

PROCEEDINGS OF THE AFRICAN  
WORKSHOP FOR THE WORLD  
NATURAL HERITAGE SITE MANAGERS



# PROCEEDINGS OF THE AFRICAN WORKSHOP FOR THE WORLD NATURAL HERITAGE SITE MANAGERS

held in

THE SOUTHERN AFRICAN WILDLIFE COLLEGE

18-22 SEPTEMBER 2000

Edited by

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## INTRODUCTORY INFORMATION TO THE WORKSHOP

### I – BACKGROUND .....

Of the 150 natural and mixed areas inscribed in the World Heritage List 33 are in Africa. Less than half of these sites are in Anglophone Africa. This undoubtedly is far below the potential number of sites that could be designated as World Natural and Mixed Heritage in Anglophone Africa. The reasons for the under-performance of the natural part of the Convention are many including:

- Several countries have to date not yet ratified the Convention – now 28 years old;
- Some key countries have ratified the Convention only in recent years and apart from the Republic of South Africa, the rest are at a very early stage in the process of identifying and nominating sites for consideration as World Heritage;
- Countries that have ratified the Convention since the early days appear not explore nomination of new sites or have difficulties meeting rigorous standards and/or detailed documentation expected of nomination dossiers now, as compared to the dossiers submitted in the early days of the implementation of the Convention; the anglophone African country with the largest number of sites ( i.e. Tanzania with 4) has not nominated any new site for inscription in the 1990s!;
- Decision makers and site managers may be uncertain and /or apprehensive of the implications of potential World Heritage designation for the management regimes in place in several African parks and sanctuaries which frequently incorporate considerable visitor use of sites and wildlife management programmes that may include legal harvesting of wildlife and their products;

- Potential for mixed site nominations, including sites of outstanding universal value for demonstrating phenomena linked to human evolution, are perhaps not adequately explored;
- West African countries (e.g. Ghana and Nigeria) that do not have large extents of wildlife habitats characteristic of eastern and southern Africa may find it comparatively difficult to identify suitable areas for nomination as World Natural Heritage; and
- Frameworks for bi-and multi-lateral cooperation for designing trans-border nominations either do not exist or those available are not effectively used.

### II – JUSTIFICATIONS .....

The World Heritage Committee has frequently stressed the importance of improving the representativity of the World Heritage List. With regard to World Natural Heritage in Africa this would mean that countries would have to be provided assistance to identify sites and nominate them as World Natural and Mixed Heritage sites. The nomination preparation process however, must be associated with a thorough and participatory effort to identify World Heritage values of nominated sites and establishing systems to monitor the state of conservation of those values over the long-term.

The US Government in collaboration with the UNESCO World Heritage Centre facilitated through the provision of a grant for the organization of the workshop. African decision makers and site managers were pulled together and they exchanged views, information and experiences that it is hoped may lead to a more bal-

anced representation of World Natural and Mixed Heritage Sites. The United States of America is one of the founding members of the notion of “World Heritage” and has been a Party to the Convention since the Convention was adopted by UNESCO in 1972, and was the first signatory to the Convention. Twelve of the country’s sites have been designated as World Heritage, and has also made effective use of the Convention as an instrument to mobilize resources and strengthen management of sites such as Yellowstone and the Everglades National Parks.

The workshop focused on African initiatives and examples, thereby enabling the sharing of experiences among the anglophone African States Parties to the Convention with view to assisting each other to improve the implementation of the Convention and to build bridges and co-operation between African States Parties.

### III - OBJECTIVES .....

The objectives of the meeting were to:

- Provide a forum sharing experience and knowledge in the implementation of the Convention for the protection of natural and mixed heritage of anglophone Africa;
- Identify and recommend policies, strategies and incentive measures that African States Parties may consider putting in place in order to enhance the interest of African States Parties to prepare new World Heritage nominations;
- Encourage and enable African States Parties to link the preparation and submission of all future nominations to putting place systematic monitoring programmes that will continuously track the state of conservation of World Heritage values; and
- Identify innovative opportunities for co-operation among concerned African States Parties for implementing the Convention

to promote nature and biodiversity conservation in Africa and to recommend strategies for developing programmes and projects for realizing those opportunities.

### IV - THE PROGRAMME .....

In order to achieve the main objectives of the workshop and produce the envisioned outputs (i.e. harmonized regional tentative list, draft nominations, and a summary of cooperative opportunities for preparing nominations), the workshop, was fully interactive, and hands-on with emphasis on participation. Facilitators were identified to guide discussions. Participants who had been requested to prepare papers and case studies presented their documents. Case study materials and other information were provided by the WH Centre to participants.

### V - EXPECTED OUTPUTS .....

- Sub-regionally (e.g. Southern Africa, Eastern Africa and Western Africa) harmonized list of potential World Heritage sites were identified for future nomination;
- Sample nominations of selected sites, including trans-border and mixed sites, identified for future nomination and for further elaboration by concerned States Parties were prepared;
- Opportunities for co-operation between sites and regional and national academic and training institutes in the preparation of nominations, monitoring state of conservation of properties and identifying and mobilizing financial and technical resources for the conservation of sites were described,
- The participants became better informed on the WH Convention ever before; and
- Recommendations were made targeting relevant stakeholders.



## VI – ORGANIZATION OF THE MEETING .....

The meeting was held in plenary and group sessions in the Hans Hoheisen Research Centre some few kilometers from the Southern African Wildlife College and strategic field trip was made to Kruger National Park. Participants were accommodated in the Wildlife College.

## VII – PARTICIPANTS .....

The African Site Managers of natural properties on the tentative lists of participating States Parties and managers of any other natural sites were invited. Few national level policy and decision makers concerned with protected area

management and wildlife conservation, and managers of designated World Natural Heritage sites in anglophone Africa, and representatives from few international organizations, were among the participants. A full list of the 34 participants appears on the Appendix of the Proceedings.

## VIII – WORKSHOP VENUE AND DURATION .....

The Workshop was held at the Southern Africa Wildlife College outside Kruger National Park and lasted for 5 working days: 18-22 September 2000. Participants arrived at the College on 16th and some 17th and all departed on 23rd September 2000.

# *Opening*

## **SESSION**



## OPENING SESSION

*By Dr. Eugene Moll, Director*

### **1.1 – INTRODUCTORY REMARKS**

#### *1.1.1– Director of the Southern African Wildlife College*

The building of the Southern African Wildlife College (SAWC) was funded by a DM 10 million donation by the German Government. This was for a Southern African Development Community (SADC) project, and the funds were secured by WWF-SA and construction was completed at the end of 1996. The SAWC is built on a farm known as Kempiana, which is a contractual National Park authority. The SAWC campus is some 32 ha in extent and is situated some 2 km north of the Orpen Road to Kruger National Park, in the Timbavati area of the Lowveld. This is about 10 Km west of the Orpen Gate to the Park, so it is in the heart of the Lowveld and in the country of the big five.

The first Short Courses at the SAWC were run in 1997, and in 1998 the first Certificate Course was started. Since then the SAWC has run Diploma and Certificate Courses on an annual basis. The students attending these Long Courses have come from some 16 African countries, mainly SADC countries, but also from the Gambia, Cameroon and the Democratic Republic of Congo. The curriculum of these courses is focused on honing the skills of existing field managers. At the Certificate level this is to enable managers to implement a management plan, and at the Diploma level to actually

develop a management plan. Because the students each have 5-10 years of field experience and the education philosophy of the SAWC is to work intensively in small groups, students and trainers are able to share experiences, develop networks and learn from one another. A key focus of the curriculum, which sets the SAWC a little apart from other training colleges in Africa, is that there is a strong emphasis on community based resource management. We at the SAWC further recognise that the act of inscribing a World Heritage Site is momentous, but without proper management (and this means adequate funding) these sites will simply deteriorate.

Right here in the Central Lowveld there is an opportunity for the development of a huge Trans Frontier Conservation Area (TFCA). Talks between the governments of South Africa, Mozambique and Zimbabwe are well advanced, and soon areas of land to the east and north of Kruger could be added to make a great TFCA of some 5 x 10<sup>6</sup> ha. The SAWC sees itself playing a central role in the training of the managers for this area, whether through the Long Courses programme (which the SAWC considers to be its core) or the Short Courses that can be tailor made to suit client needs, and even be run in situ if that is deemed to be the best way to run the courses. Since biodiversity has no political boundaries it is essential that managers of natural areas are all able to communicate effective-

ly, solve problems and manage change in this globalised world in which we are confined.

The SAWC also recognises that, although it plays a regional role, there are other training colleges that have similar objectives. The vision of the SAWC, and to some extent that articulated by a UNESCO working group that met to consider training matters in 1998 in India, and again in 1999 in Cambridge, U.K., is that at some level the training needs are better met regionally. My own opinion is that we should assist and encourage in-country training annually at the basic scout or ranger level where the demand is for many new trainees. But at the field manager level the training should be regionalised. There are a number of advantages for this:

- This level of training is more resource intensive and because each country needs 3-5 new managers annually, it is more cost effective to have regional programmes.
- Regional initiatives bring together people from different countries enabling them to network and learn from one another. Since conservation challenges are regional or continental it is important for managers to have first hand experience of this.
- All the training colleges require funding from donors or aid agencies as none are currently self-sustaining. If there is too much fragmentation of effort it will become more and more difficult to obtain adequate funding in future.

As a result of these UNESCO workshops, three of the African Wildlife Training Colleges, namely Garoua in Cameroon, Mweka in Tanzania and the SAWC in South Africa have agreed to network more closely to ensure that their respective programmes are closely aligned. It is important that it is easy to transfer credits from one institution to the next, so people can move to gain more experience.

My own personal vision is that we need to drive this African Renaissance from within using the best methods and ideas from the north

and adapting these to our own African conditions using our own experience developed over evolutionary time.

*1.1.2 – Deputy Director General, Department of Environmental Affairs and Tourism (Mr. Makgolo Makgolo)*

Mr. Makgole Makgolo conveyed apologies of the Director General for being unable to participate at the opening of this important workshop. On behalf of the Director General Mr. Kakgolo Makgolo welcomed participants to South Africa and urged everyone to feel at home.

Mr. Makgolo detailed the process that lead South Africa to ratify the World Heritage Convention in 1997. In the following year (1998) South Africa presented nominations of Greater St. Lucia Wetland National Park, Robben Island and Sterkfontein Caves (Gradle of Mankind). All the 3 sites were inscribed at the 23rd session of the WH Committee meeting held in Marakesh, Morocco, in 1999.

South Africa has since 1998, been preparing files for new sites with potential for WH Listing. In 1999 two sites Ukuhlumba Drakensberg and Cape Nature Park both of which were assessed at the beginning of 2000.

Mr. Magkolo Makgolo outlined the global strategy initiation programme in South Africa, aimed at encouraging countries to submit and register, and ratify the convention. This strategy also identifies problems, which are usually financial.

In conclusion Mr. Makgolo Makgolo reiterated the stand of South Africa to develop regional cooperation and cross-subsidies between countries in the spirit of the WH convention.

*1.1.3 – The Warden, Kruger National*

On behalf of the Director of Kruger National Park, Mr. Erasmus Geert commended UNESCO for the choice of Kruger National Park as venue

of the Workshop. He warmly welcomed the participants to the national park, which is seeking to be a World Heritage site based on history, beauty, records of the San art paintings, among others. He extended an open invitation to the participants to spend time in the park after the workshop.

*1.1.4 – International Affairs specialist, National Oceanographic Atmospheric Administration, USA (Ms. Anne Hillary)*

Ms. Hillary elaborated on the work of USA in Oceanographic Atmospheric Administration in relation to the World Heritage Convention. In particular she is responsible for the listed oceanic WH Sites, assesses the need for more nominations, and identifies countries interested in WH Site Projects. She wished Africa well in her efforts to implement the Convention.

*1.2 – DR. ELIZABETH WANGARI  
Senior Programme Specialist, UNESCO,  
World Heritage Centre, Paris*

Professor Moll, Director Southern African Wildlife College,

The Coordinator of the World Heritage Convention in South Africa and the Deputy Director General, Department of Environmental Affairs and Tourism – Mr Makgolo Makgolo ;

Director, South African National Parks – Kruger National Park Mr. Geert Erasmus ;

Ms Annie Hillary and her colleagues from USA those who are here and those who could not come ;

Distinguished Participants ;

Ladies and gentlemen :

It is a great pleasure for me on behalf of the World Heritage Centre and on my own behalf to welcome you all to the opening of the “African Workshop for Natural World Heritage Site Managers”.

May I take this opportunity to convey our gratitude and appreciation to our collaborators the United States, and to our host the Southern African Wildlife College.

The choosing of South Africa as the venue of this workshop was based on the facts that:

- South Africa has been very active and supportive of the World Heritage Convention since 1997 when the country ratified the Convention;
- South Africa has since then nominated both Cultural and Natural properties which have been inscribed in the World Heritage List and more are being considered.
- South Africa has convened several world Heritage Convention meetings for the region;
- South Africa is a member of important World Heritage Committee, which makes all the decisions concerning the World Heritage Convention.
- South Africa is known for its traditional protected area conservation excellency, and indeed there is a lot we can learn by being there.
- This meeting coincides with the celebration on the 25th September of the South African National Heritage Day; and
- Additionally, as you have learned from the previous speakers on the value of Kruger National Park, we could not have chosen a better venue than this magnificent Park – the Kruger National Park.

Under the main heading of the meeting in italics, we note that this workshop is for “sharing experience and building future cooperation.” The World Heritage Convention as we will see through the course of this workshop, is a Convention based on Partnerships. In Africa, the regional approach in managing protected area, be it a World Heritage Site or not, recognizes the ever-increasing awareness of the common property nature of terrestrial and aquatic resources. No one country can claim to be capable of achieving effective management of these resources in isolation; countries must always cooperate in this area. We will therefore be required to pool our knowledge and experiences in the relevant fields.

As for this workshop within the very limited time we have, we will share experiences on the:

- Values of the Convention as a tool for conserving the African biodiversity;
- The constraints and the opportunities for implementing the Convention;
- National legal and policy framework for implementing the Convention; and
- Identification of suitable sites in the region, and comparison of strategies for

identification, management and ways from measuring management effectiveness and monitoring, as well as ways to reinforce the transborder sites.

At the end of the workshop, we hope among others, that you will have put in place a programme for continued cooperation based on Natural World Heritage sites and a list of sites for tentative listing.

Once again, I thank you all and this workshop is now open!

# *The World Heritage*

## **CONVENTION**



# THE WORLD HERITAGE CONVENTION

*By Professor Eric Edroma, IUCN Regional Councilor for Africa  
and Professor of Nkumba University, Uganda*

## 2.1 – THE WORLD HERITAGE CONVENTION AS A TOOL FOR CONSERVING AFRICAN BIODIVERSITY

### 2.1.1 – INTRODUCTION

Africa has been renowned for the magnificent wildlife spectacles of its plains. Its large herds of ungulates and charismatic species are part of the most varied fauna of any continent. Sub-Saharan Africa contains the greatest number of different families of plants and animals of all the various bio-geographical realms in the World. African ecosystems are diverse that include rain forests, woodlands, open savannas, mangrove forests, wetlands, open water bodies, coral reefs, semi-deserts and deserts. The flora is one of the most diverse while the relief and river systems with their waterfalls provide magnificent scenery.

Environmental degradation and loss of habitats and species sweeping across the world have not spared Africa. Taking trees alone, at least 8,700 species or 10% of the world's known tree species are threatened with extinction. Not less than 17% of these are from Africa. The world is at the verge of losing up to 50,000 species of plants and animals annually. At this alarming and frightening rates 67% of all living species could be wiped out from the world by the end of the 21st Century.

Governments have responded by establishing protected areas (PAs) to conserve repre-

sentatives of wild nature. Over 30,000 PAs have been gazetted worldwide and they cover nearly 10% of the earth's land surface in nearly all countries. The percentage is much less if seas and oceans are included. But these PAs are not of equal size and value. Some are too small to contribute much to conservation while many are poorly managed to achieve their conservation objectives.

The World Heritage Convention adopted by the General Conference of UNESCO on 16th November, 1972 in Paris and that came into force on 17th December 1975, now with 162 States Parties, for the purpose of protecting the World Cultural and Natural Heritage Sites. The Convention is one of the 33 Wildlife Agreements/Conventions/Treaties proclaimed since 1900 that are of significance to the protection of biodiversity at global level, or one of the 12 Conventions of direct relevance to the future of Africa's biodiversity. The Convention is open to any State with UN membership or with one of the UN specialized Agencies, or with the International Atomic Energy Agency, and to non-members of these Agencies specially invited by the General Conference of UNESCO to ratify or accede the Convention. Currently there are 162 State parties globally.

The Convention has pulled these States Parties to its membership, which pledged to give international recognition, respect and sup-



port to the world's best and most outstanding natural habitats, which are invaluable to human society. They are magnificent contribution of nature to human culture.

These natural World Heritage (HW) Sites are not immune to forces of environmental degradation. They are increasingly being threatened by competing uses, climate change, mass tourism unplanned development, natural disasters, civil and military conflicts, poor budgetary allocation, upstream water management, lack of transborder cooperation, research and monitoring, poor planning, weak management, etc. All the natural WH Sites need to be managed if their high quality standards are to be maintained.

The World Heritage Convention concerns itself with defining the world's heritage and with the protection of the world's cultural and natural sites of priceless and irreplaceable possessions for all mankind, and of exceptional interest and outstanding universal value. For the purpose of this workshop the discussion is focused on the natural Sites. These are natural features of geological, physical, biological and physiological formations which are of outstanding universal value from aesthetic, scientific or conservation view point. These properties are precious, the work of God's hand and work done by our ancestors, and they deserve respect, preservation and protection from the threats of poaching, weak management, civil and military conflicts, and natural disasters, among many other forces. The Convention offers hope for their survival.

### *2.1.2 – AN INSTRUMENT OF INTERNATIONAL COOPERATION*

The Convention is a means for States wishing to cooperate on conservation action to establish mutual legal obligations to pursue that end. It provides framework mechanism for international cooperation to ensure the protection of the WH Sites. The preamble and provisions of the Convention bind the Parties to very strong

conservation principles such as “to protect and preserve in their habitat, representatives of all species and general of their local flora and fauna, in sufficient numbers and over areas extensive enough to assure them from becoming extinct through activities within human control”.

The inscribed 125 natural and 20 (natural and cultural) mixed WH Sites scattered in 58 countries across the world are treasures of all mankind. The plants, animals, air, large water bodies and other resources of the environment are no respecters of international boundaries. None can be said to belong to a particular country. The services they offer stretch beyond international boundaries. Mankind has consequently come to realize the need to share the responsibility of managing and preserving the natural WH Sites which contain the richest biodiversity in our common environment.

Secondly the use of the environment resources regardless of international barriers is a strong justification for mankind to view them as common assets and to share management responsibilities by pulling their resources together in order to achieve their effective management and sustainable use.

Ratification of the Convention demonstrates international solidarity with the principles of conservation which is collective responsibility for the protection of the WH Sites. By ratifying the Convention a State Party pledges to conserve all natural and cultural sites (whether listed under the Convention or not) on its territory. Their preservation for the present and future generations then becomes a responsibility shared by the international community. The proclamation of the Convention indicates the growing concern of the general public and of the highest political organs for the continued decline and disappearance of plant and animal species for which the Sites had been outstanding. Membership of the Convention affirms the notion that a rich biodiversity provides a healthy environment essential for socio-economic development. The Convention is a unique

legally binding instrument by which the States Parties agree to take action. Action that ensures the sustainable conservation of the remains of African biodiversity.

### 2.1.3 – A TOOL FOR GENERATION OF CONSERVATION FUNDS

The World Heritage is a saleable popular commodity of the public, which is keen to receive information or publicity of the WH Sites. Special effort to promote awareness of the Convention therefore readily increases the status of the Convention as a tool for generating support for stepping up efforts to manage the resources of the Site. The membership of the Convention offers an opportunity for the States Parties to make their concerns heard in the principal inter-governmental meetings for discussion of the conservation and wise use of the heritage properties. The membership brings increased publicity and prestige for the World Heritage Listing of the biodiversity in protected areas with outstanding international importance, and hence increased possibility of international support for management projects from the WH Trust fund or through the Convention's contacts with bilateral and multilateral development agencies. The Convention also enables member States to access the latest information and advice on internationally accepted standards for management of the inscribed natural Heritage Sites.

The forms of assistance under the WH fund are wide and varied which include:

- a) Preparatory assistance (up to US \$ 15,000) to any State Party that applies for:
  - i) Preparing tentative lists of natural and cultural properties.
  - ii) Organising meetings for harmonizing tentative lists in same geo-cultural or geo-ecological area\zone.
  - iii) Preparing nominations of properties to the World Heritage List.
  - iv) Preparing requests for conservation project proposals and technical coopera-

tion for example in training, education, management, among others.

- b) Emergency assistance of US \$50,000-75,000 for urgent salvaging and repairing\restoring of inscribed property or a site suitable for inclusion in the WH list which has suffered severe damage due to sudden unexpected phenomena (for example, fire, flooding, explosion, land subsidence, etc.) are in imminent danger of severe damage. Sites suffering from deterioration by gradual process of decay, pollution, erosion, poor management, etc, do not qualify for the emergency assistance.
- c) Training of specialized staff at all levels in identification, protection, conservation, preservation, and rehabilitation of properties already inscribed. Grants of \$ 20,000 or more are available for each training programme. Priority is given to group training at local, national or regional levels, or if of individuals for short term refresher programmes.
- d) Technical cooperation with States Parties. A grant of \$ 20,000—30,000 for technical material support is available for formulating action plan outlining corrective measures required for saving a property that is threatened by action of man.
- e) Assistance of \$5,000–10,000 for promotional activities, supporting meetings at regional level or activities at national level for promoting the Convention (meetings), production of promotion materials, exchanging experiences, creating awareness, etc.

The WH Convention is a tool that provides effective management and greater investments that serve as a model for conserving biodiversity for all mankind. States Parties especially the poverty stricken developing countries are not only entitled to, but are particularly encouraged to apply for the WH Fund. Requests which must be on UNESCO standardized format should be

submitted to the WH Fund Centre by 1st May or 1st September each year.

#### **2.1.4 – PROMOTER OF CONSERVATION**

One of the significant roles the WH Convention plays in conservation of the natural Heritage Sites is that it keeps the State Parties on their toes on conservation issues of concern. A State Party is by obligation expected to identify, present tentative list, prepare dossier for nominating natural and or cultural Sites of outstanding universal value for WH Listing, and to promote their protection and conservation. Out of 52 States in Sub-Saharan African 41 ratified or acceded the Convention. The Convention expects these States Parties to nominate potential properties for considering their Listing as WH Sites. The remaining 13 being members of the UN should be encouraged to join the Convention membership. Worse still for the whole of the Africa and Arab States, only 32 natural, 2 mixed and 67 cultural Sites are inscribed from only 31 States. The Africa/Arab region grossly lags behind with only 101 (10.5%) of the World total of 612 natural and cultural WH Sites. The Convention offers equal opportunities and representation to all the regions. African States should therefore rise up and revisit the imbalance. The overall awareness of the Convention and its implementation must increase. The non-States Parties should be encouraged to join the Convention. Numerous properties inscribed on the tentative lists by States Parties require document and conservation plans. Those Sites already inscribed require increased protection. The African States Parties must be seen to show commitment and determination to the Convention, set up effective and enforceable legal protection mechanism, define coherent conservation policies and training strategies, strengthen capacities of the institutions, accelerate the preparation of the nomination files, organize national workshops, request assistance from the World Heritage Fund, and redress the imbalance of the list. The provisions of the Convention empower

any State Party to ensure effective management of its inscribed natural Heritage Sites by;

- i. Formulating and implementing planning for sustainable management and wise use of the properties;
- ii. Promoting the conservation of the properties through training personnel to implement the Convention;
- iii. Consulting with other States Parties about conservation of trans-frontier Sites shared by more than one States Parties;
- iv. Ensuring adequate allocation of resources to the conservation budget;
- v. Informing the Bureau of any changes in ecological character of the inscribed Sites. Regular reporting on the conditions of Sites, on measures taken to restore and protect them, and on efforts to raise public awareness on the Sites are mandatory;
- vi. Adhering to the Articles of the Convention and to the Guidelines for correct implementation of the conservation strategy;
- vii. Promoting international cooperation in conservation of the biodiversity in the natural WH Sites;
- viii. Supporting the work of the Convention by attending meetings, adopting protocol and paying annual subscriptions to the Centre (1% of fees to UNESCO) for supporting the Convention; and
- ix. Fostering communications about conservation of biodiversity in the natural WH Sites.

If the States Parties were able to comply and adhere to the implementation of the Articles of the Convention, biodiversity conservation in the PAs of the States could greatly improve. The Convention offers the opportunity which the States Parties are encouraged to take.

#### **2.1.5 – MECHANISM FOR COMPLIANCE**

The success of the World Heritage Convention in conservation depends on the seriousness with which the State Party complies with implementa-

tion of its obligation task. The Convention has mechanisms for compliance. The WH Convention is not enforced as domestic or National law. The States Parties can rarely be compelled to perform their obligations. They are neither compelled by use of force, nor subjected to court although such procedure exists. Non-forcible techniques have been developed of persuading the member States to comply with their international legal obligations. These include:

*(i) Judicial and Arbitral procedures*

Once negotiations have failed to resolve a dispute between members States, appeal can be made to the international court of Justice at Hague, The Netherlands. The accuser and the accused must be present before court proceedings can take place. Arbitration cases are rare as States are reluctant to take each other to court because the act is politically unfriendly and it is difficult to achieve a satisfactory remedy, and even if damages and fines are awarded by the Hague court, they are rarely paid.

*(ii) Other Compliance techniques*

a) Administrative and non-judicial mechanisms are much more effective for securing compliance. For example, the parties are:

- Required to meet regularly to review implementation of provisions of the Convention;
- Reminded of their obligations; and
- Kept attentive on compliance.

These administrative and non-judicial mechanisms are designed to enable the States Parties to take appropriate remedial actions.

b) Establishment of World heritage Centre in Paris as the administrative Secretariat to oversee and assist in the implementation of the Convention. The World Heritage Committee through the Centre monitors enforcement at international level, provides technical assistance to States Parties experiencing enforcement problems, and encourages non-members

within the UNESCO family to join the Convention.

- c) The Convention also requires each State Party to establish a national authority like Zambia National Parks and Wildlife service, Zimbabwe National parks and Wildlife Board, Uganda Wildlife Authority, Kenya Wildlife Service, Tanzania National Parks, South African Parks Board, etc, to enforce provisions of the Convention.
- d) Reporting requirements are also useful. States Parties are required to submit regular situation reports in compliance with the Convention. The reporting is particularly useful if submitted to formal meetings of the Parties especially if attended by non-governmental conservation organizations which are quick to publicize poor enforcement and pressurize transgressor States Parties to perform.
- e) Other measures to help enforcement include observer schemes, systems of inspection, offering financial lures to those Parties, which comply, and others.

*(iii) National Legislation*

National Legislation is often strong because the will of the majority is sufficient to override the opposition of the minority. The Convention is contrarily weaker because no State can be bound without its consent. The Articles of the WH Convention are imbedded in the national laws, which become implemented by national legislation of each State Party. The national law is much easier to enforce than the international law. And if the national conservation law permits, the conservation agency can force its government to comply with the Convention.

**2.1.6 – INSTRUMENT FOR JOINT MANAGEMENT**

Many of the natural WH Sites (for example, Victoria Falls/Mosi-Oa-Tunya) are at transborder and they experience the same environmental problems. Management of transborder Pas

has often been frustrated by a number of management problems. Differences between two States often lead to confrontation. Under the WH Convention two States sharing a common boundary and ecosystem can present joint nomination of such a property with outstanding universal value, for WH Listing and enter into joint management of the shared natural WH Listing. Joint management of shared natural WH properties inevitably brings the managers of the common Site into direct regular contact with each other concerning a wide variety of management issues such as: boundary maintenance, resource conservation, interpretation, provision of visitor services, monitoring of tourist activities, law enforcement (anti-poaching), development projects, grazing, agricultural encroachment, fire control, prevention of pollution, erosion, spread of exotic/alien species, mitigation of natural threats/disasters, minimizing impacts of negative local attitudes, research activities, training programmes for building expertise in various management activities, operational reviews for discussing opinions, exchanging ideas and developing compatible positions, and others can best be achieved through joint ventures. For the Transboundary species, cooperation the WH Convention ushers between the management agencies of the two States Parties also stimulates indirect cooperation with other partners with similar objectives within the greater regional ecosystem. This can if well managed, lead to enlarging the PA covered by the WH designation or to creation of other forms of PAs (such as Biosphere Reserves or Buffer Zones) around the main natural WH Site.

Designation of WH Site can therefore be a powerful tool for addressing major environmental issues affecting the areas. With its international profile the Convention has been useful for supporting arguments concerning the value and significance of Natural heritage Sites especially on land use conflicts.

### *2.1.7 – MONITORING REQUIREMENTS*

The WH Convention has proved its effectiveness as a tool in conservation of biodiversity in the natural WH Sites through the requirement for monitoring and reporting conservation status as the responsibility of the States Parties. This requirement if complied with can lead to rescuing natural Sites under threats. Upon receiving an alarming report on the conservation status of an existing Site, the WH Committee can then respond by publicizing awareness of the conservation status and mobilizing support to rescue the site from continued deterioration. The WH Committee has scored several tens of achievements from its interventions in Selous Game Reserve and Ngorongoro Conservation Area in Tanzania, Garamba National Park in DR Congo, among others. The significance of this particular role of the Convention in biodiversity conservation depends on the cooperation of the States Parties. Secondly monitoring of conservation status also identifies Sites that have lost much of their integrity which deserve delisting. Resources that would be used for managing a Site being delisted can then be transferred to improve management of other protected areas.

### *2.1.8 – DANGER LISTING*

The designation of natural WH Sites in the Danger List is intended to give an early warning mechanism, a preventive measure with the view of saving such a Site from continued deterioration and possible delisting. The objectives of placing Sites in the Danger List is aimed at bringing to the attention of the International Community on the actual and threatening dangers facing the Site. Most States Parties shy away from Danger listing fearing the act as black listing. Any State Party whose natural WH Site is in the Danger list should appreciate the decision of the WH Committee and cooperate with the WH Secretariat by submitting a

programme outlining the corrective measures required to salvage the Site. Under the Convention collective action can then be mobilized and directed to save it from further deterioration. The Convention in this regard serves as a tool for restoring the WH quality for which the area had won international recognition of being outstanding. A Site on the list of the WH in danger is entitled to special attention and emergency action.

