TWENTY-TWO STORIES
OF CONSERVATION IN AFRICA:
KEY ELEMENTS FOR EFFECTIVE AND
WELL-GOVERNED PROTECTED AREAS
IN SUB-SAHARAN AFRICA

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TWENTY-TWO CHAMPIONS FROM AFRICA

The 6th World Parks Congress was organized in Sydney, Australia, in November 2014. More than 6,000 people from 170 countries attended this event which enabled conservation professionals to take stock of progress made since the previous congress, in Durban, South Africa, in 2003. And also to discuss the challenges that have emerged since then. From this point of view, Africa is particularly under pressure. The causes are many and have been the subject of numerous evaluations, some of them led by the IUCN Program on African Protected Areas & Conservation (IUCN-Papaco) since 2006. In addition to poor management effectiveness, one of these causes is the weak governance of most PAs, which negatively impacts on all activities that are conducted on the ground. That is why IUCN-Papaco focuses on governance in the context of a roadmap for Protected Areas: more ethical behavior, more legitimacy for decisions, accountability and transparency in the way they are made, more stakeholders involved, more professionalism for managers, more ownership of the tremendous assets that PAs offer, more recognition for those who succeed, more durability for conservation... these are the directions that this roadmap tries to promote for the future of conservation in Africa.

To ensure a good participation of Africa at the congress, we launched a call for proposals open to stakeholders involved in and around PAs. The objective was to prepare key messages that would be brought to the congress by a team of conservationists coming from all over the continent. This was a great success and we received more than 150 proposals (from 33 African countries). After a rigorous selection process, 22 candidates were selected and became our “champions”. Their messages cover all aspects of PA good governance, PA management efficiency and the sustainability of conservation. Together, they deliver a comprehensive and consistent message about the present and the future of protected areas on the continent and were to some extent "the voice of Africa" at the congress. All these champions indeed travelled to Sydney and were able to speak clearly and loudly about conservation in Africa. And they were listened to.

This book is about this fantastic journey. It gathers all these experiences and tells you the story of our 22 champions, their messages and their hope. Whilst certainly not comprehensive, it gives you a good overview of what Africa can produce in terms of conservation when stakeholders, on the ground, commit themselves for the sake of African Nature. All this would not have been possible without the support of our donors, namely the French Agency for Development (AfD), the Foundation for the Banc d’Arguin (FIBA) and the BIOPAMA project (EU). And this would not have been possible without the hard work of IUCN-Papaco’s staff, Marion Langrand and Beatrice Chataigner, who achieved much more than expected to make it an incredible success. All of them should be thanked here.

We do hope that you’ll find in these captivating stories something to inspire your work, to enhance your results and to improve conservation of nature in African protected areas.

Geoffroy Mauvais, coordinator of the IUCN Programme on African Protected Areas & Conservation (IUCN PAPACO)
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Our deepest appreciation also goes to the 22 champions themselves for their hard work on their stories and on their presentations at the World Park Congress. Despite all the Papaco’s - sometimes heavy - demands, they answered to all our expectations and their reactivity and optimism made it very pleasant for us to work with all of them.

Finally, we would like to thank Guy Broucke, Christine Mentzel and Stella Musiiwa from IUCN as well as Daniel Marnewick from BirdLife South Africa who gently offered to proofread this book and helped us to finalise it.
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Margaret is an environmental educator with an MSc in Environment and Development and currently pursuing a PhD from Kenyatta University (Kenya). Driven by the belief that sustained education from grassroots to leadership levels is the single most important element in improved environmental protection and conservation, Margaret has been passionately involved in conservation and conservation education since she was 10 when she joined the Wildlife Clubs of Kenya as a member- the same organization that she now runs as the National Coordinator.

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Economist Ravaka has been working for the Tany Meva Foundation in Madagascar since 2000. As a Program Officer, she is in charge of designing, implementing and monitoring programs that link conservation and local development. She also develops key partnership to be involved in these challenges, and she contributes to Tany Meva’s fundraising activities. Moreover, Ravaka serves as the Executive Secretariat for the network of African Funds for the Environment – CAFÉ, which aims at building a learning community that shares best practices and pursues innovative finance mechanisms in order to foster conservation, environmental management and sustainable development in Africa.

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A fisherman from the village of Kawawana, Salatou created, in 2006, the Mangagoulack Fishermen Association. During his tenure as president of the association, between 2006 and 2012, he worked on the implementation of the Kawawana ICCA and on its legal recognition. He later created the association Kabeka aimed at helping communities willing to implement a similar system in their villages and joined the ICCA consortium for Western Africa.

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Leseho is an International Coordinator for Lubombo Transfrontier Conservation Area (TFCA), a conservation initiative between Mozambique, South Africa and Swaziland, which is supported by the Peace Parks Foundation. Working closely with the Environmental Authorities and related Agencies of the three countries, she is responsible for ensuring that the provisions of the Protocols establishing the five areas, which form the Lubombo Transfrontier Conservation Area (TFCA), are met. Leseho has gained experience and knowledge of biodiversity issues through her previous work within the public sector when she was responsible, among other things, for the development and implementation of the Biodiversity Act and its associated regulations and for the National Biodiversity Strategy and Action Plan for South Africa.
INTRODUCTION: THE EVOLUTION OF PROTECTED AREAS GOVERNANCE IN AFRICA

The International Union for Conservation of Nature defines a protected area as a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long term conservation of nature with associated ecosystem services and cultural values (IUCN 2008). Protected areas are organized in six management categories (from a strict nature conservation approach to sustainable use of natural resources) that today include more than 200,000 protected areas spread across the globe. They are managed by different stakeholders (states, local populations, private companies, etc.) who determine the governance of these PAs, defined as the process of decision-making and interaction between those who “govern” the protected areas.

In Africa, the general trend for a long time has been to let the State be responsible for protected areas management. This led to the exclusion of other stakeholders from natural resources management and nature conservation. Protected areas were therefore seen as government-managed areas only, under a “fences and fines” approach, which has become more and more controversial whilst the effectiveness of this style of management, in most places, is not demonstrated.

Indeed, protected areas in Africa are under great pressure: the human population is growing fast and with this comes an increase of the threats towards the environment: overuse of natural resources, poaching of wildlife, conversion of the natural environment to more “productive” industrial activities, etc. Development and poverty alleviation is of course a necessity and no one would deny the right of the populations to improve their standard of living. However, with a significant rate of biodiversity loss over the last decades, even the most optimistic observers recognize that conservation in Africa is at stake.

Although many challenges remain and the continent still has a long way to go, African protected areas seem to slowly move from this exclusive approach to more open and effective types of governance. The 22 stories that are presented in this document are some examples of the challenges that African protected areas face and of the solutions and adaptations that can address these challenges.

These case studies underline the importance of three major aspects that reflect the shift of PA governance in Africa and the evolution of the key actors that are involved in this governance. State governance, whilst necessary, seems to be modernizing and accommodating the circumstances of its time, with changes in practices and scales (Part 1). The integration of a broader range of stakeholders brings more and more skills to PAs governance institutions and thus enhances its quality (Part 2). Furthermore, integrating local populations into the management of PAs ensures their legitimacy and thus allows them to reach their conservation goals (Part 3). Finally, development and conservation should not be opposed as the promotion of local development thanks to conservation policies can ensure the commitment of all stakeholders to conservation (Part 4).
As mentioned in the introduction, innovative management of protected areas is on the increase in Africa and the proportion of repressive and inefficient protected areas appears to decline in favour of more efficient and well-managed areas. Although this contrast in management efficiency is often associated to the antagonism private vs public management, the change of protected areas management in Africa is not necessarily a shift between state-managed protected areas and privately managed protected areas. Indeed, some governments have shown their capacity to evolve and to implement new policies of conservation adapted to their time: policies that implement changes in practices and scale.

Effective state-led conservation policies
Concerned by the effectiveness of its protected areas, the government of Senegal decided, in 2012, to thoroughly reform its approach to conservation by putting in place collaborative and effective tools aiming at the creation of two new marine protected areas per year that would be managed in collaboration with all stakeholders (From top-down to bottom-up, Binta Ba Diaw). In the meantime in southern Africa, Botswana went further and made certain that the integration of multiple actors in the management of protected areas would not endanger the effectiveness of protected areas and would allow them to fulfil their goal of long-term conservation (Improving protected areas’ management effectiveness, Virat Motshereganjyi).

Conservation beyond borders
Because biodiversity issues do not necessarily stop at political borders, states sometimes have to collaborate to implement effective conservation policies. In this regards, Lesego Sello’s story about the collaboration between Mozambique and South Africa (Beyond Borders) and Nicholas de Goede’s description of the tools that explain the success of the collaboration between South Africa and Namibia in the |Ai-|Ais/Richtersveld Transfrontier Park (Recipe for a good couple life) show that this collaboration is possible and desirable. Going further, Georges Muamba demonstrates that this can even work in sensitive areas such as the border of Rwanda, Uganda and DRC which political relations have been very sensitive for the past decades (Building peace on nature conservation).
PARTICIPATIVE IMPLEMENTATION OF MANAGEMENT PLANS OF MARINE PROTECTED AREAS IN SENEGAL: BETTER INTEGRATION OF LOCAL POPULATIONS

Binta Ba DIAW, Marine Community Based Protected Areas Department of Senegal

INTRODUCTION

Concerned by the conservation of its marine biodiversity and by the improvement of coastal populations’ standard of living, the government of Senegal decided, in May 2012, to create a Committee for Community Marine Protected Areas (CCMPA). The CCMPA’s mission is to manage the Senegalese network of marine protected areas (MPA) in order to make it consistent and representative of coastal, estuary and marine ecosystems that are found in Senegal. This network currently includes 9 marine PAs, spread over 206,887 hectares. The CCMPA objective is now to create two new MPA per year and, doing so, to take into account the needs of the population living close to these areas. The CCMPA promotes community-led conservation initiatives that value the local traditions and knowledge of the communities. To do so, it supports the implementation of volunteer groups composed of local populations of the MPA.

GOVERNANCE KEY ACTORS

The identification of local actors starts with the exploration of the area of interest in terms of coastal and marine biodiversity (future MPA) and goes on with the formalization of the status of this zone as a PA. During this process, the CCMPA contacts the administrative authorities of the locality and various decentralised technical services, civil society organisations and development NGOs.
LOCAL STAKEHOLDERS TRAINING TO USE OF PARTICIPATIVE PLANNING TOOLS

For the second step of the process, the CCMPA organises a workshop to train local stakeholders (populations, members of communities’ organisations, officials, members of decentralised technical services) in the use of participative diagnostic and planning tools to enable them to actively participate in the data collection and in the planning of future activities within the protected areas. These diagnostic and planning tools include: resources mapping based on GPS location and seasons calendar, problem trees, analysis of all stakeholders interests, objective trees as well as a consistency chart drawn in order to check that goals and action planning are consistent. Once the stakeholders are trained in the use of these tools, they are able to be fully integrated into the shared governance of the MPA and to evaluate the quality of the PA’s governance and management.

PARTICIPATIVE ANALYSIS OF THE MPA’S RESULTS

The participative diagnostic analysis consists in a prior analysis of the area’s biological and socio-economical characteristics by local stakeholders and the CMCPA. Once this is done, their report is presented to the local communities, members of local administrations, organisations and decentralised technical services. After the presentation and discussion of these results, all the above-mentioned stakeholders approve the results and give recommendations allowing the team in charge to finalise the diagnostic report.

