat lots of insects, including mosquitoes.

Usually I sleep most of the day and wake up as the sun goes down.

I make a variety of sounds including squeaks, and whistles.

I hunt using sound to locate my prey.

I have wings and can fly very fast!

Fish

I am not a plant.

I cannot walk I have no legs.

I do not have fur.

I live in water.

I can breathe under water.

I eat lots of things, including insects and vegetation.

Humans like to catch and eat me.

I lay eggs.

I can swim very well.

Tree

I am not an animal.

I live on dry land.

Usually I grow very slowly.

I can grow to be over 50 m tall.

I produce seeds and fruit to reproduce.

I use sunlight to grow.

When I breathe I release oxygen into the atmosphere.

I can live for hundreds of years.

I am very useful for humans.

Lake

I am not an animal or plant.

I can be big or small.

You can see yourself in me.

I am beautiful as in me you can see the colours in the sky and a reflection of my surroundings.

I can be round or long and thin.

I get bigger when it rains.

I supply humans with food and water.

I can be deep or shallow.

I have many things living in me, including fish, hippos and crocodiles.

7.2 Appendix 2: Word Search Puzzles

Jedwali la maneno

Maneno nane yaliojificha katika jedwali ilifuatalo hapa chini.

Unaweza kuyatafuta yote?

Moja alimefanywa (Panya) kukusaidia.

P	A	N	Y	A	S	M
O	N	Y	O	K	A	T
P	M	A	U	A	X	U
O	T	N	D	E	G	E
W	S	I	M	B	A	H

Herufi lazma ifuate nyingine katika mstari ulionyoka.

Maneno yanaweza yakaenda kulia au chini, lakini sio nyuma.

Panya	Ndege
Maua	Simba
Nyoka	Nyani
Mtu	Popo

Jedwali la maneno - Kiingereza

Maneno nane yaliojificha katika jedwali ilifuatalo hapa chini.

Unaweza kuyatafuta yote?

Herufi lazma ifuate nyingine katika mstari ulionyoka.

Maneno yanaweza yakaenda kulia au chini, lakini sio nyuma.

- Wetland
- Marsh
- Lake
- River
- Water
- Mangrove
- Hippo
- Crocodile
- Heron
- Kingfisher
- Fish
- Stork
- Snail
- Dragonfly
- Python
- Eel
- Crab

F	D	R	A	G	O	N	F	L	Y
I	Z	X	E	S	T	O	R	K	T
S	N	A	I	L	A	P	O	I	Y
U	A	S	D	H	E	R	O	N	I
F	G	H	J	K	C	L	Z	G	H
Q	M	W	E	C	R	A	B	F	I
M	A	N	G	R	O	V	E	I	P
Y	R	T	R	I	C	C	X	S	P
U	S	V	N	V	O	V	B	H	O
I	H	O	B	E	D	T	N	E	N
W	A	T	E	R	I	L	U	R	M
I	U	W	E	T	L	A	N	D	L
L	Y	A	L	E	E	K	U	J	O
P	Y	T	H	O	N	E	O	I	P

Jedwali la maneno

Maneno nane yaliojificha katika jedwali ilifuatalo hapa chini.
 Unaweza kuyatafuta yote?
 Herufi lazima ifuate nyingine katika mstari ulionyoka.
 Maneno yanaweza yakaenda kulia au chini, lakini sio nyuma.

ARDHI OWEVU
 CHEPECHEPE
 ZIWA
 MTO
 MAJI
 MIKOKO
 KIBOKO
 MAMBA
 SIPUSIPU
 SAMAKI
 KERENGENDE
 MKONOKONO
 NYOKA
 KAA
 MAWINGO
 MAFURIKO
 CHATU
 CHURA

M	O	S	A	M	A	K	I	L	M	I
K	M	A	M	B	A	I	A	C	A	V
O	G	H	J	Q	X	B	X	H	J	S
N	Y	O	K	A	E	O	M	E	I	I
O	M	T	O	C	Z	K	A	P	R	P
K	A	R	D	H	I	O	W	E	V	U
O	J	G	F	A	W	H	I	C	C	S
N	I	U	R	T	A	W	N	H	H	I
O	K	Z	X	U	C	Y	G	E	U	P
M	A	F	U	R	I	K	O	P	R	U
K	A	A	Q	B	N	M	I	E	A	T
J	K	E	R	E	N	G	E	N	D	E
Q	E	U	Y	P	M	I	K	O	K	O

Jedwali la maneno

Maneno nane yaliojificha katika jedwali lifuatalo hapa chini.
 Unaweza kuyatafuta yote?
 Herufi lazima ifuate nyingine katika mstari ulionyoka.
 Maneno yanaweza yakaenda kulia au chini, lakini sio nyuma.

Water Cycle Word Search

EVAPORATION
 PRECIPITATION
 RAIN
 CLOUDS
 SNOW
 ICE
 WATER
 LIQUID
 STEAM
 VAPOUR
 TRANSPIRATION
 RUNOFF
 EROSION
 WET
 DROUGHT
 FLOOD
 MIST

M	O	W	S	T	E	A	M	E	T	A	I	S	L
I	G	H	J	L	V	A	P	O	U	R	I	N	I
S	I	O	P	K	A	D	R	O	U	G	H	T	Q
T	R	A	N	S	P	I	R	A	T	I	O	N	U
U	A	T	C	L	O	U	D	S	R	E	W	Q	I
Y	I	C	E	J	R	H	G	N	F	D	S	A	D
W	N	J	K	L	A	E	R	O	S	I	O	N	X
E	V	B	N	M	T	Q	U	W	A	T	E	R	Z
T	P	R	E	C	I	P	I	T	A	T	I	O	N
C	V	R	U	N	O	F	F	K	W	A	C	K	L
K	N	M	L	K	N	F	L	O	O	D	E	G	A