### 2.1.9 – CONCLUSION

The WH Convention is designed as a tool to lead to:

- i) Establishment of new national parks, wildlife reserves and other categories of wildlife protected areas that contain representatives of all species and ecosystems and that are of outstanding universal value;
- ii) Keeping boundaries of national parks and other PAs unaltered;
- iii) Ensuring that each State Party establishes effective wildlife legislation and management authority, and adequate mechanism to enforce both the national and international wildlife law;
- iv) Provision by the States Parties of extraordinary commitment to preserve and protect the natural diversity;
- v) Ensuring compliance of States Parties with the administration and implementation of Articles of the Convention;
- vi) Protection of species from man-induced over hunting, over fishing, over consumption of the natural resources that could lead to species extinction;
- vii) Emphasis on the need for international cooperation for conservation in activities such as scientific research, inventory, monitoring, technical cooperation, financial assistance, training, education, awareness promotion, planning, zonation, production of management plans, among others;
- viii) Up keeping and managing wildlife in accordance with the ecological needs of the inhabitants and of the animal species inside and outside PAs;
- ix) Re-establishing and restoring destroyed and degraded ecosystems;
- x) Enhancing the significant role of wildlife in enriching the environment, maintaining balance in climate, controlling river flow and flooding, saving biodiversity from extinction, promoting sustainable cultural, social, economic, scientific, educational and other ecological uses, etc;
- xi) Ensuring mitigation and control of pollution of the environment;
- xii) Conducting public awareness on protection and wise use of wildlife resources;
- xiii) Establishing a global network of wildlife institutions which cooperate directly with their counterparts in other States without adhering to the contracts of formal diplomatic channels.
- xiv) Increasing public participation. For years management of Protected Areas had omitted involvement of the adjacent local communities and users of the protected resources in their management. This exclusion heightened conflicts between the PAs managers and the local people and it aggravated management problems. Recognition by the WH Convention of the practical understanding of the environmental and conservation issues of the traditional societies and of the needs and aspirations of the people living within and around the PAs have made the local communities and the other stake holders to view the PAs as being “ours”. Employing local people to carry out various management tasks such as maintenance of roads, buildings and nature trails, tour guiding, providing security and casual services, participating in the process of developing PA management plans, overseeing monitoring, taking part in policy decisions on tourism, buffer zone management,

and in the revenue sharing programmes, have individually and collectively minimized levels and frequencies of conflicts with PA management, and therefore have contributed significantly to improvement of management practices. The continued encouragement of participation of the local communities in PA management and in the equitable sharing of the benefits on the use of the PA resources are brightening the future prospects for conserving the African biodiversity.

## 2.2- SLIDE SHOW

*By Dr. Elizabeth Wangari, Senior Programme Specialist, UNESCO, WH Centre*

A slide show of the World heritage Centre titled "Shared Joys and Responsibilities" was shown as an introduction to the World Heritage Convention.

The Slide show highlighted the Convention and the evolution of States Parties, operational Guidelines, the World Heritage Fund, monitoring and reporting of activities, Sites in Danger, selection of sites for World Heritage listing, challenges of the World Heritage concept, sustainable tourism, urbanization and the World Heritage awareness building.

## 2.3 - GENERAL DISCUSSION

*Lead by Professor Edroma and Dr. Wangari*

### Questions:

- How do or can we promote Biosphere Reserves around WH sites
- Student Programme – expand to primary and secondary schooling levels
- Why has West Africa been dormant?

### Answer:

- Funds are needed to be routed into operating these heritage sites. Intimation was

made that funding may be made available by December 2000.

- Education system can be augmented by site managers who could play more active and adaptive role and are well placed to reach out to the neighbouring school systems.
- West Africa has responded to calls of democracy but the region is still plagued by civil struggles. For those sites that have been registered, unrest has prevented implementation of the WH principles

### Question:

- Concern that information on WH sites is limited and not freely available.
- Major problem is making information available and its documentation to the local level.

### Suggestion:

- That all listed sites should have their applications published onto the internet.
- Sites information may be available at :
  - [www.iucn.org/wcpa.org](http://www.iucn.org/wcpa.org)
  - [www.unesco.org/whc](http://www.unesco.org/whc)
  - Both sites have links to WCMC that has additional information

### Question:

- Statement that adults are the decision makers as well as those that are degrading the sites, therefore need an education programme to focus on them.

### Answer:

- Managers of sites need to be directly involved with all age groups. (This suggestion would require a separate session to be fully debated).

## 2.4 - INTERNATIONAL RANGER FEDERATION (IRF)

*By Gordon Miller, Executive Director, IRF*

I will start by explaining the role of the International Ranger Federation (IRF). It is a

world wide Federation of national or state ranger organization. We exist to raise the professional standards of Rangers around the world. To facilitate the exchange of expertise/experience and to represent the 'grass roots' in partnerships with other international organizations such as UNESCO World Heritage Centre and the IUCN World Commission of Protected Areas with whom we signed a Memorandum of Understanding at the beginning of September 2000.

I have been involved on behalf of the IRF on a UNESCO Task Force (CONNECT) studying capacity building in World Heritage Sites in Paris. We have identified particularly training needs, management effectiveness and networking as primary aims. The Federation as a 'grass roots' organization representing Rangers at the forefront of conservation in protected areas is striving to increase its capacity to represent more Rangers in more countries. The III World Ranger Congress held in Bergen dal, Kruger National Park during 1-5 September 2000 succeeded beyond our wildest dreams in exposing African rangers to what is happening elsewhere in the world. Without doubt the most important points to emerge were the needs to raise standards, not only in Africa, but also throughout the world. A resolution relating to those subjects that were considered essential in training/education of Rangers was approved. How does this relate to World Heritage (WH) Sites? In considering sites it is, I believe, becoming more important to consider not only designation but also those sites that can maintain their biodiversity, integrity and sustainability. It is this practical aspect of World Heritage Sites that we are particularly interested in and would seek to work with you and other partners to achieve that. We have within the Federation a wealth of experienced Rangers and a growing network to spread that expertise.

The II World Ranger Congress in Costa Rica was notable for bringing Rangers from pro-

tected areas in Latin America together for the first time – animated Latin America conversation was a sight to behold as Rangers, many of whom had not left their parks, let alone country, met and discussed mutual problems and successes. Since Costa Rica there has been the first Latin American Ranger Training Course, supported by IRF in Mexico, and followed by a Ranger Guide Training Conference in Argentina for 150 Rangers from 4 countries (including WH sites) in South America. The III World Ranger Congress last week in Kruger Park has done the same in increasing awareness and enthusiasm in Africa, 340 delegates from 58 countries met at Bergen dal and 24 African countries were represented. Area integrity, working with communities and ecotourism were the main themes.

Congresses offer the opportunity for young Rangers to meet with those with considerable experience – experience that should not be lost. The Federation is to establish an IRF consultancy to harness this experience for use throughout the world. The consultancy will offer training and support services (e.g. research, study tours, etc). We will continue to work with the World Heritage Centre to identify training needs in WH sites particularly in Africa, and look at opportunities of sharing expertise and extending capacity. We heard a great deal last week in Bergen dal about the appalling lack of resources and lack of political support in many protected areas. In spite of that, the enthusiasm generated was phenomenal – it were possible to bottle the essence of Bergen dal as a commodity and spread it around the world, I believe there would be a great deal more optimism for the future of our protected areas. Rangers are a precious resource and in places have become an endangered species. I was delighted to hear of the financial support being given to field staff in Virunga and Garamba both in the, Democratic Republic of Congo by United Nations Foundation through UNESCO. A proposal for a UN Wildlife Protection Unit – green helmet brigade, was made at a Costa Rica



Congress. While there have been difficulties in progressing the resolution, we are pursuing the idea. Dr. Ian Player and Dr. John Hanks raised the idea to address to UNEP and this has stirred interest in the UN. The Federation is involved in a project to train rangers in the endangered WH site at Butrint, Albania in an example of IRF involvement in improving the protection of WH sites. The federation is very interested in discussing with any parties, ways in which we can progress our relationship with WH Sites and look forward to developing new relationships this week.

#### 2.4.1 – DISCUSSION OF THE PAPER ON IRF

##### Questions

- Why sites must be sustainable by empowering the Ranger and without equipping him? Under such situation the sites exist only on paper?
- Should other ranks be included in the Ranger category?

##### Answer

- All those who manage a site are considered as Rangers

##### Question

- Constraints operating around the effectiveness of the Ranger.

##### Answer

- Requires a broad discussion outside of this forum

Different sites are managed using different structures from country to country ranging from State to NGO but ultimately inscription has to fall under a government or national authority.

##### Question

- What is the structure of the IRF?

##### Answer

- Continental >> National >> Local. Acceptance into IRF at a National level. Executive Council >> National Association >> individual ranger.

For Africa, it was agreed that countries will be grouped into regions with a coordinating country, which forms a committee that has a representative on the IRF.

##### Question

- What has to be done to empower Rangers to manage WH Sites?

##### Answer

- We do have guidelines for inscription and a management plan has to be in place in order to qualify for inscription. Therefore burden is not entirely on the Ranger.

#### 2.5 – EARLY DAYS OF THE CONVENTION .....

##### 2.5.1 – CASE STUDY: TANZANIA

*By Erastus T. Lufungulo (Deputy Chig Park Western)*

##### 2.5.1.1 – Introduction

The General Conference of UNESCO adopted the Convention concerning the Protection of the World Cultural and Natural Heritage or World Heritage Convention in November 1972. The Convention aims at safeguarding monuments, cultural sites and natural areas, which are of outstanding universal value.

Tanzania became a Party to the Convention on August 2, 1977. Out of the 150 natural and mixed areas inscribed in the World Heritage list of January 1, 2000, 33 are in Africa and four of these are situated in Tanzania. These include the Selous Game Reserve, Ngorongoro Conservation Area, Serengeti National Park and Kilimanjaro National Park. Tanzania National Parks (TANAPA) manages Serengeti and Kilimanjaro sites. Tanzania has also nominated new sites for inscription, including: Ruins of Kilwa Kisiwani and Ruins of Songo Mnara, Bagamoyo Historic Town, Zanzibar Stone Town, oldonyo Murwak, Gombe Stream National Park, and Jozani-Chwaka Conservation Area.

**TABLE 1.** World Heritage Sites In Tanzania

SITE	SIZE IN KM <sup>2</sup>	YEAR	MANAGEMENT AUTHORITY
Ngorongoro Conservation Area	8,288	1979	Ngorongoro Conservation Area
Serengeti National Park	14,763	1981	TANAPA
Selous Game Reserve	50,000	1982	Wild Division
Kilimanjaro National Park	756	1987	TANAPA

### 2.5.1.2 – Serengeti National Park

Serengeti National Park lies in Northern Tanzania, west of the Great Rift Valley. A western arm extends close to the eastern shore of Lake Victoria and the northern section joins the international boundary abutting Kenya's Masai Mara Game Reserve. It is also contiguous with Ngorongoro Conservation Area, Maswa, Grumeti, and Ikorongo Game Reserves. Serengeti was conferred with protected area status of Game Reserve in 1940 and it was upgraded to National Park status in 1951. The present Serengeti National Park was created after extensive boundary modifications in 1959. The park was accepted as a World Heritage Site in 1981, and together with Ngorongoro Conservation Area, Serengeti also forms part of a Biosphere Reserve of UNESCO, also recognized in 1981.

#### (a) Criteria for nomination

Serengeti was accepted as a World Heritage Site after the Government of Tanzania nominated the area and the proposal accepted by UNESCO standards of the WH Convention.

The criteria recognized that:

- Serengeti National Park was an outstanding example representing a significant on going geological processes, biological evolution and man's interaction with his natural environment;
- Serengeti National Park contained unique, rare or superlative natural beauty; and

- Serengeti National Park provided habitats where populations of rare or endangered species of plants and animals still survive.

#### (b) Conditions of integrity

Serengeti National Park also fulfilled certain conditions of integrity basing on the Operational Guidelines for the Implementation of the World Heritage Convention.

The following conditions were applicable:

- In the case of migratory species, seasonable sites necessary for their survival, wherever they are located, should be adequately protected;
- A management plan should be prepared and implemented to ensure the integrity of the natural values of the site in accordance with the Convention; and
- The site should be of sufficient size and contain the necessary elements to be self-perpetuating, and contain those ecosystem components required for the continuity of the species, natural elements or processes to be conserved.

#### (c) The Serengeti National Park within the context of the World Heritage Site

The size of the site is a common concept to both Biosphere Reserves and World Heritage Sites that it must be large enough to function as an effective conservation unit. There is no doubt that the Serengeti, as a national park, is large enough to contain viable populations of many plant and animal species.

**(d) Areas of importance**

However it was scientifically proven that, the Serengeti National Park did not contain within its borders all those areas utilized by and of vital importance during the wet season. Such areas lie:

- Within the Ngorongoro Conservation Area, and
- Outside of both Ngorongoro and Serengeti to areas known as Salei plains.

It was also noted that vital dry season areas in the northern Serengeti and in the Masai Mara in Kenya were being threatened by encroachment thorough increasing settlement and agricultural development. Settlement and fields occur right up to the border over much of the western boundary of the northern Serengeti. Research also came up with a list of some endangered species that are not well protected by the park. One such a species is the African Hunting dog (*Lycaon pictus*).

It is clear therefore that the acceptance of the Serengeti National Park as a World Heritage Site, aimed at an improved management of the park and its surrounding environs.

**2.5.1.3 – Kilimanjaro National Park****(a) General**

The Kilimanjaro National Park and the surrounding Forest Reserve occupy the upper part of Mount Kilimanjaro in northern Tanzania. The National Park with a size of 756 sq km comprises the whole of the mountain above the tree line and six forest corridors, which stretch down through the Montana forest belt.

History shows that Mount Kilimanjaro and the surrounding forests were declared as a game reserve by the German colonial government in the early part of the 20th Century. The area was gazetted as a forest reserve in 1921. Part of the area was reclassified as a national park in 1973. The national park was then accepted as a World Heritage Site in 1987. Kilimanjaro is a volcanic massif (last showing signs of major activity in the Pleistocene), which is not only the highest mountain in Africa, rising 4877 m above the surrounding plains to 5895m, but also one of the

largest volcanoes in the world, covering an area of some 388,500 ha. There are three main volcanic peaks of varying ages lying on an east-south-east axis, and a number of smaller parasitic cones. The park has a management plan that does not include the forest reserve.

**(b) Justification for inclusion in the World****Heritage List**

Kilimanjaro National Park nomination, as presented by the Government of Tanzania provided the following justification for designation as a World Heritage property;

- Superlative natural phenomena, and exceptional natural beauty. As the largest single freestanding mountain mass in the world, Mount Kilimanjaro snow-capped summit stands almost 5 km above the surrounding plains.
- Habitat of rare and endangered species. The park supports a variety of rare and endemic plants and animal species.

Possession of the following distinguishing features from other mountains in Africa:

- Its height?
- Its physical form; and
- Its place in the historical exploration and “image” of Africa.

**(c) Kilimanjaro National Park in the context of the World Heritage Site**

Like the Serengeti National Park, the management of Kilimanjaro National Park also needs to be supported both financially and materially. The main pressure on Kilimanjaro is being experienced on the Forest Reserve, which surrounds and acts as a buffer zone to the national park. Nominally controlled logging continues in the Forest Reserve and despite its high watershed values it is incrementally losing its natural vegetative cover.

It has been established that the snow cover is also decreasing due to global warming and other human induced disturbances to the forest. This World Heritage Site is large enough but is not

adequately protected because a large part of the ecosystem is outside the National Park System. The natural forests contain 70% of biodiversity. TANAPA is still pursuing the possibility of protecting the entire mountain and its biodiversity by annexing the catchment forest to the park.

## 2.6 – PRESENT DAYS OF THE CONVENTION .....

### 2.6.1 – CASE STUDY I: BOTSWANA

*By Mr. D. Thebes, Department of Wildlife and national Parks*

#### 2.6.1.1 – Introduction

The World Heritage Convention was adopted in November 1972 in Paris, France by the General Conference of UNESCO. It came into effect in 1975. The central theme of the Convention is that, from a global perspective, there are cultural and natural properties of outstanding universal value and that these properties should be conserved and protected for the benefit of all humanity. The Convention is concerned with encouraging member states to identify, protect and preserve their cultural and natural heritage.

#### 2.6.1.2 – Sites with potential for nomination

Botswana ratified the World Heritage Convention in October 1998 thereby pledging to protect its cultural and natural heritage. The country has selected within its borders, sites that it considers to be of outstanding universal value. Botswana's tentative list includes Tsodilo, Gchwihaba, old Palapye, Toutswe mogala, Lekhubu Islands, Makgadikgadi Salt Pans and the Okavango Delta. Of all these sites, Botswana has so far only submitted Tsodilo to the World Heritage Centre for inscription on the World Heritage List. There is need for more work to be done on the other proposed sites to satisfy the requirements of the Convention. Plans have already started to prepare the Okavango Delta and the Gchwihaba hills for submission to the WH Centre.

### (a) Tsodilo – A candidate for World Heritage listing

#### *Background*

Tsodilo is situated in the Northern corner of Botswana near the Namibian border. Tsodilo is comprised of four hills. These hills vary in height and shape and because of their relationship with one another, they have come to be known as male, female, child and grandchild. Male, with peak of 1934 m above sea level is the highest peak in Botswana. Tsodilo's massive formations rise majestically from ancient sand dunes to the east and a dry lake bed to the west giving rise to them being called inselbergs which is defined as a steep-sided eminence arising from a plain tract. The surrounding dunes are covered with trees and open savannah vegetation that add to the aura of mystery and spirituality of Tsodilo. The setting and multi-coloured rock formations combined with the great number of rock paintings found there have a spiritual nature that is very truly inspirational.

#### *Features of outstanding value*

Tsodilo is one of Southern Africa's most important archaeological sites, and the remains of past cultures can be found in the many rock shelters, caves and other sites found there. In addition to cultural remains, there are more than four thousand five hundred individual rock paintings scattered over more than 400 sites, some dating to 500 AD. This is significant since rock art in Botswana, unlike that found in South Africa, Zimbabwe and Namibia, is relatively rare due to the fact that suitable or perhaps desirable rocky outcrops used by early artist occur in limited numbers.

The rock paintings at Tsodilo also have regional significance in Southern Africa in that most of the paintings have been executed in isolation from one another or in fairly small panels, as opposed to the large friezes which were more commonly employed in the region. There are also significant differences in terms of execution and composition between these paintings and those found in Namibia, Zambia and South

Africa. In particular, there is a higher proportion of geometric designs than either in human figures or depictions of animals, whereas in the South Africa rock paintings, human figures tend to be the most dominant motif, and in Zimbabwe, animal figures are the most dominant in numerical terms. Tsodilo is also unique because the Basarwa, whose ancestors are believed to be responsible for much of the rock art, still reside in the area even today.

Tsodilo has strong spiritual and religious significance to many local groups. Local traditional doctors and churches often travel there for rituals, prayer and meditation. The local Habukushu and the Basarwa have myths of creation and fertility associated with the hills.

Inclusion of Tsodilo in the tentative World Heritage List is justified for the following reasons:

- Tsodilo is an outstanding example of human occupation and land use in particular area for at least 50,000 years and most likely 100,000 years B.C. Traditions of hunting and gathering, metallurgy, cattle rearing and farming, use of land and temporal changes in populations are within the archaeological record at Tsodilo.

Evidence of the first cattle herding traditions in the region is found in Tsodilo.

- Evidence of early mining activities is present in Tsodilo. The rocks forming Tsodilo belong to the Damara sediments and they are economically important, containing base metal ores and consisting of quartzites, sandstones, siltstones, limestones and massive dolomites.
- Evidence of early human endeavours at expression through art is abundant at Tsodilo. Tsodilo is also a place of “outstanding natural beauty” as it is made up of inselbergs, caves and sand dunes. It is also home to the leopard, vervet monkey, ant bear, warthog, brown hyena, kudu and diminutive Tsodilo Rock Gecko, which is found only in Tsodilo. The landscape is also

enhanced by the presence of magnificent bamboo trees as well as large number of Mongongo tree.

#### *Nomination dossier*

The Botswana National Museum, the body responsible for all national monuments in the country, sent in May 2000 nomination dossier giving reasons and justifying why Tsodilo should be considered and honoured as a World Heritage Site. The outcome of this endeavour is expected in 2001. Tsodilo is Botswana’s hope for a first World Heritage Site. When describing Tsodilo, Professor Pierre De Meret in his report ‘Evaluation of the Tsodilo hills management plan and its implementation (1995:2), states, “Tsodilo is a major landmark in the Kalahari desert. It is not only a wonder of nature but also a rock art area of major international significance”. The rock art of Tsodilo is truly a Botswana and wider Africa treasure to be protected and shared with the world.

#### *The Management plan of Tsodilo*

The government of Botswana, through the Department of Museum, has compiled a management plan for the area including land use, site management and preservation. The management plan addresses the expected growth in tourism and the carrying capacity of the site. Other developments in the area include 2.4 million Government sponsored site museum and camping grounds with camping facilities. The Department of National Museum has also appointed a curatorial team to implement the management plan in line with the requirements of the World Heritage Convention as well as Botswana’s national development plan which both advocate for the need to combine conservation with suitable use. Unsuitable forms of development and commerce prohibited by the provisions on the Convention will not be carried out. The site is however, being prepared to support eco-tourism activities, which will generate income and jobs for the local communities.

## (b) Conclusion

Tsodilo represents an original example of the way the people of Botswana have lived in harmony with nature, combining our unique natural environment. The evidence of this is the rock paintings, ancient settlements and oral histories about Tsodilo. Tsodilo is too charming, too beautiful, and too unique to remain the heritage of Botswana alone; it is only right that Botswana shares this heritage with the rest of the world. While Tsodilo is a priority for listing, in the more recent years there has been a call from the international community to have the Okavango Delta and the Gchwhaba caves listed. Extensive consultation has to be carried out before these areas can be included for tentative listing. One of the major impediments to the listing is that the Okavango Delta still supports a variety of lives including people who depend on it. Tourism activities in Okavango Delta are high and somehow it will have to be scaled down to meet the requirement of the Convention. The Gchwhaba area is still in its pristine stage and its caves are totally untouched by human interference.

### *2.6.2 – CASE STUDY II: RECENT INITIATIVES TO ENHANCE THE INTEGRITY OF MT. KENYA WORLD HERITAGE SITE, KENYA*

*By Mr. Bongo Woodley, Senior Warden*

#### *2.6.2.1 – Introduction*

Mt. Kenya is Africa's second highest mountain after Kilimanjaro and attains an altitude of 5,199 m (17,058 ft). Of volcanic origin it was formed some three million years ago and it features dramatic peaks holding eleven glaciers with deeply incised u-shaped valleys radiating from this volcanic plug. A diverse range of vegetation which varies with altitude and rainfall includes afro-alpine flora, heath and parkland, pure bamboo and mixed closed canopy forest with several endemic and near endemic species occurring. The entire ecosystem is

approximately 2,800 square kilometres in extent and is the largest remaining stand of indigenous forest in the country. Since Kenya has only 3% forest cover the mountain is a vital natural asset that must be protected. Extensive commercial forestry plantations are established in the lower boundaries.

A wide variety of fauna is represented with the natural forest zone in particular hosting several important population of endangered species such as elephant, black rhino, leopard, giant forest hog, bongo and guereza colobus.

The local communities who live adjacent to Mt. Kenya are the Kikuyu, Meru and Embu tribes and they regard this holy mountain as the spiritual dwelling place of their traditional god, Ngai.

More practically about one third of Kenya's entire population depends on the mountain as a water catchment reservoir; it is also an important source of forest produce both for subsistence and commercial use. Due to its unique scenery and rich biodiversity, the mountain is a major tourist attraction and source of much needed revenue.

#### *2.6.2.2 – Management Authority*

Until recently this ecosystem was managed by two separate administrations; the Kenya Wildlife Service (KWS) being responsible for the National Park and the Forestry Department being responsible for the forest reserve which included all indigenous forests also. The Wildlife Act (Cap 376) governs the former whilst the Forest Act (Cap 385) governs the latter. Mt. Kenya had originally been gazetted a forest reserve in 1932 and the National Park subsequently being created within the forest reserve to include all the high altitude moor land and peak areas gazetted in 1949. In 1978 the park was internationally recognized as a Biosphere Reserve by UNESCO MAB programme and then in 1997 the park and the upper forests were accepted as Natural World Heritage Site No. 800.

### 2.6.2.3 – Degradation

Various factors have resulted in severe environmental degradation of Kenya's forests, and on Mt. Kenya an innovative method of low-level systematic aerial surveillance was undertaken to establish the threats to the integrity of its forests.

The results revealed that most of the indigenous forests on Mt. Kenya were heavily impacted by illegal activities leading to serious destruction of the canopy and a decrease of the overall forest area. Threats included in the KWS August, 1999 report were 14, 600 indigenous trees felled, 8,200 ha of indigenous forest virtually clear felled, 2465 charcoal kilns, 4258 head of livestock, 21 areas impacted by fire, 120 landslides, 127 extensive areas of "non-resident cultivation" and some 200 ha of cannabis cultivation.

### 2.6.2.4 – Intensification of management measures

This well catalogued and publicised devastation led to a groundswell of public support and was undoubtedly the catalyst for the Government of Kenya to take the action of re-gazetting the entire 2,124 square kilometres of Forest Reserve to be a National Reserve managed by the Kenya Wildlife Service Vide Legal Notice No. 93 dated 24th July, 2000.

This new status affords enhanced protection over the indigenous forests and already KWS has re-enforced security operations in the area with considerable success. No fresh extensive logging areas have been detected in the natural forest although persistent attempts at illegal exploitation occur. Given that 355 kms of boundary enclose some 2,800 square kms of montane area it is obviously unrealistic to assume that absolute integrity of Mt. Kenya can be guaranteed.

A task force comprising of KWS and Forest Department personnel has also been formed to oversee and give recommendations on the transition of management of the indige-

nous forest to KWS and to work out modalities of continued Forest Department management of plantation areas within the newly gazetted National Reserve.

These actions by the Government of Kenya which hopefully may set a precedent for other forests in the country constitute a positive climate for meaningful forest conservation and should certainly negate recent calls for Mt. Kenya to be considered for inclusion in the List of World Heritage in danger.

It is proposed that the boundary of the World Heritage Site be extended to cover most of the natural forest (approximately 1632 sq.kms) including the areas now rejuvenating. The inclusion of the plantation areas had also been suggested but justification for integrated forest land use may not apply. The Biosphere reserve concept would be eminently applicable to the new situation on Mt. Kenya with a modified World Heritage Site representing its core.

## 2.6.3 – CASE STUDY III: UGANDA

*By Mr. Joseph Serugo and Mr. Chris Ponsiano Oryema, Wardens-In-charge of Rwenzori Mountains and Bwindi Impenetrable National Parks*

### 2.6.3.1 – Introduction

Uganda ratified the World Heritage (WH) Convention in 1987. Rwenzori Mountains, Bwindi Impenetrable, Murchison Falls and Mountain Elgon National Parks were consequently nominated in 1992. Two of these four natural sites, Rwenzori Mountains and Bwindi Impenetrable National Parks were in December 1994 inscribed as Uganda's first batch of WH Sites under the World Heritage Convention of UNESCO. Both Protected Areas are situated in South Western Uganda along the border between Uganda and the Democratic Republic of Congo (DRC).

The outstanding values of these two areas had been recognised early in Uganda's colonial history. They became managed as Forest Reserves first by the British Colonial masters during the 1930s to 1962, and thereafter by the Ugandan authorities. The move to upgrade their conservation status to National Parks began in the 1970s when pressure for their resource use increased dramatically.

In August 1991 the two areas were finally gazetted as National Parks under Uganda National Parks Act. In August 1996 Uganda National Parks merged with the former Game Department to form the Uganda Wildlife Authority the agency responsible for the management of the Wildlife estate including the two World Heritage Sites.

#### 2.6.3.2 – Rwenzori Mountains National Park

Rwenzori Mountains National Park (996 Km<sup>2</sup>) is part of the Albertine Rift Montane Forest Eco-region, which straddles several national borders in East and Central Africa. On the western edge the mountains share the border with the Virunga in the Democratic Republic of Congo (DRC). It rises to a height of 5190 m above sea level with rugged terrain covered by a variety of vegetation types ranging from Afromontane forest to heather/moorland. It has several peaks some of which are permanently covered with snow.

The importance of Rwenzori Mountains revolves around its natural resource base, the conservation and management of the resources, the people, the institutions and environmental management issues. On natural resources base, the important aspects include the following:

- The theories accounting for the formation of the mountains.
- Ethnic groups, the history and cultural attachments to the mountains.
- Biodiversity.
- Geology and seismicity of the region.
- The attributes of the mountains as water catchment area.

- The concerns over the glacial recess.
- The potential for the exploration of the mountains and its future prospects.

The current management status of Rwenzori Mountains National Park is threatened by the presence of armed rebel groups operating within the park and in the neighbourhood, and by the civil and military conflict in the DRC. The threats became so serious that the site had to be closed to tourists in 1998, and the staff managing it moved out of the park, and relocated at Kasese Town. The WH Committee at its twenty-fourth session in July 2000 consequently resolved to retain the National Park on the list of WH Sites in Danger.

#### 2.6.3.3 – Bwindi Impenetrable National Park

Bwindi Impenetrable National Park was once part of the larger forest that had stretched north along the Rift Valley Escarpment and south to the Virunga Volcanoes. But cultivation and settlement caused considerable decline in the forest cover. Increased deforestation in the twentieth century significantly reduced the once extensive impenetrable forest to the present.

Bwindi's rugged hills were formed by seismic unwrapping along the edge of the Great Western Rift Valley. It is one of the few forest habitats in East Africa to include both lowland and Afromantane forest habitats. Its altitude ranges from 1160-2607 m above sea level between two geographical zones: the dry savannah of East Africa and the vast rain forest of the Congo Basin. Its geographical location has contributed to the forest's high species diversity.

Most important however, is Bwindi's probable role as one of the remaining Pleistocene refuge, serving to protect species during the last period of glaciations. It supports one of Africa's richest plant and animal communities with over 200 tree species, 350 bird species, 350 butterfly species and half to the world's remaining 600 mountain gorillas.

Threatened species in this WH Site include large mammals such as Chimpanzees, l'Hoest monkeys, leopards, and elephants. Many species



of birds (e.g. the African Giant Swallow tail and Green banded swallow tail are also endemic in the region. It is home of at least 23 Albertine Rift endemic bird and over 40 butterfly species.

The current General Management Plan drawn in 1994 is still in use. Production of a new plan will soon start.

#### 2.6.3.4 – Challenges/Constraints

Uganda Wildlife Authority as the implementing agency for the WH Convention for natural sites faces the following challenges:

- (a) The Rwenzori Mountains and Bwindi Impenetrable WH Sites share the international border with the DRC. On the western side of the border exists similar Wildlife Protected Areas. However, co-operation and collaboration efforts by managers of these transborder PAs have been made difficult as a result of the armed conflicts in the entire Great Lakes Region.
- (b) Communication difficulties. Uganda is Anglophone while DRC is Francophone. The language barrier, differences in ethnic diversity and lack of communication facilities such as roads have made cooperation between the two states difficult.
- (c) The Great Lakes Region is characterised by dense human population. This factor has placed increasing demand for the natural resources on these sites.
- (d) Limited or lack of general information about the WH Convention and on the values of its natural sites is a hindrance to promoting management of the sites.
- (e) The proposed Trans-Rwenzori road connecting Kasese, Kabarole and Budibugyo districts is posing a threat to the integrity of the Rwenzori Mountain National Park WH Site.
- (f) Institutional instability of Uganda Wildlife Authority since 1997 has discouraged adequate funding, and because of this there has been no submissions of nominations of other sites with potential for WH listing.