PARTICIPATIVE PREPARATION OF THE ACTION PLAN

Once the local stakeholders validate the diagnostic analysis, the team starts to write an action plan based on it. To do so, the team organises a local planning workshop where the participants will have to identify the main environmental issues of the MPA. Then, taking these threats, challenges and opportunities into account, they define the strategic goals to pursue and the answers to give to the challenges previously mentioned. Finally, they set the deadlines and identify the means to achieve the expected results.
**Writing the Management Action Plan (MAP)**

Based on the diagnostic analysis and the action plan, the CCMPA can then write a management action plan. Using what was agreed with the local stakeholders, they summarize the conclusions of the participative diagnostic analysis and of the planning workshop. Once this document is finalised, it is printed and shared with the local actors, presented and validated by them. One or several workshops are organised to present it to all the stakeholders. During these meetings, the communication is adapted to the diversity of the public and must be accessible for everyone to understand it and express potential criticism.

**Conclusion**

The participatory writing process of the MAP organised by the CCMPA is a crucial step to the implementation of community marine PAs. It allowed to put in place a concerted approach to identify sites of interest for the conservation of marine and coastal biodiversity as well as local stakeholders, to train the local stakeholders in the use of participatory analysis and planning tools, to integrate them in the process of analysis and planning of the MPA’s activities and to organise a workshop for the restitution and validation the MPA’s plan of action with all local stakeholders. This process of learning by doing guarantees the appropriation of the MAP by local stakeholders. Recognizing the endogenous knowledge during the phase of analysis and planning of activities increases the chances of future success of the MPA’s management since it anticipates and takes into account the potential conflicts and frustrations of local stakeholders.
Story n°2 – Improving protected areas management effectiveness

STRATEGIC PARTNERSHIPS TO IMPROVE THE FINANCIAL AND OPERATIONAL SUSTAINABILITY OF PROTECTED AREAS IN BOTSWANA

Virat M. Kootsositse, Birdlife Botswana

INTRODUCTION

Over the decades, areas set aside for conservation and resources invested in biodiversity conservation have been increasing. However, despite these efforts, habitat and wildlife losses have continued to rise across the African continent with increasing poverty for communities living around these areas. As a result, it is becoming apparent that the hope for conserving the global biodiversity cannot be nested within the current PAs model but may require new models that not only engage stakeholders but also strategically influence meaningful and resourceful partnerships.

For the Convention on Biological Diversity (CBD) a deliberate effort was made to have a specific program that deals with PAs system management. As one of the programs under CBD, the Program of Work on Protected Areas deals with direct actions for planning, selecting, establishing, strengthening and managing PAs; ways and means to improve governance, participation and equity; and enabling activities related to PAs. In Botswana, inadequate management and lack of effectiveness is a key challenge faced by PAs.

To improve the financial and operational sustainability of PAs in Botswana, BirdLife Botswana in partnership with the Department of Environmental Affairs and the Department of Wildlife and National Parks, implemented a project named ‘Strategic Partnerships to Improve the Financial and Operational Sustainability of Protected Areas in Botswana’ over a period of five years (2009 to 2013).

GEOGRAPHIC AREA, STAKEHOLDERS AND RESOURCES

Botswana that has a total land area of 581,730 km², had established, by 2008, an impressive PAs estate which incorporates more than 40% of the total land territory, approximately 243,000 km², representative of the diverse national habitats and ecosystems. However, current funding streams for PAs management systems seem to be inadequate in some areas where biodiversity is threatened because PAs are not fulfilling their management functions. This is primarily the case in areas (covering approx. 30,000 km²) located in spaces with growing human populations and accompanying economic activities, which place direct and indirect pressures on biodiversity.
The main threat to biodiversity in these areas arises from the conversion of natural habitats into other "productive" land uses such as cattle rearing (beef is the second highest foreign revenue resource export after diamonds). The expansion of cattle into wildlife areas has led to habitat fragmentation leading to increasing pressure on adjacent PAs, and high levels of human-wildlife conflicts. This correlates with high levels of human resentment against conservation initiatives in site-adjacent populations.

The conservation areas currently comprise about 7.7% in national parks, 10.3% in game reserves, and 24% as Wildlife Management Areas (WMA). The latter is based on wildlife utilization by local communities, a Community Based Natural Resource Management (CBNRM) concept adopted to conserve biodiversity whilst involving communities in the management of natural resources within their vicinity. A large proportion of Botswana’s PAs estate (ca 70%) lies in remote dry land areas with little human habitation.

**LEGITIMATE AND RECOGNISED STRUCTURES**

Park management committees are created and now recognized by the government to provide a platform for multi-stakeholders. These committees are set to discuss mainly s management issues in order to increase benefits and credibility of the PAs system to stakeholder. These committees constitute (1) Communities around the pilot area (Southern Sua Pan): e.g Mmatshumo, Mosu, Mmea and Mokubilo villages; (2) Private sector (e.g Debswana Mining Company and BotAsh Mining Company), and (3) The government departments, (e.g Land Board, Boteti Council’s Physical Planning Unit, Department of Tourism (DoT), Botswana Tourism Organization (BTO), Boteti District Administration, Department of Wildlife and National Parks and the Department of Environmental Affairs).

**INSTITUTIONAL MECHANISMS TO ENABLE DECISION MAKING**

An assessment and review of the Wildlife Conservation and National Parks Act 28 of 1992 and the recently approved CBNRM Policy (2007) was undertaken. Although these legal frameworks provide a platform to guide multi-stakeholder involvement and community participation in co-management of PAs (especially WMAs), they do not have clear guidance for the governance structures to realize such co-management. The capacity of the DWNP (as the Protected Area Authority) is continuously improved to be able to successfully apply co-management models, applying not just “best practices” in this approach, but also other financial planning and management tools required to ensure that the
model works, that partners are genuinely engaged, that the most cost-effective options are adopted and that management decisions are “evidence-based” and transparent, lest PAs co-managers and other stakeholders (policy makers, donor agencies etc.) lose confidence in the approach, resulting in a relapse to the traditional top-down statist approach, which is very costly to maintain.

LONG-TERM SUSTAINABILITY

In order to be sustainable, ss need to be financially self-sustaining and to have direct economic returns to the local communities. Under this project, the three PA management options that were assessed were government governance, private governance and co-management/joint management approaches. The best PA management system is the one that maximizes/optimizes operational and financial sustainability of PA operations. Consequently, Cost Benefit Analysis (CBA) was employed and the option with the highest net present value (NPV) was selected. In order to validate the results obtained from the CBA, Multi Criteria Decision Analysis (MCDA) was also applied. The advantage of MCDA is that it uses various criteria rather than just relying on financial criteria in selecting the best PA management system. Based on the two appraisal techniques, co-management/joint management emerged as a preferred sustainable option for financial sustainability and management effectiveness of natural resources. The project followed up with instituting training sessions for park managers and developing a co-management module for the country’s wildlife training institute such that the concept is included into the curriculum.

CONCLUSION

Establishing a legal tool for partnerships in natural resource management-policy, legislation and enforcement-is a critical step to initiate a process of improving PAs’ management effectiveness. Then PAs financial and management effectiveness need to be continuously evaluated.

• Protected areas need to be financially self-sustaining that is why economic evaluation of natural resources needs to be established as a basis for discussion and for decision-making. Indeed PA information and knowledge should be effectively managed and used in decision-making.

• Local communities should be meaningfully engaged in natural resources management and their capacity continuously developed. Creating a multi-stakeholder forum for participating in natural resources management ensures holistic approach to management of these resources and private sector should have a stake management of PAs.
TRANSLOCATION AS A WAY OF RESTOCKING THE LESS POPULATED AREAS WITH A SHARED ECOSYSTEM IN THE LUBOMBO TRANSFRONTIER CONSERVATION AREA

Leseho SELLO, Peace Parks Foundation- Lubombo Trans-frontier Conservation Area

INTRODUCTION

The Lubombo Spatial Development Initiative, formalised in July 1999 by President Mbeki, President Chissano and His Majesty King Mswati III put in place a platform for regional cooperation and delivery in various sectors such as agriculture, infrastructure development, malaria control, tourism and conservation. Collaboration on conservation and tourism was formalised through the signing of a General Transfrontier Conservation and Resource Area Protocol in June 2000 and the establishment of the Lubombo Tranfronteir Conservation Area (TFCA). The spirit or object of the Protocol is to “promote sustainable development and utilisation of the natural resource base, the maintenance of a healthy environment, and holistic cross-border ecosystem management”. The Lubombo TFCA covers an area of approximately 4,195 km² of which about 8% is in Swaziland, 26% in South Africa, and 66% in Mozambique. It consists of five distinct TFCAs namely Usuthu-Tembi-Futi, Ponta do Ouro-Kosi Bay, Lubombo Conservancy-Goba, Nsubane-Pongola, and Songimvelo-Malolotja. The Lubombo TFCA is one of the most important areas of biodiversity and lies within the Maputaland Centre of Endemism which contains an exceptionally high number of species and is a zone of marked transition. This area contains many endemics in its own right, which are spread over the whole taxonomic spectrum making...
it the southernmost extent of the East African flora and fauna and the northernmost extent of many Southern African species.

**LINKING MAPUTO SPECIAL RESERVE WITH TEMBE ELEPHANT PARK**

The focus of the story is the collaboration of Mozambique and South Africa in one of the five TFCAs, Usuthu-Tembe-Futi. The area regroups the Maputo Special Reserve (MSR) in Mozambique and the Tembe Elephant Park (TEP) in South Africa.

**The Futi corridor**

In 2009 Mozambique extended the Maputo Special Reserve by adding to it an area of 68,800ha called the Futi Corridor. It thereby linked Maputo Special Reserve to Tembe Elephant Park and created a contiguous ecological system of approximately 134,000ha protecting the main biodiversity hotspots of the region.

The ultimate goal of this expansion was to allow free movements of wildlife along this ecological gradient and across international borders. By attaining this goal it would be possible to stimulate and promote economic development, through increased tourism opportunities in the two PAs whilst safeguarding the unique biodiversity which is supported by and cooperatively managed by the two countries.

**Translocation of animals**

As part of the collaboration between the two countries, the government of Mozambique requested donation of animals from South Africa to be introduced in Maputo Special Reserve. The objectives of introductions were to complete various levels of chain and restore natural processes essential for Maputo Special Reserve, address the requirements of re-establishing the biodiversity mix previously present in this globally recognized biodiversity hotspot and improve game viewing potential for tourism development.

To that effect the two governments initiated a multi-year endeavour with wildlife donated from different reserves from Kwa-Zulu Natal, South Africa which resulted in a total 909 animals being successfully translocated since 2010. In 2013, 88 zebras, 72 nyala, 75 impala, 48 warthog, 73 blue wildebeest, 12 giraffe and 24 kudu were translocated. The translocations were backed up by aerial surveys and counts, which have been taking place annually since 2011. The translocated animals are responding positively to their new habitat and are multiplying, especially giraffes, zebras and blue wildebeests and this has resulted in better sightings and increased tourist satisfaction at MSR.

Until recently, there was no accommodation inside Maputo Special Reserve but a new community lodge is currently being built in Ponta Chemucane within the concession area of MSR. The visitors to this 18-bed community lodge will now benefit from the abundance of game together with turtle sightings and bird-watching. The improved sightings will also benefit the communities as it is anticipated that more sightings will increase tourism flows and thus more income to this community lodge. It is also anticipated that the communities residing in and around the reserve will have a better
appreciation of wildlife and respond differently to the human-wildlife conflicts caused, for instance, by elephants raiding the crops.

**LEGITIMATE, RECOGNISED STRUCTURES THAT ENABLE EFFECTIVE DECISION MAKING**

A joint Park Management Committee was established with the objectives to provide direction and guidance on the implementation of a Joint Operational Strategy and to ensure appropriate consultation and inclusion of relevant stakeholders for an effective management of the MSR-TEP core area. This Park Management Committee reports to the Usuthu-Tembe-Futi Task Group which consists of representatives from appropriate conservation and resource area management experts, tourism and development experts and representatives of relevant government and implementing agencies appointed by the responsible Ministers of the three countries.