#### 2.6.3.5 – Recommendations and conclusion

- (a) There is an urgent need for a legal, political and socio-economic framework to harmonise co-operation and collaboration across national frontiers. The East African Co-operation Treaty is a good starting point.
- (b) Uganda Wildlife Authority should continue to strengthen links with the army to ensure security in its protected area estate.
- (c) Uganda should foster consultations with all stakeholders in any future nomination of WH sites.
- (d) The following sites are proposed for nomination as WH sites:
  - Murchison Falls National Park originally nominated in 1992 was rejected for listing due to heavy poaching that had catastrophically reduced its animal populations. However, the declining trend has been reversed and its boundaries have been extended to include two adjacent Wildlife Reserves of Karuma and Bugungu. The total area has increased from 3850 to over 5,000 sq.km.
  - Mt. Elgon National Park in Uganda is facing serious encroachment problems, which are political in nature. The Kenya side of the mountain which is also a National Park with the same name is also experiencing similar problems. To protect the mountain Elgon and its resources, it is important to accord the two national parks with the highest level of international recognition as a common transfrontier WH Site.
  - Mgahinga Gorilla National Park in Uganda is part of the same ecosystem with the Virunga volcanoes in DRC and volcanoes in Rwanda both of which are already inscribed as WH Sites. Its nomination for consideration as a Trans-boundary WH site will enhance its conservation especially as a shared home for half of the world's mountain gorillas.

Opportunities exist for the Uganda Wildlife Authority to collaborate with Makerere University Institute of Environment and Natural Resources (MUIENR) and Institute of Tropical Forest Conservation (ITFC) among others in the nomination process.

#### **2.6.4 – CASE STUDY IV: VICTORIA FALLS NATIONAL PARK, ZIMBABWE**

*By Mr. Erickson Ndlovu, Site Manager.*

##### *2.6.4.1 – Introduction*

The Victoria Falls is one of the world's greatest natural wonders, and consequently it is a major tourist attraction in the Southern African Region. The social, economic and environmental impacts in the Falls are felt-locally and internationally. Locally the Falls and related tourism industry are placing significant – environmental and development strains on the authorities in Zimbabwe and Zambia. Rapid and unmanaged growth of development for tourism is placing severe strain on the municipality resources and threaten to destroy the environmental assets upon which the town's existence is based urban municipal development is spreading to impact on the adjacent Zambezi and Victoria Falls National Park and the diverse ecosystem which they contain.

##### **(a) Area and date of establishment**

The Zimbabwean portion of the Victoria Falls Natural World Heritage Site occupies some 3181 ha of land on the extreme North Western Corner of Zimbabwe on the banks of Zambezi River. The area was declared a National Park in 1952 and a World Heritage site in 1989.

##### **(b) Climate and vegetation**

Annual rainfall is about 600-700 mm. The spray from the Falls is responsible for sustaining the rainforest.

The predominant vegetation is the Mopane *Colophospermum Mopane* teak, and Miombo woodland and the Riverine forest along the

Zambezi River. The Riverine Forest within the splash area (Rainforest) is a fragile ecosystem dependent upon maintenance of abundant water resulting from the spray.

##### **(c) Visitor and visitor facilities**

The Victoria Falls is one of the world's greatest natural wonders and on average about 20,000 people enter the Victoria Falls National Park every month.

Besides providing access to the Falls, there are no other permitted activities within the Rainforest. Activities such as water rafting, Flight of Angels and leisure cruises are available away from the main Falls area.

##### *2.6.4.2 – Nomination*

In accordance with the articles of the World Heritage Convention the Victoria Falls with its unique geological features is a result of process erosion that creates a fissure at right angles to the flow of the river. That has resulted in a waterfall and the Rainforest that supports a delicate plant community. The ecosystem is considered to be of outstanding universal value. The Victoria Falls also has a historical significance to it in that although the local people knew of the existence of the Falls, David Livingstone whose statue still stands near the Falls was the first European to visit the falls and he named it Victoria Falls. The criteria for nomination are therefore based on the geology, scenery, culture and ecosystem in the area.

##### *2.6.4.3 – Management tools*

In terms of the Parks and Wildlife Act (Chapter 20:14 of 1996), the Victoria Falls and the Zambezi National Park is a National Park gazetted in 1952, Managed in accordance with the Parks and Wildlife Act.

The Management Plan in use today was prepared by the National Park and Wildlife Department but for managing a World Heritage Site. There is an urgency to prepare a detailed

integrated management plan for the greater area within which the WH Site falls. This has the effect of affording the National Park extra protection in terms of the Act. Movement of people is controlled within the Rainforest, and other undesirable activities which may be detrimental to the park are prohibited. The park has a financial budget and personnel to administer the area in accordance with the Park and Wildlife regulations.

Realising that the Victoria Falls town is the fastest growing town and noting that the rapid unmanaged growth is likely to impact negatively on the World Heritage Site, the Government of Zimbabwe has embarked on an Environmental capacity enhancement plan whose purpose is to provide the planning of environmentally sustainable communities. Expected impact of this plan is a better-managed development of the Victoria Falls Town area with long-term benefits to the World Heritage Site.

Improved financial and social benefits to the people through increased revenue from a better managed Victoria Falls town will encourage people to preserve and protect the World Heritage Site as a Tourism destination.

The Government in Zimbabwe is preparing an Environmental Bill. This legislation will form an important piece of regulatory framework together with Management plans being prepared by the World Bank Education.

Situated within the Victoria Falls is the extension and interpretation branch of the Department of National Parks and Wildlife. The purpose of this branch among other countries is to make people aware of the values of the Victoria Falls as a World Heritage Site.

#### 2.6.4.4 – Management Constraints

The Victoria Falls World Heritage Site is constrained by a number of factors including:

- Lack of a joint World Heritage Site managements plan to control and coordinate developments on the Zambia and Zimbabwe sides of the Falls.

- Presence from the Heritage communal Lands as demand for land increases ultimately this pressure will build on the Victoria Falls.
- On average there are 20,000 people entering the Rainforest every month. The passage of human feet creates damage to the site through (trampling). Currently the visitors only use paved paths specially constrained with the Rainforest.
- Development of the Victoria Falls town to provide facilities for the visitors and local population is mounting pressure. This will impact negatively on the World Heritage Site unless managed properly; and
- Threats to block the game corridors are expected to disrupt populations and structures of the large mammals in the greater area.

#### 2.6.4.5 – Recommendation

The legal instruments for the Park and Wildlife management and capacity building to enable the managers to enforce the WH site regulations should all be strengthened.

### 2.6.5 – CASE STUDY V: LONG WALK TO NOMINATION: THE IN MOZAMBIQUE

By Mr. Sen Enadahl, UNESCO, Maputo, Mozambique

#### 2.6.5.1 – Introduction

##### (a) Location and coast

Mozambique is situated between latitude 10° 20' S and 26° 50' S. It's coastline, of ca. 2770 km, is characterized by a wide diversity of habitats, including sandy beaches, coral reefs, estuarine systems, bays, and mangroves and sea grass beds. The coast is a compound shoreline and can be divided into three main natural regions – a coral coast, a swampy coast and a parabolic dune coast – with one additional type of limited occurrence, namely the delta coast.

Coral coasts occur in the northernmost section of the country, extending about 770 km southward from the Rovuma River in the north. The primary formations consist of limestone formed by fringing coral reefs, but extensive mangroves and sea grass beds also occur. Corals also occur at intervals offshore from Bazaruto southward to South Africa. The southern limit of the shallow water fringing corals is the Inhaca Island at latitude 26° S.

Swampy coasts occur in the central section of Mozambique, extending over about 978 km between Angoche (16° 14'S) and Bazaruto Island (21° 10'S). They consist of simply linear to arched beaches, swamps and estuaries. Low dunes known as Cheniers, which run parallel to the coast, characterize the shoreline. The sea along this coast is shallow and the waves are high but short, disturbing the bottom materials close to the beach and causing high turbidity. In this section 24 rivers discharge into the Indian Ocean, each with an estuary supporting well-established mangrove swamps. Beaches between Pebane and the Zambezi River have black sand and are fairly rich in minerals ilmenite and rutile.

Parabolic dunes extend over 850 km of shoreline, from Bazaruto island southward to Ponta de Ouro in Mozambique and beyond to Kwazulu-Natal, South Africa. It consists of high parabolic dunes, north oriented capes and barrier lakes behind the dunes. The dune systems attain heights of 120 m and are considered the highest vegetated dunes in the world.

Delta coasts occur in only two sections of the Mozambican coastline, at the Zambezi and Save river deltas.

#### **(b) Climate**

The major part of the Mozambique coast experiences a tropical humid and sub-humid climate, with the coast experiencing rainfall in all months with a summer maximum (November to March). The highest annual average rainfall is recorded for the central region.

#### **(c) Human Activities**

The Mozambican coast is under pressure from:

- Casual tourists (mainly campers and sport fishermen): Uncontrolled illegal activities of these tourists consists of harvesting of many hundreds of kilograms of fish including reef fish; driving above high water mark thereby threatening the nests of sea turtles, and harvesting of corals.
- Visiting yachts: these usually anchor over reefs, causing extensive damage.
- Requests for concessions to set up eco-tourism ventures, some of which have been illegally established.

##### *2.6.5.2 – The process of selecting potential sites to be nominated*

During the Pacsicom conference (Pan-African Conference on Sustainable Integrated Coastal Management) held in Maputo on July 16-26, 1998, the Government of Mozambique proposed that a technical workshop on natural heritage of coastal areas of Africa be organised. This meeting did not take place. However, in 1999 the idea of candidating a coastal area in Mozambique to the UNESCO World Natural Heritage List was initiated and a first meeting with interested parties took place to explore the interest among Mozambican authorities and organizations. During this meeting the Government of Mozambique manifested great interest in pursuing the work of candidating one or several coastal areas to the World Natural Heritage List. The coastal zone unit under the Ministry for Coordination of Environmental Affairs (MICOA) was identified by the institutions present to be the national focal point for the Nomination Coordinating Committee, until anything else was decided.

MICOA invited the interested parties to another meeting in January 2000 to discuss possible site candidates. During that meeting a list of 7 sites along the coast of Mozambique was compiled. The institutions present at the meeting also decided that this list should be devel-

oped further to form the basis for a more structured meeting on March 20-21, 2000 which should decide which coastal sites the Government of Mozambique might consider to propose to the UNESCO World Natural Heritage List.

During the Workshop in March, the participants representing a broad variety of stakeholders in Mozambique critically assessed the 7 coastal sites: Bazaruto Islands, Quirimba Archipelago, Maputo Elephant Reserve, Inhaca Island, Island of Mozambique, Nacala Bay, Primeiras and Segurdas Islands.

The basis for the main discussion during the workshop was a report presenting seven coastal sites in Mozambique with potential for nomination to the UNESCO World Heritage Committee. The participants also benefited from presentations from the regional guests.

Based on the SWOT approach (strengths, weaknesses, opportunities, threats) the workshop discussed all the seven sites and concluded that the strongest candidates for nomination to the UNESCO World Heritage Committee were;

- Bazaruto archipelago; and
- Maputo Elephant Reserve including Inhaca and Portuguese Island.

#### 2.6.5.3 – *The biodiversity of the sites nominated* **Fauna**

The Bazaruto Archipelago has a few indigenous mammal species from the geological period when the archipelago was part of the mainland. The existing terrestrial mammal species consist of samango monkey (*Cercopithecus mitis*), lesser gushnbaby (*Galago moholi*), red squirrel (*paraxerus Palliatus*), red duiker (*Cephalophus natalensis*), bushbuck (*Tragelaphus scriptus*) and few species of rodents such as the house rat (*Rattus rattus*).

Around 180 bird species have been recorded in the Archipelago, distributed among marine, intertidal and inland birds. Thirty-six species of waders have been recorded in the Archipelago

and the total number of water birds counted has exceeded 23,000 birds.

Forty-five reptiles and amphibian species have been recorded in the archipelago. Five species of marine turtle occur: green turtle (*Chelonia mydas*), hawksbill turtle (*Eretmochelys imbricata*), loggerhead turtle (*Caretta caretta*) and the leather back turtle (*Dermochelys coriacea*). The olive ridley turtle (*Lepidochelys olivacea*) occurs in the open sea. Snakes play an important role in controlling the rodent population, especially of the house rat.

Among the marine fauna, large marine mammal species recorded are: Humpback whale, minke whale, dwarf sperm whale (*Kogia breviceps*) and false killer whale. In addition, 5 species of dolphins occur in the area: spinner, humpback, bottlenose, common and spotted dolphins. The largest remaining population of the endangered dugong (*Dugong dugon*) along the east African coast survives in the area of the archipelago.

The fish fauna of the archipelago is diverse and rich. Over 2,000 species of fish have been recorded from the area. Around 74 species of fish belonging to 33 families are captured by commercial fisheries. Most fish families of the Indo-Pacific Region are found in the Bazaruto Archipelago, and represent 80% of all species recorded. In addition 20 species of crustacea and 57 species of mollusc are recorded for the area for dugongs and green turtles.

The Fauna for the Maputo Elephant Reserve including Inhaca and Portuguese Islands are similar to those described as above for Bazaruto Archipelago.

#### 2.6.6 – CASE STUDY VI: CULTURAL LANDSCAPE OF THE SHAI HILLS RESOURCE RESERVE: PROPOSED WORLD HERITAGE SITE FOR GHANA By Mr. James Agyei-Ohemeng, Site Manager

##### 2.6.6.1 – Introduction

The Shai Hills Resource Reserve is situated about 50 km northeast of Accra, the capital of

Ghana on the main Tema-Akosombo highway. It is approximately one hour drive from Central Accra. The Reserve is 5,140 ha and is made up of largely Savannah covered plains, about 60 m elevation, which surround a series of inselbergs. The most prominent of these is about 290 m high. The hills are covered by a mosaic of forest; thickets and grassland with a unique low stature dry forest in the intervening canyons.

At present, Ghana has 15 terrestrial protected areas of different categories under the Wildlife Division of the Forestry Commission. The protected areas cover 1,247,600 ha. or 5.2% of the country. Categories of protected areas administered are National Parks, Wildlife Sanctuaries, Strict Nature Reserves and Resource Reserves. Shai Hills Resource Reserve is one of the first protected areas to be established by the Wildlife Division. It was established on 5th November 1971 by Legislative Instrument No. 710.

#### 2.6.6.2 – History

The Shai Hills area has been occupied since late Stone Age time (10,000 BC to 500 BC) by hunter-gatherers. From the Middle Iron Age (10th Century AD) to 1892 Shai Hills was the home of the Dangme Se and Le people (Anquandah, 1992). The Shai people were expelled from the hills in 1892 by the British colonial army and were dispersed into a number of local settlements though some migrated as far as present day Togo.

Pottery was a major occupation of the Shai people and several archaeological sites with large amounts of pottery artifacts are found in the reserve. Several of the sites have been excavated and surface collections made from others. Trade items dating to 1600 AD such as carnelian and glass beads from India and Venice have been unearthed (Anquandah, 1992).

Evidence of bone fragments dating to the same period indicates the former presence of large carnivores and elephants in the locality. Numerous archaeological sites are found in the reserve, notable among them for touristic and

educational purposes include Pianoyo, Hioweyo, Adwuku, and Sayu. There are also several sites of major cultural importance to the Dangme Shai in the hills of the reserve. Makpwin, which is located on the slopes of Hioweyo is of particular significance to the people. Entry to this site is restricted to only 7 nominated persons.

This custom is taken into account as far as visitor management is concerned.

#### 2.6.6.3 – Evaluation of site features and potential

Cultural landscapes offer rare opportunities for collaborative work and multidisciplinary approach to issues of culture resource management as well as adaptive mechanisms and strategies amongst Africa's hill dwelling populations (Eboime, 1999). Even though the Sais do not dwell in Shais Hill anymore they have maintained the link to the Hills.

At the time of their expulsion, the Shais could not carry their gods out of the reserve and so many of the original and most significant shrines of the Shais are still located in the reserve. They are uniquely confined within small areas showing all the scenic cultural features of present day Shais.

There are six major shrines within the Hills of the Reserve regularly visited by the Shais to date, namely:

- Kotoklo >> April
- Makpwem >> May
- Mla Hiome Lalne >> May
- Nadu >> June
- Ngmayem >> September
- Mkagbao >> October

In addition to the natural beauty and game viewing potential of the Reserve, the Obonu Tem and Se Yo as well as Aduoku caves are unique features. The Obonu Tem and Se Yo are opened at both ends, and were used as escape routes during invasions and tribal wars. There is a legend that the fetish priests could recite some incantations for the stones to close up so that external enemies could not get them.

The kob (*Kobus kob*) one of the mammals in the Reserve with conservation importance has a special significance to the Shais. The hide is used for performing the Dipo puberty rites for girls. The initiates sit on the hide during the ceremony.

#### 2.6.6.4 – *Community involvement and integration*

This is dependent on establishing lines of communication to gain support and using incentives to strengthen that support. At the same time educating the communities on their responsibilities and accountability they will have to assume with regard to the reserve. In 1996, the Wildlife Division (1998) offered the Shai traditional Council the chance to hold their annual durbar within the Reserve on commemoration of their expulsion 100 years ago with a donation of one Kob for associated rituals. This has established a firm foundation for community participation in conflict resolution through communication and consensus based on stakeholders.

A Management Advisory Board with membership drawn from the Traditional Council, District Administration and opinion leaders from within and around the Reserve to provide communication link between the people as stakeholders and the Wildlife Division as the Wildlife and archaeological conservators.

#### 2.6.6.5 – *Justification for Shai Hills resource reserve as a cultural landscape*

There are 3 criteria in defining areas, which qualify to be regarded as a cultural landscape. Shai Hills fulfils one of these, namely the organically evolved landscape (Rossler, 1999). “This results from an initial social, economic, administrative and/or religious imperative and has developed its present form by association with and in response to its natural environment”. In this case the Shai people conducted their social, economic, administrative and /or religious activities in the hills as evident from the archaeological sites.

As far as Shai Hills Resource Reserve landscape is concerned, it is continuous, and experts define this as “one which retains an active social role in contemporary society closely associated with the traditional way of life.... At the same time it exhibits significant material evidence of its evolution over time” (Rossler 1999). This is evident from the annual visits of the Shai people to their shrines.

In Shai Hills Resource Reserve due recognition has been given to associative values of landscape and features to indigenous Shai people as well as protecting biological diversity.

#### 2.6.6.6 – *Conclusion*

Ghana is committed to conserve this living vibrant Reserve for posterity, for appreciation today and tomorrow. At the moment, the European Union, under a Protected Areas Management Programme for some selected Reserves in Ghana, has agreed to implement the Shai Hills Resource Management Plan for purposes of recreation, education and cultural needs of tourists. Part of the income derived from these activities will be reinvested in the management of the natural and cultural resources of Shai Hills Resource Reserve.

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### 2.6.7 – YELLOWSTONE NATIONAL PARK (WORLD HERITAGE SITE)

By Mr. Michael Finley, Superintendent

#### Introduction

Yellowstone National Park is a natural site but has cultural sites which are protected.

It was established as the first World's National Park in 1872. It has a landmass of 107x87 sq km.

#### Park's unique features

The park has rare geological phenomenon such as 2 living volcanoes, 10 geothermic areas, about 200 geysers and hot springs, the falls of 90M in height marks the boundaries of the lava flows and thermal areas.

It is an important ecosystem with 5 endangered species. Its vegetation types range from near desert to sub alpine meadows and forests. It is home to a variety of Wildlife which among them include bison (American buffalo), elk, grizzly and black bears, trumpeter swam and tort, etc.

Since its establishment as a National Park, Yellowstone has evolved from being a pleasure resort and wildlife sanctuary to today's biosphere reserve and World Heritage Site. The park has 12 camping grounds, over 2000 km trails that offer recreational activities such as boating, canoeing, bicycle rides, etc. It attracts visitor patronage of 120,000 in winter and about 2-9 million in summer.

#### Current status

The park was listed on 5th December 1995 as a site on danger. About 14 Non-governmental organizations raised an alarm on the danger in which Yellowstone was.

#### Impacts affecting the Park

The listing among endangered sites was due to a number of impacts affecting the park. Some of the impacts include:

- (i) Proposed mining in the vicinity of the Park by a Canadian mining conglomerate.
- (ii) Exotic fish introduced in the park's lake.
- (iii) Sewer leakages.
- (iv) Deteriorating road networks.
- (v) Visitor use especially snow mobiles.
- (vi) Overpopulation of bison numbers (2400) at present.

A combination of all or some of the above have greatly impacted on the ecosystem of the park.

#### Resolutions

Some parts of the park are closed at certain seasons so as to lessen the impacts on resources found in these areas. There is need to benefit from the revenue generated from the microbar exploitation by companies.

Park management have also developed a general management plan to help in analyzing any emisaged development.

### 2.7 – ROUND TABLE DISCUSSION

*Moderated by Dr. Wangari and Prof. Edroma*

The sessions on session 2.0 (the World Heritage Convention) was rounded up in a lively and informative discussion. The following are highlights of the issues. The aim of the workshop system is to gain feedback as previous calls for information in the form of circulars and questions.

#### Question:

- How is funding from WH Council/Bureau awarded?

#### Answer:

- Director can approve up to \$5,000. A reply may be achieved within days of request.
- Up to \$20,000, requests are approved by the Chairperson.
- Up to \$30,000, requests are approved by Bureau of the WH Committee.
- Above \$30,000, the approval is considered by the World Heritage Council.



- Requests cannot be considered –particularly for Cooperation and Preparatory Assistance – until the 1% membership fee is fully paid.

#### Question

- Community involvement in managing WH sites. How do we involve these, at times of violent communities in protected Area Management?

#### Answer

- Increase the tangible benefit from the buffer zone e.g. Tourist lodges within buffer areas that are run/administered by the community. These are examples where the communities started patrolling exclusive areas around the lodges. Also community gains or benefits from profits of the core area. Most monies go into community-based projects.
- Provide resources from the protected area and 20% of gate entrance and thereby sharing ownership of the resources. Funds go to community projects. Employment is biased towards communities abutting the protected area.
- Make social/economic benefits greater than what is obtained from illegal activities.
- An alternative is one of resource ownership and parity in decision-making as well as the establishment of meaningful partnerships.
- Conservation of the WH Site requires the establishment of proactive land use planning to ensure integration of the Park into a broader landscape.
- Support of earlier comment– need consultation with neighbouring communities so that they feel that they have meaningful place in ownership and sharing of benefits
- Need to build capacity rather than addressing an isolated needs with donor funding.
- Cannot trade values of the resource – conservation authority needs to retain right to

veto discussions regarding the integrity of the Park.

- The biggest threat to wildlife is the “rich” person that can lure local men to poach for commercial gain.
- State officials e.g. Policemen could easily be bought by these operators.

#### Question

- What mechanisms are available to address this issue?

#### Answer

- The WH Convention interacts with other Conventions that give strength to regulation and law enforcement e.g. CITIES, TRAFFIC. Also need to involve local communities in the management of the Park.

#### Question

- What benefits will accrue to each WH Site from the Global Strategy, and what base is given to either natural or cultural heritage sites.

#### Answer

- Cultural heritage sites are few on this, particularly so for Southern African countries as they had not ratified the conventions or those that had, had not listed sites.

#### Question

- Provision must be made for bird sanctuaries particularly for migratory birds.

#### Answer

- These sites need to be identified, but whether the sites meet the criteria for WH needs should be investigated. For those marine related sites that meet the criteria – a list of experts that interact with these sites should be forwarded to Ms Annie Hillary so that they could be considered for her June 2001 workshop.
- RAMSAR would also need to be approached for registration under the RAMSAR Convention. There is a strong move to harmonise other conservation

Conventions with WH Convention. In so doing if a site is threatened under RAMSAR it will automatically become a threatened site under the WH Convention.

**Question**

- Reporting on the status of WH Sites after inscription, what mechanisms are in place to assist in this process?

**Answer**

- A report needs to be submitted every 6 years. There is a proforma that needs to be followed which is appended to the application documents. Only 6 of the 18-20 reports have been received from WH in Africa. Suggestion was made to submit

annual reports to UNESCO as a “back-up” to ensure that flow of information on the status of WH Sites in Africa is sustained.

Considerable debate was held on the potential inscription of the Okavango Delta. A major importance is that the Delta is reliant on water that is sourced in Namibia and Angola. It was motioned that a large proportion of the catchment be included in the application. This would require cooperation between the 3 countries. It was suggested that the Botswanian component of the system (i.e. the core area) be inscribed and then the site expanded to include critical ones in neighbouring countries at a later stage.

# *World Natural Heritage*

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## **SITES**



## CONSTRAINTS AND THREATS FOR GLOBAL BIODIVERSITY

*By Prof Eric Edroma, IUCN Regional Councilor for Africa*

### **3.1.1 – CONSTRAINTS**

#### *3.1.1.1 – Lack of Integrated Management Plan*

Any area protected under the WH Convention must have an integrated management plan, developed by involving all stakeholders. Most of the WH Sites lack up-to-date integrated management plans. In some cases the plans are either out of date, or are in the form of drafts, incomplete, not yet approved and unpublished.

For a management plan to be meaningful, it must be drawn with involvement and consultation of the people living in the surrounding community and other stakeholders in the regions. Several WH Sites are being managed without approved and published management plans. Lack of this vitally important document has been seen as the main source of the major problems weakening management of the sites.

#### *3.1.1.2 – Funding*

Many WH Sites suffer from chronic inadequate funding and shortage of cash flow. They are heavily constrained by acute shortage and/or grossly inadequate budgetary allocation by the Treasury to cover maintenance costs, human resource development, salaries and wages to staff, conservation, laboratory work, management and monitoring of human activities on regular basis, surveying, purchase of specialized equipment such as Light aircraft, etc. Lack of funds has paralysed conservation activities in many of the Protected Area's. Examples are many across the continent.

With limiting funds basic urgent obligations cannot be met, equipment and other facilities cannot be bought/supplied and human and other resources cannot be availed.

#### *3.1.1.3 – Inadequate staff*

Most Protected Areas in Africa are understaffed. For example the vast Mana Pools National Park (6784 km<sup>2</sup>) was in 1998 managed by only 3 wardens and some 120 supporting staff. Worse still the workers have not been trained to manage Protected Areas inscribed on the WH List.

#### *3.1.1.4 – Lack of monitoring of activities*

As demanded by the Convention and its operational guidelines monitoring of management activities is lacking in many Protected Areas. Most urgent problems are solvable if only mechanisms for regular and vigilant monitoring is put in place to enable management to detect potential problems and to promptly formulate action strategy before they blow out of proportion.

#### *3.1.1.5 – Research*

Research in natural protected areas is either fragmented or totally lacking. Limited scientific information upon which to base decision is a common constraint throughout the continent.

#### *3.1.1.6 – Communication*

Lack of Communication both within a country where the Protected Areas are remote from the Head Quarters, and with other states hinders

progress in sharing experiences among the protected area managers. We need to develop networking schemes and national, regional and international cooperation so as to break up the communication problem.

#### *3.1.1.7 – Political interference*

This is a wide spread factor that undermines management Authority and effectiveness. It renders conservation, policies and legislation null and void.

### **3.1.2 – THREATS**

#### *3.1.2.1 – Uncontrolled harvesting.*

Commercial poaching, illegal fishing, unsustainable collection of plant species with nutritional and medicinal values and domestic poaching as the main source of protein in areas of military conflict, etc., threaten the integrity of the natural WH sites. Example for uncontrolled harvestings are many, especially in those countries ravaged by armed conflict. The biodiversity in such regions is threatened by poaching for ivory, seriously decimating the animal populations. Despite mitigation by military counter attacks of the concerned governments, the menace still continues.

#### *3.1.2.2 – Armed civil and military conflicts*

Africa is plagued by armed struggles. Armed Civil and military conflicts attributed by government authorities (both Formal and rebel) to different groups have created, for example, in DRC total lack of communication and coordination between authorities responsible for ICCN in Kinshasha and those in the 5 WH Sites – Virunga National Park, Garamba National Park, Okaya Wildlife Reserve, Salonga National Park and Kahuzi Biega National Park. The management operations in the 5 sites fall under authorities of individuals with 3 different governance regimes: Salonga under the government of DRC, Garamba, Okapi and Northern Virunga under the rebel authorities based in Beni/ Bhura, while Southern Virunga and

Kahuzi Biega are under rebel groups based in Goma and Bukavu. There is therefore no communication between individuals of ICCN and the Government in Kinshasha in case of Virunga. In Kahuzi Biega only 5-10% of the 6000 km<sup>2</sup> National Park is accessed by ICCN. Elephants have been severely poached, and their reduction is bound to affect the mountain gorillas since elephants open up thick forests and create areas of secondary growth, preferred habitats for the gorillas.

WH Values of Simea National Park in Ethiopia have been severely eroded by wars. While in Rwensori Mountain National Park Uganda the conflict between the Allied Defence Forces (ADF) and the government Uganda Peoples Defence Forces (UPDF) has led to the closure of the Site. Again in Uganda, the brutal and senseless attack of tourists and Park staff by the Interehamure rebels on 1st March 1999 plunged Bwindi Impenetrable National Park into panic. This single incidence crippled tourism in Uganda. Efforts made by the government forces have restored peace and order in the Park since December 1999.

#### *3.1.2.3 – Inappropriate institutional framework*

The implementation of integrated management plan under the WH Convention makes it necessary to set up an appropriate management authority or agency, with the necessary powers of decision making. Where a WH Site is impacted by several competing interests (e.g. fishery, agriculture, dams constructions, water development, tourism, conservation, etc.) it may become necessary to create one autonomous management authority as proposed for the Okavango Delta WH Listing. In some countries management agencies with similar objectives are located in different ministries. This has often bred internal wrangles and direct conflict involving exchange of arms. Agencies for managing wildlife, forestry, fisheries, cultural sites and other lead Departments should be placed in one or same ministries or if possible merged.

#### 3.1.2.4 – *Encroachment*

Human settlement, deforestation, degradation of the biological diversity, agricultural and pastoral farming in the surrounding community of the WH Sites, compounded by increasing poaching and other illegal practices, lack of respect for the Heritage Site, and presence of potentially hostile subsistence farmers who live close to the boundaries of natural Heritage Sites pose serious problems to the future of such Protected Areas.

#### 3.1.2.5 – *Refugees*

Africa is plagued by refugee problems. Refugees resident in and around Mt Nimba Nature Reserve are seriously threatening the future of that WH Reserve. It has consequently been listed a Heritage in Danger. For its rescue, a Foundation for Mt Nimba has been suggested and the governments of Guinea and Cote d'Voire are preparing joint nomination for transboundary management.