The Usuthu-Tembe-Futi Task Group is the overall institutional mechanism that takes decisions on matters related to the TFCA. It is assisted by working groups that it constitutes as and when needed. In this instance, it constituted a Park Management Committee that developed a Joint Operational Strategy (whose objective are to:

- Guide and facilitate the relationship between the Authorities of the two PAs, thus enabling the establishment of a functional and operational transfrontier PA transcending the international boundary
- Serve as accountability tool regarding the efforts of the two authorities. Through the utilisation of the Joint Operation Strategy, the Usuthu-Tembe-Futi Task Group and the
Commission can effectively and efficiently report back to the various stakeholders affected by the conservation initiative.

CONCLUSION

The translocation to Maputo Special Reserve is an example of how transboundary conservation provides a good opportunity for countries to work together and achieve conservation goals. The translocation was made possible through trust, good working relations, constant communication and joint planning, within the created structures. The newly created Park Management Committee will facilitate monitoring and reporting of direct tourism and related benefits of the translocation programme.
INTRODUCTION

The /Ai/Ais-Richtersveld Transfrontier Park (ARTP) has now been existing for 10 years and has, in the last 4 years, excelled in joint management of Richtersveld National Park (South African National Parks - RSA side) and /Ai/Ais Hot Spring Game Park (Ministry of Environment and Tourism - Namibia side). Namibia Wildlife Resorts also forms part of the ARTP as they are the tourism operator within the National Parks in Namibia. A treaty between South Africa and Namibia was signed by the presidents of both countries in 2003 and kept the park boundaries as they already were defined, for a total surface of 6 045 km² (604 500ha). The Transfrontier Park is governed by the Joint Management Board, which is advised by the Park Management Committee, comprising of the respective park managers of the two parks. The parks are managed by South African National Parks, the Namibian Ministry of Environment and Tourism and the Namibia Wildlife Resorts. All organisations are government funded.

STRUCTURES FOR TRANSBOUNDARY GOVERNANCE

Park managers, and then International coordinators, came together in 2010 and, with the participation of the Peace Parks Foundation, established a document called the Joint Operation Strategy. This document covers all aspects of the management plans of the respective parks and is a dynamic, working document that can be adapted when necessary. It covers all joint day-to-day operations, such as law enforcement, staff training, border crossings, income generation projects, community involvement etc.

Once the paper exercise was completed, the implementation was done through the establishment of a Park Managers committee composed of park managers, section rangers and tourism managers from both parks. Police officers and Immigration Officers can also be invited as and when required. Every six months, the committee presents a report covering all challenges and successes of the Joint Management Board. If possible, all issues are sorted out, otherwise they are taken to higher authorities. Indeed, once a year a bilateral ministerial meeting takes place between the ministers and chair persons of both countries and all interventions that need higher input are discussed there.

Bilateral fundings

Financing of all of the above meetings are covered by the Department of Environmental Affairs and the Peace Parks Foundation. The Joint Management Board meetings are usually sponsored by Peace Parks Foundation while the ARTP has a ring fenced account that is
managed by Namibia Wildlife resorts (the tourism arm of the Transfrontier Park) and unanimous decisions between all committee members have to be reached before any funds can be utilized.

**LEGITIMATE, RECOGNISED STRUCTURES**

The National Environmental Management: Protected Areas Act (Act 57 of 2003) or the National Environmental Management: Biodiversity Act (Act 10 of 2004) are the legislation that govern the RSA side. Namibia has similar legislation on their side. One of the sections of the Joint Operation Strategy – the form that guides the day to day cross border operations and functions is looking at the harmonisation of policies and procedures. ARTP has done a lot in this regard. For example cross border radio licences were received from both countries’ communication authorities so that a radio network can legally be operated across the border. This would not have been possible in the past and is a good example of the success of the treaty signed between Namibia and South Africa.

**DEVELOPING INSTITUTIONAL MECHANISMS TO ENABLE DECISION MAKING.**

As mentioned above, the ARTP is governed by a Joint Management Board. This Joint Management Board has only a strategic role and is not dedicated to design practical tools that would help the coordination of the activities within the transfrontier park on the ground. But thanks to the commitment of the staff in the field, the Park Management Committee was formed and thereafter the Joint Operation Strategy, which is the tool aiming at coordinating the decision making of the ARTP, was drawn up. The Joint Management Board endorsed the Joint Operation Strategy and that made decision making a lot easier on the ground. Once the Park Management Committee has made a decision it is implemented immediately. An example would be the cross border tourism product i.e. Desert Kayak Trails. The idea has been on the table for a while and after a successful donor application to GIZ the project is in full swing.

**LONG-TERM SUSTAINABILITY**

In the initial stages the ARTP was totally funded by governments. Yet, thanks to continuous efforts by the staff on the ground, a lot of sponsorships - such as Peace Parks Foundation, GIZ, Department of Environmental Affairs and Honorary rangers - have added their contribution to get the ARTP fully functional as it is today. Moreover, through the development of the Joint Operation Strategy and the joint tourism management plan, activities
such as Desert Kayak Trails and Desert Knights Mountain Bike Tour have participated in making the ARTP a financially viable transfrontier PA.

**CONCLUSION**

Through perseverance the ARTP has showed that the idea of a Transfrontier Conservation Area is not only a utopia but could be a reality. It has shown that the conservation footprint can be enlarged across borders and managed towards a common goal. Furthermore is has shown that there can be an harmonisation of different government policies and legislation as long as there is a will to do so. After a lot of hard work over the last 4 years the ARTP is a fully functional and operational transfrontier PA and could be used as an example for others.
INTRODUCTION

In the 90’s, while armed conflicts and political instability were recurrent in the region of the Greater Virunga, an informal collaboration between the eight neighbouring national parks of DRC, Rwanda and Uganda started. This collaboration then evolved in time to eventually become formalized by a ministerial agreement: the agreement between Rwanda and the Transboundary Greater Virunga Collaborative (TGVC). Another high-level agreement between the three neighbouring countries is expected to be soon signed despite the tense political relation that remains in this area.

A THREATENED BIODIVERSITY

The Greater Virunga area is facing increasing threats from poaching affecting the Gorillas and other flag species that represent the core area of tourism activities in the region. Illegal trafficking of ivory, hunting and logging are other additional important pressures on those PAs. The PAs of each of the three countries could not face all these threats individually in a sustainable way. Thus Uganda, Rwanda and DRC agreed on a joint strategy to protect and
conserve the biodiversity of the region of the Albertine Rift by putting together their human resources.

**JOINT STRATEGIC PLANNING**

**Management of the Greater Virunga**

The executive secretariat of the TGVC is responsible for the implementation of the joint strategic plan. To this end, four transboundary consultative committees have been set up. They are in charge of guiding decision making related to ecological monitoring and scientific research within the Greater Virunga landscape.

Meanwhile the administrative council and the park managers meet on a regular basis and participate to the decision making related to the global management of the landscape. Decision makers together with representatives from civil society from DRC and Rwanda also benefit from site visits in order to better understand the real impacts of Ugandan oil exploitation on biodiversity and assess its impact on the landscape. The strategic plan is supported by technical partners that are in charge of the implementation of the outcoming field activities, of the investigations on illegal trafficking of natural resources as well as of the study of alternative revenues that could be provided by REDD+ or other similar opportunities.

**Involving and supporting local communities**

Different types of activities aiming at supporting community development are being developed within the Greater Virunga, such as beekeeping, ecotourism, construction of drinking water tanks, etc. Moreover, the neighbouring communities of the PA are themselves involved in the management of the park. Local communities are widely informed and they actively take part to the operational planning process and to the evaluation of the joint strategic plan. Thanks to their involvement throughout the process, their perception of biodiversity conservation has progressively changed. Now they are more willing to conserve natural resources and to use them in a sustainable way.

**JOINT SURVEILLANCE AND GOOD PRACTICES OF MANAGEMENT**

Today an operational joint surveillance system is being implemented across the national borders of the Greater Virunga landscape thanks to joint patrols that include rangers from the three different countries. Intelligence on illegal activities within the landscape, provided by this surveillance system, is shared among all the park managers. Moreover thanks to site visits among leaders of villages settled around the
Greater Virunga, the TGVC promotes the dissemination of good practices of management for their community land. Management of water tanks and techniques of agroforestry are, for example, topics that are mentioned in these visits. For instance, the members of a Rwandese cooperative have trained the Congolese colleagues to agriculture models integrating livestock. Meanwhile Congolese experts have trained their Rwandese and Ugandan colleagues on water tank construction.

**CONCLUSION**

This experience of collaboration between DRC, Rwanda and Uganda within the Greater Virunga landscape demonstrates that conserving biodiversity in armed conflict and politically unstable areas is still possible. This has been made possible thanks to a high level political collaboration that enabled joint surveillance activities and involvement of local stakeholders in developing new income generating alternative activities.
PART 2

TOWARD A BROADER PROTECTED AREAS’ GOVERNANCE: MORE STAKEHOLDERS FOR BETTER RESULTS

In order to strengthen protected areas’ governance and to promote good decision-making, it is important to widen the available skills of governance structures. Indeed, the diversification of actors involved in the management of protected areas could ease the sharing of relevant information and knowledge that are specific to each group of actors and could thus benefit conservation.

Diversity of actors, diversity of knowledge
In the Central African Republic, the NGO “Maison de l’Enfant et de la Femme Pigmés” promotes the use of participatory mapping as a tool for local communities to express their knowledge about resource use and influence the management and creation of protected areas (From hunting to mapping, Jean Bruno Ngoungogbia). Similarly, the involvement of women in conservation activities can highly benefit conservation. This has been proven in Rwanda where the Association des Ecologistes Rwandais (Rwandese Environmentalists Association) promotes the participation of women in conservation and sustainable use of natural resources (When women take the lead, Dancilla Mukakamari).

When private actors get involved in conservation
The next two stories of this chapter on the diversification of conservation stakeholders describe the key elements of the success of two privately led conservation initiatives in Southern Africa. In the Namib Desert, Namibia’s private landowners decided, thirty years ago, to commit their farm lands to conservation and created the largest private nature reserve in Southern Africa run by effectively well-organised institutions (When private landowners commit to conserving nature, Nils Odendaal). In South Africa, the NGO Birdlife South Africa aims at expanding the protected area network outside of state-owned national parks and nature reserves by setting a proactive partnership with the South African government and the landowners whose lands form part of the Important Bird and Biodiversity Areas in order to ensure the legal protection of these lands (Stakeholders’ collaboration driven by an international NGO, Daniel Marnewick).

Involving future generations
Going further with the involvement of diversified and numerous actors, the Wildlife Clubs of Kenya thinks forward and works with the young generations in Kenya to teach them about the necessity of protecting their environment and making them tomorrow’s conservationists (Involving youth to build the future, Margaret Otieno).
PARTICIPATORY MAPPING: A TOOL TO INVOLVE LOCAL COMMUNITIES IN DECISION MAKING PROCESSES FOR THE GOVERNANCE OF THE MBAERE BOBINGUE NATIONAL PARK (CENTRAL AFRICAN REPUBLIC)

Jean Bruno NGOUGNOGBIA, Maison de l’Enfant et de la Femme Pygmés

INTRODUCTION

The Mbaere-Bobingue National Park is located in Southwest CAR and covers an area of 867km² composed of savannah and different types of forest ecosystems whose resources are essential for local communities. These communities were not taking part in the management of the park until recently, when an innovative approach involving neighbouring communities was developed and tested to improve PAs’ management. This project is implemented by the NGO « Maison de l’Enfant et de la Femme Pygmés », and supported by the Rainforest Foundation UK. It promotes an approach based on participatory mapping, which enables a better understanding of the traditional uses of natural resources around the park.

CONFLICT BETWEEN COMMUNITIES AND PARK MANAGERS

In central Africa, conflicts between parks managers and local communities living in or around PAs have long existed. They are mainly due to the lack of integration of the local population in parks management and to the repressive actions taken against them by the parks authorities. As a result, access to natural resources is a major source of conflict and local communities have for long illegally exploited the park’s wildlife and natural resources to sustain their needs.

PARTICIPATORY MAPPING IS A TOOL THAT FACILITATES NEGOTIATION BETWEEN COMMUNITIES AND PARKS MANAGERS

To address these conflicts, participatory mapping approaches have been developed for local communities to highlight their traditional knowledge and to support their rights towards the natural resources they depend on. The participatory mapping approach is implemented by the following five major steps:

Step 1: Information, awareness raising and consultation of communities living around the park

This step entails explaining the goals and usefulness of participatory mapping to the communities in order to gain their support. Being a negotiation and lobbying tool, participatory mapping helps parks managers (at national and local levels) to understand the concerns and issues raised by local stakeholders. Indeed by drawing a map representing the area where they usually harvest natural resources for their livelihoods, the local communities
can explain and argue for their use. This step allows building confidence between the communities and the association’s team that is driving the process.

**Step 2: Manuscript map of resources use drawn by the communities**
The members of the community display all their traditional knowledge regarding geographical, biological and sociological aspects of natural resource use by anticipatively drawing a map.

**Step 3: Training of local cartographers**
A few members of the community are chosen by their peers and trained in the use of GPS and data collection techniques.

**Step 4: Data collection**
Local cartographers walk into the forest together with some technical staff from the association in order to geolocate with a GPS the sacred sites as well as areas where they used to harvest non-timber forestry products (such as mushrooms, caterpillars, fruits, etc.) or to set traps to catch game.

**Step 5: Digital participatory mapping**
Data that have been collected by local cartographers are collated by the GIS staff of the association in order to build a georeferenced participatory map. The comparison between the digital and the manuscript maps enables us to correct possible mistakes or omissions that may have been highlighted on the handmade map but not yet georeferenced. Once ready, the final digital map is discussed and validated by the local communities.

**CONCLUSION**

Participatory mapping enables the creation of good quality maps that gather all necessary information for wise decision-making and good governance in terms of sustainable use of natural resources. By taking into account the information provided by the map for the zoning of the PAs, PA managers can avoid the usual conflicts related to the use of natural resources by the local stakeholders.

Participatory mapping in CAR helped increase communities’ understanding of their rights and eased the implementation of initiatives led to reinforce PAs’ governance at local and national levels. By taking into account communities’ traditional use of resources and lands occupation, participatory mapping takes advantage of traditional, historical, social and cultural knowledge of these communities and promotes their right to be involved in the management of PAs. Moreover, by using it as a lobbying tool it ensures a fair dialogue between all stakeholders.
Thanks to this approach community based PAs have been created in the periphery of the park and communities are able to manage their own natural resources. This model can be easily replicated in other parts of the country in order to improve the governance of natural resources around PAs.
**Story n°7 – When women take the lead**

**Gender Approach in the Conservation of Protected Areas in Rwanda**

*Dancilla Mukakamari, Association Rwandaise des Ecologistes (ARECO – RWANDA NZIZA)*

**Introduction**

Governance of PAs can take many shapes, but its quality always depends on the decision-making processes that are developed by all stakeholders impacting or impacted by the management of the PAs. In Africa, new models of governance helping local communities to become fully responsible for their own natural resources are emerging. In Rwanda, a gender based approach is being used to ensure the participation of women in conservation.

In Africa, more than 70% of women are involved in agriculture and other key sectors related to natural resource management (energy, water, medicine, etc.) and yet major inequalities are observed between men and women’s control, access and benefit from natural resources. Issues of gender and specific participation of women in biodiversity and natural resources management should be included in national policies and regulation texts and should also be translated into actions. Enabling legal and policy frameworks are important to ensure gender mainstreaming and women empowerment at all levels of PA governance.

Due to human pressure, PAs in Rwanda have lost more than 50% of their superficy within the last thirty years. Concerned by the increased deforestation and the decrease in the participation of women in forest conservation, the Rwandan government has started to mainstream gender in biodiversity conservation and natural resources management. This initiative is part of the national policy framework that encourages women’s participation.

**The Role of ARECO in Empowering Women Around Protected Areas**

ARECO currently intervenes in PAs located in northwestern and southwestern Rwanda, in the Volcanoes National Park, the Nyungwe National Park and the Mukura reserve.

ARECO supports community-based initiatives with a focus on women’s participation in
biodiversity conservation and sustainable natural resource management in PAs. To formalize the process, a memorandum of understanding was signed between ARECO and the Rwanda Development Board (RDB), the government authority in charge of PAs management in Rwanda.

The pilot phase of ARECO’s interventions started in 2003 in the Mukura reserve and its activities were later extended to the Volcanoes and Nyungwe National Parks, in 2006. Among the main activities conducted were:

- Organisation of awareness raising campaigns to inform and encourage women to participate in PAs’ conservation;
- Facilitation of the enrolment process for women in community-based organisations; and
- Training of women in natural resources management including agroforestry, bamboo domestication and processing, rain water harvesting and sustainable agriculture. This training includes study tours organised in Burundi and DRC to promote transboundary exchanges.

Within the Volcanoes National Park for example, ARECO currently facilitates 12 women-based cooperatives in different areas around the park. Nowadays these cooperatives bring together 3 545 members including 75% of women compared to 10% in 2006.

**Women’s Cooperatives are Legitimate and Recognized Structures**

Nowadays 60% of the cooperatives are registered with the Rwandan Cooperative Agency and the rest are still in the registration process. This legal status gives members the right to access funding and other opportunities. The cooperatives can also benefit from revenues from tourism and conservation activities that represent 40% of the budget allocated to communities. This funding is allocated to women’s cooperatives provided they are well organized and certified as community-based organizations.

**Mechanisms to Include Women’s Groups in Protected Areas Decision-Making Processes**

Through field initiatives on natural resources management, women have demonstrated their capacity to implement sustainable projects targeted at conserving biodiversity. Women’s groups are now recognized among the parks management structures of the Community Conservation programme established by the Rwanda Development Board. As part of the community structure, they are now recognized at the same level as the other stakeholders within the community (Crop rangers, crafts makers,
beekeepers, animators of conservation and porters’ clubs). All these different groups of stakeholders are involved in governance processes. Women’s groups are represented in various meetings and dialogues and they have the right to vote.

**CONCLUSION**

The Rwandan new gender approach shows that women have new innovative ideas and practices that contribute tremendously to the quality of governance, conservation and livelihoods in PAs. This experience is an example of the success of positive discrimination that is necessary for women to get involved in conservation and governance of PAs.

Involving women in the management of natural resources is key for sustainable conservation and good governance in PAs. The role played by NGOs in empowering women and communities in general is therefore important since they facilitate communication and collaboration between government institutions and grassroots communities.
INTRODUCTION

The NamibRand Nature Reserve is a model for private conservation in Southern Africa. It demonstrates that a group of philanthropists can make a meaningful impact toward the conservation of critically important ecosystems. The NamibRand Nature Reserve Association is a successful example of the application of good governance, innovative management systems and the pooling of resources to reach common biodiversity conservation objectives.

The NamibRand Nature Reserve, located in southern Namibia, is a private nature reserve established to help protect and conserve the unique ecology and wildlife of the south-west Namib Desert. Conserving the pro-Namib, the area along the eastern edge of the Namib Desert, is critically important in order to facilitate seasonal migratory wildlife routes and to protect biodiversity.

The NamibRand Nature Reserve started in 1984 with the purchase of the first former livestock farm. In subsequent years, more heavily over-utilised and environmentally degraded properties were purchased and added to the reserve. These farms have now been rehabilitated and turned back to nature so that today the reserve is probably the largest private nature reserve in Southern Africa, extending over an area of 202,200 ha. The reserve shares a 110km border with the Namib-Naukluft National Park. Virtually all facets of the Namib Desert are...
represented on the Reserve – sand and gravel plains and stretches of savanna alternate with mountain ranges and vegetated dune belts.

To date, sixteen former livestock farms have been rehabilitated into a single continuous natural habitat. Recognizing the importance of wilderness areas, the NamibRand Nature Reserve has exclusively set aside more than 15% of its total area for wilderness.

LANDOWNERS COMMITING THEIR LANDS TO CONSERVATION

The NamibRand Nature Reserve is a non-profit private nature reserve and does not receive any aid from the government. All landowners have themselves decided to sign an agreement which sets aside their land for conservation, now and in the future.

“All landowners have signed an agreement which sets aside their land for conservation”

Landowners who form part of the NamibRand Nature Reserve have signed Articles of Association, which binds their land to the reserve. The Articles govern what can and cannot be done in terms of resource use and restrict the land use of these former livestock farms to conservation and tourism. All landowners who commit their land to the Reserve also become directors of the Association and they form part of the board that governs and makes up the top decision making body of the Reserve. By signing the Articles of Association these landowners all subscribe to a common conservation vision for the area which is underpinned by a set of objectives and environmental goals, which the directors have agreed on.

These landowners have all come together because they all share the vision that this ecologically important and sensitive area should be used for conservation only. They all agree that livestock farming in particular is unsustainable and detrimental to the environment and biodiversity in this area.

Their common resource is nature and the indigenous biodiversity production systems that can be sustainably utilised through eco-tourism.

HAVING LEGITIMATE, RECOGNISED STRUCTURES

The NamibRand Nature Reserve is registered as a not-for-profit association at the High Court in the Government of the Republic of Namibia. This makes the Namibrand Nature Reserve a legally recognised structure that can enter into agreements and conduct business in Namibia.

INSTITUTIONAL MECHANISMS TO ENABLE DECISION MAKING

The Articles of Association are essentially a constitution that also act as a tool that creates an enabling policy environment. They provide guidance and rules as to how the directors can make decisions, administer the Association, appoint staff, conduct

“Create a framework in order to achieve the vision and goals of the Association.”

“15% of its total area for wilderness.”

“The Articles govern what can and cannot be done”

“They all share the vision that this ecologically important and sensitive area should be used for conservation only”

“The directors design and approve an environmental management plan”
business, manage finances and create a framework in order to achieve the vision and goals of the Association.

As provided for by the articles of Association, the directors design and approve an environmental management plan that also contains a tourism and development plan as well as a land use zonation plan. These plans enable the Chief Executive Officer and the Reserve management staff, to work towards the goals of the association. Staff can thus work and make decisions towards implementing these plans. They do so within the limits of an annual financial budget and an annual work plan as approved by the CEO and the board of directors.

**DEVOLVING RESPONSIBILITY AND RIGHTS BACK TO THE LAND OWNERS.**

Landowners benefit through being members of the reserve by having their land and biodiversity resources holistically and centrally managed. Although there are rules and regulations that govern such things as traversing, utilization and infrastructure development on the Reserve, these are within the spirit of the overall vision of the Reserve and tourism concessionaires and landowners are not micro managed by reserve staff. Besides benefiting from conservation and land management and the associated costs, which are carried by the Association, landowners also receive a small annual land use recognition fee. This is currently a minimal amount of 60cents per hectare, however land taxes are also covered for landowners by the Association.

**LONG-TERM SUSTAINABILITY**

The reserve raises funds from low-impact, high quality tourism. Five tourism concessions have been awarded to independent safari operators on the Reserve. These operate independent tourism ventures such as accommodation establishments, self-catering camping, hot-air ballooning and horseback safaris in the Reserve. In exchange for operating on a well-managed and functioning ecosystem, tourism operators collect park fees from visitors on behalf of the NamibRand Nature Reserve Association. These funds bring in enough revenue to pay staff and support the ecosystem management services that are required.

The Association holds regular board meetings where progress and emerging issues are discussed, finances are reviewed and decisions are made. Finances are also audited by an independent auditor on an annual basis to ensure transparency and good
management. This process of consultation, participation and feedback is vital for the continued existence of the Reserve.