#### 3.1.2.6 – *Mass tourism*

WH sites are source of tourism and recreation. The tourist activities include clustering to appreciate the scenic beauty, fauna and flora, recreational walking, camping, fishing, and hunting. Tourism activities in many of the natural WH Sites including the Mosi-Oa-Tunya/ Victoria Falls, Mana Pools and other national Parks with influx of 4x4 vehicles is alarming.

#### 3.1.2.6 – *Dams*

Construction of Dams for power generation disrupts the hydrological cycles and sedimentation patterns in the resulting lakes. Depths of lakes therefore decrease more rapidly which in turn provoke changes in water regime or flooding. The Ichkeul National Park WH Site in Tunisia has been severely threatened by the construction of a dam. The decrease in the numbers of water birds especially of wintering birds has been significant. The wintering ducks decreased from 200,000 to 50,000 individuals following floral degradation. Similarly the construc-

tion of downstream dams in Senegal had interfered with the water regime of Djondji National Bird Sanctuary (WH Site). This resulted in its inscription on the list of WH in Danger in 1984.

#### 3.1.2.8 – *Weak management*

Management involves day-to-day operations, management arrangements, resource management, responsiveness to concerns, etc. Management may be rated excellent, very good, good, satisfactory, poor, very poor, better, worse, similar, etc. Continuation of weak management in some of the WH Sites is threatening biodiversity in sub-Saharan Africa.

#### 3.1.2.9 – *Introduced animals*

Alien or introduced animals especially into vulnerable areas disturbed by grazing, clearings, or fire, worsen the level of integrity of the area. Introduced or feral animals such as dogs, cats, foxes, rabbits, mice, sheep, goats, and other species are destructive to the native/ local vegetation, and to the botanical and conservation values of the area.

#### 3.1.2.10 – *Mining*

Mining threatens or has the potential to threaten WH sites. A meeting is taking place tomorrow 21-22 September 2000 for conservationists and miners to produce general principles, explorations and extraction of minerals in natural WH Sites, their impact on WH Sites, contribution of mining companies to the objectives of the WH Convention and of biodiversity conservation. Fortunately there is already increasing collaboration between mining and conservation interests, which hopefully will lead to minimizing the impacts of mining on protected areas in the future.

#### 3.1.2.11 – *Penning of roads*

Dja Faunal Reserve in Cameroon is faced with illegal opening of roads for forestry activities, logging and poaching for meat. The road construction has created significant threat to the

Site. Providing alternative resource use options for the local communities and donor support for capacity building are desirable. In Tanzania construction of a proposed access road to Ngorongoro through the Ngorongoro WH Site is certain of threatening this Site. A feasibility study in progress will soon, guide decision on the construction. In Bwindi Impenetrable National Park, a proposed major road was strongly resisted in 1993. Thanks to a feasibility study report that forced the government in Uganda to cancel the proposal.

#### *3.1.2.12 – Invasion by alien/exotic species*

Invasion of Djoudji National Bird Sanctuary in Senegal, by water hyacinth led the Director of Senegalese National Parks on 25 April 2000 to request the WH Committee to be re-included in the list of WH Sites in Danger due to the imminent dangers of the invasion. Management of invasive species is desirable that should involve: prevention, eradication, control, legislative and regulatory principles, knowledge and awareness-raising requirements.

#### *3.1.2.13 – Water and solid wastes*

Several natural heritage sites with water bodies face threats of water pollution due to discharge of effluent and solid wastes.

#### *3.1.2.14 – Uncontrolled bush/veld fires*

#### *3.1.2.15 – Unexpected natural disasters*

Africa is prone to occurrences of drought, flooding, El Nino weather conditions, disease outbreaks, earthquakes etc., which have caused destruction of resources in the WH Sites.

#### *3.1.2.16 – Policy and legislation*

Until recently the policies and legislation practices across Africa were out of date, unimplementable and colonial. They made management difficult to the disadvantage of the biodiversity. Most countries have gone through policy and legislation

reform over the past 5-10 years. Some countries are already reviewing their policy and legislation that had outlived their life span or found to be impracticable.

#### *3.1.2.17 – Pollution*

### *3.1.3 – DISCUSSION*

Professor Eric L. Edroma was commended for the paper. The following issues emerged from Questions and Remarks:

- That some States like U.S.A. feel that by ratifying and listing their sites under the WH Convention, they are losing their states sovereignty to the United Nations and UNESCO.
- Concern that protected areas are not managed according to what management plans states but rather according to what influential politicians say.
- Where political interference is too much, ratifying the Conventions could help as the international community and provisions of the convention could stop some development envisaged for protected areas of management.
- There is resistance to sending/submitting sites for inscription because of fear of losing existing benefits, especially by those already benefiting from that area. The effects of uncontrolled environmental unfriendly substances such as DDT should be viewed as threats. Africa is being used as dumping site for DDT. Uncontrolled growth of numbers of animals in protected areas can also be a threat. Too many animals can destroy a site.

Professor Eric Edroma's key note paper on Constraints and threats for protected areas was amplified by Dr. Wangari's illustrations of indicators of site deterioration. The factors accelerating deterioration were grouped in categories of:

- Development pressure;
- Environmental pressure;

- Natural threats and catastrophes;
- Tourism consequences;
- Relationship with neighbouring residents to the site;
- Socio-economic considerations;
- Specific problems of refugees;
- Other factors such as vandalism, looting, etc.

### 3.2 – GENERAL TALKING POINTS: WORLD HERITAGE PROJECT .....

*By Mike Finley, Yellowstone national Park, USA*

#### 3.2.1 – PROJECT PARTNERS

- World Conservation Union (IUCN);
- UNESCO Regional Office in Jakarta;
- National Oceanographic Aeronautical Association (NOAA) as sister to NASA;
- UNESCO World Heritage Center;
- Others (TBD).

#### 3.2.2 – PROJECT PURPOSE

- To analyze potential constraints for expanding World Heritage listing to include tropical coastal, marine protected areas and small islands.
- To develop and promote a multi-site (cluster and trans-border) approach for nominating tropical, coastal, marine and small island ecosystems.
- To assist UNESCO in identifying priority sites for consideration and to encourage their nomination through pilot project development.

#### 3.2.3 – PROJECT OBJECTIVES

- Develop expert consensus on potential areas for nomination as World Heritage Sites;
- Development of an innovative approach for applying a multi-site approach (clusters and trans-border sites).

#### 3.2.4 – PROJECT ACTIVITIES

- An assessment of existing constraints to expand World heritage listing to include tropical coastal, marine protected areas and small island ecosystems.
- A compilation of tropical coastal, marine protected areas and small island ecosystems for consideration as potential World Heritage Sites.
- An expert workshop to develop a consensus report on potential sites for nomination.
- An expert consensus workshop report for dissemination to World heritage Committee and States Parties.
- A pilot project strategy (including agreements by States parties and donors) to pursue multi-site nominations.

#### 3.2.5 – PROJECT SCHEDULE: JULY 2000 – JUNE 2002

##### Year One

- Prepare for workshop (July 2000-January 2001);
- Conduct the Assessment (July 2000-January 2001);
- Conduct Workshop (Winter 2001);

##### Year Two

- Produce and disseminate workshop report (Spring 2001);
- Consultation for financing and conducting pilot (Fall 2001).



*National legal an policy framework*

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**FOR IMPLEMENTING THE WORLD  
HERITAGE CONVENTION**



## Case studies

### 4.1 – CASE STUDY 1: SOUTH AFRICA

*By Mr Makgolo Makgolo, Deputy Director General Department of Environmental Affairs and Tourism*

#### 4.1.1 – INTRODUCTION

South Africa ratified the World Heritage Convention in May 1997. The Department of Environmental Affairs and Tourism, which is the line function department responsible for the implementation of the Convention, immediately established an intergovernmental advisory Committee, as a conflict management tool, to ensure a consultative process in implementing the Convention. This Committee is called the South African World Heritage Convention Committee. The South African Government has also developed legislation to provide for incorporation of the World Heritage Convention into the South African law; the enforcement and implementation of the World Heritage Convention; the establishment of Authorities and the granting of additional powers to existing organs of state. The World Heritage Act is the focal point of this paper.

#### 4.1.2 – THE WORLD HERITAGE ACT

##### **South African World Heritage Convention Committee**

The Committee is made up of senior officials from the provincial departments of Environment and Arts & Culture, the national Departments of Environmental Affairs and Tourism, Arts, Culture Science and Technology and Foreign Affairs, the related statutory bodies – National Botanical Institute, the South African National Parks and the National Heritage Resources Agency, as well as the South African National Commission for UNESCO (ex-officio). The Committee is chaired by the Deputy Director General in the Department of Environmental Affairs and Tourism, its secretariat is also located in this Department.

The Role of the Committee is to advise the Minister and the Department in the implementation of the Convention. It assists in identifying sites and preparing the tentative list of potential South African World Heritage Sites, and makes recommendations on nomination of sites for submission to the World Heritage Centre. This Committee meets twice a year, in April and September. The tentative list and the nominated sites which were submitted to the World Heritage Committee in 1998 were prepared by this Committee. The establishment of this structure has to a large extent prevented regional conflict on location of World Heritage

Sites. Establishment of such structures is important in non-unitary states in order to enhance co-operate governance and nation building.

#### 4.1.3 – EXISTING LEGISLATION

There are various pieces of legislation governing the protection and management of both cultural and natural sites in South Africa. The key ones are the National Environmental Management Act of 1998 and the National Heritage Resources Act of 1999. The National Heritage Resources Agency is responsible for the implementation of the latter while the Department of Environmental Affairs & Tourism is responsible for the former

##### 4.1.3.1 – National Environmental Management Act

The National Environmental Management Act provides for co-operation in environmental governance by establishing principles for decision making on matters affecting the environmental governance “by establishing principles for decision making on matters affecting the environment, institutions that will promote co-operative governance and procedures for co-ordinating environmental functions exercised by organs of the state; and provide for matters connected therewith.”

##### 4.1.3.2 – National Heritage Resources Act (1999)

On the other hand, the National Heritage Resources Act is intended to “introduce an integrated and interactive system for the management of the National Heritage Resources; to introduce an integrated system for the identification, assessment and management of the Heritage Resources of South Africa”. The management of this legislation is co-ordinated by the National Heritage Resources Council, established under the National Heritage Council Act of 1999. The National Heritage Resources Agency is responsible for the implementation of

the legislation and it reports to the aforementioned Council.

##### 4.1.3.3 – The World Heritage Act (1999)

The South African government, through the National Department of Environmental Affairs and Tourism, developed a piece of a legislation – the World Heritage Convention Act of 1999 – designed to create a legal and administrative framework to effectively manage the South African World Heritage Sites. The Act was created to incorporate the World Heritage Convention into the South African Law. There are only two States Parties to the Convention, Australia and South Africa, with such legislation. This clearly demonstrates the government’s commitment to the objectives of the Convention, in particular section II of the Convention, which deals with “National Protection and International Protection of the Cultural and Natural Heritage.”

##### 4.1.3.4 – Objective of the World Heritage Act (1999)

The Act seeks to create a legal and administrative policy framework for the implementation of the Convention in South Africa. It seeks to create a mechanism that allows the government to:

- Strengthen the powers of bodies managing World Heritage Sites where such powers do not exist or are not strong and appropriate;
- Establish new management authorities where such authorities do not exist, to provide for management and sustainable development of World Heritage Sites;
- Create, where necessary, advisory boards to oversee the authority and its staff component responsible for the day-to day management of the Sites;
- Provide for the preparation of integrated management plans and the state of conservation reports as required by the Convention;

- Provide for proper auditing and financial control, as well as the preparation of annual reports outlining the activities of each authority; and
- Ensure that it gives “the cultural and natural heritage a function in the life of the community” (Article 5(a) of the Convention) to enhance the well-being of such a community which resides within the vicinity of the World Heritage Site.

#### 4.1.3.5 – Main features of the act

The Act therefore ensures that the principles and values of the Convention are given proper application over South Africa’s tentative and inscribed Sites.

This entails taking effective and active measures for the protection, conservation and presentation of world cultural and national sites situated in South Africa.

The main features of the Act are as follows:

- Definitions, objectives, principles and implementation
- Authorities
- Board and Executive Staff Component
- Integrated Management Plans
- Land
- Finances and Reports
- General

#### 4.1.3.6 – Regulations

The Department, in consultation with the site managers, is presently in the process of drafting site specific regulation for management of the new World Heritage Sites as required by the Act. The first regulations to be drafted are for the Greater St Lucia Wetland Park. These regulations are intended to create mechanisms for establishment of an authority to manage the Sites. They are also intended to establish administration framework for the Site. The Greater St Lucia Wetland Park regulations will be ready by the end of October 2000.

Drafting of regulations for Robben Island and the Cradle of Humankind will commence after

authorities responsible for management of these Sites have been consulted.

#### 4.1.3.7 – Guidelines for implementation of the Convention in South Africa

In recognition of lack of post-inscription guidelines for the management of the new World Heritage Sites, and the implementation of the Convention in general, the Department opted for development of alternative guidelines applicable to the South African situation. The key sections of these guidelines are:

- Introduction to the World Heritage Convention
- Having a site inscribed
- Management of World Heritage Sites
- Contact Details

The drafting of these guidelines is in progress and it is hoped that they will be completed by November 2000

#### 4.1.4 – CONCLUSION

The World Heritage Convention Act is seen as a seminal example of how development, growth and job creation, can be combined with the preservation of cultural heritage and the conservation of biodiversity. The various regulations and institutions allowed for in the act are explicitly designed to emphasise sustainable development over constraining forms of protectionism that have sometimes been associated with the Convention. This balance between conservation and development is particularly important in developing countries such as South Africa, where we cannot afford the under-development of important national assets, such as our World Heritage Sites at the expense of the socio-economic needs of our impoverished communities living within or in the boundaries of these Sites. In this sense, it could be argued that the Act is of value to all developing countries seeking to use the Convention as a means to protect their heritage while at the same time utilising it for jobs and entrepreneurial creation.

The Act encourages strict management controls and devotes national and international support to these activities while at the same time encouraging sustainable development and growth, through controlled tourism and utilization of these resources.

#### 4.1.5 – DISCUSSION

##### Question:

- If a WH Site was inscribed where it had been a protected areas, does that mean that the regulations that had been existing for that national park will be changed?

##### Answer:

- New regulations are not supposed to conflict with existing regulations. If the existing regulations are found wanting, then additions can be made by enacting new legislation.

#### 4.2 – CASE STUDY II: THE NIGERIAN SITUATION

*By Dr O.J. Eboime, National Coordinator, UNESCO, World Heritage Programme for Nigeria*

##### 4.2.1 – INTRODUCTION

Nigeria occupies a landmass of 923,765 square kilometers with a population of over 100 million and some 350 ethno-linguistic groupings distributed into 36 territo-administrative states, which lie within six geo-political zones; south-west, south-east, north-central, north-east and north-west. The national capital is the Federal Capital territory of Abuja carved out of the north-central zone in the middle of the country.

Nigeria is a landmass of vast and variegated bio-cultural diversity; some of which are of outstanding value from the point of view of scientific values, aesthetic ambience and integrity as well as from the point of view of human creative genius and authenticity.

While much of the natural and cultural heritage of Nigeria is yet to be comprehensively surveyed and documented, it is established that the landscape is characterized by some of the following features and outstanding heritage values which include:

- Some of the World's oldest and most diverse rain forest ecosystems, Gashaka Gumti in the Afro-tropical zone of the north-eastern highlands of Nigeria, with a total area of 6,402 square kilometers, it has several ecological zones protecting a complex variety of flora and fauna. It is the most diverse conservation area in Nigeria, while Yankari National Park in the north-central zone, is one of the most important conservation areas in West Africa.
- Black Africa's largest 18th century city and some of her most extensive ruins: Old-Oyo (Oyo-Ile) – Katunga lying within the vicinity of the Oyo-Ile National Park. Oyo-Ile ruins represents remnants of the ancient political capital of the Yoruba.
- The most extensive block of threatened mangrove ecosystems on earth; the Niger Delta wetlands and marine ecosystems/coastlands.
- The world's longest and most extensive ancient earthworks (Benin – Ijebu) which provide some of the earliest topographic evidence of urbanization processes as well as the engineering feat involved in their construction and execution. They are said to be more extensive than the famous China walls.
- Africa's first cultural landscape to be enlisted into the UNESCO's World Heritage List, Sukur in the north-eastern borderlands with the Cameroon, described as an eloquent testimony to a strong and continuing spiritualism and cultural tradition that has endured for centuries, protected down the ages through customary law.

#### 4.2.2 – LEGAL AND POLICY FRAMEWORK FOR HERITAGE CONSERVATION

Today the Nigerian cultural heritage consisting of monuments, sites, and buildings are protected under Decree 77 of 1979, which set up the National Commission for Museums and Monuments, a Federal Government Parastatal with a Director General and a Board of Management under the Ministry of Culture and Tourism. The Decree was a modification of the Antiquities Ordinance of 1953.

There are sixty-six listed monuments under gazette, most of which were scheduled when the concept of World Heritage Listing had not fully developed.

The Natural Heritage in the form of National Parks are protected under a Federal Decree promulgated in 1991. Kanji National Park in the north-central part of the country (5,380 square kilometres) was however the first to be designated a Federal National Park in 1979; the same year as the Decree establishing the National Commission for Museums and Monuments was promulgated.

The National Policies on Environment and Culture came into being in 1979 and 1988 respectively. These policies were intended to set the pace for the implementation of the various international conventions, which Nigeria had signed to conserve her natural and cultural heritage. It is noteworthy that Nigeria signed the 1972 UNESCO Convention concerning the Protection of the Natural and Cultural Heritage in 1974, two years after its adoption by the General Assembly of UNESCO. She has also been very active in the Man and Biosphere Programme of UNESCO which has yielded fruits in the declaration of the Omo Forest Reserve in Ogun State (south-western Nigeria) as a UNESCO Biosphere Reserve. Similar reserves are underway in the other vegetation zones (savannah, sand, etc) of the country.

#### 4.2.3 – THE UNESCO WORLD HERITAGE PROGRAMME

The implementation of the UNESCO Convention did not proceed as expected in Nigeria for several reasons including:

- Lack of awareness of the Convention and the guidelines for its implementation.
- The concept of monumentality and ecclesiastical architectural forms were in favour of western cultural heritage and Christianity; and excluded sub-Saharan African Civilizations. The notions of spirituality and the intangible heritage embedded in our oral traditions and the other forms of cultural representation were excluded. This made it impossible for any of Nigeria's listed monuments to qualify for World Heritage Listing.
- The civil war and the subsequent political instability in Nigeria did not favour sustained conservation efforts. They make it impossible to match action with policies on environment and conservation.

The strengthening of cultural solidarity systems as survival mechanisms at the grass roots was the result of the near collapse of the national project before the democratic dispensation of President Olusegun Obasanjo came to the timely rescue last year (1999). Thus totemic beliefs and agelong taboos protected sacred forests, groves, shrines and monuments from being vandalized and some animals and bird species from being exterminated. At the same time however the rapid growth of Christian and Islamic fundamentalism has threatened culture and biodiversity conservation.

The situation calls for an aggressive awareness campaign at all levels to protect what is left of the heritage of Africa's most populous country. This is being pursued within the limitations of the Nigerian World Heritage Committee.

#### **4.2.4 – THE INAUGURATION OF THE NIGERIAN UNESCO WORLD HERITAGE PROGRAMME AND THE BIRTH OF A NATIONAL COMMITTEE**

The inauguration of the UNESCO World Heritage Programme emerged in 1994 from the initiative of a non-governmental organization the Leventis Foundation, in collaboration with the British Council, United States Information Agency and the Nigerian National Commission for UNESCO.

The Leventis Foundation sponsored a countrywide identification project in 1994, which produced Nigeria's first tentative list that was forwarded by the National Commission for UNESCO through Nigeria's permanent delegate in Paris to the World Heritage Centre. The same year the British Council supported the training of Dr. Joseph O. Eborime on Heritage Management at the Southampton University in the United Kingdom. This course emphasised the details and strategies for the implementation of the World Heritage Convention as well as the broader areas of heritage planning, education and conservation management. The United States Information Agency reinforced this by designing a visitor training programme to five States in America, visiting parks, heritage places, museums and monuments as well as exchanges with funding bodies and institutions.

The result of these exposures were fed back to the Management of the National Commission for Museums and Monuments who in consultation with the National Commission for UNESCO inaugurated a National Heritage Committee on the approval of the Minister to coordinate the implementation of the UNESCO Convention in Nigeria in 1995. The Nigerian model has since been adopted by Ghana after Dr. Eborime was sent on a UNESCO mission to that country in 1999.

#### **4.2.5 – THE SUKUR CULTURAL LANDSCAPE: THE FIRST FRUIT OF THE CONVENTION**

Out of the 18 properties submitted to UNESCO, seven were selected for further systematic research, survey and dossier compilation by the World Heritage Center (4 were cultural and three natural properties).

Guided by the recommendations of two UNESCO / ICOMOS evaluation missions the Nigerian Committee proceeded with Sukur, Benin and Osun (Osogbo) cultural landscapes.

Sukur's nomination was processed rapidly due to a combination of the following factors:

- The enthusiasm and zeal of the local communities whose customary laws and protective mechanisms are still very much in place to the advantage of conservation.
- The relative isolation and remoteness of the landscape have ensured Sukur's integrity and authenticity; two crucial conditions required by UNESCO's Bureau and the WH Committee.
- The cooperation of the State Governor and Government facilitated the promulgation of protective laws within weeks.
- The commitment of the members of the Committee facilitated by the donation of a computer to the programme by the Horniman Museum in London as well as the support of the museum and monuments management.
- The Global strategy team at the World Heritage Centre in Paris led by Galia Sauoma-Forero and Mechtild Rössler facilitated Nigeria's chances through trainings and exposures at Porto Movo, Tiwi (Kenya, Mombassa) and Paris where the new concepts of cultural landscape and cultural itineraries were increasingly elucidated through interactional workshops and field visits.

#### 4.2.6 – THE WAY FORWARD

Sukur now forms a model that will build the capacity in people, materials and networks at regional, national and local levels for other properties to be rapidly inscribed into the World Heritage List.

The Nigerian Government is conscious of the dynamic relationship between World Heritage Sites, the National Parks and eco-tourism development in Nigeria. Hence the inclusion of the National Parks in the tentative list.

Nigeria is also conscious of the relationship between biodiversity conservation and the ethno-solidarity systems that will sustain community identification with the World Heritage Convention. This is the basis of the inclusion of the Niger-Delta Mangrove and Wetland ecosystems as well as its threatened monuments and sites in the revised tentative list to UNESCO. Each geographical zone is now represented on the tentative list which is subject to revision in the light of more surveys, and documentation in consultation with local communities.

The Government has inaugurated a Countrywide Master Plan upon which site specific plans will be formulated and implemented by the respective conservation Agencies; (i.e. National Museums and National Parks).

With the creation of a new Ministry of Culture and Tourism, and the prospect of a new Department of Museums and Monuments within the National Commission for Museums and Monuments, the framework for collaboration and partnership with all the stakeholders in the challenges of heritage conservation has been firmly established.

The Nigerian UNESCO World Heritage Committee will continue to promote awareness of the Convention with the support of the National Commission for Museums and Monuments, the National Parks, State and Local Governments.

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*Analyses of frameworks*

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**AVAILABLE FOR IMPLEMENTING  
THE WORLD HERITAGE CONVENTION**



## ANALYSES OF FRAMEWORKS

The following conclusions were reported from the three sub-regional working Groups.

### 5.1 – EASTERN AFRICA

#### 5.1.1 – TANZANIA

##### 5.1.1.1 – Institutional framework

The Ministry of Natural resources and Tourism through the :

- Tanzanian National Park (TANAPA)
- Wildlife division
- Ngorongoro Conservation Area

The Ministry is the lead Ministry under which the management of the World Heritage Sites fall. The management activities are coordinated by the UNESCO/MAB Committee.

##### 5.1.1.2 – Legislative framework

- The Wildlife Conservation Act (1974)
- The Wildlife sector policy (1998) currently under review

##### 5.1.1.3 – Administrative framework

Sites are integrated into local, Regional/district and National development plan.

##### 5.1.1.4 – Implementation

- (a) Community Conservation Services– Extension work.

- (b) Law Enforcement – patrols and surveillance
- (c) Ecological monitoring coordinated by Frankfurt Zoological Society and Tanzania Wildlife Research Institute and others.

##### (d) Funding Mechanisms:

- TANAPA and Ngorongoro Conservation Areas – are autonomous parastatal bodies (self accounting), which pay corporation tax to government.
- Wildlife division and Selous World Heritage Site receive subvention from government.
- Management plans are in revision/preparation.
- The Tanzania Tourism Board is responsible for adverting, marketing and promotion of the World Heritage Sites.

#### 5.1.2 – UGANDA

##### 5.1.2.1 – Institutional framework

The Ministry of Tourism, Trade and Industry (MTTI) through :

- Uganda Wildlife Authority (parastatal) (UWA)
- National Committee for UNESCO/ MAB

##### 5.1.2.2 – Legal framework

- The Uganda Wildlife statute No.1 of 1996
- The Wildlife Policy (1996)

### 5.1.2.3 – Administrative framework

Management of the World Heritage Sites is integrated into local, District and National development plans of the Government.

### 5.1.2.4 – Implementation

- (a) Cooperation with the World Bank, Global Environment Facility, World Wide Fund for Nature (WWF), Carry American Relief Everywhere (CARE) project called Development Through Conservation.
- (b) Awareness/Education–Community Conservation Department in the UWA Headquarters is represented on the ground by the Community Conservation Wardens and Rangers.
- (c) Research coordinated by the Institute of Tropical Forest Conservation (ITFC) at Ruija in Bwindi Impenetrable National Park and by the Makerere University Biological Field Station based in Kibale National Park.
- (d) Advertising/Marketing and publicity by the Uganda Tourism Board (UTB)
- (e) Funding Mechanisms:
  - Donor Funding mainly by World Bank.
  - Government subvention.
  - The Bwindi Impenetrable Forest and Mgahinga Gorilla Conservation Trust Fund.
  - Revenue Generated (Inadequate) by the World Heritage Sites as tourism attractions.
- (f) Law Enforcement – patrols by the Ranger force of UWA.
- (g) Ecological monitoring of changes in key species, habitats, diseases, etc.
- (h) Brochure production by UWA and UTB.

## 5.1.3 – KENYA

### 5.1.3.1– Institutional framework

There are two sets of institutional arrangement for managing the World Heritage Sites in Kenya.

- (a) Firstly, the Office of President through the Kenya Wildlife Service is responsible for the natural sites within the wildlife (National Parks) protected areas.
- (b) Secondly, the Ministry of Home Affairs through the Department of Museums and Antiquities is charged with cultural sites.

### 5.1.3.2 – Legal framework

- The Wildlife Act (1976)
- The Kenya Wildlife Service Act 1990
- The Monuments Act (1990)

### 5.1.3.3 – Implementation

- Through the Education Department
- Community Conservation Department
- Scientific Department
- Tourism Department

N.B.: *The Management Plan for Mt. Kenya World Heritage Site expired. It is currently under review with UNESCO funding.*

## 5.1.4 – AMENDMENTS (GENERAL) FOR KENYA, TANZANIA AND UGANDA

- Review of Institutional Framework underway – Reform and Restructuring.
- Review of management Plans, boundaries, etc, is required.
- Greater cooperation with East African Cooperation Agreement is desirable.

## 5.1.5 – RECOMMENDATIONS

The World Heritage Committee should do the following:

- (a) Facilitate preparation of simple, integrated and achievable management plans for all sites.
- (b) Standardise signage/plaques for site identity.
- (c) Streamline Communication through:
  - Copying to site managers
  - Use of internet
- (d) Encourage Networking – facilitation of International Rangers/Wardens Association.

- (e) Introduce Regional training for site staff
- (f) Address site Managers by official titles e.g. Senior Warden-in-Charge.
- (g) Streamline reporting system through:
  - simple format for use by site Managers
  - annual reports for site managers
  - staff placements/handovers
  - incidental reports by site managers
- (h) Hold regular regional meetings for site managers at rotating sites.
- (i) Consult with appropriate stakeholders and competent authorities for the nomination and listing of newly proposed Trans-frontier sites with potential under the Convention.
- (j) Review site boundaries as appropriate.
- (k) Establish databases at sites, National and Regional headquarters.
- (l) Establish mechanisms for contingency plans.
- (m) Urgently respond to the inscription of the following Tran frontier sites:
  - Serengeti - Masai Mara
  - Kilimanjaro - Amboseli
  - Mt. Elgon - Kenya/Uganda
  - Mgahinga-Queen Elizabeth (Uganda), Bufumbira Volcanoes (Rwanda) and Virunga (DRC).
- (n) Provide support/fundraising for:
  - The formation of World Heritage Site Trust Funds for formulation and production of operational guidelines for site managers.

5.2 – WESTERN AFRICA .....

The working group for Western Africa comprised of members from Nigeria, Ghana, Gambia, and three delegates representing International organizations made the following four recommendations.

5.2.1 – The group recognized the importance of National Committees in the implementation of the World Heritage Convention and therefore

urges the World Heritage Centre to facilitate the formation of National Committees within the sub region in areas where they do not exist (Gambia, Sierra Leone, Liberia, etc.).

5.2.2 – The National Committees should be empowered to prepare tentative lists and expand existing ones to accommodate the efforts of IUCN, the Man and Biosphere programme, RAMSAR and Bonn Conventions among others.

5.2.3 – It is also strongly recommended, as a matter of deliberate policy, that UNESCO encourages Regional meetings within the World African sub-Region for the attainment of the Global Strategy, as well as the harmonization of the Tentative lists and listed sites.

5.2.4 – The working group further recommended that the World Heritage Centre facilitates the involvement of IUCN and the World Commission for Protected Areas in the effective management and capacity building of protected prospective areas and listed sites.

5.3 – SOUTHERN AFRICA .....