Large landscape conservation is vital for a robust ecosystem in the hyper arid ecosystem of the Namib and Pro-Namib area as animals need to migrate large distances in search of grazing. For this reason, the NamibRand Nature Reserve has joined with other likeminded, conservation and tourism land users in the area to form the Greater Sossusvlei-Namib Landscape Association. This initiative aims to also apply the principles of good governance, cooperative management and the application of a broad vision for the benefit of socio-economic development and environmental conservation in an area that now encompasses almost 2 million ha.

**CONCLUSION**

It is possible to run a large, well managed and well functioning private nature reserve which is funded privately without donor and government aid. Good governance systems and benefits, be they indirect or concrete are necessary so as to reward participants.

The rights over natural resources are important as people who can benefit from the sustainable utilization of their natural resources, non-consumptive eco-tourism in this case, are more inclined to take ownership and thus be incentivised to care and look after this resource. Regular feedback, consultations and participation are also key to a successful conservation initiative such as the NamibRand Nature Reserve.
PROTECTING IMPORTANT BIRD AND BIODIVERSITY AREAS USING BIODIVERSITY STEWARDSHIP: THROUGH GOVERNMENT, LANDOWNERS AND NGO PARTNERSHIPS

Daniel MARNEWICK, BirdLife South Africa

INTRODUCTION

The Important Bird and Biodiversity Areas (IBA) Programme is an international programme coordinated by BirdLife International and implemented by over 100 BirdLife country partners. There are over 12,500 IBAs worldwide. The ultimate aim is to conserve these IBAs into the future, and the most effective means to achieve this is to attain legal protection associated with sustainable governance at these sites. However, developing countries have limited resources to invest in PAs expansion, or to structure sustainable governance of these sites. Of South Africa’s 122 IBAs, less than 40% are legally protected.

Biodiversity Stewardship was initiated in 2005 by the national government and NGOs to assist the expansion of the PAs network. Through voluntary legal agreements with landowners, Biodiversity Stewardship provides a cost effective conservation tool for securing biodiversity, promoting the sustainable management of natural resources and expanding the PAs network outside of state-owned national parks and nature reserves; while also allowing development objectives to be reconciled with conservation. BirdLife South Africa has recently provided assistance to formally protect 60,000 ha of a grassland and wetland IBA, and is working to declare a further 60,000 ha in the next three years in grasslands and estuaries.
RECENT SUCCESSES

In collaboration with provincial conservation departments and partner environmental organisations, for the past three years BirdLife South Africa has engaged landowners towards declaring around 100 000 ha of Protected Environments in three priority IBAs: Grassland, Chrissie Pans and Steenkampsberg. Similarly, a further 2 000 ha will soon be declared in the KZN Mistbelt Grasslands IBA and 20 000 ha in the Verlorenvlei estuary IBA.

HAVING LEGITIMATE, RECOGNISED STRUCTURES

The Biodiversity Stewardship Guideline Document, published by the Department of Environmental Affairs (DEA) on 24 November 2009, defines Biodiversity Stewardship and summarises the legal, institutional and procedural frameworks, thereby setting a national standard. It remains at the discretion of each provincial government department to adapt the forms and procedures to suit their specific needs and nuances, within the constraints of the National Environmental Management: Protected Areas Act (Act 57 of 2003) or the National Environmental Management: Biodiversity Act (Act 10 of 2004).

DEVELOPING INSTITUTIONAL MECHANISMS TO ENABLE DECISION MAKING

Each Biodiversity Stewardship site, declared as either a Protected Environment or Nature Reserve, needs a management authority elected by and representing the land owners. Each site also needs a management plan. These management plans are supported by government departments, government programmes (e.g. working for Water), and non-government conservation organisations and are audited once a year.

DEVOLVING RESPONSIBILITY AND RIGHTS BACK TO THE LAND OWNERS

The Stewardship concept is a new way of achieving conservation. The Biodiversity Stewardship Programme offers a range of conservation options which aim to set up positive, proactive partnerships with landowners, to support and encourage them as they take on the responsibility of managing and protecting the natural assets that are in their care. In order to support this management, appropriate benefits are offered for land that has been set aside for conservation. These include management support and fiscal benefits, as well as protection from unsustainable land developments.

LONG-TERM SUSTAINABILITY

Biodiversity Stewardship relies on land owners to implement appropriate land management, and on government to support this management. However, many of the land practices also involve commercial operations which depend on making profit. Therefore a monitoring protocol, by way of an annual audit, is implemented to ensure management follows the management plan.

The annual audit also interrogates stakeholder satisfaction and future needs.
The biggest challenge to Biodiversity Stewardship is long term capacity (on the side of government) and financial sustainability (in terms of maintaining benefits and land management). BirdLife South Africa is currently involved in developing these models.

**CONCLUSION**

The proposed declarations of these sites through Biodiversity Stewardship will meaningfully contribute towards conserving grasslands, wetlands and estuaries; priority IBAs and associated species; whilst maintaining livelihoods from livestock farming, agriculture and tourism; ensuring food and water security. They are visionary and should give a true representation of inspired good governance.
LEARN TO CONSERVE FOR A BETTER TOMORROW: ENGAGING THE YOUTH IN THE CONSERVATION OF KEY ECOSYSTEMS IN KENYA

Margaret OTIENO, Wildlife Clubs of Kenya

INTRODUCTION

In 1968, several students at Kagumo High School (Nyeri, Kenya) approached their biology teacher with the idea of forming a Wildlife Club in the school. The teacher asked and received assistance from the Ministry of Tourism and Wildlife (MTW), where Mr John Pile, seconded by the UNDP/FAO, helped to develop the Wildlife Clubs idea.

The original idea of building the Wildlife Clubs of Kenya (WCK) came from within the country, from the local youth themselves. After a weekend meeting, the formation of the national WCK was delegated to the National Museum’s Education Section (Nairobi) with moral and financial support coming from the Elsa Wild Animal Appeal, the African Wildlife Leadership Foundation, the East African Wildlife Society and Kenya’s Ministry of Tourism and Wildlife.

Together with the Ministries of Education and Natural Resources, they formed a council and drafted a constitution for the association. Finally, in December 1968, the Wildlife Clubs of Kenya Association was created and registered as a charitable, Non-Governmental Organization. It was the first conservation education programme to be created in Africa and was in 1987 described by Dr. George Schaller as the most effective grass-roots conservation education programme in Africa.

WCK mission is to provide conservation education to Kenyans and to support wildlife clubs through training, information sharing and advocacy with the following three objectives:

- Interest and educate Kenyans about the environment, natural resources and biodiversity;
- Alert the public to the great cultural, environmental, aesthetic and economic value of biodiversity;
- Develop a better understanding of the need to conserve wildlife and biodiversity.

To achieve these objectives, WCK provides conservation education in over 3,000 schools in Kenya, runs education programmes for sustainable development, organises youth groups and communities all over the country with specific interest in communities adjacent or within the country’s key ecosystems.
WILDLIFE CLUBS OF KENYA GEOGRAPHIC AREA AND MEMBERSHIP

With a countrywide coverage, WCK has seven environmental education centres that lead actions all around Kenya in the regions of Nairobi, Mombasa, Malindi, Kitui, Mt Kenya, Kisumu and Nakuru.

WCK is a membership organisation and its members range from school clubs to community groups. Categories of membership include primary schools, secondary schools, tertiary educational institutions like universities and colleges, associate membership (i.e. adult individuals), corporate membership and community church groups that currently constitute more than 3000 clubs and over 300,000 individual members. Despite being a membership organisation, the KWC opens its environment conservation activities to organised groups and community members living within and around areas of biodiversity importance.

HAVING LEGITIMATE, RECOGNISED STRUCTURES

WCK is managed by a National Secretariat with backing of a 20-member Governing Council and an Executive Committee composed of specialists in conservation education, business and public administration. The organisation’s engagements are guided by the WCK Constitution. Because of the important responsibility undertaken by the WCK, the government of Kenya has recognised the organisation as a key partner and involves WCK in the activities of the Ministry of Environment, Natural Resources and Water. Moreover, the WCK has a legal existence in schools and is recognised by the Kenya Wildlife Service (KWS) - who are the custodians of the country’s wildlife - and Kenya Forest Service (KFS) - who are custodians of the country’s forests. This recognition enables WCK to conduct activities in the parks and forests legally.

THAT ALLOWS WCK TO LEAD EFFICIENT ACTIVITIES OF CONSERVATION

WCK has within its structure an organ called the National Coordination Committee which is composed of Regional Education Officers and Action Group Chairmen (elected by member schools) that meet once a year and decide on a rallying environmental theme. This theme is the foundation of the annual calendar of activities that are organised within the entire country. For example, the theme for 2014/2015 is “Combating Poaching through Education for Sustainable Development” through which WCK aims to make youngsters aware of the sustainable commercial value of live rhino and elephant in the form of job creation, tourism and other related industries. WCK does not only target youth but
tries to involve the communities surrounding PAs more generally. This has been proved to be a powerful tool for conservation because it empowers the communities with knowledge of the importance of the resources.

CONCLUSION

Since 1968, the WCK has proved to be an efficient programme with well organised and legitimate institutions. Thanks to this legitimacy, the WCK was able to organise all sorts of activities to sensitize youth to conservation in Kenya and to provide the best opportunity for young Kenyans to gain lifetime knowledge and experience of the country’s flora and fauna. More than 90% of Kenya Wildlife Service personnel belonged to a Wildlife Club during their childhood and most park wardens and rangers claim to have found their conservation career path through WCK membership. Education on conservation imparts positive values and a sense of responsibility among the youth. This is bound to exert a positive influence on the children’s future outlook on the environment in general.
PART 3

STRENGTHENING PROTECTED AREAS’ LEGITIMACY: WORKING WITH THE LOCAL COMMUNITIES

Although perfectly understandable and legitimate, the aspirations for development of the growing African population can sometimes be a threat for natural resources and protected areas. Over time, it appears that repressive and exclusive approaches to conservation are most of the time not efficient enough and often too expensive. Indeed, unless protected areas management authorities were able to employ one ranger per villager willing to use the natural resources of his environment, “fences and fines” protected areas seem to be insufficient to answer to current conservation challenges. It is thus extremely pertinent to work on the legitimacy of protected areas to allow them to fulfil their goal of conservation for the populations and with the populations.

Protected areas as a common heritage to preserve
By explaining the interest of conservation to the populations surrounding the protected areas and by empowering them in the management of these areas, park authorities would most probably be able to reduce conflicts over resources and make protected areas a common heritage that everyone is willing to preserve rather than a simple commodity. This is what Inza Koné, Martial Koundé and Togarasei Fakarayi’s stories illustrate. Indeed, these three examples from Côte d’Ivoire (Empowering communities, Inza Koné), Benin (When hunters enter conservation, Martial Koundé) and Zimbabwe (Widening consultation for strengthening biodiversity conservation corridors, Togarasei Fakarayi) are success stories of local communities empowered in the management and creation of protected areas.

Local and indigenous populations’ rights over resources
When dealing with the legitimacy of protected areas and thus with the ownership of natural resources, not only should local communities’ rights be taken into account but also indigenous peoples’, whose ancestors have been living in these areas and using their resources for generations and generations. In Kawawana, Senegal (Marine conservation by and for fishermen, Salatou Sambou), this aspect has been taken into account by local fishermen whose resources were mainly overused by fishermen coming from other provinces of the country. In DRC, this idea is also currently being discussed and indigenous and local peoples’ rights over resources should soon be legally recognised (National recognition of local traditions, Joseph Itongwa Mukumo).