The Working group from Southern Africa discussed the framework for implementing

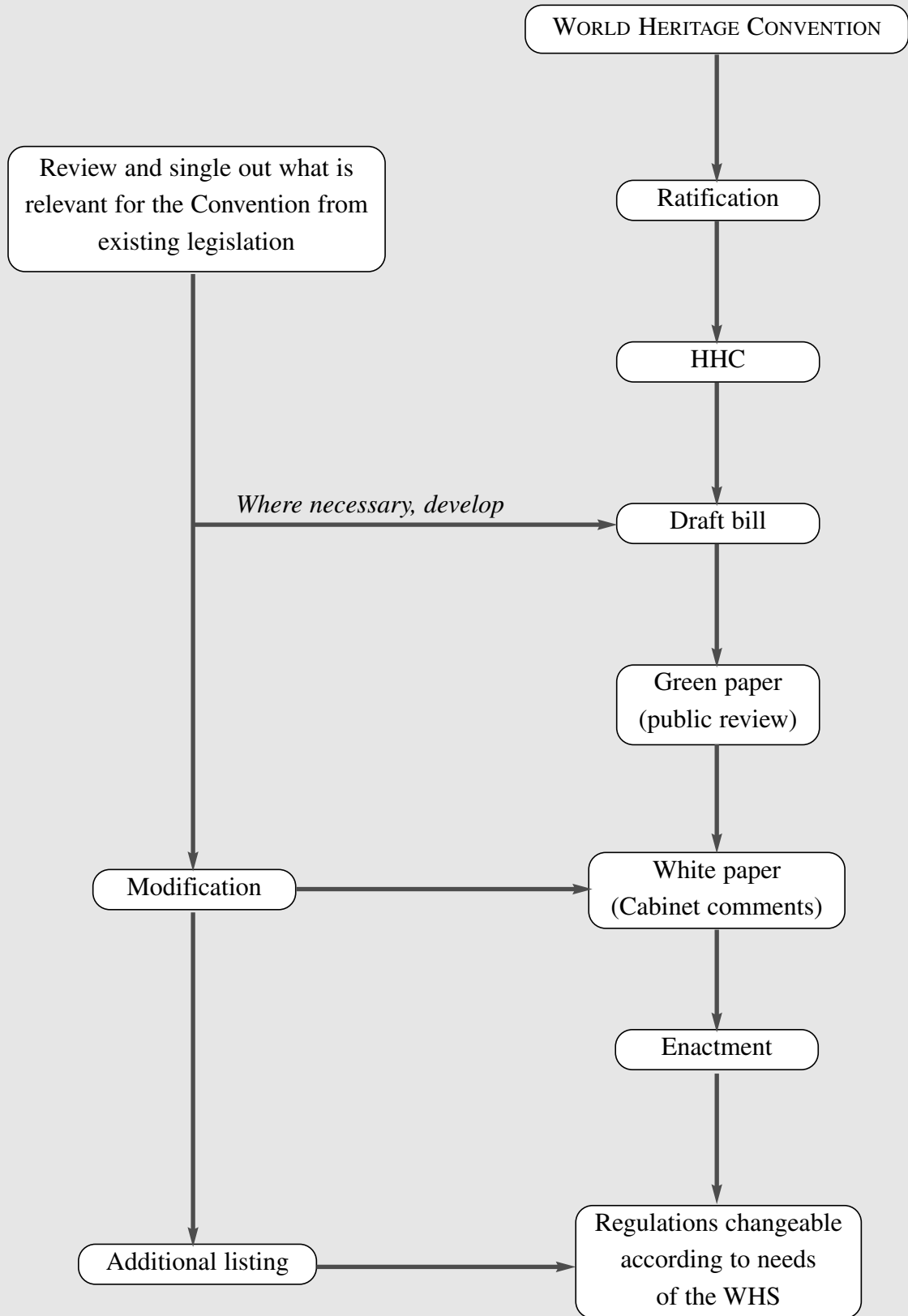
The World Heritage Convention under three sections by examining the processes for listing sites under the Convention, ratifying the Convention, formulation of regulations, and by proposing recommendations.

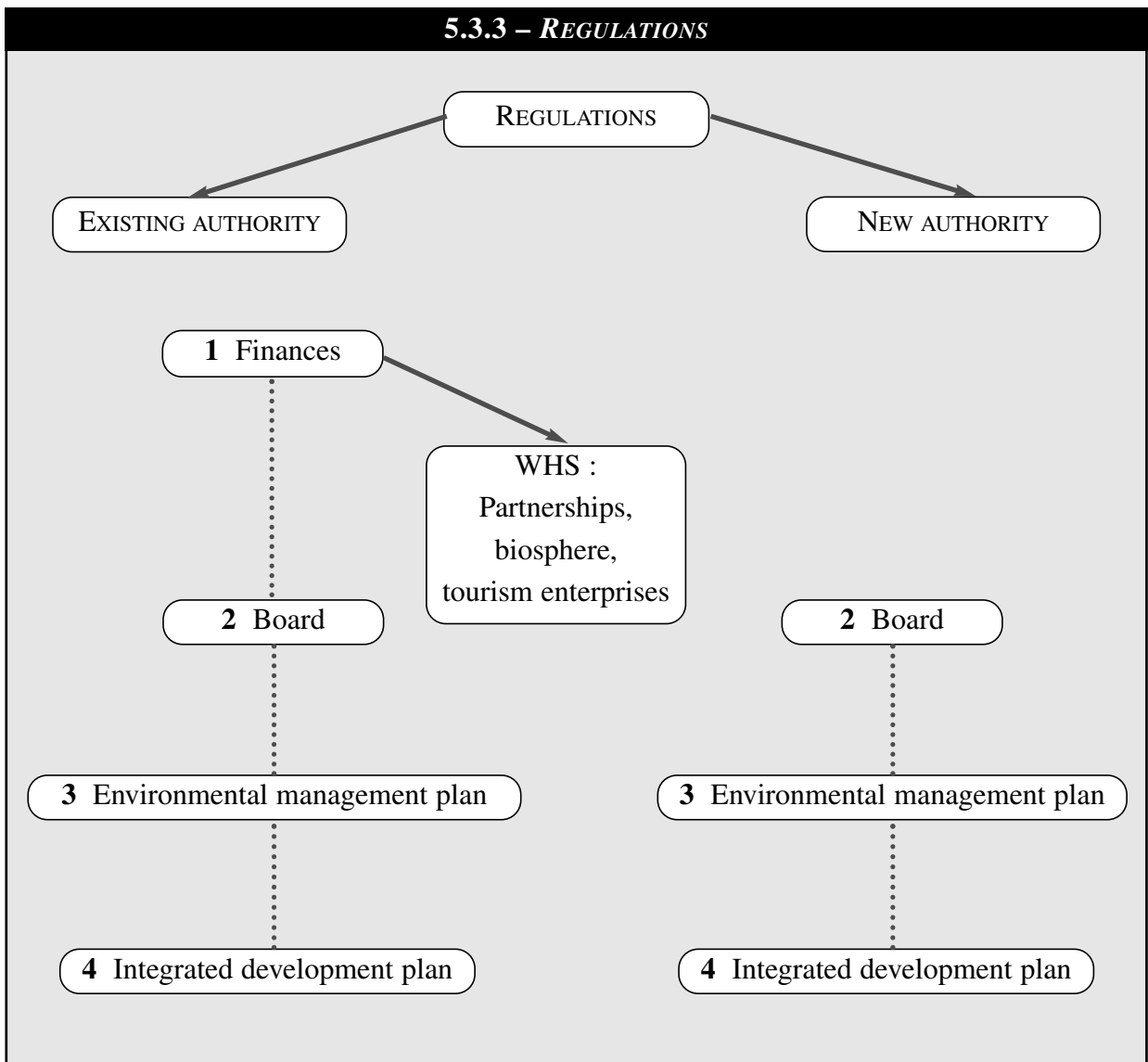
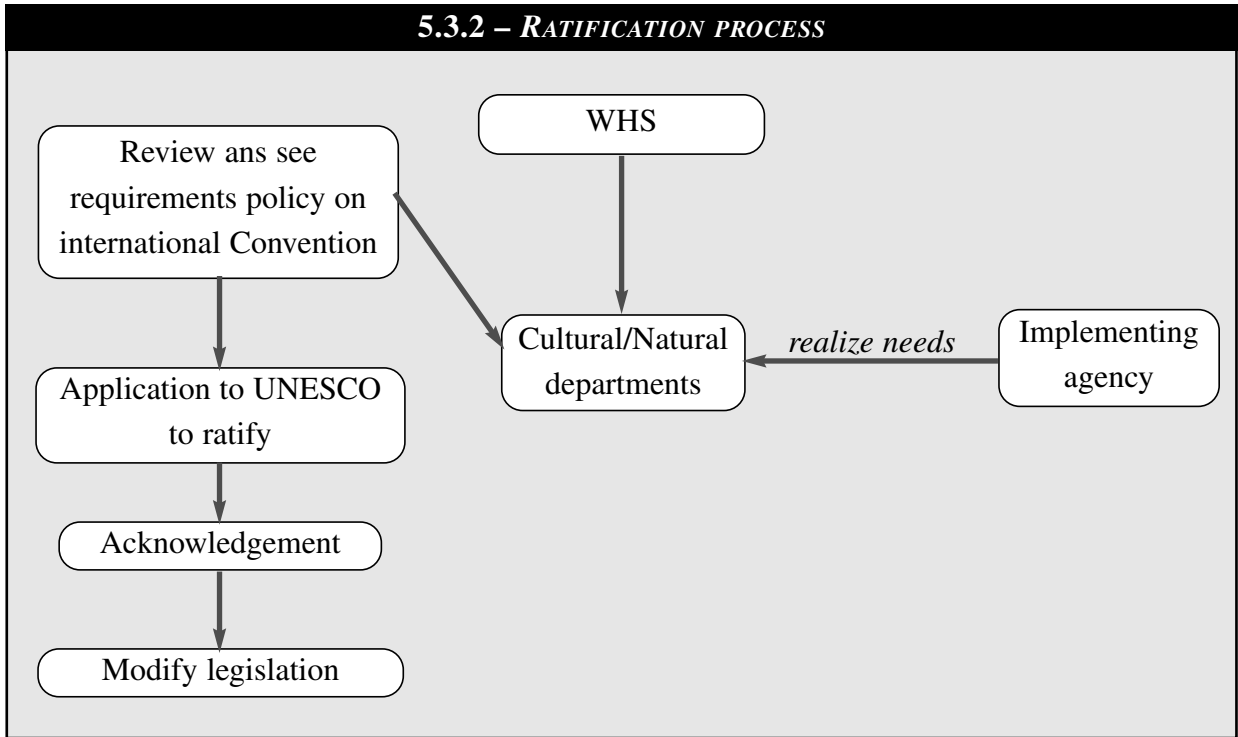
5.3.4 – RECOMMENDATIONS

The working group recommended that:

- (a) Applicant country should have followed regulations and have basic infrastructure and documentation in place.
- (b) Applicant country should develop networking and support systems.
- (c) Rigorous sensitization and lobbying by the implementing agent at local and national level are essential.

**5.3.1 – PROVISIONAL LIST**





*Preparation of nomination files*

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**OF PROPERTIES**



## NOMINATION FILES OF PROPERTY

### 6.1 CONCLUSIONS AND RECOMENDATIONS OF WORKING GROUPS ON NOMINATIONS OF KRUGER NATIONAL PARK .....

#### 6.1.1 – IDENTIFICATION OF PROPOSED PROPERTY

The Working Group recommended the following identification for proposing Kruger National Park for listing as World Heritage Site.

1. Country: South Africa;
2. Location: Mumalanga and Northern Provinces;
3. Kruger National Park;
4. Management Institution: South African National Park;
5. Park Headquarters: Skukuza;
6. Area: Nearly 2 million hectares.

Area: Nearly 4 million hectares, the area is transboundary, shared by South Africa, Mozambique and Zimbabwe. The Buffer Zone for Kruger National Park alone is not known

#### 6.1.2 – FORMAT AND CONTENT OF NOMINATIONS

##### 6.1.2.1 – Description

Description of the property involves the geographical description of the site / property and the

physical description in terms of its cultural and natural significance. While the history and development of the area relates to the significance of the site in relation to its current status whether cultural or natural or both. The historical significance of the place and how the communities are linked to it should also be described. Note should be taken of upgrading the site for utilization in line with the planned programmes.

Form and date of most recent records of the site that explain the latest archaeological findings, research, documentation, etc., about the site and it's linkage with past and present generations should be reflected.

Under the present status of conservation indicate the category of protection accorded. Does the protection of the site fall under any of the following:

- Protected Area;
- Cultural Site;
- Sacred Groove;
- National Monument; or
- Any other category.

##### 6.1.2.2 – Policy and legislation

The policy for the site must be in line with the Guidelines for the World Heritage Convention. It should be under governmental control, cultural control or any form of control with a management plan with specific management objectives.



### 6.1.3 – NOMINATION OF KRUGER NATIONAL PARK AS WORLD HERITAGE SITE

The group of 3 participants having considered the salient features noted adequate justification for nominating Kruger National Park as a World Heritage Site.

#### 6.1.3.1 – Description

Kruger National Park is one of the oldest protected areas in Africa. It was proclaimed in 1920. The Park is the most extensive in terms of acreage and age. It contains one of the earliest evidence of prehistoric stone and iron age developments in Southern Africa that include: iron ores, pottery, tuyeres, iron furnaces, slugs, among many others.

The area covers a wide area of 4 million hectares, making the largest transfrontier ecosystem in Africa. Nearly half of this extensive area is taken by the Kruger National Park.

#### 6.1.3.2 – Justification for inscription

- (a) Kruger National Park contains a unique constellation of protected and natural resource areas found nowhere else in the world.
- (b) What is more outstanding is its delicate combination of three biomes (Savanna Woodland, Afro-montane and grasslands mosaic) giving it an ambience of scenic beauty and safe habitat for biodiversity interplay.
- (c) It thus provides an environmental landscape of heterogeneous zoological fauna and flora species thriving within this exceptional biospherical ecosystem.

#### 6.1.3.3 – Recommendation

When all the threats (fire, refugees, mining, etc.) have been addressed Kruger National Park should be nominated under criteria IV of the operational guidelines as it evidently harbours some of the most important and signifi-

cant natural habitats for in situ conservation of biological conservation it also has outstanding prehistoric evidence of the earth's history qualifying it for inscription under criteria 1(a).

### 6.1.4 – FACTORS AFFECTING THE SITE

The Working group of 4 participants examined all parameters, situations and structures in Kruger National Park and made the following observations:

#### 6.1.4.1 – Sizes Vs pressures

The Park has a very large area of 2 million ha. That there is a lot of pressure from Tourists. But the size of the park is large enough to absolve this pressure.

#### 6.1.4.2 – Development pressures

At the buffer zones, firewood collection, mining and agricultural practices occur. Poaching takes place in the Park. The need for effective enforcement of the by-laws and promoting awareness programmes were stressed.

#### 6.1.4.3 – Environmental natural disasters/ pressures

Rock fall is evident in the buffer zone and probably in the park as well. There was also evidence of floods and heavy situation seen in the Olifant river. Fire was very extensive at the time and ought to be controlled. Research unit should assist in controlling burning. Drought appeared to be intense, and effect of pollution from the neighbouring mining sites need not be underestimated.

Rock paintings were being washed off through seepage.

#### 6.1.4.4 – Visitor/tourism pressures

Traffic congestion was noticeable and feared to exert stress on the animals. The problem of litter were evident.

#### 6.1.4.5 – *People within the site/buffer*

The Park is a passage for immigrants or refugees from Mozambique.

- Park was used for drug and weapon trafficking.
- Population of workers and tourists need to be checked and properly planned.
- Population pressure for land in the buffer or land around the park's periphery should be controlled.
- Pressure for energy is depleting the fuel wood resources.

#### 6.1.4.6 – *Other factors*

The impact of Wildlife (especially elephants) on the ecology of the Park needs regular monitoring. Aircraft should be used in monitoring surveillance of fires, poaching, encroachment and other illicit activities in order to achieve effective management of the vast Kruger National Park.

### 6.1.5 – *JUSTIFICATION FOR INSCRIPTION AS WORLD HERITAGE SITE*

#### 6.1.5.1 – *Justification for inscribing African Sites under the World Heritage Convention*

It includes:

- Last remaining sub-tropical area containing its original components.
- Exceptional terrestrial, wetland, and marine ecosystems.
- High density of endemic and internationally threatened and migratory species.
- Outstanding geomorphological processes.

It was noted that such wide range of systems, processes, wetlands, species of special importance, etc., have not been documented for the African Coast under the World Heritage Convention.

The working Group considered the following criteria for justifying inscription of sites under the World Heritage Convention.

#### 6.1.5.2 – *Criterion 1*

Outstanding examples of major stages of the earth's history including significant on-going geological processes.

#### 6.1.5.3 – *Criterion 2*

Outstanding examples of significant on-going ecological and biological processes in the evolution of terrestrial and development of terrestrial, freshwater, coastal and marine ecosystems and communities.

- Only remaining most coastal subtropical area large enough to sustain original ecological and biological processes to operate without interference;
- Huge gradient from highly dystrophic to eutrophic soils;
- Remarkable environmental heterogeneity and variability and an equally remarkable diversity in natural biota;
- All historical elements and processes present in the national park excluding elephant and lion;
- High density of life support systems.

#### 6.1.5.4 – *Criterion 3*

##### **(a) Superlative natural phenomena or areas of natural beauty and aesthetic importance**

- Highest forested aeolian coastal dune cordons, uninterrupted throughout the entire length (220 km) of the Park;
- Pristine Mkuze Swamp with its extensive reedbeds and associated cascading wetland systems.

##### **(b) Other superlative natural spectacles**

- Breeding Leatherback and Loggerhead turtles;
- Whales, sharks, dolphins and whale sharks;
- Pristine coral reefs;
- One of the highest density/diversity of migrant and breeding waterfowl including pink and yellow bank pelicans, yellow billed storks, Caspian (and other) terns, spoon bills, saddle bills, red winged pratincoles, etc.

**(c) Tested importance to an international society**

Dune mining threat was averted not only by the National Parks intrinsic value to conservation, but importantly to spiritual value to both the indigenous and visitor communities. e.g. calming effect the Park had on violent and severely traumatized people

**6.1.5.5 – Criterion 4**

Contain the most important and significant natural habitats for *in situ* conservation of biodiversity, including those containing threatened species of universal value

- Each habitat (wet & dry forest, wet and dry grasslands, thickets, fresh water, marine and estuarine vegetation, sandy dunes, etc) has a high richness, and many others have a high number of regionally (including internationally) important or threatened species.
- High density of type descriptions with the original type habitats.
- Park occurs within two centres of endemism and hence has a high occurrence of endemics within the bounds of the Park.

**6.1.6 – MANAGEMENT**

The working group reported that the status of a site proposed for nomination under the World Heritage Convention should be adequately described under the following:

**6.1.6.1 – Ownership of the site**

Indicate whether or not by :

- Government
- Private
- Any other (specify)

**6.1.6.2 – Legal status**

- Protected area under highest legal protection
- Traditional protection
- Any other (specify)

**6.1.6.3 – Protective measures and means of implementing them**

- Territorial integrity
- Management plan and development plan
- Finance/Staffing
- Institutional arrangements for safeguarding protection

**6.1.6.4 – Plans agreed/endorsed by**

- Government
- Private institution
- Any other (specify)

**6.1.6.5 – Sources and levels of finance**

- Assessment of needs
- Assessment of securing funds (sustainable financing) with the aim of diversified funding sources.

**6.1.6.6 – Sources of expertise and training**

- Government
- Private
- Donor
- Any other (specify)

**6.1.6.7 – Site management and development plan**

- Availability site (date)
- Need for review
- Non-existent

**6.1.7 – MONITORING**

The working group of 3 participants discussed monitoring of areas listed as World Heritage Sites under three major sections.

**6.1.7.1 – Key indicators for measuring the state of conservation**

- Outline criteria for selecting the site as prescribed as a World Heritage Site.
- Take inventory of the site inscribed on: flora, fauna, prestiness, cultural/monument site and determine their status. State other values: aesthetic, religious,

ecological, geological, historical, spiritual, geomorphological and any others.

- (c) List possible threats, constraints and success of the Site and state its biological, economical and sociological significance.
- (d) List human resource requirements available and those lacking.

*6.1.7.2 – Administration arrangements for monitoring property*

- (a) Develop integrated management plan.
- (b) Monthly report according to existing institutional or organizational structures, protocols, etc.
- (c) Collect and compile information from various experts within the site.
- (d) Review the management and development plans for the site.
- (e) Report quarterly for the organization and annually for UNESCO.
- (f) Establish criteria 4 database and sharing of information with line ministries. Draw a mechanism for interministerial flow of information.
- (g) Put in place appropriate infrastructure.
- (h) Development educational program and information update for neighbouring communities

*6.1.7.3 – Results of previous reporting exercises*

When the above are in place, it becomes easy to evaluate the successes of the previous reporting exercise.

**6.2 – PREPARATION OF THE TENTATIVE LISTING**  
.....

*By Ms. Y. Kaboza, UNESCO World Heritage Centre, Paris*

Ms. Kaboza presented a model for presenting a tentative list of nominations of sites for submission to UNESCO WH centre. She outlined that a country can nominate as many sites as possible depending on whether they meet the crite-

ria of Universality, and that States Parties are urged to go to regional or sub-regional groupings.

Ms. Kaboza then requested participants to discuss in working groups preparation of tentative lists from the three Eastern, Southern and Western African sub-regions.

**6.3 – REPORT OF WORKING GROUPS**  
**ON TENTATIVE LISTING**  
.....

**6.3.1 – RECOMMENDATIONS FOR EASTERN AFRICA**

*6.3.1.1 – Tanzania*

(a) Tentative Listing

- **Ruaha National Park**  
Ruaha National Park is Tanzania’s second largest National Park (after Serengeti). It is the transition point between the Southern and Northern habitats with Unique stands of Miombo woodland. Watered by the Great Ruaha River the park hosts an important elephant population. It meets criteria (ii) and (iii) for listing.
- **Udzungwa Mountain national Park**  
This important catchment area is the easternmost of the great arc of mountains overlooking the eastern rift valley. Apart from being rich in biodiversity Udzungwa Mountain National Park is high in endemism of both flora and fauna, including the mangabeys and galago’s. It meets criteria (ii) for listing.

(b) Modification to existing sites

- **Kilimanjaro World Heritage Site** boundary is proposed for lowering/extension to include all the catchment area of the natural forest.
- **Ngorogoro World Heritage Site** boundary is considered for extension to include Olduvia Gorge, a paleological site, and possibly be nominated as a mixed natu-

ral/cultural site pending consultation with ICOMOS.

#### 6.3.1.2 – Uganda

##### (a) Tentative Listing

- **Murchison Falls Conservation Area**

The Murchison Falls Conservation Area Includes the Murchison Falls National Park, Bugungu and Karumu Wildlife Reserves and the entire area complex is the largest protected area in Uganda. This world famous Murchison Falls of the river Nile is threatened by the frequently proposed development of a dam to generate power. If constructed, not only will the magnificent/spectacular/mighty waterfalls be lost, but the development will affect the rich diversity of flora (including wetlands) and fauna (including chimpanzees and re-tailed monkeys) of the Sanctuary. The area is the converging point of western and eastern faunal species and it harbours a variety of historical and cultural sites. Murchison Falls National Park had been nominated for listing in 1993, but due to the low populations of fauna at the time the nomination was rejected. The current status of the Wildlife population warrant the area for renomination. It meets criteria (ii) and (iii) of the guidelines.

#### 6.1.3.1.3 – Kenya

##### (a) Tentative Listing

- **Tsavo National Parks (East and West)**

The two Tsavo National Parks covering an area of some 21,000 sq kms including the Chyulu hills is one of the largest protected areas on the continent. It supports several complete ecosystems and an abundance of wildlife including some 8,000 elephants and two populations of black rhinoceros. The Tsavo National Parks also contain about 80 Hirola antelope (*Damaliscus hunteri*), which were Translocated from their original range near the Somali border

where their chances of survival had been slim. The Hirola is the most critically endangered antelope on the continent. The bird-ringing site at Ngulia has also provided important information on migrants. The Mzima springs produces pristine water at a rate of 450 million litres a day which is tapped underground at source and supplies Mombasa of water needs. Mzima also supports a wide variety of fauna in such an arid region as does the Ol Turesh spring and The Tsavo, Athi/Galana, Voi and Tiva Rivers. Geologically the area supporting the Tsavo National Parks contains the world's longest lava plateau – the Yatta – as well as lava and limestone caves and also the ash cones of Chiemau and Shaitani. The landscape is scenically outstanding and the biodiversity is one of the richest and least disturbed in the region. The two Tsavo National Parks meet Criteria (ii), (iii) and (iv) for listing.

- **Kakamega Forest Reserve**

This endangered tropical forest is the easternmost extent of the central African rainforest. Accordingly it contains a high diversity of flora, fauna and avi-fauna. The Kakamega Forest Reserve meets Criteria (ii) for listing.

- **Aberdares National Park and Natural Forest Reserve**

Scenically spectacular and a vitally important catchment area that contains extensive stands of montane forest and afro-alpine moorland. This area forms part of the eastern wall of the great rift valley. Geological formations of volcanic origin are dated at 13 million years old and predate Mt. Kenya by 10 million years and clearly defines the difference between the two mountains. With many endemic megahites and other rare flora

the area also hosts important populations of endangered fauna such as the bongo, the giant forest hog, the black rhino and elephant.

#### 6.3.1.4 – Transboundary

##### (a) Tentative Listing

- **Virunga World Heritage Site (DRC) & Queen Elizabeth Conservation area (Uganda)**

Queen Elizabeth National Park together with Kigezi and Kyambura Wildlife Reserves form the second largest protected area in Uganda (after the Murchison Falls Conservation area). The complex is part of the greater Virunga World Heritage Site and it has high biodiversity including endemic avi-fauna and large water bodies such as Lakes George and Edward. Once the Uganda side of the resources are inscribed, its management and that of the neighbouring Virunga World Heritage Site would become easier and efficient under shared transboundary internal arrangement. The area meets Criteria (ii) and (iii) for listing.

- **Mt. Elgon Nation Park (Uganda) and Mt. Elgon National Park (Kenya)**

Mount Elgon is a border extinct volcano astride the Kenya/Uganda boarder. It erupted some 24 million years ago. It has the world's largest surface area and an intact caldera of 40km<sup>2</sup> area surrounded by numerous peaks. The mountain has several hot springs of over 50<sup>c</sup> which presumably contain microbes of scientific interest, as well as deep caves used by elephants and other wildlife as a mineral lick and by cultures from the present and past. The water catchment value of the mountain is immense and the diversity of its forest is unfortunately being threatened by illegal logging and encroachment despite the two sides across the interna-

tional boarder being Mt. Elgon National Park, sharing the same name. The two National parks meet Criteria (ii) and (iii) for listing.

- **Mgahinga Gorilla National Park (Uganda) Muhavura Volcano's (Rwanda), and Virunga (DRC)**

The Virunga Volcano in DR Congo – is already a World Heritage Site. This together with the Virunga Volcano in Rwanda and the Ngahinga Gorilla National Park in Uganda hold the world's population of some 300 mountain gorillas. Water catchment value, richness in biodiversity and ongoing geological processes would also reinforce this nomination as a transboundary shared natural resource. The Virunga Ecosystem meet criterias (i), (ii) and (iii) for listing.

- **Serengeti (Tanzania)/Masai Mara (Kenya)**

Serengeti National Park is already a World Heritage Site while Masai Mara reserve is the dispersal area for the world's greatest migration of wildlife. Both Serengeti and Masai Mara are directly linked and depend on one another for the survival of an extraordinary wealth of biodiversity. It is imperative that this ecosystem falls under integrated management planning. This area meets Criteria (ii), (iii) and (iv) for listing.

- **Kilimanjaro (Tanzania/Amboseli – Kenya) National Parks and corridor**

Kilimanjaro is already a World Heritage Site whilst Amboseli could stand in its own right as another. The fact that Amboseli and its wetlands depend on the water resource from Africa's highest mountain (Kilimanjaro), and that elephants migrate from one sanctuary to the other as well as the two offering world

famous fascinating view of wildlife and great mountain in the foreground and backdrop respectively, justify recognition of this common resource across the international boundary. Amboseli also boasts of having the only intact elephant population in the region. It didn't suffer from widespread poaching and thus retains complete family structures. Its elephants are the most intensely researched in the world. This area meets Criteria (i), (iii) and (iv) for listing.

- **Kisite Mpunguti (Kenya) and Pemba Island (Tanzania)**

This is an extensive system of coral reefs and a relatively undisturbed marine ecosystem including mangrove forests. This area supports populations of sea turtles, dugongs and whale sharks. It meets Criteria (ii) and (iv) for listing.

### 6.3.2 – REPORT FROM SOUTHERN AFRICA

#### 6.3.2.1 – Namibia

The Namibia Desert should be nominated because :

- (1) It is pristine;
- (2) It possesses a unique desert elephant and horse;
- (3) Adopting well to macro and micro species of mammals, reptiles, insects and arthropods;
- (4) It offers a main route for whales and sea lions.
  - the area is a wilderness which is entered only with permit
  - the areas with seals are tourist centers
  - there is a plan to put up recreational area and tourist facilities in the area.
  - the area wants to start mountain tourism in due areas but feasibility study is still being done on traffic and environmental impact generally of opening area for tourism.

#### 6.3.2.2 – Botswana

- Ratified the Convention in 1998.
- The history of San bushmen is clearly preserved in rock paintings, tools all protected under the Monuments Act.
- The government endorsed nomination for the WH Listing of:
  - Tsodilo Hills, and
  - Okavango Delta. However there is need to undertake consultations with other stakeholders of the Okavango nomination.

#### 6.3.2.3 – Mozambique

The Mozambique Island

- Coastal area Basaluta island 5 islands 5 – 12,000 hectares.
- Has largest collection of sea cows – endangered some 100 times, tortoise, whales, migratory birds, hard corals, soft corals, etc. Maputo elephant reserve. Inyaka Island and Portuguese island could serve as an extension of St Lucia wetland WH Site with increased biodiversity for migratory birds. Could have increased biodiversity because it is meeting point for tropical and sub tropical areas.

#### 6.3.2.4 – Zambia

Waterfall

1. Katambo Falls as the second deepest in Africa in North Zambia. It is host to endangered species.
2. Bangwerly – Kafue Wetlands host endemic species like the lechwe which are endangered. IUCN and WWF are trying to preserve them.

#### 6.3.2.5 – Zimbabwe

##### (a) Mana Pools National park

This flood plain is very unique:

- *Acacia albida* provides food when other trees do not have. The trees therefore attract fauna to their area for food.

- Scenic view is attractive
- Zimbabwe hopes to twin with Zambia in making this shared flood plain a transfrontier WH Site.

**(b) Victoria Falls**

**(c) Matopos Great Zimbabwe ruins**

*6.3.2.6 – Swaziland*

Swaziland has not yet ratified the Convention.

But it has identified sites that are worthy of World Heritage Committee consideration for inscription under the Convention. These include:

**(a) Malolotya Nature Reserve**

- Lion larven – mine 40,000 years old;
- Ngwenya mine;
- Rare species;
- Species diversity;
- Falls, pot holes;
- Scenic values;
- Wilderness character;
- Zone of endemism.

**(b) Sibebe granitic outcrops**

- Biggest granitic outcrop in the world;
- Zone of endemism;
- Protected by government statute;
- Tourist attraction.

**(c) Mdoimba mountains**

- Protected traditionally;
- Burial sites for kings;
- Increased biodiversity.

*6.3.2.7 – Recommendations*

Need for regional meetings to discuss World Heritage matters and screening of tentative listing and to discuss the management of the proposed sites.

The World Heritage Centres should appoint someone to be focal point to assist other countries with their nominations.

**6.3.3 – REPORT FROM WESTERN AFRICA**

*6.3.3.1 – Tentative listing*

The West African working group took cognizance of the importance of National

Committees for the Implementation of the World Heritage Convention in the Collaborative compilation of Tentative lists with the World Heritage Centre.

It was the considered opinion of the Group that the gains of the National Committee should form the basis for regional cooperation along the West Coast; within Anglo-phones and between Anglo and Franco-phones in the Economic Commission of West African States (ECOWAS) sub region. The group also considered the (OAU) Charter on Regional integration as fertile ground for this strategy.

The UNESCO project on Slave and Iron roads provide further impetus for cooperation as well as the Man and Biosphere (MAB) and the Global Environment Facility (GEF) projects.

The West African coastal region is a breeding ground for threatened rare species of fish, birds and depleting marine life. The mangrove ecosystem is on the verge of disappearance from foreign species and the activities of oil and gas exploration and exploitation.

The following properties were recommended for a West African Tentative list for serial and joint nominations:

1. The marine and coastal heritage of West Africa. This requires Anglo-Francophone cooperation;
2. Oban Hills/Korup between Nigerian and Cameroon;
3. The slave routes (as Anglo-Francophone heritage);
4. The stone circles between The Gambia and Senegal.

The working Group recommended that UNESCO should facilitate a reassessment meeting for nominations 1, 2 & 4 to enable countries identify experts and net up teams for the project. The group was aware that the third nomination was well under way within the UNESCO slave roads project.

The marine and coastal heritage of West Africa would satisfy Criteria (i) and (iv) as the stretch and in country nomination represent out-



standing examples that calibrate ongoing ecological and biological processes of fresh and salt-water coastal and marine ecosystems. Containing the most important and significant natural habitat.

#### 6.4 – GENERAL DISCUSSION .....

Lively discussion lead by Professor Timothy Afoloyan covered a wide range of issues within the theme of the workshop. The following salient points were emphasised:

- All parties are urged to form national committees;
- Countries wishing to submit nomination should quickly do so;
- There is need for networking and sub-regional cooperation;
- Focal points required in each country;
- Program for education, outreach, communities and awareness must be developed;
- How to involve policy makers and all stakeholders in the convention;
- Closing the gap for imbalance in the membership and distribution of WH Sites across the World;
- Determining economic benefits of World Heritage Sites including intrinsic values;
- Legal instrument for policy framework on World Heritage Sites;
- National Strategy for World Heritage Sites required;
- Community involvement and partnership essential;
- Capacity building within States parties to effectively manage World Heritage Sites for sustainability;
- How often should workshops of this type be held;
- No natural and cultural property should be listed as World heritage Sites unless it has approved integrated management plans;
- The current frequency of 6 years for managers of World Heritage Sites; to submit status of conservation reports is too long. Managers tend to forget. It should be every 2 years;
- Encourage partnerships in management of World Heritage Sites.

*Ocean, coastal land*

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**AND ISLANDS**



# OCEAN, COSTAL LAND, AND ISLANDS

*By Dr. E. Wangari, UNESCO WH Centre, Paris*

## 7.1 – NATURAL HERITAGE OF COASTAL AND MARINE AFRICA

Wetlands, marine and coastal areas are among the most productive natural environments on earth providing substantial socio-economic benefit to humans as well as habitat for numerous species. However despite their importance to the natural process and livelihood to humans, wetlands and marine areas remain among the world's most threatened habitats.

Recently, one quarter of the world's population of some 5.9 billion lives in coastal areas and most of the largest urban concentrations are in the seacoasts. The current coastal urban population of 220 million is projected to almost double in the next 20–30 years. Unless governments take appropriate action and users of coastal resources, population pressure and associated levels of economic activity will further increase the already evident over-exploitation of coastal resources and environmental degradation of many coastal habitats. In many developing countries, this trend is further exacerbated by the widespread existence of extreme poverty and unemployment. Furthermore, conflict often arises from competing and antagonistic use of resources, or by the displacement of traditional users of coastal resources by new economic activities.

African coastal countries face serious coastal management and development problems. Degradation of the coastal environment is causing a decline in the quality of life of local pop-

ulations. Coastal erosion and desertification related to climate change provoke biodiversity loss and drinking water problems. Local economies are adversely affected by over-exploitation of living resources, coastal development which ignores ecosystem services, pollution of coastal aquifers, etc. Transboundary impacts are caused by marine and fresh-water pollution, river damming, harbour and other major coastal developments. Short-term economic gains often take priority over long-term benefits.

Integrated coastal area management offers a means to balance the competing demands of different users of the same resources and to manage the resources to optimise the benefits to be derived on a sustainable basis consistent with a country's goals. In many countries, sector-oriented line ministries have the mandate, technical competence and professional experience to conserve, manage and develop coastal resources. Commitment on the part of some ministries is a condition of the successful adoption and application of truly integrated plans for the conservation, management and development of coastal resources. In addition to the institutional capacities to undertake their tasks, line ministries must also have staff with a sufficiently flexible approach for constructive collaboration across ministries.

With this realization the Convention on World Cultural and Natural Heritage recognizes since its creation in 1972 the importance

for rational management of coastal and marine environment and conservation of their biological resources as a determinant component for sustainable development.

Over seventy-five wetland and marine sites are already inscribed in the World Heritage List and three more nominated sites are pending approval of the World Heritage Committee as of December 1999. The oldest Coastal World Heritage sites include the Everglades National Park in the United States and the Galapagos National Park in Ecuador both inscribed in the World Heritage List in 1979.

The Everglades World Heritage site, which covers 592,920 hectares, represent an area of exceptional conservation value as it includes the largest mangrove ecosystem in Western Hemisphere and is a home for several endangered species.

In Africa there are four World Heritage coastal sites: Saint Lucia Wetlands National Park in South Africa, Djoudj Bird Sanctuary in Senegal, Aldabra Atoll in Seychelles and Banc d' Aiguin in Mauritania. Africa has several significant marine zones that contain areas which may merit consideration for World Heritage nomination and it is hoped that this workshop will identify them.

Recognizing the importance and the threat posed on the wetland and marine areas, the World Heritage Centre working with IUCN initiated a project to prepare a global strategy for natural World Heritage Sites covering various biomes of the world including wetlands and marine areas.

## 7.2 – CASE STUDIES .....

### 7.2.1 – ST LUCIA WETLAND NATIONAL PARK

*By M. Andrew Blackmoore*

In verbal presentation, Mr. Blackmoore provided the following information on St. Lucia Wetland World heritage Site:

- Inscribed in 1999;
- Surface area is 15000 ha;
- Criteria used for inscription is 1,2,3, and 4;
- Justification for its inscription was that it is the last remaining sub-tropical area, containing its original components;
- It entails outstanding geological, ecological, biological, coastal and marine ecosystems;
- It is a zone of endemism with internationally threatened and migratory species.

### 7.2.2 – MOZAMBIQUE

*By Mr S. Engdahl, UNESCO, Mozambique*

Mr. Engdahl provided a slide presentation summarized as follows:

Mozambique ratified the WH Convention in 1982 and discussion on nomination of potential sites for inscription started in 1999 and hope to submit tentative list with potential for WH Standards in 2001. Potential candidates have been Maramei, Bazaruto, Pomene, Maputo Elephant Reserve, Inyaka and Portuguese Island. These areas are being chosen for their pristine condition and high biodiversity amongst others. All these sites chosen are coastal and inland ecosystems and will be included in the next nomination/submission.

## 7.3 – DISCUSSION ON COASTAL AND MARINE PROTECTED AREAS .....

*Lead by Ms Anne Hillary*

The workshop noted with concern the imbalance shown in the distribution of WH Sites of terrestrial and marine ecosystems. The urgency was expressed to address this anomalously. The attention of the participants was drawn to publications of the IUCN's World Commission on Protected Areas (WCPA) that includes marine aspects as well. The site managers were advised to join this (WCPA) commission and to request for documents and guidelines on marine protected areas.

*Methodology and techniques*

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**USED IN EVALUATING MANAGEMENT  
EFFECTIVENESS**



# METHODOLOGY AND TECHNIQUES

*By Professor Eric L Edroma, IUCN Regional Councilor for Africa*

## 8.1- METHODOLOGIES AND TECHNIQUES USED IN EVALUATING MANAGEMENT STRATEGIES .....

### 8.1.1 – MANAGEMENT PLAN

At the time of nomination, an area for inscription under the WH Convention must have an integrated overall management plan of the greater region within which the WH property falls. The management plan must be developed with involvement of the local people living in the surrounding community and other stakeholders in the region who have interest. Consultation of the local community is not enough.

### 8.1.2 – WAYS AND MEANS OF DESIGNING MONITORING SYSTEMS

Management of World Heritage properties must be based on sound principles and guideline for management inscribed, in management plans for each World Heritage Site. This document must be developed and implemented as a high priority and that the primary objective of the management plan must be to “protect the World Heritage property in perpetuity whilst still recognizing the implications (for management) of other natural and cultural values”.

Essential requirements of such a management plan should include:

- (a) They preclude land and sea uses which are incompatible with protection of World Heritage Values.
- (b) They include implementation plans.
- (c) They should make provision for monitoring and periodic review.
- (d) They should include mechanisms (methodologies and techniques) to address cumulative impacts.
- (e) They should have statutory force and adequate resources (financial and human) available for their effective implementation.
- (f) They should identify fully human activities likely to endanger natural WH values. These forces could include:
  - Human population and settlement.
  - Human encroachment on boundaries or in upstream areas.
  - Agricultural and industrial development including use of pesticides and fertilizers.
  - Construction of water reservoirs which flood important parts of the property.
  - Installation of major public works.
  - Mining and petroleum exploration and production. Mining is not a compatible activity in a national park (IUCN category II PA). In the April 1999 IUCN Council we issued a strong statement prohibiting by law or other effective means exploration and extraction of mineral

resources from PA's in IUCN management categories I to IV. Mining was defined to include removal of petroleum, coal, shell, gypsum and other ores, slat, sand, etc. Mining impacts on the high botanical values, the entire vegetation communities, scenic amenity and landscape values, and integrity of the area.

- Pollution – from domestic, industrial and agro-pastoral activities.
- Extraction of basic raw materials. A basic raw materials strategy for the WH areas must be developed so that the basic raw materials are accessed in an orderly and ecologically sustainable manner.

(g) They should consider tourist development and pressures.

- That an overall tourism management strategy be developed to provide a systematic basis for future tourism developments.
- That management plans be developed for specific “hot spots”, where there is known development activity.
- That zonation of the WH Site be considered for segregating recreational users and activities thus spreading out tourism pressures and restricting certain fragile or sensitive parts of the property from tourism and certain research activities
- That access to identified areas of specific vulnerability be restricted until adequate infrastructure or staffing surveillance is in place

(h) They should avoid over-grazing by domestic livestock.

- That the management agency of WH Sites be encouraged to more actively administer and monitor management of pastoral leases (e.g. In Shark Bay WH Site in Australia)
- That advice, current research information and assistance are made available to pastoralists in an accessible form to ensure best practice of pastoral management.

- That relevant legislation for the protection of pastoral areas be enforced where necessary.

(i) They should prevent introduction of animals (dogs, cats, foxes, rabbits, goats, sheep); that feral herbivore and carnivore predator control and eradication programmes continued as a priority activity.

- Those efforts are continued to ensure that areas made free of feral animals remain that way.

(j) They should prevent invasion by Alien/ Exotic Species. This causes imminent danger to the WH Site. Such species (e.g. Water Hyacinth) should be kept out through management practices of involving prevention, eradication, biological control, legislative and regulatory principles, knowledge and awareness-raising requirements.

(k) They must control commercial and recreational fishing.

- That research and monitoring programmes be encouraged to provide an accurate picture of fish populations and habitat.
- That measures to ensure the recovery of threatened populations and to prevent further decline, and promote their recovery be adopted.

(l) They must control development projects.

- Whether of water, aquaculture, construction or any other, development project, must be preceded by Project Development Plan that has undergone full environmental impact assessment.
- That this assessment includes consideration of a range of factors such as location of the developments, land tenure adjacent to the proposed site, potential for pollution, conditions specific to the area, proximity to “hot spots”, the risk of introducing invasive species, emergence of infectious diseases of wildlife, etc.
- That no development consent be granted for an activity until it has been

demonstrated that such a development does not pose a threat to the WH values and to the ecological integrity and sustainability of the ecosystems.

- That the assessment process be subject to full consultation, exhibition, and comment and be prepared with extreme vigour.
  - That no new cultures that are likely to damage the WH area and its WH values be permitted.
- (m) They should ensure sound marine management.
- That resources be provided for management of marine WH Sites and that these be staffed by persons with specialist marine environmental management skills.
- (n) They should insist on development of modern means of defining monitoring systems and environmental auditing at the time of nomination of the natural properties for WH Listing. Such monitoring systems should include:
- Identifying key performance indicators that are quantifiable or measurable e.g. Quality of the site in terms of species diversity, species abundance, vegetation cover, environmental quality, pollution level, soil fertility, etc.
  - Using accurate impact measurement techniques such as photographing (systematically at regular intervals at particular times under particular conditions), weighing, counting, sampling, quadrat analysis and transects.
  - Establishing goals which should be specific, realistic, challenging, attainable and measurable.
  - Establishing lower performance levels and steep performance declines are clear signs of lack of management effectiveness.
  - Determining impacts on soils, plants, wildlife, water, etc.
  - Adopting communication management

techniques such as enforcement of regulations, information flow, education, interpretation, awareness campaigns, etc.

- Using Landsat imagery, remote sensing data, Geographical Information System (GIS) and other techniques.
- (o) They should encourage establishment of partnerships between the management agencies and the local communities together with stakeholders, in the management and sustainable utilization of the WH Sites.

## 8.2 – CAPACITY BUILDING FOR WORLD HERITAGE SITE

MANAGERS: AFRICAN PERSPECTIVE

*By Mr Frank Litondo, Kenya Wildlife Service Training Institute*

### 8.2.1 – OBJECTIVES

- (a) To equip the managers with adequate knowledge and skills.
- (b) To be well focused to allow the managers the confidence they need to deal with prevailing situation (economic, political, environmental, scientific, etc).
- (c) To focus on various levels of management and based on training needs assessment.

### 8.2.2 – IMPORTANCE OF WORLD HERITAGE SITES

#### 8.2.2.1 – Natural

- (a) Homage for biodiversity.
- (b) Role of enhancing ecological balance.
- (c) Stepping grounds for migratory birds and other animals.
- (d) Research.
  - Genetic variations in organisms
  - Hydrologic cycles
  - Biodiversity
  - Fish and human diseases
- (e) Support lives of endangered and rare species.
- (f) Breeding ground for species.
- (g) Geological value.



#### 8.2.2.2 – Cultural

- (a) Bearing important historical features.
- (b) Architectural.
- (c) Archaeological.

#### 8.2.3 – THREATS FACING WORLD HERITAGE

Sites may include:

- (a) National Development projects.
- (b) Demographic factors.
- (c) Human settlement.
- (d) Unpredictable environmental dynamics.
- (e) Land ownership and tenure system.
- (f) Policies.

#### 8.2.4 – MITIGATION

- Training of Protected Area Managers.
- Education and training to create awareness.

#### 8.2.5 – WHY IS IT IMPORTANT TO TRAIN?

##### Long term implications

- (a) To create a knowledgeable and skilled team with capacity to conserve and manage the Sites.
- (b) To train PA Managers, to a level of understanding and appreciating the importance of Heritage Sites.
- (c) PA Managers should be able to understand the levels where they can be able to take appropriate measures during sporadic environmental changes.
- (d) Effective training will enable site managers to address the conservation needs.
- (e) Local communities need to be educated on the management plan and its implications.

#### 8.2.6 – TRAINING PROGRAMMES

##### Strategies

- (a) Identification of target groups.
- (b) Training needs Assessment.

- (c) Careful selection of trainees.
- (d) Designing of modules for training.
- (e) For biodiversity:
  - Training is a two-way process:
    - > Bottom-up track
    - > Top down

#### 8.2.7 – TRAINING PROGRAMME MODEL

- (a) Target Group 1 for lower level managers:
  - Grassroots type of training (administration, monitoring and evaluation)
  - Data collection techniques and mitigations
  - Sustainable management
- (b) Target Group 2 for middle level managers:
  - As above and also in Culture, history, science and legislation
- (c) Target Group 3 for top-level managers:
  - General knowledge of identified site
  - Policy issues and relevant international laws and conventions
  - Value and problems of sites
  - Management plan

#### 8.2.8 – TRAINING NEEDS ASSESSMENT

- (a) To reveal patterns of deficiencies in knowledge and skills
- (b) Design of required training
- (c) Selection of trainees

#### 8.2.9 – CONCLUSION

- (a) Integration of training in the general process.
- (b) Integration of revealed deficiencies in training.
- (c) Trainees to be selected basing on revealed patterns of deficiencies.
- (d) Awareness created and protection issues addressed leading to development and implementation of an acceptable management plan.

# *Transboundary*

## **NOMINATIONS**



# TRANSBOUNDARY MANAGEMENT

By Dr Elizabeth Wangari, UNESCO WHC, Paris

## 9.1 – TRANSBOUNDARY MANAGEMENT OF THE NATURAL RESOURCES .....

### 9.1.1 – INTRODUCTION

Transboundary or Crossboundary issues are a subset of the broader concept of regional issues, i.e. issues that affect more than one country. Transboundary issues are those that actually go across the border of two or more countries. Both terms (cross-border and regional) are increasingly in vogue in the environmental and biodiversity resource management sectors. There is now a huge literature on “Transboundary Conservation”, including the “Peace Parks” concepts.

Donors are funding crossborder initiatives. East Africa over the last two years has seen the start of the Global Environment Facility funded Cross Border Biodiversity Project, and four more regional and crossborder GEF projects were under preparation. There are several Southern Africa crossborder Peace Parks initiatives and a series of planning workshops for Transboundary Conservation Areas in the sub-region.

### 9.1.2 – WHAT ARE THE BASIC ISSUES BEHIND CROSSBORDER INITIATIVES?

1. Where there is a shared continuous ecosystem, or migratory resource.
2. Where threats to that ecosystem cross bor-

der, e.g. Trade, poaching, smuggling, etc.

3. Where one party can profitably learn lessons from the experiences of the other.

### 9.1.3 – ARE THERE REGIONAL APPROACHES THAT ARE VALUABLE?

The answer is yes that includes:

1. The exchange of practical experiences;
2. The valorisation of local capacities;
3. Addressing an entire biome for conservation planning;
4. A situation Where a landscape approach or ecosystem approach is possible;
5. Addressing cross border issues such as migration, refugees, poaching;
6. Economy of scale on investment, training and research;
7. Facilitation of common policies on resource management in the region;
8. The synergy of persuasion – if one country can do, they ALL can!

### 9.1.4 – WHAT ARE BIODIVERSITY ISSUES AT REGIONAL LEVEL?

#### 9.1.4.1 – Transboundary issues

They require regional or bilateral strategies to address them, e.g.:

- a. Lake Victoria as an ecosystem;
- b. Managing cross-border protected areas; such as National Parks (e.g. Mt Elgon National Park in Kenya and in Uganda);

- c. Common Watershed Management (e.g. head waters of Okavango Delta).

#### 9.1.4.2 – Common issues

Common to two or more countries best addressed at regional level but do not require common strategies e.g.:

- a. Institutional capacity building in all fields of biodiversity conservation;
- b. Training at all levels, pooled training; promoting centres of excellence;
- c. Resource inventories—broader regional picture for planning and shared methodologies;
- d. Monitoring resource use, depletion, impacts and conservation effectiveness;
- e. Implementing regional/international conventions.

#### 9.1.4.3– Similar issues

Issues or problems that are similar but may not benefit by a regional approach, but can benefit from exchange of experiences at regional level:

- a. The formulation of national biodiversity strategies;
- b. Lack of adequate ex situ conservation facilities;
- c. Inadequate regulations/ enforcement in the control of alien species.

#### 9.1.4.4 – Regional interactions for mutually beneficial biodiversity issues

- Taking common positions in, for example International Conventions
- Sharing common experiences, e.g. Wildlife research management and anti-poaching activities.
- Institutional Cooperation, e.g. Research technology (e.g. common databases) Utilisation of expertise from the region

#### 9.1.4.5 – Type of regional interaction for transboundary issues

- a. Common management strategies and priorities

- b. Harmonization of policies and laws affecting the shared resources
- c. Exchange of information

#### 9.1.4.6 – Type of interaction in transboundary resource management

- a. Joint capacity building programmes including training
- b. Technical coordination e.g. of database management, inventory methodologies, etc.

#### 9.1.4.7 – Roles and regional interaction in transboundary resource management

- a. Identify transboundary resources
- b. Facilitate meetings between relevant expertise on transboundary resources
- c. Joint wildlife surveys and monitoring, disease surveys and environmental studies
- d. Encourage joint forest and water catchment protection services.

## 9.2 – CASE STUDIES

### 9.2.1 – THE CASE OF THE MOSI-OA-TUNYA VICTORIA FALLS WORLD NATURAL MONUMENT HERITAGE SITE BETWEEN ZAMBIA AND ZIMBABWE

by Donald Chukumbi and Muyumbwa Ndiyoi

#### 9.2.1.1 – Introduction

The Mosi-Oa-Tunya or Victoria Falls, spanning the Zambezi River is surrounded by Mosi-Oa-Tunya National Park on the Zambian side, Victoria Falls and Zambezi National Parks on the Zimbabwean side. Between Zambia and Zimbabwe, the Victoria Falls lies at 17 degrees 56 minutes south of the equator and 25 degrees 55 minutes east of the Greenwich meridian. The Victoria Falls and the gorges found downstream are geologically, geomorphologically and hydrologically of outstanding value in both scientific and aesthetic terms. The flora and

fauna in the surrounding Mosi-Oa-Tunya, Victoria Falls and Zambezi National Parks add a complementary biological interest to the World Heritage Site. The mist soaked Forest on the opposite side of the Falls support rare plants, which are of interest to botanists.

#### *9.2.1.2 – Nomination and inscription*

In 1989 Zambia and Zimbabwe jointly recommended the nomination of the Victoria Falls National Park and the Zambezi National Park in Zimbabwe and the Mosi-Oa-Tunya National Park in Zambia to the UNESCO World Heritage Committee for the inscription on the World Heritage List of Natural and Cultural wonders. The month of December 1989 saw the inscription of the Victoria Falls on the World Heritage List.

#### *9.2.1.3 – Universal significance*

In assessing the joint recommendation of the two Governments, the IUCN Committee decided that only the core features of the Falls area (i.e. the Falls, gorges and upstream islands) were of “Universal Significance” and hence only that area was inscribed on the World Heritage List as a World Heritage Natural Site.

Prior to the inscription, working groups were constituted in both countries to work on the documentation of the area.

At its earlier meeting of 29th February 1984, the Executive Committee of the Man and Biosphere (MAB) Zambia, together with National Heritage Conservation Commission (then National Monuments Commission) requested the production of a plan for a meeting in October, 1984 to draft the application to the World Heritage Committee for inclusion of the Victoria Falls Region on the World Heritage List. It was felt strongly that the Victoria Falls and its environs qualify for inclusion in the natural properties of the World Heritage List (Section D, paras 43-45 of the Operational Guidelines – 1999).

The second meeting of the Executive Committee of MAB held on the 18th April

1984 brought together local authorities to the Falls region to decide on the speakers, contributors and areas of research required for the October meeting. But the process stalled for some time until around 1987-88. At that time the management plan of Mosi-Oa-Tunya was being prepared.

The path to the joint nomination has not been a smooth one. Initial steps towards the same were being hindered by conditions which first had to be met – land ownership and control. In both countries, the larger part of the site is within the designated national parks of Zimbabwe and Zambia. This created apprehension to national parks and wildlife Department, which nearly worsened when it was rumoured that the Zimbabwe side was moving away from the idea of declaring the Falls as a World Heritage Site. IUCN played a pivotal role to assure the Zambian National Park that Zimbabwe was not abandoning the idea or rather process.

#### *9.2.1.4 – Path to nomination of Victoria Falls World Heritage Site*

In this process, Zimbabwe was quite ahead as far as documentation and submission of the nomination was concerned. Zimbabwe at the time had already three World Heritage Sites namely Great Zimbabwe, Khami Ruins and Mana Pools National Park. By 1985, Zimbabwe had already submitted the nomination of the Victoria Falls as World Heritage Site but it was turned down for the reason that “it related to merely half of an international site” even though the supporting documentation had been deemed adequate. This created an opportunity for both countries to collaborate in conformity to the requirement of the WH Convention guidelines regarding Sites shared by more than one State Parties (Section B of operational guidelines). During the preliminary meeting held in Harare on the 18th May attended by representatives from Zambia National Commission for UNESCO, IUCN

staff in Zambia and Zimbabwe, National Monuments commission, National Museum, National Parks and Wildlife Services noted that, though Zambia was slightly behind in documentation, there was a great deal of work already undertaken on the preparation of the Victoria Falls National Park Management Plan which would greatly contribute to the World Heritage Nomination.

It was also deemed realistic, with IUCN assistance (Consultancy to assist with the preparation of a nomination bid) and Zimbabwean collaboration, to plan for a submission before 31st December 1988.

During the same preliminary meeting, it was suggested that the Zimbabwe group should scrutinize the draft nomination by the Joint meeting with the Zambian group. The Joint group meeting would then focus on the harmonisation of the efforts and the actual procedures for joint nomination. The following steps were agreed upon to assist in the Joint Nomination:

- Distribution of minutes;
- Provision by IUCN of copies of the former nomination for Victoria Falls and Mana Pools National Park;
- Preparation by IUCN of a draft re-nomination from the Zimbabwe side;
- Convening of a further meeting in Harare to review the draft re-nomination and to define the route for channelling the proposals;
- Holding of a joint meeting with the Zambian group at Victoria Falls, Zimbabwe, which would include a site visit to the Zambian; the meeting to work on the integration of the two draft documents into a single nomination;
- Distribution to and review by Zambian and Zimbabwean authorities of the draft nomination; and
- Revision, finalisation and submission by 31st December 1988, failure to which UNESCO could be notified to expect a slightly late nomination.

A similar meeting was held on the Zambian side on the 12th May 1988 attended by NMC of Zambia, IUCN Regional Office for Southern Africa, Zambia National Commission for UNESCO, National Parks and Wildlife Services, Livingstone Museum, Zambia National Tourist Board, IUCN Senior Consultant – Zambia. One very important issue was taken note of during the meeting on the Zambian side as regards the area to be designated. It was required that “all the land must be state-owned or at least subject to control and management by Government”. This was in reference to the north bank below Songwe Gorge held in trust by the State but is not public land. The issue was settled by incorporating State ownership in Mosi-oa-Tunya National Park through the Commissioner of Lands who acted on behalf of the President.

The Joint meetings were meant to harmonise, exchange information and minimize disparities. Some of the issues debated and agreed upon were the extent of the proposed world heritage site.

A proposal to nominate the whole area including the three national parks was adopted unanimously. But the IUCN Committee felt that declaring the whole area does not conform to Section D of the Operational Guidelines. The two countries were later requested to re-demarcate the boundaries to encompass the core features of the Falls area in conformity with Section D and this was done.

Final draft to carry signature of senior officials at Permanent Secretary level. Heads of States would be invited to sign at the actual Proclamation ceremony in one course.

#### *9.2.1.5 – Assistance*

##### **Technical**

Part III paragraph 78-87(1988) of the guidelines provides for application for technical assistance. The working groups collaborated in preparing a proposal for technical assistance towards the implementation of the World

Heritage Convention. The proposal has three projects, which had, as their general objective, implementation of the World Heritage Convention. The three projects (namely: Facilitation of further meeting, Scientific, Educational and Interpretative Measures, and rehabilitation of the Mosi-Oa-Tunya National Park) were formulated to achieve the following specific goals:

- That the fruitful collaboration between UNESCO, IUCN, Zambia and Zimbabwe in respect of the nomination of Victoria Falls as a World Heritage Site be sustained and strengthened with a view to successful implementation of the World Heritage Convention;
- That steps be taken to inform the public better about the Scientific, ecological and aesthetic value of the World Heritage Site; and
- That necessary measures for the further conservation of the Site be undertaken and where necessary, remedial work be undertaken to rehabilitate neglected and degraded portions of the site.

#### **Facilitation of further meeting**

Under this project, the assistance sought was to facilitate the formation of a Joint body to be tasked with responsibility of formulating Joint objectives for the conservation of planning and management of the falls areas, harmonising development and conservation, and maximising the interchange of information between Zambia and Zimbabwe on one hand and IUCN and UNESCO on the other. To achieve the foregoing, it was agreed that:

- The joint working group from both countries that prepared the WH Site nomination be reconvened to formulate proposals to the Governments and to the World Heritage Commission of UNESCO on the establishment of a Permanent Joint Body.
- A project budget of US\$1,000 be requested for establishment costs only, subsequent funding to be met by the States Parties.

- The existing institutional and infrastructure arrangements be taken advantage of and used to the fullest potential and in so doing, minimising costs.
- IUCN and UNESCO to serve in an advisory capacity in the proposed body; but their powers and responsibilities to be determined by the Governments of the States Parties.

#### **Scientific, education and interpretative measures**

The aim of this micro-project was to enhance both the general appreciation of the World Heritage Site and Scientific knowledge of the Site. The funds requested US\$9,000, initiated the efforts that would then be sustained from local resources and tourism receipts. The sum of money was shared equally to meet the education needs of the two countries.

On the Zambian side, the money was used in meeting the publication costs of a new Interpretative Guide to the Victoria Falls and its Environs. Research and preparation of the material had already been funded by Zambia's National Conservation Committee and IUCN. The book contains detailed descriptions on, geology, vegetation, mammals, reptiles, insects, fish, early man, modern man, tourist attractions, modern art and culture.

The proceeds from the sale of the Guide was to be managed by the National Monuments Commission and the National Conservation Committee and devoted to the rehabilitation and continuing conservation of the environs of the Zambian side of the Victoria Falls.

On the Zimbabwean side, the following were intended to be achieved with this assistance: -

- Incorporation of the World Heritage Theme into the interpretative centre at Victoria Falls National Park.
- Small permanent exhibition on World Heritage was mounted as a global effort.
- The Interpretative Centre would foster the exchange of photographic and other interpretative material with other World Heritage Site.

### **Rehabilitation of Mosi-Oa-Tunya National Park**

Under this project, assistance was sought to help National parks and Wildlife Services, National Monuments Commission and Livingstone District Council in accordance with proposals already developed by Management plan working group to:

- Improve footpaths especially around the Falls by provision of appropriate surfacing;
- Provide safe access especially for the disabled and elderly people;
- Remove extraneous matter and rehabilitation of the floodlighting;
- Erect controlled access gates with appropriate sign posters at Songwe, Mukuni Village, Maramba Show grounds; and
- Construction of cattle grids at entrance points.