Making concessions
Finally, part of the protected areas’ legitimacy comes from their ability to make concessions to benefit the population. This is one of the reasons for the success of the Ol Pejeta Conservancy in Kenya, which made the deliberate choice to integrate wildlife and cattle with conservation activities - a choice that benefits both the local farmers and the conservancy’s wildlife (Because conservation has to make concessions, Martin Mulama).
COMMUNITY EMPOWERMENT FOR THE CONSERVATION OF CRITICALLY ENDANGERED PRIMATES AND THEIR HABITAT IN SOUTH-EASTERN CÔTE D'IVOIRE

Inza KONE, Centre Suisse de Recherches Scientifiques en Côte d'Ivoire (CSRS)

INTRODUCTION

For decades, local communities have been excluded from the management of protected areas in sub-Saharan Africa as they were considered ill-informed, unskilled and non-rational users of biological resources. Thus it is not a surprise that many conservation policies have failed in sub-Saharan Africa. Indeed, there is a permanent conflict of interest between official managers and local communities, who are no longer considered “owners” of protected areas. However, no one can be more interested in planning and implementing sustainable forest management than local communities who rely on the forest for their daily livelihood and the maintenance of ancestral cultural values. Consequently, a change of mind-set allowing the consideration of traditional knowledge and skills in the management of natural resources is essential. Community-based systems for natural resources management are becoming widespread and are proving to be viable options for sustainable management of natural resources.

The policy on nature conservation in Côte d'Ivoire dates from the colonial era. Since political independence in 1960, the country passed a series of laws and decrees and ratified most international conventions related to biodiversity conservation. Meanwhile, several state institutions were created with specific missions related to the management of an important network of protected areas. However, despite these measures that reflect a certain political will for nature conservation, more than 50 years after the independence of the country the situation is alarming. Indeed, Côte d'Ivoire is one of the tropical countries that recorded the highest rates of deforestation. Since 1960, the country has lost about 67% of its original forest cover. The effects of deforestation and illegal hunting of wildlife in the country have been devastating. Animal populations are becoming scarce in most national parks and forest reserves, with many species hunted to near extinction or even extinction.
If the enormous human pressures on natural resources in Côte d'Ivoire are inherently related to population growth and poverty, the chaotic situation just described shows the ineffectiveness of conservation policies in the country. Thus a series of adjustments of these policies is currently being promoted and includes the empowerment of local communities for nature conservation. The case of the community-based conservation project of the Tanoé forest, southeastern Côte d'Ivoire, is considered as a promising pioneering experience. The Tanoé Forest provides habitat for a number of rare and highly threatened primate species and is a priority area for conservation that had not received attention until recently. Primate habitat is threatened by unsustainable land use, including oil palm and chainsaw milling and monkeys are killed for bushmeat by impoverished local communities.

**Geographical characteristic and stakeholders**

The project site is located in the southeastern corner of Côte d'Ivoire, West Africa and forms part of the Upper-Guinean East biodiversity hotspot. In the project area, the Tanoé River represents a natural boundary between Côte d'Ivoire and Ghana. Nine villages distributed in 2 different districts are part of the project area. In 2012-2013, management committees were formed in eight villages. In each of the two districts a paramount association was established as well.

The last step of community organization will consist in establishing a "federal association" encompassing both paramount associations. The newly established local institutions receive technical and financial supports from CSRS and partners for the planning and implementation of their activities.

**Legitimate and recognised structures**

In October 2009, a national committee comprising community members, NGOs and governmental authorities was established by the Ivorian Minister of Environment to deal with the process of classification of the Tanoé forest as an official community reserve. Following that, a workshop was organized for communities to decide about the appropriate organizational scheme and elaborate drafts of the management rules of forest resources. Then a preliminary participatory demarcation of the forest was made with community members at the frontline. Later, a survey of *commodo* and *in commodo* allowed confirming that all local residents agreed to go forward with the classification of the demarcated portion of the forest as a community reserve.

"The Tanoé Forest provides habitat for a number of rare and highly threatened primate species!"

"In 2012-2013, management committees were formed in eight villages!"

"Officially registered by the appropriate governmental authorities!"
All management committees and the two paramount associations have been established following the requirements and procedures of the national administration. Their bylaws and organisational schemes have been officially registered by the appropriate governmental authorities. The same procedures will be followed for the establishment of the "federal association" that will request to be considered as the official interlocutor of the government.

ENABLING DECISION MAKING

The roles of the established local management institutions were defined as follows:

- **The management committees from each village constitute the bottom of the pyramid**: they are responsible for implementing the action plan for the management of the forest as decided by the two paramount associations; they identify management activities to submit for approval to their paramount association; they are also responsible for designing and implementing the village development plan; all stakeholders from a given village are ex-officio members of the management committee of that village and elect a president every 3 years; routine decisions are taken by the president and the board of the management committee (8 persons) while exceptional ones are taken after a meeting with a quorum of all stakeholders;

- **The two paramount associations coordinate the work programs of the management committees**: they elaborate policy guidelines for the management of the forest; they consolidate the village development plans and are also responsible for fundraising; all members of the management committees in a given district are ex-officio members of the paramount association of that district; each paramount association elect a board of 8 persons for routine decisions while exceptional ones are taken during meetings with a quorum of all members;

- **The federal association will be the official manager of the Tanoé forest on behalf of the villages** of the project area; as such, it provides broad guidelines for the conservation of the forest; it raises funds for the paramount associations; it can possibly sign a contract with a third party for co-management of the forest; it supervises the design and implementation of local development plans and collaborates with the national administration, NGOs, etc.; the members of the federal association are the members of the respective boards of the two paramount associations; they elect a board of 8 persons for routine decisions while exceptional ones are made during special meetings with a quorum of all members federal association.

DEVOLVING RESPONSIBILITY AND RIGHTS BACK TO THE LAND OWNERS

The tenet of the community-based conservation concept is community empowerment for the long term management of their natural heritage. This is in contrast with classical conservation approaches including so-called participatory management approaches. Indeed the process will be considered as successful only if engaged communities become autonomous in dealing with all aspects of ecosystem management. To date,
outstanding achievements have resulted in a growing acknowledgement of the process as a promising model for wildlife conservation in West Africa.

**LONG-TERM SUSTAINABILITY**

The project design is based on the involvement of local communities, local, national governmental and non-governmental agencies with the support of international partners. The project pays particular attention to community organization so that local communities become valuable interlocutors for the administration and various partners. This is accompanied by capacity building for forest conservation and development activities in a mutual-learning process so that communities become independent in conceiving and carrying out such activities. The project also focuses on awareness raising for communities to clearly understand and adopt the concept of sustainable development. Future project finance will be ensured by strengthening the current growing partnership for the conservation of the Tanoé forest and by exploring potentials for REDD+ mechanisms. A special effort will be made so that the traditional partners of the project maintain or increase their annual contribution and other national and international partners will be invited to join the network. However, communities are expected to clearly understand that the fate of the forest is primarily their responsibility.

**CONCLUSION**

The main strengths of the project are its originality and the outstanding preliminary achievements. Indeed, the Tanoé forest will no doubt be the very first relatively large community-managed protected forest in Côte d'Ivoire. The project is one of the rare ones in Côte d'Ivoire involving several villages where communities receive continuous technical support from scientists, conservationists and governmental authorities. In terms of achievements (i) a national classification committee has been established by the Ministry of Environment, local associations have been settled in most villages of the project area and training sessions are organized in addition to the process of learning by doing; (ii) a preliminary demarcation of the forest has been made by communities, signboards have been settled in strategic places, and preliminary management rules have been elaborated by communities; (iii) the biological and anthropological dimensions of the conservation value of the forest have been highlighted; (iv) a critical mass of informed and skilled locals are engaged in conservation actions; (v) alternative livelihoods such as smart cultivation of vegetables and cassava are experiencing growing success. All these have resulted in significant reduction of the intensity of chainsaw milling, clearing for agriculture, and hunting in the Tanoé forest. The preliminary success of the project is increasingly used by decision makers and conservation practitioners in Côte d'Ivoire, neighbouring Ghana and elsewhere to advocate for community empowerment in managing natural resources.
COMMUNITY BASED MANAGEMENT OF NATURAL RESOURCES IN THE SITATUNGA VALLEY, BENIN

Martial K. KOUDERIN, Regional Research and Education Center for integrated development (CREDI-ONG)

INTRODUCTION

Since the creation of the national agency in charge of protected areas management in Benin (CENAGREF), conservation efforts have mainly been focused on the national parks W and Pendjari in the northern part of the country. However, after the February 2004 Kuala Lumpur CBD conference - where an ambitious program of work on PAs was developed - Benin realized the necessity of expanding its network to other types of protected areas in the southern part of the country.

In this context, the Regional Research and Education Center for integrated development (CREDI-ONG) launched the Sitatunga Valley initiative: a community-based approach of natural resources management.

CREATION OF THE SITATUNGA VALLEY COMMUNITY-BASED NATURE RESERVE

In 2006, CREDI-ONG created the PANTODON fish farm in the village Kpotomey in order to promote integrated fish farming. As soon as the farm started, hunters from the village came to offer bush meat to the employees of CREDI-ONG who soon realized that the bush meat market was very wide and included many IUCN red-listed species. CREDI-ONG thus decided to start an awareness campaign to educate local communities on sustainable management of the natural resources of this area still rich in wildlife although located only 30km from Cotonou. A wildlife inventory was carried out and a lobbying campaign eventually led to the signing of a legal act formally recognizing the creation of the Sitatunga Valley community-based nature reserve in 2010.

LOCAL COMMUNITIES ESTABLISHING THE RULES OF NATURAL RESOURCES MANAGEMENT

New approaches to natural resources governance are slowly being developed in West Africa. In Benin, local management of natural resources often follows traditions that are based on the animalist religion. With regards to restrictions of natural resources use, those traditions and rules are better respected than national laws. Local communities are generally reluctant to formalize written legal acts as their poor level of literacy prevents them from having a clear
understanding of the content of these acts. However the lack of a formal legal act describing
the management of natural resources in the
Sitatunga Valley is not a weakness, as local
communities have set up a traditional agreement
which has a higher coercive value for them than
any formal law could have.

“The lack of formal legal act describing the management of
natural resources in the Sitatunga Valley is not a weakness”

THE GOVERNANCE OF THE SITATUNGA VALLEY, A DECISION-MAKING PROCESS INVOLVING MANY STAKEHOLDERS

CREDI-ONG is in charge of coordinating natural resources management by bringing together
all the different stakeholders to think about the important challenges to solve and thus to
provide a strong basis for wise decision-making.
The Territorial Committee for the Management of the Reserve (TCMR) is the highest level of
decision-making within the reserve. It is chaired by the elected representatives of the villages
and includes representatives of various stakeholder groups as well as of the Council of the
traditional chiefs from the 22 surrounding villages. The TCMR’s role is to deliberate every
quarter on decisions regarding natural resources management and community development.
The reserve governance system also includes groups of youth organized in environmental
clubs named “Knowing and Protecting Nature”. These groups are involved in environmental
education and tourism guiding. Site visits and discovery trips between clubs are supported by
CREDI ONG, thus enabling the youth to gather experiences from other regions and other
countries.

Women are deeply involved in reserve management as well. They are in charge of providing
catering, accommodation and information to the visitors of the reserve. They benefit from
capacity building and technical support from CREDI ONG in order to improve their services.
In every village, they are organized in women groups that are also included in the consultation
framework and they elect two women that take part in the TCMR.

PROMOTING TRADITIONAL KNOWLEDGE

In order to reduce the negative impacts of traditional hunting in the Sitatunga Valley, CREDI-
ONG actively involves hunters in ecological monitoring activities and tourism guiding within
the reserve. Thanks to these activities, hunters receive alternative income that is compatible
with conservation. Whenever hunters decide to completely convert their activities into
conservation friendly income generating activities, they can benefit from micro-credit to
develop livestock farms for instance.

Meanwhile CREDI-ONG provides training that is aimed at transforming their usual hunting
activities into sustainable and controlled activities. In line with this process, a hunting plan
has been developed and validated in a consultative way with other community stakeholders.
This plan, which has been implemented on the basis of the hunters’ traditional knowledge,
describes the hunting practices that are allowed because they have a lesser impact on wildlife.
It also details the periods during which hunting is allowed or not and the species for which
hunting is prohibited.