#### *9.2.1.6 – Post inscription collaboration*

##### **Increased pressure**

In December 1989, the Victoria Falls was inscribed as a World Heritage Site under the WH Convention of UNESCO. But prior to its declaration, the Falls had witnessed or experienced pressure as far as tourism developments were concerned. The Victoria Falls being a tourist attraction of high class it has attracted several developments and activities many of which had not been planned for. After the inscription the WH Site experienced even a greater increase of tourism activities, which has threatened the integrity of the site. In a project proposal of 1988 on Victoria Falls Interpretation Project, it was observed that, “The Victoria Falls on the Zambia side is fast deteriorating in terms of attractiveness as compared to the Zimbabwean side. This report alluded this to:

- Lack of environmental consciousness on the part of the Zambian developers;
- The lack of approved Park Management Plan including Zoning, which meant that the Park is being run without Environmental Management Plan; and

- The lack of adequate interpretative infrastructure.

The Zimbabwean side had also a share of its own as regards the environmental problems and little strides were made but much is still left to be desired.

In 1993, the Joint Committee agreed on several issues to bring the situation under control as indicated by the Minutes of 22nd–23rd April 1993 and some of the issues of concern were as follows:

- The drawing up for implementation of a Master Plan for tourism development in two resort areas, where the two countries share common borders, namely, Victoria Falls, Kariba and Lower Zambezi.
- The need for the Commissioning of an integrated Victoria Falls Development Plan, including Environmental impact assessments for the future development of the area.
- Environmental Impact of Tourism Infrastructure Development (for example, of the proposed cable car, etc).
- Constraints on Tourism Development in the Victoria Falls area due to the Victoria Falls being designated as a World Heritage Site.

Tourism Master Plan for Livingstone was done but not implemented. Similarly an Environmental Impact on tourism development was done but not effected either.

In 1995, the two countries through the Joint Management Committee sought assistance from IUCN to carry out a Strategic Environmental Assessment of Development around the Victoria Falls. The extent of coverage of this study was a 30 km radius around the Victoria Falls. The aim of the Strategic Environmental Impact was to give:

- Guidelines for development in the World Heritage Site and surrounding areas.

Apart from this collaboration, the Joint Committee collaborated successfully in defending the World Heritage Site against the proposal of Batoka Hydro-Electrical Station.



### **Constraints against the implementation of the WH convention**

- Lack of co-ordination in tourism developments. This still persists.
- Conflicts between Institutions as regards control and Management of Site.
- Inadequate funding especially for the Zambian side.

### **Current co-operation**

Both Zambia and Zimbabwe are holding national workshops on the implementation of the IUCN recommendations. Later in the year 2000, a bilateral meeting is scheduled to discuss and work out a Management Plan with regard to the Site on the:

- Planning and Biophysical Development;
- Planning and Socio-Economic Development;
- Zoning and Guidelines Development;
- Need for cross border Institutional arrangement;
- Sustainable Development and Maintenance of Wilderness Value;
- Monitoring and Adaptive Management;
- Communication and Co-ordination.

Constant consultations between the two parties ensures harmony and survival of this unique World Heritage Site.

### **9.2.2 – MASAI MARA/SERENGETI NATIONAL PARK**

*By Ezekiel Dembe, Tanzania*

#### **9.2.2.1 – Introduction**

The management of the Masai Mara/Serengeti Ecosystem has been a great concern to many conservationists and scientists who have come into contact with this world famous area. The World Heritage Centre has also been concerned over the area for a long time. The Centre even suggested a joint nomination of Masai Mara Game Reserve as an extension of the Serengeti National Park. To do justice to the area, TANAPA's position is that while this suggestion

is good, Masai Mara Game Reserve should be nominated by the Government of Kenya and must be accepted by the World Heritage Centre basing on its own merits rather than as an extension of the Serengeti National Park. Ngorongoro Conservation area was accepted by the World Heritage Communication as part of the Masai Mara/Serengeti ecosystem basing on its status. Therefore the criteria for the nomination should be based on its own conservation status in the same ecosystem.

#### **9.2.2.2 – Serengeti-Masai Mara Ecosystem**

The Serengeti-Masai Mara Ecosystem is an area of some 25,000 km<sup>2</sup> on the border of Tanzania and Kenya and is defined by the seasonal movement of the migratory wildbeest. The ecosystem covers several different conservation administrations. These are Ngorongoro Conservation Area (8,288 km<sup>2</sup>), Serengeti National Park (14,763 km<sup>2</sup>), Maswa Game Reserve (2,200 km<sup>2</sup>), and Grumeti/Ikorongo Game reserves and Loliondo Game Controlled area in Tanzania, and the Masai Mara Game Reserve (1,672 km<sup>2</sup>) and adjoining Group Ranches in Kenya. It is obvious that improved ecosystem is seriously threatened by increasing population pressure especially in the western borders in terms of settlement, agriculture and livestock husbandry, commercial poaching for meat, and disease transmission between wildlife and domesticated animals.

#### **9.2.2.3 – Reasons as to why nomination has not been possible**

According to the criteria by the WH Convention each country has to nominate its own property for a WH Site. Tanzania nominated Serengeti and was accepted in 1981, while Kenya did not nominate Masai Mara.

Even if Kenya requested Tanzania to jointly nominate the Masai Mara Game Reserve as a World Heritage Site, the following observations will come into force:

Tanzania is aiming at promoting low volume tourism in the Serengeti National Park.

This has been possible by developing a management plan and a management zone plan that control development and use of the park for improved services and visitors experience without seriously impacting the resource. But the management of Masai Mara Game Reserve has to the contrary been encouraging mass tourism that has also attracted massive development inside the reserve. In the long run, such massive development might seriously affect the trends of the world famous wildebeest migration and other ungulates into the ecological system.

TANAPA is not against the management of reserves by County Councils in Kenya, but it is difficult to harmonize National Parks policies with those of Game Reserves due to different management objectives. TANAPA has always wondered why Kenya Wildlife Service was not managing the Masai Mara Game Reserve (currently managed by Narok County Council). If the concept of trans-boundary parks will come into effect, it would also speed up the expected transformation of the status of Masai Mara to a National Park like in the case of the Serengeti National Park.

#### *9.2.2.4 – Possible solution*

TANAPA strongly advocates that Masai Mara Game Reserve needs restoration through serious interventions if the ecosystem is to be effectively conserved and protected. The World Heritage Centre should speak to the Government of Kenya on this predicament and seriously look into the future management of Masai Mara Game Reserve. In order for the Government of Kenya to nominate Masai Mara Game Reserve to be a WH Site, the area must meet the criteria set by the WH Convention and must fulfil the conditions of integrity of the area. The Centre must also encourage the Government of Kenya to nominate the site on its own merit and not as an extension of the Serengeti National Park, which is one and only in Tanzania. The extension of the WH Site to Masai Mara will not

provide a value added to either sites, but rather would spread the bad experiences on the entire ecosystem.

When eventually both Serengeti National Park and Masai Mara Game Reserve (or any other status) are World Heritage Sites they should be known by their respective names and the management should effect close co-ordination to improve the quality of the ecosystem, which is otherwise further degrading.

Tanzania desires to see Masai Mara Game Reserve nominated to a World Heritage status. Similarly, TANAPA is concerned with the management problems in the Masai Mara Game Reserve and other similar areas, which are directly affecting the future of the Masai Mara/Serengeti ecosystem.

#### *9.2.3 – THE OKAVANGO ECOSYSTEM AND ITS POTENTIAL AS A WORLD HERITAGE SITE FOR BOTSWANA AND NAMIBIA*

*By Mrs Maria Kapere, Director of Resource Management, Namibia*

##### *9.2.3.1 – Background*

Namibia is endowed with an extensive system of national parks and game reserves covering about 15% of the country. The 15 proclaimed national parks and game reserves provide for an exceptional tourist product and afford tourists with the opportunity to experience the diversity of nature and all its facets throughout the country.

The low and erratic rainfall typical of Namibia, which is serious constraint for agricultural production, nevertheless lends itself to tourism and wildlife. Because of the fragile environment, tourism development should not be allowed to expand unchecked without considering the resource base on which it relies, namely wildlife and the aesthetic qualities of the environment. It is therefore necessary to regulate by determining the tourism carrying capacity of the national parks and preserving the historical/cultural aesthetic sites.

The Okavango River is located in the Kavango and Caprivi regions and these have been thought of by planners as the potential “bread basket” of Namibia because they benefit from the highest rainfall in the country. The River is the official border separating Namibia from Angola and rises from the southern part of Angola. It flows eastwards along the northern border of Namibia and empties into the Okavango Delta in the western part of Botswana where a diverse of animals occur.

The Okavango River is one of two perennial inland rivers of the country and contains major freshwater and forest resources, relatively fertile Rivernine, flood plain and alluvial soils. The average population density along the river is rather high. Livelihoods in the area are largely dependent on the natural resources and are in return a direct threat to the natural environment in general and to the National Parks in particular.

#### 9.2.3.2 – Conservation

The Namibian Cabinet recently approved the renaming of Caprivi National Park to Bwabwata National Park and to integrate the Mahango National Park in the Bwabwata National Park and to deproclaim the Bangani corner and Omega. Without access to the rivers, the wildlife populations will not survive. The Ministry of Environment and Tourism with deproclamation of Bangani and Omega gives the surrounding communities the opportunity to establish a conservancy for their benefit.

The 20 km of the Okavango River bordered by the Mahango National Park on one side and the Buffalo core conservation area on the other, represents the only conserved area of some 440 km<sup>2</sup> of Rivernine habitat along the entire Namibian length of the Okavango River and the Ministry plans to declare this part of the Rivernine habitat a potential World Heritage Site. The rest of the river falls in communal land and managed by Traditional Authorities.

The part of the River, which falls, in the Buffalo core conservation area forms the upper reaches of the Okavango Delta and as such is of international importance. The agricultural schemes and settlements along the Okavango River in Botswana also present a hostile environment, which tends to push animals, northwards into the Namibian National Parks.

Forests are a natural phenomenon to which Namibian forest and savannah ecosystems are adapted. Problems occur when frequent man-made fires disturb forest ecology, destroying trees, retarding tree growth and hampering seedling regeneration.

High densities of elephants are significantly destroying Rivernine vegetation and hence habitat for species such as the Reed Buck. Pressure is most acutely felt on the Okavango River section where it is reported that some 4,000 elephants are concentrated along a 20 km stretch of the river.

The river floodplains of the Okavango River are vital habitats for a wide variety of animals, including rare and endangered species of mammals and birds and host Namibia’s only true wetland/tropical habitats and a rich biodiversity. The areas along the River have tremendous tourism potential and are identified in Namibia’s Tourism Development Plan as an area ideally suited for the establishment of tourism facilities.

#### 9.2.3.3 – Conclusion

The current situation requires an integrated long-term conservation and development approach. Many of the necessary activities are already underway. The Ministry of Environment which is responsible for national parks and wildlife reserves, is in the process of reviewing the management and the infrastructure inside the northeast wildlife protected areas.

The future of the Okavango River will depend on Angola, Namibia and Botswana’s joint management approaches. Namibia is prepared to look at the possibility to declare the part of the Okavango River in the Bwabwata

National Park as a World Heritage Site to give more status to this sensitive ecosystem.

Namibia is a long way to go and prepare justification for nominating the proposed areas as WH sites.

#### 9.2.4 – THE OKAVANGO DELTA

*By I.M. Chite, Department of Wildlife and National Parks, Botswana*

##### 9.2.4.1 – Introduction

In the North West part of Botswana lies one of the largest inland Deltas called the Okavango. This comprises the end drainage of the Okavango River, together with those of the Chobe and upper Zambezi as well as the whole Makgadikgadi internal drainage system.

The Botswana government ratified the Convention on wetlands “The Ramsar Convention” and it became a contracting party as of 4th April 1997. The Okavango Delta was listed as a Ramsar site as per article of the Convention. The conservation and wise use such a wetland of International importance should therefore be promoted. The Harry Oppenheimer Okavango Research Centre and the National Conservation strategy of Botswana are preparing a management Plan for the Delta.

The Okavango Delta has been proposed as a World Heritage Site. Botswana is now working on its first nomination of World Heritage Sites, which is the Tsodilo Hills. located at the beginning of the Okavango Delta.

The Moremi Game Reserve is found in the middle of the Delta and covers an area of 4871 square kilometres. The area was officially declared as a game reserve in 1965 and was initially managed by the Fauna Conservation Society. Moremi was then extended to include Chiefs Island in 1976. In August 1979 the Reserve was taken over by the Department of Wildlife and National Parks. A further extension was added as recently as 1992 and now the Reserve contains within its boundaries approxi-

mately twenty percent of the Okavango Delta.

Surrounding the Reserve is the Wildlife Management Areas (WMAs), which serve as buffer zones between the Reserve and communal areas. These WMAs are made up of community, hunting and/or photographic areas.

The Okavango Ecosystem is divided into six categories:

- Upper Okavango: catchment of Cubango and Cuito Rivers in Angola,
- Namibia Section: Okavango River between Mucusso and Mohembo,
- Panhandle: Okavango River and swamp between Mohembo and the Delta,
- Delta: All areas liable to flooding within Gumare and Thamalakane fault troughs,
- Boteti River, and
- Makgadikgadi Depression.

##### 9.2.4.2 – The ecology of the Delta

The Okavango Delta comprises of three major ecotypes, distinguished by their lack or abundance of water. These are:

- The permanent swamp, with perennial surface water up to 4 m deep;
- Seasonally-inundated areas, the extent of which varies to a large degree, depending on the magnitude of the annual flood from Angola and the amount of local rainfall; and
- The higher dry land masses of which there are three examples: Moremi Game Reserve, Chiefs Island and the Western sand veld.

Within these broad divisions is an interlocking mosaic of habitat types, which contribute most to the Delta’s diverse wildlife spectrum at all phylogenetic levels.

Most of the conspicuous wildlife species utilise the last two zones to varying degrees, but the first provides suitable habitat for comparatively few large wild animals. The permanent swamp is characterised by deep, permanently-flowing channels and lagoons, with extensive beds of papyrus and reeds. Islands occur throughout this zone with increasing frequency towards the south.

The second and largest zone is one of larger islands divided by streams that are wide, shallow, grass and sedge covered flood plains. The Primary floodplain dominated by sedges, is regularly inundated less frequently, when the flood is higher than average.

The islands in this zone also show the typical fringe of riparian woodland and central areas of island grassland.

The large dry land masses comprise mainly areas of mopane woodland with frequent pans. Interspersed with these are large patches of deep sandveld where the dominant trees are *Terminalia sericea* or *Acacia giraffe*. Another important component of the Okavango's physical environment is the large number of termitaria that occur throughout the delta. Widespread in the dry areas the termitaria are of some importance to various animals as either vantage points or for convenient burrowing.

They have been attributed to having a substantial effect on regulating the flow of the floodwaters and initiating the formation of new islands.

The input of water into the delta is biphasic. Each year the Okavango floods of Angolan origin, provide water at a time when the residue of the single annual rainy season is diminishing or has disappeared. Precipitation normally occurs between November and April with the bulk of the rain falling in January and February. In a normal year the rainwater in pans, streams and other areas of impeded drainage has disappeared by July. This coincides with the high points of the annual flood in the central delta. Water begins to rise in the Okavango River in Mid January and peaks at Xaxaba in May and at Maun in August. As the water in the streams recedes to a minimum towards the end of the year, rains normally begin to fill the pans. This is crucial to the majority of larger wild animals. The delta boasts of an extremely wide variety of large wild animals, ranging from those that are almost totally aquatic, such as the crocodile and hippopotamus, semi aquatic species such as sitatunga and lechwe, many water dependent species, and a few which

are water independent, such as the gemsbok and ostrich, which reflects the delta's proximity to the arid region of south western Africa.

The permanent swamp sustains only three species of large wild animals, the crocodile, hippopotamus and sitatunga, although since it is not a completely discrete zone, lechwe do occur in some areas and occasionally leopard may be found in the larger islands. In addition other species may traverse sections of this zone, notably the elephant and the buffalo.

It is however, in the vast mosaic of channels and islands together with the major dry land intrusions that the large variety of the Okavango wildlife resource becomes apparent. It is here that the unique alternating floods and rains characterise the seasonal distributions of most of the large fauna. There are 20 species of large herbivores ranging from the steenbok to the elephant.

The habitat with the most pressure exerted on it is the ecotone consisting of the woodland/grassland fringes of the larger islands and dry land masses. Here the diversity of browsing and grazing animals on a year-round basis has resulted in locally evident browse lines and patches of over-grazing. The grazing phase of this ecotone receives protection to a varying degree from the rising flood waters.

Large predators are abundant with the lion and spotted hyena being most evident. Cheetah and wild dog are widespread and the leopard undoubtedly occurs throughout the Delta. The brown hyena is also found in the Delta.

The largest snake in the Delta is the African Python. There are three genera for water snakes. The most conspicuous back-fanged snake is the boom slag, which is common throughout, as are the sand snakes. Three species of cobras occur commonly and equally abundant is the black mamba.

#### 9.2.4.3 – Present uses of the Okavango Delta

The Okavango Delta is utilized for the following purposes:

- Domestic water supplies;
- Livestock watering;
- Irrigated agriculture;
- Wildlife and Fisheries;
- Tourism and Recreation.

#### 9.2.4.4 – *Why conserve the Okavango Delta*

The landscape, biodiversity and cultural attributes of Okavango Delta are of such outstanding international value that the Delta deserves special conservation attention. The major reasons include:

- It has unique features of geology, geography, flora and fauna, the understanding and appreciation of which will be of great importance to future generations,
- With a rapidly rising tourist industry, attracted by wildlife and wild places, the interest and variety of national parks and other sites are enhanced by the wetlands they contain,
- A number of African wetlands have become scientific benchmarks as a result of investment in research, and
- The Delta is under threat from some exploitation of its water for irrigation and industrial development. This would mean diverting some of its water to the above activities.

*Mixed*

**STUDIES**



## CASE STUDIES

### **10.1.1 – SIBILOI/CENTRAL ISLAND NATIONAL PARKS, KENYA**

*By J.M. Mburugu, Kenya Wildlife Service*

#### *10.1.1.1– Introduction*

The Convention concerning the protection of the World Cultural and Natural Heritage (UNESCO'S World Heritage Convention 1972) established a unique international instrument, which recognises and protects both the cultural and natural heritage of outstanding universal value. Kenya is among the 33 African countries, which have natural and mixed Sites. At present the country has only two Sites. Mt. Kenya the second highest mountain in Africa, the first in Kenya inscribed under natural Criteria (ii) and (iii) as one of the most impressive landscapes of East Africa with its rugged glacier-clad summits and forested slopes illustrating outstanding ecological processes. The second Site is a joint Sibiloi and Central Island National Parks in the northern part of Kenya, which was nominated on the basis of its both cultural and natural outstanding universal values.

#### **10.1.1.2 – Site description – 20 27' N, 360 04'E**

Lake Turkana covers an area of 756,000 ha at an altitude of 335 m. It is a very large, isolated chloro – carbonate alkaline lake, the northern most and by far the largest of the chain of Rift Valley Lakes in Kenya. The Omo river delta at the extreme northern end of the lake is within

Ethiopia. Turkana water is blackish with a pH of 9.5 –9.7, but drinkable, and the lake holds freshwater fish. The 600 km or so of lakeshore vary greatly in substrate, from rock to pebble, sand and mud at Loiyengalani, Elmololo and Allia Bays, the Oma delta and the inlets of the Turkwell and Kerio rivers.

The country surrounding the lake is semi-desert with sparse vegetation. Annual rainfall averages less than 250 mm (substantially less in some places). The lakes Central Island with three beautiful crater lakes supports a variety of bird species.

The site was nominated in accordance with the operational guidelines, which state that “States Parties should as far as possible endeavour to include in their submissions properties which drive their outstanding universal value from a particularly significant combination of cultural and natural features”.

#### **10.1.1.3 – Criteria for nominating Sibiloi/central Island Site as a mixed WH Site**

Sibiloi National Park was established on the eastern shores of Lake Turkana in 1973 while Central Island in the central part of the lake was established in 1983 for the protection of the greatest Crocodile *Crocodylus niloticus* concentration in the World found in the lake. It is home to a variety of fauna and flora including some of the threatened species such as Grevy Zebra, which are usually found north of



the equator. It is also rich in fish, with 47 species, seven of which are endemic. Lake Turkana is extremely important waterbird site, 84 waterbird species, including 34 Palaearctic migrants, have been recorded at the lake. Over 100,000 Little Stints may winter, representing 10% of the entire East Africa/South East Asian wintering population. Lake Turkana is among the most important Bird Areas in Kenya. The World Heritage Committee inscribed this property on the basis of natural heritage criteria (i) and (iv) for the discoveries of mammal fossil remains in the site, which led to scientific reconstruction of the Palaeo-environment of the entire Turkana Lake Basin of the Quaternary period. The lake Turkana ecosystem with its diverse bird life and desert environment offers an exceptional laboratory for studies of plant and animal communities. Concerning cultural criteria, the WH Committee noted that the comparative study of fossil hominid sites by ICOMOS gives highest importance to Koobi Fon an area where fossil remains of extinct elephant and footprints of *Homo erectus* the human closest ancestors, have been discovered. It is rich in fossil remains of animal and human beings bearing clues of the origins of modern man and his predecessors dating back nearly three million years and has been consequently named the "Cradle of Mankind".

The locations of the most important finds can be visited. Four particular treasures are: - the shell of a giant tortoise dating back 3 million years, a set of jaws over 5 ft long from a crocodile believed to have been over 45 ft in length and the remains of extinct elephant with massive tusks, both dating back 1.5 million years and the hominid (early man) finds.

#### **10.1.1.4 – Management as an operational process**

No one is better able to identify, describe, and communicate the most effective strategies for management of World Heritage Sites than the

managers themselves. They are the ones who must find practical solutions to the challenges of the preservation of the cultural sites and conservation of natural sites while addressing human needs.

Management of a site is an operational process initially best dissected by analysing the managerial functions which enable organisations to achieve their objectives by planning, organising and controlling their resources including gaining the commitment of their employees (motivation).

Management is not an activity that exists by its own right. It is rather a description of a variety of activities carried out by those members of organisations whose role is that of a manager that is someone who normally has formal responsibility for the work of at least one other person in the organisation. The activities carried out by managers have generally been grouped in terms of planning, organising, motivating and controlling activities. These groupings describe activities, which indicate broadly what managers actually do. They are describing manager's job primarily in term of their inputs.

#### **Summary of management activities**

The grouping of management activities can be summarised as follows:

- *Planning* – Deciding the objectives or goals of the organisation and preparing how to meet them.
- *Organising* – Determining activities and allocating responsibilities into appropriate structure.
- *Motivating* – Meeting the social and psychological needs of employees in the fulfilment of organisation goals.
- *Controlling* – Monitoring and evaluating activities and providing corrective mechanisms.

These traditional groups – the POMC approach are a convenient way of describing most of the key aspects of the work of managers in practice. An effective management of site requires the support of the following:

### **Management plan**

A management plan based on a sound Research findings, which should include contributions from all stakeholders. Protecting anything of Nature, whether it may be a single or a whole representative ecosystem, requires management intervention to ensure that the desired environment is maintained. To manage protected areas with any degree of efficiency and safety, the manager must first know and understand the way in which the various ecosystems involved operate, and the effects of Man upon them.

The integrated management plan for Sibiloi National Park recognizes the importance of both cultural and natural values including threats of livestock grazing and the need for regional collaboration with Ethiopian Government where Omo River that supplies 90% of the lake's water comes from.

### **Biophysical information**

Five basic topics can be identified for which the manager will require accurate, scientifically collected, biophysically treated information before he (or she) can prepare a comprehensive plan for the long-term management of a protected area. These are:

#### *Inventory*

What plants, animals, and other natural resources are present? Are there reliable estimates of species and populations densities? How are they distributed in space and time? What are important medicinal plants and other wild relatives of domestic species? What are the water runoff rates and amount of measurable pollution? Are there geological and soil maps? What are the threats to the protected site?

#### *Species needs*

As much information as possible should be gathered on status, particular habitat requirements, shelter, food, minerals and water-needs of species of special management significance. For example Lake Turkana is a key stop-over site for birds on

passage. The highest densities of water birds are on mud and pebble shores particularly concentration occur in sheltered muddy bays and the Omo delta. At least 23 species breed in the delta, including Goliath Heron.

#### *Ecological relationships*

What animal eats what? What plant competes with what? What otherwise depends on what? What are the key species maintaining the integrity and functioning of the ecosystem? The variety of the fish at the lake support large population of crocodiles.

#### *Monitoring and dynamics of change*

Studies are needed on colonization and restoration of disturbed areas, invasion by new species, changes of river flow or quality, and population trends within species. Is there evidence of climatic change? The Omo flows from the Ethiopian Highlands where its flow has been diminished by irrigation projects and the effects of prolonged drought. Important Kenya inflows, such as the Turkwell have also been substantially reduced in recent years by hydro-power and irrigation schemes.

#### *Predictive manipulation of ecosystems*

Where the natural processes of change are contrary to the objective of management, the manager will want to prevent change or effect its direction. To do this will require special knowledge of the direct or indirect short-term and long-term effects of different management options.

### **10.1.1.5 – Management resources**

A site manager should address the following 5Ms for effective management of World Heritage Sites

#### *Manpower*

The planning of manpower is a resourcing activity. Sibiloi National Park is managed through a workforce of 30 members of staff including the Warden. This site is currently understaffed.

### *Money*

To build and maintain the institutional and technical capacity need to sustainably manage natural resources, a stable source of financial support must be available. Sibiloi site is operating on a meagre financial resource.

### *Machinery/equipment*

These are essential tools to enable the manager to effectively manage an area. At present Sibiloi requires a reliable transport and an extra powerful boat.

### *Marketing*

The museum of Koobi For a site provides valuable information to the visitors. However marketing an area and creating awareness taking into account that changing stakeholders behaviour is a complex process that is influenced by their knowledge and by social and economical factors.

### *Methodology*

Appropriate methods of implementing projects of conservation of natural resources such as Game Census must be addressed.

### *Site interpretation*

Site interpretation to minimise tourism impacts on the ecosystem to educate the visitors on the importance of the site. Sibiloi and Central Islands National Parks being in the remotest part of Kenya are visited by only a few visitors and as such there is no significant tourism impact. The total number of visitors to this site from 1992 to 1998 are shown below:

<b>YEAR</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>
Central Island	271	457	450	501	413	468	204
Sibiloi	735	619	475	480	881	289	254
Total	1006	1076	925	981	1294	757	458

### **10.1.1.6 – Conclusion**

In conclusion the following is the summary of the management challenges for the Sibiloi and Central Island National Parks as WH Site.

- Overgrazing by livestock causes deterioration of the lakeshore vegetation.
- Minimal poaching
- Disturbances by fishermen seem to be a general problem for the island nesting birds.
- Omo river flow has been diminished by irrigation project in Ethiopia and the effects of prolonged drought within the region.
- Kenyan inflows have also been substantially reduced in recent years by hydropower and irrigation schemes.
- Erosion of soils by very strong winds characterises this area.
- Inadequate manpower, finances, machinery and equipment.

It must be emphasized that in order to balance the twin goals of conserving biodiversity and meeting people's needs, the use of natural resources must be sustainable.

### **10.1.1.7 – References**

- Kenya Wildlife Service 1999. Nomination Dossier for Sibiloi/Central Island World Heritage Site.
- UNESCO, 1997. Operational Guidelines for the implementation of the World Heritage Convention.
- Cole, G.A, 1999. Management Theory and Practice, Fourth Edition University of Sussex.

### **10.1.2 – THE EMERGING NOMINATION OF GREAT RIFT VALLEY ECOSYSTEM AS A WORLD HERITAGE SITE**

*By J.M. Mburugu, Kenya Wildlife Service*

#### **10.1.2.1 – Introduction**

The Republic of Kenya is strategically located astride the Equator and on the Indian Ocean seaboard. It covers an area of 582,646 sq.km. of which 13, 396 sq.km. is water surface and the remaining 569, 250 sq. km. is land surface.

The Great Rift Valley Ecosystem is one of the most spectacular volcanic regions in the world. The valley extends southwards for 6,000 km. from Dead Sea through Red Sea coming ashore at a far and passing through Ethiopia, across Kenya into Tanzania and Mozambique.

Name of property: The Great Rift Valley Ecosystem.

Exact location on map and indication of geographical coordinates: The Great Rift.

Valley Ecosystem in Kenya stretches from Lake Turkana (formerly Lake Rudolf, 40 35' N and 350 50'E) in the north to Lake Magadi (2000'S and 360 18'E) in the south. The proposed World Heritage Site includes the Rift Valley floor and associated lakes, and the escarpments to the watershed boundary that delineates the extent of the Rift Valley internal drainage. The drainage system covers an area of 126,910 km<sup>2</sup>.

Area of site proposed for inscription (ha.) and proposed buffer zone (ha.) if any: The Great Rift Valley Ecosystem in Kenya extends for a distance of 900 km from the north to south. The average width of the Rift Valley at Magadi is 56 km, Naivasha, 45 km, Baringo, 97 km and Turkana, 169 km. The lowest parts of the Rift Valley floor are at Lake Magadi, 584 m above sea level and Lake Turkana, 375 m above sea level.

#### **10.1.2.2 – Justification for inscription**

##### **Statement of significance**

The Great Rift Valley ecosystem supports diverse biological resources that are of global, regio-

nal, national and local importance. Among the biological resources include the internationally famous concentrations of the Lesser Flamingo and globally threatened, rare and endemic species of mammals, birds, fish, micro invertebrates and micro-organisms. As the inter-lake flights of flamingos, pelicans and other birds so conspicuously show, the Rift Valley lakes form a linked chain of ecosystems.

Valley lakes form a linked chain of ecosystems.

The Great Rift Valley also contains many fossil remains of plants, animals and human beings bearing clues of the origins of modern man and his predecessors dating back nearly four million years ago and has been consequently named "Cradle of Mankind". The fossil finds enable the reconstruction of human history and the history of other animal species.

##### **Possible comparative analysis (including state of conservation of similar sites)**

The areas that are presently set aside for conservation constitute a small proportion of the total area of the Great Rift Valley ecosystem. These protected sites do not form viable conservation units and are not established to form an effective network.

##### **Criteria under which inscription is proposed (and justification for inscription under these criteria)**

The Great Rift Valley ecosystem meets both the criteria for the inclusion of cultural properties and the criteria for inclusion of natural properties in the World Heritage List.

#### **10.1.2.3 – Cultural properties**

The Great Rift Valley ecosystem meets all the criteria for inclusion of cultural properties.

##### **Criteria**

###### *Human creative genius*

Many important fossils have been found on the shores of lake Turkana including the

skull of *Homo habilis* (KNM-ER 1470), the earliest recognized species of the genus *Homo*.

*Interchange of human values*

Olorgesailie is a site that has numerous artefacts of early man, which have been left as they were buried 600,000 years ago.

*Unique testimony to cultural tradition or civilization*

Koobi Fora is the only site in the world, which has documented record of human physical and cultural evolution over the last 4 million years.