COMMUNITY-BASED MANAGEMENT OF NATURAL RESOURCES AND LOCAL DEVELOPMENT

In Benin, as well as in many developing countries, conservation of natural resources faces a
major and fast growing demand in terms of socio economic needs.
However, the Sitatunga Valley claims to be a lever for sustainable local development. To this end, the TCMR has developed a Territorial Development Plan (TDP) that reconciles nature conservation and local development challenges. This plan is driving every new project aimed at improving neighbouring communities’ livelihood.

The mission of CREDI-ONG is to mobilize technical and financial partners to assist the implementation of the TDP that has been previously validated by all the stakeholders. Within this framework, sanitation and water projects are being developed in the surrounding villages. The promotion of agro-ecology in the areas around the reserve also represents one of the strategic axes of the plan as it fairly combines development and conservation objectives.

**Conclusion**

Nowadays, trying to manage natural resources while not considering local knowledge and practices and communities’ needs is an aberration. In Benin, the creation and the management of the Sitatunga Valley Community-based Nature Reserve that has been coordinated by CREDI-ONG highlights the success of locally managed natural resources system through an appropriate governance framework. This reserve has halted the fast degradation of natural resources of the area that was driven by a major and fast increase of the human population density. After less than 10 years, the trend seems to progress thanks to a noteworthy awareness and engagement of local communities.
PARTICIPATIVE MANAGEMENT IN THE CHIMANIMANI-NYANGA MOUNTAINS BIODIVERSITY CONSERVATION CORRIDOR

Togarasei FAKARAYI, BirdLife Zimbabwe

INTRODUCTION

Shared and participatory governance in Key Biodiversity Areas/hotspots is essential to improve conservation within critical ecosystems and sites. As shown by the Local Conservation Groups and Stakeholder Management Advisory Groups in Chimanimani-Nyanga Mountains biodiversity corridor, collaboration and a coordinated approach to biodiversity conservation widens existing knowledge, enhances management and governance of biodiversity sites, reduces conflict among stakeholders and enables community involvement in decision making.

Increased loss and fragmentation of key biodiversity areas (KBA) and hotspots along conservation biodiversity corridors has taken place in the face of various conservation practitioners on the ground. Although more qualified conservation personnel have been released into the system, the magnitude of biodiversity loss has been increasing for the past decade. A similar scenario can be witnessed along the Chimanimani-Nyanga Mountains Biodiversity Conservation Corridor of Zimbabwe, a corridor consisting of five fragment Key Biodiversity Areas (KBAs) and forming part of the Eastern Afromontane biodiversity hotspots.

FRAGMENTED APPROACH OF THE CORRIDOR’S CONSERVATION

Despite of the presence of different conservation institutions and experts at each site of the Chimanimani-Nyanga mountains corridor, the lack of a coordinated approach towards biodiversity conservation has resulted in poor management of Key Biodiversity Areas (KBAs) and ultimately loss of biodiversity. To address this governance gap, BirdLife Zimbabwe embarked on a programme 'Stakeholder capacity building for Key Biodiversity Area management planning in the Chimanimani-Nyanga Mountains biodiversity conservation corridor' aiming at improving biodiversity conservation by promoting a collaborative and coordinated approach towards conservation and management of KBAs by all relevant stakeholders.

“Improving biodiversity conservation by promoting a collaborative and coordinated approach”
CAPACITY BUILDING TO PROMOTE PARTICIPATIVE MANAGEMENT BY ALL STAKEHOLDERS AROUND THE CORRIDOR

BirdLife Zimbabwe has initiated and facilitated this capacity building process that has, so far, received great support from all stakeholders. Institutional mechanisms promoting participative management of biodiversity - Stakeholder Management Advisory Groups (SMAGs) and Local Conservation Groups (LCGs) - were set up at each site. Members of the SMAGs consist of Parks Managers, Foresters, District Environmental Officers, Rural District Councils Conservation Officers, District Administrators, Civil Society Organisations and Environmentalists from the Private Sector. On the other hand, the LCGs are groups of volunteers (including traditional leaders) from the local communities, within or adjacent to Key Biodiversity Areas (KBAs), who share the same interest of conserving biodiversity. The role of the SMAG is to advise the authority responsible for the management of the sites, assist in providing solutions to problems faced at the sites, and help raise awareness on biodiversity conservation. The LCGs help raise awareness on biodiversity conservation within local communities and transmit a community voice in decision-making regarding conservation and management of the KBAs. Both groups received intensive trainings to help them build-up their knowledge, networks, and drive the process. Several KBA site meetings have been conducted by these groups where site specific issues were discussed, conservation gaps at sites identified, and discussions for possible solutions to the problems held with involvement of the responsible management authority of a site who take note of advice from the groups. Most line managers of the KBAs have acknowledged the role played by these groups and a need for cooperation among stakeholders in addressing threats to KBAs. Moreover, the local communities, through LCGs, have identified the role they can play for improved KBA management. Traditional leaders, who are part of the LCGs, have also noted advice provided by the members of the groups during meetings. However, more technical support and guidance is still required by these established groups for effective interventions in biodiversity conservation of KBAs.

IMPACTS OF PARTICIPATIVE MANAGEMENT ON THE DECISION MAKING PROCESSES OF THE CORRIDOR

The stakeholders realised the high potential of using information generated during SMAGs and LCGs meetings to positively influence decision making towards improved biodiversity conservation of each KBA. Meanwhile, modalities for channelling shared ideas generated
during group meetings on management and governance of KBAs into high level decision making are being discussed among stakeholders. To date, the cooperation of stakeholders at site level has generated useful knowledge with brilliant and diverse ideas that could help close some of the conservation gaps in KBAs. For instance, the stakeholders at Stapleford Forest KBA adopted the coordinated approach to KBA management when they formed a solid team to deal with the problem of veld fires in Stapleford Forest and the surrounding areas. In Chikukwa, the local communities under the leadership of a village headman are actively participating in the protection of Masangoni Forest in their village within the Chimanimani Mountains KBA after realising the importance of birds and other biodiversity.

CONCLUSION

The model used in this process influenced a paradigm shift from a one-man management to a join-hands management and governance model of the critical ecosystems of the corridor. Equally important, improved management of biodiversity and quality of governance of KBAs are hinged upon great minds from cooperation by all stakeholders. This approach to conservation can also be an important tool for conflict resolution as it brings all stakeholders on board from the beginning of the planning stage. Through this capacity building project, stakeholders in the Chimanimani-Nyanga Mountains biodiversity corridor have developed great interest in working towards addressing conservation gaps in KBAs.
**IMPROVING THE DIVERSITY AND QUALITY OF COMMUNITY-BASED PROTECTED AREAS’ LOCAL GOVERNANCE**

*Salatou SAMBOU, Mangagoulack Fishermen Association*

**INTRODUCTION**

In Casamance (Southern Senegal), the overexploitation of marine ecosystems accompanying the demographic growth of the area represents an important threat for coastal and marine biodiversity. Within this area, the Mangagoulak rural community is particularly vulnerable as it is already threatened by pollution, coastal erosion and climate change.

"Measures aiming at stopping the degradation of the region’s ecosystem and promoting the regeneration of natural resources”

Adopting new strategies and innovative approaches thus seemed essential to face these challenges. Representatives from the government of Senegal, NGOs and local associations thus joined their efforts to develop measures aimed at stopping the degradation of the region’s ecosystem and promoting the regeneration of natural resources in this area of Senegal.

**RAISING AWARENESS ON THE OVEREXPLOITATION OF NATURAL RESOURCES**

The dramatic drop of fish stocks in Mangagoulak has induced awareness among the members of the Kawawana fishermen association, who decided in 2008, to create a community-based protected area to reverse this trend. Indeed, because Mangagoulak is located within the estuary of Casamance, it is easily accessible to many fishermen coming from other areas of Senegal. This major pressure on marine resources has led to severe disturbance of the ecological balance of the marine ecosystem. Thus, since 2008, villagers, community-based organizations, local authorities and local technical departments of the ministries in charge have met several times in order to design a proper system to manage fishing and avoid overfishing.

**NECESSITY TO MAINTAIN TRADITIONAL KNOWLEDGE**

The local communities of Mangagoulak are mainly composed of Diola people, which hold a wide set of traditional knowledge and practices (in particular from animism religion) aimed at preserving their environment. Traditionally, many forests, islands and rivers are considered
sacred sites (“gni-gni” in Diola) that are strictly regulated and controlled. Diola people therefore have a strong interest in creating community-based protected areas in order to manage their natural resources.

IDENTIFYING STAKEHOLDERS TO INCLUDE IN THE GOVERNANCE SYSTEM OF THE COMMUNITY-BASED PROTECTED AREA

In Kawawana, the Mangagoulack Fishermen Association has played an important role in organizing consultations with local authorities and local technical services of the government in order to develop adequate management rules for the protected area. It retains the main responsibilities regarding the management of this ICCA (Indigenous peoples’ and community conserved territories and area) whose sustainability is now ensured by its official recognition at national level.

DEVELOPING SIMPLE TOOLS TO HELP DECISION-MAKING

Assessing the current resources management impacts on the Kawawana ICCA is essential to enable corrective actions. This assessment consists of a regular monitoring of the resources and this data has enabled the implementation of appropriate fishing rules in Kawawana. This simple monitoring protocol has been developed in a participatory way and clarifies the role of each stakeholder. It aims at clarifying who is responsible for organizing the field staff in charge of monitoring, the equipment needed, the samples that have to be collected, when they should be collected, etc.

CONCLUSION

The successful creation of the Kawawana ICCA inspires new perspectives for participatory, fair and effective management of marine ecosystems in Senegal. This story highlights the importance of considering traditional knowledge related to natural resources management. It demonstrates that involving local communities is necessary to ensure sustainable harvesting and that it helps them to maintain their cultural identity and rules.

The fact that the establishment of Kawawana has been supported throughout the process by local authorities and technical services of the government will help to transfer responsibilities at local level, in particular in terms of monitoring fishing activities. In that sense Kawawana significantly contributed to demonstrating the capacity of local communities to effectively manage their natural resources.
**Towards the legal recognition of protected areas and heritages conserved by indigenous and local people in DRC**

Joseph ITONGWA, « Réseau des populations autochtones pour la gestion durable des écosystèmes forestiers » (REPALEF RDC)

**Introduction**

Until recently, the legal framework regulating DRC’s network of protected areas was made of laws developed more than 40 years ago. Even if new laws and strategies have been written on this matter since then, access to natural resources remains prohibited to some neighbouring communities of protected areas (indigenous and local people) and their participation in the governance and management of protected areas remains low.

The legal recognition of Indigenous peoples’ and community conserved territories and areas (ICCAs) as official protected areas would help to improve this situation by:

1. Pacifying the relationships among local stakeholders around PAs and thus improving the management effectiveness of these zones that are currently the source of many conflicts;
2. Strengthening the traditional rights of indigenous people in their ancestral territories and thus capitalising on their cultural knowledge on nature conservation;
3. Increasing the number of protected areas at national level and thus the percentage of DRC territory considered as protected, in compliance with targets no 11 and 18 of the Aichi protocol.

**Key aspects of the process**

This project seeks to demonstrate the local and global benefits of ICCAs in DRC in order to lobby for their legal recognition within the national law.

The first national workshop on this topic, organized in 2012, was aimed at explaining the concept of ICCAs to the representatives of indigenous people, civil society and protected areas of ten different districts. The statement that came out of this meeting mentions that ICCAs are one of the best tools to improve natural resources’ management, as they combine biodiversity conservation, sustainable development and pacification of conflicts around existing protected areas.