*Technological ensemble illustrating significant stages in human history*

Hyrax Hill was occupied during the last phases of the Stone Age (Neolithic) and during the last phases of the Iron Age.

*Traditional human settlement representative of a culture, which has become vulnerable under impact of irreversible change*

Kariandusi represents an ideal display of typical Acheulian archaeology.

*Events or living traditions with ideas, beliefs of outstanding universal significance*

The Stone Age Man hewed blocks of obsidian for tool manufacture at Fischer's Tower at the northern end of Hell's Gate near Lake Naivasha.

**Authenticity**

*Authenticity in setting*

Koobi Fora, Karandusi, Hyrax Hill, Gambles Cave and Olorgesailie are important for their rich fossiliferous deposits which have preserved records of the Rift Valley inhabitants over a period going back to 4 million years.

*Legal and /or contractual and /or traditional protection and management mechanisms*

The Great Rift Valley historical sites and monuments are protected under the Museums Act (Cap 216) and the Antiquities and Monuments Act (Cap 215) enacted in 1983.

**10.1.2.4 – Natural Properties**

**Criteria**

*Outstanding example representing major change of earth's history*

The Rift Valley was formed as a result of powerful uplifts and down warping of the interior of the African continent since Pleistocene. The Rift Valley, as seen today, is therefore, part of a great rapture of the earth's surface, which has been formed over the last 30 million years as a result of tectonic movements.

*Outstanding example representing significant ongoing ecological and biological processes*

The biological resources in the Great Rift Valley ecosystem can be categorised as aquatic and terrestrial. Owing to its geographical position, the Rift Valley serves as the wintering and maintenance station for a large number of terrestrial and aquatic birds, which include Southern Africa, Sub-Saharan and Palearctic species. Many species of plants and animals have high levels of endemism.

*Contain superlative natural phenomena, areas of exceptional beauty or aesthetic importance*

The Great Rift Valley is a geological spectacle of extreme natural beauty and aesthetic significance. It is dotted with distinctive volcanic mountains some with remarkable craters. Lake Nakuru has earned the title of the greatest bird spectacle in the world where it is possible to see more than 2 million Lesser Flamingo.

*Contain the most important and significant habitats for in-situ conservation of biological diversity*

The Great Rift Valley ecosystem contains many sites that have been identified as Important Bird Areas (IBAs) and regarded as priority sites for biodiversity conservation.

**Integrity**

*Key interrelated and interdependent elements*

The earth movements, since Miocene (about 20 million years ago) have had pro-

found geological, hydrological, biological and human consequences. The landscape of the Great Rift Valley can be divided into four components, namely, highlands, lowlands, the young volcanic and scarp, and the built (modified) environment.

*Key aspects of processes essential for long-term conservation*

The diverse features of the Great Rift Valley ecosystem, including physical and chemical characteristics and climatic conditions, have resulted in numerous habitat types and an evolution of diverse flora and fauna.

*Outstanding aesthetic value*

The Great Rift Valley is one of the world's most spectacular places. It is a scar on the face of the earth that is visible 140,000 km out in space. Its most dramatic section is in Kenya where it appears as a gigantic chasm.

*Habitats for maintaining the most diverse fauna and flora*

National and international mechanisms in place for biodiversity conservation and management in specific habitats include protected areas such as national parks, national reserves, Ramsar Sites, Man and Biosphere Reserves, and World Heritage Sites. These protected areas cover lakes, tropical savannah and montane forests.

*Management plans*

Amongst the protected areas in the Great Rift Valley ecosystem, only Lake Naivasha Ramsar Site has a community-based management plan.

*Long-term legislative, regulatory and institutional protection*

Kenya Wildlife Service (KWS) is charged with the mandate of wildlife conservation and management. In recognition of the need for collaboration, KWS has signed memoranda of understanding with Forestry and Fisheries Departments. The National Museums of Kenya (NMK) col-

lects, documents, preserves, and presents natural and cultural heritage for the benefit of Kenya and the world.

*Important site for conservation of biological diversity*

The Great Rift Valley ecosystem contains many habitats that have been identified as Important Bird Areas (IBAs) by Nature Kenya, Bird life International and GEF.

**10.1.2.5 – Description**

*Description of Property*

The Great Rift Valley is an extension of the world-girdling system of mid-oceanic ridges.

*History and Development*

The Great Rift Valley was formed during the Late Cainozoic Phase (the last 20 million years). In the last 11 million years, a succession of faulting took place, and the shoulders of the valley were uplifted exposing walls of the escarpment, mainly of basalt rock.

*Form and date of most recent records of site*

Lake Turkana supports a large population of the Nile Crocodile (approximately 14,000). Over 500 species of birds have been recorded in the Rift Valley. In one single day, more than 300 bird species have been sited at Lake Baringo. The Lesser Flamingo population in the Rift Valley soda lakes is estimated at 4 million.

*Present state of conservation*

A number of conservation areas have been established in the Rift Valley by the Government of Kenya. These include: National Parks (Lake Nakuru, Sibiloi, Central Island, Turkana, South Turkana, Aberdares, Mount Longonot and Hell's Gate); national reserves (South Island Turkana, Nasalot, Lake Naivasha); Man and Biosphere Reserves (Mt. Kulal); and World Heritage Sites (Sibiloi/Central Island National Parks).

*Policies and programmes related to the presentation and promotion of the property*

There is considerable political will to conserve the cultural and natural resources as attested by the Ramsar Convention, World Heritage Convention, CITES, Convention on Migratory Species of Wild Animals, and the Convention on Biological Diversity.

**10.1.2.6 – Management**

*Ownership*

The ownership of the Great Rift Valley ecosystem is shared among Government institutions (Ministry of Environment and Natural Resources, KWS. Forest Department, Fisheries Department, National Museums of Kenya), local authorities, local communities and the private sector.

*Legal status*

The Environmental Management and Coordination Act (1999) is now in force.

*Protective measures and means of implementing them*

Protected areas and cultural sites are managed by KWS and the National Museums of Kenya in accordance with their legislative mandates respectively. The local authorities legislation is applied in those areas under the jurisdiction of the country Councils.

*Agency/agencies with management authority*

The agencies that have management mandates over environmental matters in the Rift Valley are KWS, National Museums of Kenya, Forestry Department, Fisheries Department, Water Department, Lands and Settlement Department and Kenya Agricultural Research Institute. Local authorities such as country and municipal councils have the rights of use and management over natural resources within their areas of jurisdiction.

*Level at which management is exercised (e.g., on site, regionally)*

The management of environmental affairs within the Rift Valley is largely sectoral. Kenya Wildlife Service, Forestry Department and the National Museums of Kenya have signed a tripartite collaborative memorandum of understanding.

*Agreed plans related to property (e.g., regional, local plan, conservation plan, tourism development plan)*

National development plans and policy papers provide guidelines to government departments and agencies as well as resource developers with regard to natural resource management.

*Sources and levels of finance*

The sources of finance are from Government allocation to departments and local authorities as well as gate collections from tourists to protected areas.

*Sources of expertise and training in conservation and management techniques*

The Kenya Wildlife Service Training Institute in Naivasha conducts training to various cadres including Rangers, Non-Commissioned Officers and Wardens for KWS and other organizations. The public universities provide expertise in research, monitoring and impact assessments.

*Visitor facilities and statistics*

Visitor facilities are available in well-established protected areas such as Lake Nakuru and Aberdares National Parks. In other protected areas, visitor facilities are under various stages of development.

**10.1.2.7 – Factors affecting the site**

***Development Pressures (e.g., encroachment, adaptation, agriculture, mining)***

The major threats to the cultural and natural resources of Great Valley ecosystem are linked to human activities. Overgrazing and clear

felling of trees has exposed the soil to the agents of erosion.

*Environmental Pressures (e.g., pollution, climate change)*

The pollution impact is heavy in the central Rift Valley where land use is most intensive.

Pollution from agricultural chemicals such as fertilizers, pesticides and herbicides as well as domestic effluent threaten the biodiversity of Lakes Nakuru and Naivasha. Invasive alien weeds such as *Salvinia molesta* and *Eichhornia crassipes* threaten the ecological character of lake Naivasha.

*Natural disasters and preparedness (earthquakes, floods, fires, etc.)*

The drought of 1999/2000 has led to the decimation of wildlife, livestock and starvation of the local people in many parts of the Great Rift Valley.

*Visitor/tourism pressures*

There is a growing concentration of human settlements associated with fishing, cottage industries, trade and tourism on the shores of Lake Turkana. Heavy tourism pressure has led to off road driving in Lake Nakuru National Park.

*Number of inhabitants within site, buffer zone*

The population density within the Great Rift Valley ecosystem ranges from 4 per-

sons per square km in Turkana District to 198 persons per square km in Nakuru District.

#### **10.1.2.8 – Monitoring**

*Key indicators for measuring state of conservation*

The key indicators for measuring the state of conservation can be grouped into categories. These include:

- Regional Landscape;
- Community/Ecosystem;
- Species/Populations; and
- Protected Area Management.

*Administrative arrangements for monitoring property*

The Kenya Wildlife Service, the National Museums of Kenya and the Department of Resources Surveys and Remote Sensing undertake monitoring of specific sites. There is no overall monitoring programme for the whole Great Rift Valley ecosystem.

#### **10.1.2.9 – Conclusion**

In conclusion, I strongly recommend this site to be nominated as a World Heritage Site because of its both cultural and natural heritage of outstanding universal value.

#### **10.1.2.10 – Reference**

Kenya Wildlife Service – Nomination Dossier.



*Opportunities for regional*  
**AND INTERNATIONAL COOPERATION**



# REGIONAL COOPERATION

## 11.1 – OPPORTUNITIES FOR REGIONAL COOPERATION IN AFRICA

*By Professor Eric Edroma, IUCN Regional Councillor for Africa*

### 11.1.1 – Introduction

Africa faces formidable challenges in many sectors, including developing cooperation. Many factors are responsible – the key ones being: the vast size of the continent, difficult and impenetrable terrain, lack of easy communication by road, air water, and even by foot, least development of modern computerized telecommunication technology, prevalence of civil and military conflicts, economic hardships, health hazards, culture that is characterized by backwardness, absence of common language, tribal barriers, scarcity of educational and scientific institutions that have limited opportunities for many Africans who could have attained the highest levels of academic and professional excellence, lack of resources and facilities necessary for pursuing scientific and technical ambitions within Africa, lack of opportunities for innovative inventions, brain drain to greener pastures, lack of organization, being among numerous other limitations. Consequently Africa trails behind other regions in fostering cooperation, collaboration and coordination of activities, between and among the talented people resident in the different parts of the continent. Africa cannot hope to develop and

compete favourably with the other regions when its citizens cannot interact with one another. It is high time this vicious situation is stopped and buried once and for all.

Not all is negative about Africa. Africa is rich in natural resources and it has nuclei of educated knowledgeable and experienced people scattered in its 56 states and abroad. Basic institutions exist to facilitate and promote the desired regional cooperation. These opportunities should be used to initiate regional cooperation in matters concerning the World Heritage Convention.

### 11.1.2 – Why is regional cooperation desirable?

The benefits for regional cooperation are many that include:

- (a) Problems of natural resources management are basically similar across Africa. If there are differences in different States, they must be in degree. By cooperating, we shall learn and share management experiences from one another and improve upon management techniques much more readily than if each State was left to fight the burden alone.
- (b) Cooperation helps to avoid repetition of research and management activities, thus minimizing costs for conservation activities.
- (c) It promotes exchange of personnel and dissemination of scientific and other information.

- (d) Through cooperation managers from neighbouring and other States are compelled to meet and discuss matters of common conservation concerns. Such physical interaction builds greater cooperation, harmony and stability. Cooperation leads to elimination of possibilities of hostility.
- (e) Through inter-State or regional cooperation, management activities such as research, game populations census, control of fire and pollutions, keeping migration routes open for the Wild animals, control of zoonotic diseases, development of regional tourist circuits, anti-poaching patrols, controlling smuggling of live animals and their trophies, law enforcement, can be done more effectively through collaborative programmes without resorting to diplomatic channels.
- (f) Regional cooperation is a tool for better management of the remnants of Africa's biodiversity. It will encourage the States to identify species and ecosystems that are threatened and endangered which require immediate attention. An effective network of Protected Areas that contain all representative of biomes can be maintained. Such cooperation will leave no stones unturned.

### 11.1.3 – Opportunities for cooperation

A number of options for regional cooperation are available for immediate adoption, the most convenient are:

- (a) Training of wildlife biologists and managers. Regional or better still, sub-regional centers of excellency for training the required man-power exist at the College of African Wildlife Training at Mweka in Tanzania for the Anglophone and at Garua in Cameroon for the Francophone Africa, the Southern African Wildlife College and at other Centres of national structure. These few institutions for training wildlife managers should be better funded and equipped to provide quality training under a regional cooperation than doing it nationally. Similar curricula could also be developed under the cooperation of University training programmes in several targeted Universities.
- (b) Language is a hindrance in Africa. Through regional cooperation a common language could be developed to facilitate and speed up the process of regional integration. English seems to offer the obvious candidate because it is the only language of the Internet in the whole world. Secondly English is more widely spoken in Africa than any other language other than perhaps Swahili. Thirdly, most Africans from French speaking countries try or tend to speak English. With awareness of this fact, and introduction of English in francophone States, the continent could overcome the obstacle of language sooner than later.
- (c) We must create/establish networking, system for exchange of personnel, sharing of knowledge and experiences, and disseminating of information through publications and other literature and through regional fora.
- (d) Organs exist for launching the regional cooperation. At the regional level we have the Organisation of African Unity (OAU). Then at each of the sub-regional levels, there is the Southern African Development Cooperation (SADC), East African Community (EAC) and Economic Cooperation of West African States (ECOWAS). These regional groupings recognized globally, provide the starting points. For example the East African Community has the Wildlife research and coordinating Committee that could be expanded to take care of management issues of the inscribed WH Sites. The assessment of financial and training needs would be better treated by or through the regional groupings than nationally.

e) I propose we should today, create an African World Heritage Network. Through the proposed network, all information on States Parties, WH sites, their distribution and status of conservation, management issues, personnel and capacity building in all activities in the WH Sites in the continent will become readily available to managers of the WH Sites throughout the continent. Activities such as meetings to identify and nominate properties for tentative listings, group training programmes, echoing conservation concerns for redress by the international community in times of crisis or emergency situations, mobilizing funds for effective management of WH Sites, controlling illegal trade in Wildlife and its products, encouraging States Parties to comply with provisions of the Convention and to implement their obligations, etc., can best and speedily be achieved under a regional cooperation than single handily under national efforts.

The proposed African WH Network, if accepted, will have the National Committees as its back-

bone constituencies. Seven elected representatives from the National WH Committees, from within each of the Eastern Africa, Southern Africa, Western Africa and Central Africa will form Executive sub-Regional Committees for that sub Region. Two elected representatives from each sub-region from each of the sub regions will form the Regional Executive Committee (REC) as the highest organ of the structure. The Chair and Vice Chair as well as members of REC are elected at Regional Assemblies of managers of WH Sites drawn from every State Party and held every 5 years. The network should have a small Secretariat of 2 or 3 staff – 1 Coordinator, 1 Secretary and perhaps 1 office assistant. The Secretariat must be in Africa at a location determined by the General Assembly. Funding and other details can be worked out once the proposal is accepted in principle.

We should sell this idea to our countries, and especially to those francophone central and partially West African States, and to potential donors and partners not present in this workshop.

*Concluding*

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**RECOMMENDATIONS**



## CONCLUSION AND RECOMMENDATIONS

### 12.1 – RECOMMENDATIONS TO STATES PARTIES .....

12.1.1 – Considering the urgent need for enhancing the protection of African Heritage Sites and in particular World Natural Heritage areas, the Expert Group meeting in the Southern African Wildlife College, South Africa, during 18-22 September, 2000 recommended that:

- The African States which have not yet ratified the World Heritage Convention do so at the earliest convenience.

12.1.2 – Realising the importance of securing the long-term legal protection of the African Heritage Sites and in particular the World Natural Heritage Sites, it is recommended that:

- The States Parties are requested to ensure that proper legal and policy structures are in place when sites are nominated to the World Heritage Centre.

12.1.3 – Considering the importance of having an institutional framework incorporating a broad variety of stakeholders concerned with the sites, the Expert Group recommended that:

- A National Committee be created in each country with a broad representation of Ministries, Institutions, NGO's, Universities, Private Sector, local community groups and others; and
- A National Focal point be identified.

12.1.4 – Considering the importance for managing the nominated or accepted World Natural Heritage Sites in a long-term professional and sustainable manner, the Expert Group recommended that:

- The State Parties be requested to submit with the nomination and integrated management and development plan of the site.

12.1.5 – Having underlined the importance of such a management and development plan, the Expert Group requested that special attention should be given to:

- Incorporating sustainable and diversified financing mechanisms e.g. Trust Funds, which ensure long-term and stable funding and prevent dependency on a single source of income.
- Exploring the possibilities for partnership with the private sector, local communities and other concerned stakeholders.
- Incorporating marketing plan for increasing the awareness and understanding of importance of the site among the public, decision makers, potential founders, surrounding communities and other stakeholders who form an integral part of the concerned parties.
- Incorporating a strategy for capacity building in the form of education and training of staff and partners in all levels of the concerned organizations working

with the protection and development of the Sites.

12.1.6 – Understanding the financial situation for many countries on the continent, it is recommended that:

- The States Parties increase the funding to their Natural Heritage Sites and in particular World Natural Heritage Sites in order to secure that we pass on to our children the heritage that we inherited from our parents.
- The State Parties to support the management of natural areas and in particular the world natural heritage areas, with at least 1% of the annual budget of the State Party.

12.1.7 – Realizing the importance of information and knowledge exchange between the African States Parties, it is recommended that :

- The States Parties set up a system for such exchanges at national, regional and pan-African level in an African World Heritage Network with a small secretariat to ensure efficiency of operation.

## **12.2 – RECOMMENDATION TO THE NOMINATED SITES**

Realising the importance of information exchange and networking between World Natural Heritage Sites, it is recommended that:

- The Site managers enhance the communication with other Heritage Sites ensuring that all relevant information is submitted to the library at the WH Centre as well as accessible on the Internet.

## **12.3 – RECOMMENDATION TO THE WORLD HERITAGE CENTRE (WHC)** .....

12.3.1 – Considering the importance of enhancing the protection of African Heritage Sites and in particular the World Natural Heritage Sites, the WHC is asked to:

- Provide the States Parties with increased financial assistance for preparing nomination requests as well as to support, the training and education of staff working with managing and developing the World Natural Heritage Sites.

12.3.2 – Realising that substantial amount of information about nominated and accepted World Natural Heritage Sites that is available at the WHC, the WHC is asked to:

- Make all that collective information available to all the States Parties through the Internet.

12.3.3 – Realising the importance for increased exchange of information and knowledge between all the African stakeholders, the WHC is further requested to:

- Provide for an Internet base aiming at exchanging such information and knowledge.
- Facilitate the establishment of a working group aiming at finalizing the structures for this system.
- Effectively communicate the great natural and economic values that the African World Natural Heritage Sites represent to the International Community as well as to the State Party being the custodian of these sites.

12.3.4 – Lastly, the Expert Group is recommending the World Heritage Centre to:

- Continue the support for national, regional and pan-African collaboration, education and training such as the workshop organised in South Africa during 18-22 September 2000.

*Workshop*

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**EVALUATION REPORT**





## WORKSHOP EVALUATION

Every participant was requested to evaluate the workshop using a questionnaire. The following was the response:

### 13.1 – THE TECHNICAL PROGRAMME

#### 13.1.1 – Papers presented

Good	18
Excellent	6
Fair	3
Very Good	2
	<hr/> 29

#### 13.1.2 – Discussion

Good	15
Excellent	12
Very good	1
Fair	1
	<hr/> 29

#### 13.1.3 – Recommendations

Good	16
Excellent	4
Very good	6
Fair	3
	<hr/> 29

### 13.2 – WORKING GROUPS

#### 13.2.1 – Enthusiasm of participants

Excellent	15
Good	11
Fair	3
	<hr/> 29

#### 13.2.2 – Topics discussed

Good	15
Excellent	9
Fair	4
Poor	1
	<hr/> 29

#### 13.2.3 – Recommendation

Good	16
Very good	6
Excellent	5
Fair	2
	<hr/> 29

### 13.3 – TIME ALLOWED

#### 13.3.1 – Length of workshop

Adequate	24
Little	4
Too much	1
	<hr/> 29

#### 13.3.2 – Case Studies

Adequate	23
Little	4
Too much	2
	<hr/> 29

#### 13.3.3 – For paper presentation

Adequate	23
Too much	5
Little	1
	<hr/> 29

*13.3.4 – For working Group sessions*

Little	17
Adequate	11
Too Little	1
	<hr/> 29

*13.4 – HOW MUCH HAD YOU KNOWN ABOUT THE WORLD HERITAGE CONVENTION?*

Average	16
Little	7
Too much	5
Nothing	1
	<hr/> 29

*13.5 – HOW OFTEN SHOULD THIS TYPE OF REGIONAL MEETING TAKE PLACE?*

Every 2 years	15
Every 3 years	7
Annually	5
Every 4 years	1
Every 5 years	1
	<hr/> 29

*13.6 – IS REGIONAL COOPERATION IN THE WORLD HERITAGE CONVENTION NECESSARY?*

Yes	29
No	0
	<hr/> 29

*13.7 – HOW SHOULD THE REGIONAL COOPERATION BE AFFECTED?*

The following responses were recorded, through:

- 13.7.1 – Organising specialised seminars and workshops on topics such as: cross boundary, marine, concession, and reintroduction of species.
- 13.7.2 – Using increasing Internet on WH Sites.
- 13.7.3 – Selecting the best and knowledgeable presenters to prepare well-researched papers for future meetings.
- 13.7.4 – Selecting topics for course participants.
- 13.7.5 – Discussing in workshops bio prospec-

ting of microbe and sharing benefits of the WH Sites.

13.7.6 – Networking through regular newsletters, e-mail, mail, faxing, etc in all areas. To improve communication.

13.7.7 – Improving communication between the WH Centre and the site managers. Organising regular professional meetings to discuss issues of mutual interest.

13.7.8 – Encouraging countries to ratify the convention.

13.7.9 – Exchanging information and sharing ideas on the Convention.

13.7.10 – Encouraging publication of technical reports at national and regional, levels.

13.7.11 – Influencing policy and decision makers on matters fostering of the Convention.

13.7.12 – Fostering bilateral and multilateral technical cooperation.

13.7.13 – Encouraging joint nominations of transboundary sites and joint management of the shared resources.

13.7.14 – Joint training of both WH Site managers and stakeholders.

13.7.15 – Designing management mechanisms through memoranda of understanding.

13.7.16 – Proving Technical assistance for improvement of WH Site management.

13.7.17 – Stepping up Research on resources of the WH Sites.

13.7.18 – Establishing WH regional body (Union).

13.7.19 – Providing motivation to the Site managers.

13.7.20 – Raising public awareness of the Convention.

13.7.21 – Creating and maintaining a stronger cooperation on matters of the Convention within the region.

13.7.22 – Fostering African renaissance.

13.7.23 – Sharing information and capacity building for management.

13.7.24 – Establishing joint and regional funding mechanisms.

- 13.7.25 – Establishing national committees as a starting point.
- 13.7.26 – Exchanging visits of political and appointed site officials.
- 13.7.27 – Analysing the economic benefits of the Sites.
- 13.7.28 – Promoting smooth flow of tourists through the continent.
- 13.7.29 – Ushering Political stability within the region.
- 13.7.30 – Breaking the language barrier by encouraging use of one language.
- 13.7.31 – Identifying existing strengths, weaknesses and opportunities.
- 13.7.32 – Keeping on trying the process of regionalisation.
- 13.7.33 – Establishing electronic discussion groups.
- 13.7.34 – Providing operational funds (by UNESCO) for the networking and regional meetings.
- 13.7.35 – Using the media to promote regional cooperation.
- 13.7.36 – Canvassing politicians for assistance.
- 13.7.37 – Requesting the WHC and other bodies such as the International Rangers Federation and other NGOs to facilitate the networking.
- 13.7.38 – Forming National, sub regional and regional WH Committees.
- 13.7.39 – Convening another regional meeting where every country in Africa is represented, during which the proposed African regional WH Network is launched and elections take place.
- 13.7.40 – The WH Centre should keep site managers posted with literature and I.
- 13.8 – WHAT SHOULD BE DONE TO ENSURE THAT ALL AFRICAN STATES RATIFY THE CONVENTION**
- 13.8.1 – States Parties should through their Site managers entice the non-Party States to ratify the convention.
- 13.8.2 – WH Centre to create understanding and awareness campaigning on values and benefits of WHC to politicians and leaders.
- 13.8.3 – UNESCO should send missions knowledgeable and skilled persons to the non-Party states to encourage them and assist with the process.
- 13.8.4 – Promote conservation education in countries.
- 13.8.5 – UNESCO should through any channel at its disposal interest the countries to ratify the convention. This could be through lobbying and using the UNESCO Representatives. National Commissions to UNESCO, Ambassadors accredited to UNESCO, Resource Management Agencies in the countries, and others.
- 13.8.6 – Communicate issues of concern to the Convention through specific high- ranking officials as contact points in the countries.
- 13.8.7 – UNESCO should remind and pressurise the highest offices of the non-State Parties of the need to ratify and UNESCO should detail to them the benefits for ratifying.
- 13.8.8 – UNESCO should sensitise appropriate national authorities at Diplomatic levels.
- 13.8.9 – The WH Convention should be synergised with the other Conventions for example Convention for Biodiversity (CBD), Ramsar Convention, Convention on migratory species, CITES, etc.
- 13.8.10 – UNESCO should visit Sites with potential for nomination and provide
- 13.8.11 – Regional meetings should involve non-Party States for encouragement.
- 13.8.12 – Representatives from non-party States should be facilitated to visit/tour fully functioning WH Sites for encouragement.
- 13.8.13 – Bombard non-Party States with information on the Convention.
- 13.8.14 – UNESCO should invite key ministerial executives to forums as concluded, and

organise tours for them to well-managed WH Sites.

13.8.15 – Target specific government agencies for contacts for example, planning, natural resource management departments, etc.

13.8.16 – Clarify the practical of the Convention to the non-Parties States.

13.8.17 – UNESCO should facilitate and encourage the non- Parties to ratify the Convention and should make the countries to see the tangible benefits of ratifying and getting Sites listed.

13.8.18 – UNESCO should create marketing and outreach strategies.

13.8.19 – UNESCO should use OAU and other organs and forums for reaching the targets.

13.8.20 – Demonstrate that the WH Convention is a tool for best management and use of the Heritage Sites.

13.8.20 – Convince leaders that the Convention and the WH Sites convey status, prestige, values and sustainable protection.

13.8.22 – Professionals in the country knowledgeable about the Convention should influence the non-Party States.

13.8.23 – Conduct workshops in Africa showing the economic success and benefits of Heritage Sites. Invite senior politicians who are able to take decisions to the workshops.

### 13.9 – VALUE/IMPACT OF THE WORKSHOP

Very High	11
Useful	10
High	8
	29

### 13.10 – OVERALL RESPONSE

13.10.1 – The Course was well conceived. The agenda was considered too ambitious for the time allotted. The one-day reserved for field trip was good, and that such arrangement should be kept for future meetings. The days

were too busy leaving no opportunities for night sessions. It was recommended that one day more should be added to the agenda, and that the case studies should be reduced except for those topics that support and elaborate a specific concept.

13.10.2 – For improving the future workshops of this kind, the overall response for action was that:

- Visual aid should be provided and used;
- The structure and objectives should be focussed;
- More group discussions included;
- Presenters should be advised in good time for preparation;
- The organisers should ensure that the venue has all the tools such as projectors, photocopiers, fax and e-mail facilities;
- More time is allocated especially to develop recommendations;
- More constructive goals conceived;
- Clear instructions are given.

### 13.11 – EXPERIENCE IN WH CONVENTION (ONLY THOSE 29 WHO RESPONDED)

Site Managers	16
MAB Coordinator	1
President of International Ranger Federation(IRF)	1
Other officials of IRF	1
Advisor on Wildlife Training Institute	1
Wildlife Planner	1
Others involved with natural resource management	8
Total	29

# *Annexes*

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## CLOSING ADDRESS

*By Dr Elizabeth Wangari, Senior Programme Specialist,  
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On behalf of the World Heritage Centre, United States of America and the Southern African Wildlife College, I would like to express deep gratitude to the Republic of South Africa and the Department of Environment and Tourism by accepting the organisation of this meeting in this country and to the Southern African Wildlife College for offering to host this workshop. We are particularly grateful to its Directors Dr. Eugene Moll and the College Staff for devoting all their time to ensure that this workshop has come to a successful conclusion. We are grateful to Prof. Eric L. Edroma for assisting the WH Centre in conducting this meeting. We thank them all.

It is my hope that the workshop has achieved its basic objective of “sharing experiences and building basis for future cooperation”. It is my believe that we have acquired valuable knowledge from each other on how World Heritage Convention as a tool can be used to conserve the African biodiversity. It is my hope that the participants are now better equipped for planning and nominating sites for Tentative listing and for eventual nomination for World Heritage Listing.

We have identified the constraints in managing Africa’s World Heritage Sites, particularly the lack of trained personnel, facilities for research and equipment, communication and financial resources to our efforts.

In view of the increasing world population, and particularly in the developing countries of

Africa, and in view of the rising aspirations of millions of people all over the world for a better standard of living, free from poverty, hunger and disease, the resources of the earth, including those found in our aquatic environment, will continue to receive unabated pressure from human exploitation to meet the increasing human demands.

It is therefore my hope that the deliberations that have taken place in the course of this workshop will contribute significantly to the formulation of scientifically oriented, proper and sound techniques and methods for the protection, development and management of natural World Heritage Sites, working under above constraints. You have all voiced full realization that no one nation in isolation can succeed in the fight against the deterioration of our resources. The problems facing our heritage resources as well as their management are transnational in as far as terrestrial and aquatic flora and fauna diversity know no national boundaries. It is therefore our hope that, in our endeavours to fight this threat to our natural environment, there will be concerted regional and international co-operation, consultation and exchange of information with regard to this very important component of our environment.

This workshop we hope has laid the foundation for regional co-operation and exchange of ideas in Africa. We at the World Heritage Centre within the scope of our competence as mandat-

ed by the States Parties to the World Heritage Convention, will continue to co-operate and harmonise our activities with countries so that we can find ways and means to ensure the continued survival and productivity of Africa's rich natural heritage.

We convey our most sincere thanks to Ms. Michael Peterson for the wonderful assistance and reception here at Hans Hoheisen Wildlife

Research Station and to Ms. Debby Thomson who has assured that our documents are in order and indeed legible to all of us.

Let us all consider this as the beginning of a conservation journey and working together we shall be there. With that word I declare the meeting closed.

I wish you all a good and safe journey back to your respective countries and duty stations.

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