“ICCAs are one of the best tools to improve the natural resources’ management”
Once adopted, this concept has been translated into a road map detailing the steps that will lead to the identification of the ICCAs with the local stakeholders. The next step will be to develop appropriate strategies to ensure their good management. On this basis, three ICCAs have now been identified within various ecosystems (forest and non forest ecosystems). The ICCA located in Eastern DRC includes four community-managed forests nearby Lufito, Kissa-Kilali, Kambushi and Busisi villages. The one in central DRC includes three sacred ravines that are protected by the Bantou and Batwa communities. These areas, located within the traditional territories of indigenous people, outside of existing protected areas, are now fully recognized by the national institution in charge of nature conservation in DRC, the ICCN, and will thus, hopefully, be included in DRC future national biodiversity conservation strategies.

**CONCLUSION**

In DRC, local and indigenous communities are more and more interested in the concept of ICCAs because it recognizes and emphasises their traditional knowledge in line with good practices of governance and management of natural resources. The identification and the legal recognition of three ICCAs represent a major step forward in terms of diversification of governance systems of protected areas in DRC. This model will help improve the quality of PA governance and increase the respect for traditional knowledge of local stakeholders in terms of natural resource conservation.
INTRODUCTION

The Ol Pejeta Conservancy is a not-for-profit organisation situated in Laikipia County, Kenya. Prior to 2005, the 90,000 acres area currently occupied by the Conservancy and then known as Ol Pejeta Ranching Ltd was used extensively for cattle ranching. Wildlife was perceived as having no economic value therefore rarely tolerated and removed at every opportunity. Post 2005, the 24,000 acres of the ranch previously set aside as a rhino sanctuary was extended into the ranching area therefore enhancing biodiversity conservation. Removing the fence that was separating wildlife from livestock thus allowing the two to mix freely was a deliberate move to challenge the previously intolerable wildlife-livestock integration concept. The deliberate integration of wildlife and livestock was informed by the following considerations:

i) cattle and wildlife together generate more revenue than “either/ or”;
ii) cattle can be used as a wildlife habitat management tool by creating nutrient rich “hotspots”, removal of rank grass, creation of a heterogeneous landscape;
iii) land productivity can be maximized, more people employed thus more statutory tax remitted to the central government through employment;
iv) it is a model for conservation in pastoral areas where wildlife is rarely tolerated;
v) an alternative revenue stream for conservation is available in times of tourism slump
The Conservancy thus works to conserve wildlife, provide a sanctuary for great apes and to generate income through wildlife tourism and complementary enterprise for reinvestment in conservation and community development.

**WILDLIFE-LIVESTOCK INTEGRATION**

The model is effectively contributing to the vision of the Conservancy as the Conservancy has recorded a 58% increase in total wildlife between 2006 and 2012. Specifically, the critically endangered black rhino has increased from 20 in 1993 to 101 in 2013 making it the largest black rhino population in East Africa and one of the only 8 in Africa with a population of over 100. The chimpanzee sanctuary is now fully-fledged and largely funded from internal revenue. Visitation has increased three-fold within the same period thanks to the abundant, diverse and healthy wildlife that is a characteristic of well managed and secure protected areas. Similarly, the Conservancy has diversified its revenue streams through complimentary enterprise such as beef and wheat farming - thus contributing to the much needed alternative revenue stream from tourism - that has contributed to establishing an elaborate Community Development Program that focuses on health, roads, water, education, and agricultural extension.

By incorporating community livestock in this model by allowing organized grazing of the community livestock in the Conservancy when there is less graze outside, the initiative demonstrates an effective and equitable model of protected area management. In return the wildlife is tolerated outside of the Conservancy and neighbouring communities are willing to participate in conservation issues. Based on the achievements so far, an agreement has been signed with the Agricultural Development Corporation in the neighbouring Mutara area (Government Ranch, north of Ol Pejeta Conservancy) to implement a similar model, essentially availing a further 20,000 acres for...
wildlife conservation and setting the scene for another private-public-partnership conservation venture in this region.

**CONCLUSION**

The Conservancy demonstrated leadership by pioneering the wildlife-livestock integration model when it was considered inconceivable. The model itself was developed as a result of creative thinking to achieve a *win-win* situation for wildlife conservation in a region dominated by pastoralists. This initiative has led to an increase of wildlife, number of tourists, revenue streams, established community development program and presents optimism that conservation goals can be achieved. By allowing organized grazing of the community livestock in the Conservancy when there is less graze outside, the initiative demonstrates an effective and equitable model of protected area management. In return wildlife is tolerated outside of the Conservancy and neighbouring communities are willing to participate in conservation issues.

As the decision to integrate wildlife and livestock was deliberate, it was well planned and captured in a 5-year management plan that was implemented through annual work plans. The plan was subjected to annual external evaluations for the first 3 years and to annual internal evaluations for the last two years. Although the Conservancy is fenced, gaps have been established strategically along the fence to ensure wildlife connectivity remains with the larger Laikipia ecosystem, in recognition of the landscape approach and importance of the connected protected area system. This model shows that conservation goals can be achieved if well planned and managed. The Conservancy is currently working on its 2020 strategic plan that will build on the lessons learnt from the initiative and see it strive to become an innovative and sustainable conservation and development model to conserve biodiversity - particularly endangered species - and to contribute to economic growth and improved livelihoods of rural communities. Consequently, wildlife-livestock integration is a form of multiple land use that can be used to achieve conservation goals, especially in pastoralist areas.
As mentioned in the previous chapter of this book (Part 3 Strengthening protected areas’ legitimacy: working with the local communities), the support of local populations is a crucial factor impacting PA effectiveness. Unfortunately, conservation and development are sometimes presented as two different and opposing concepts, with PAs perceived as a constraint to development. To ensure the effectiveness of conservation policies it is thus important to highlight their role in development, particularly in Africa.

Conservation for development
The first two stories (Financial challenges of conservation, Freddy Manongi and Ecotourism as a tool for local development, Sakhile Nsukwini) of this chapter illustrate the idea that PAs should not be seen as an economical burden for developing countries but rather as financially sustainable institutions that can generate local revenues.

Voluntary regulation
Informing and educating local populations about the sustainable use of natural resources aims to empower them in the management of these resources. This proved to be an effective answer to overfishing in Madagascar (Auto-regulation by communities for marine conservation, Alasdair Harris) and the overuse of forest resources in Burkina Faso (Ensuring the sustainability of natural resources uses, Alexis Kabore), where local communities realised the necessity to constrain their own fishing, hunting and harvesting activities in order to maintain these activities on the long term.

The good balances
Finally, accounting for the value of the environment, and of PAs in particular, can sometimes help to make the right choices between conservation and development (Counting and accounting for good decision-making, Ravaka Ranaivoson). Conservationists can sometimes be brought to make concessions in this regard but should nonetheless try to limit the negative impact of development activities on PAs (Development and conservation, a matter of concessions, Tom Obong Okello).
THE NGORONGORO CONSERVATION AREA: WHAT ARE THE SOLUTIONS TO THE CHALLENGES OF MULTIPLE LAND USE?

Freddy S. MANONGI, Ngorongoro Conservation Area Authority

INTRODUCTION

The Ngorongoro Conservation Area (NCA) in Tanzania was established in July 1959 and was the first Tanzanian site to be inscribed - the same year - on the World Heritage List. In 2010, the UNESCO World Heritage Committee inscribed NCA as a mixed property on the World Heritage List, making it the only East African facility of the list with mixed status. Internationally, since 1981, NCA is also recognized as a part of the Serengeti-Ngorongoro Biosphere Reserve, under UNESCO's Man and the Biosphere Program. NCA is a successful multiple use PA, where indigenous people (est. 87,851) are, so far, living harmoniously with wildlife in an area of 8,282 km².

NCA encompasses the spectacular Ngorongoro Crater (250 km²), which is the world's largest unbroken caldera. It also encompasses the Oldupai Gorge, one of the world's most important prehistoric sites, where anthropologists Louis and Mary Leakey made many of their greatest discoveries. Footprints that were most likely made by *Australopithecus afarensis* as well as fossils of the same early humans can also be found in one of the sediment layers inside NCA. There are large populations of wild life in the crater - including wildebeests, zebras, elands, Thomson and Grant gazelles as well as hippopotamus and a visible population of black rhinoceroses.

It is a major achievement for the government of Tanzania that the co-management of people and wildlife in a PA has worked for 50 years. The multiple use management approach in Tanzania has been adopted by the government of Tanzania to reach conservation goals. Nonetheless, it has also been shown that the NCA model is constrained and needs to be reviewed in order to achieve the goals of sustainable natural resource conservation, and tourism and human development as defined by the Government of Tanzania.

CHALLENGES FACED BY THE NGORONGORO CONSERVATION AREA

The growing local human population (from less than 8,000 in 1959 to about 87,000 today) in NCA seems trapped in a state of poverty with no views on how to mitigate between their basic needs, traditional lifestyles and contemporary development aspirations. Agriculture is not permitted in NCA because it would likely increase the conflicts between wildlife and agro-pastoralists. To compensate, the Ngorongoro Conservation Area Authority (NCAA) provides food to all the people of NCA as well as development support in terms of water projects, health and education programs for the
people residing in NCA. NCAA has relocated some of the immigrants by establishing a village outside of NCA.

However, despite all these efforts, people are increasingly complaining about hunger, killing of livestock by wildlife, scarcity of grazing, and they feel like the NCAA is not doing enough.

The number of indigenous people in NCA is also growing faster than ever before. Tourism uses, physical development and number of tourists, the key revenue generating economy in the NCA, are increasingly impacting the delicate balance between conservation and development, and threatening the very integrity of the site. Complaints from tourists about the haphazard movement of livestock and people are also increasing.

Finally, there are many things that challenge the current governance of the NCA. Factors such as less regular rainfalls, increased droughts, and invasive species, while economic and political factors in the vicinity of the NCA add to the pressure on the multiple use management model.

**TENTATIVE ANSWER BY THE NCAA**

Programs to relieve hunger, improve human health, educate locals, and livestock breeding have been adopted recently by the NCAA. Poverty alleviation projects through tourism initiatives and provision of livestock and other incentives to the very poor people in NCA have been implemented. Illegal immigrants have been relocated to a site outside NCA. NCAA annually spends a significant amount of money to build schools, health centres, roads and dams for the local community. Zoning was adopted in 2006 to control human use and development in NCA. Programs to control invasive species and manage pasture for livestock and wildlife have been implemented.

**FURTHER REFORMS ARE NECESSARY**

However, these programs have not completely solved the current conflicts between tourism, human development and conservation. In order to ease the current conflicts and achieve broader conservation goals the systems of governance and management of NCA require a totally new approach. There is an urgent need to determine trends and to see what has worked well in managing the difficult balance between nature conservation, tourism and people. Most importantly, there is also a need to determine what can be done to improve the situation for people, tourism management and conservation of natural resources in NCA.

After 55 years, the current model of multiple use management in the Ngorongoro Conservation Area faces serious challenges. The NCAA implemented several policies to limit
the conflicts between tourism, local needs of communities, and conservation. However, drastic reforms are clearly necessary. The systems of governance and site-related economies, business and investment planning are in urgent need of a new approach to balance the needs of wildlife management, tourism development, and the sharing of rights, benefits and responsibilities with the local communities.
THE SOCIO-ECONOMIC IMPACTS OF ECOTOURISM IN RURAL AREAS: CASE STUDY OF NOMPONDO, A COMMUNITY BORDERING THE HLUHLUWE-iMFOLOZI PARK (HiP), KWAZULU-NATAL, SOUTH AFRICA

Sakhile NSUKWINI, Southern African Wildlife College

INTRODUCTION

South Africa’s natural resources attract millions of local eco-tourists every year. Hluhluwe-iMfolozi Park is the largest conservation and ecotourism provider in the South African province of KwaZulu-Natal (KZN). Ezemvelo KZN Wildlife is the government authority, and is driven by a new concept of conservation that is radically different from the conservation models that were put in place since the country’s colonial and apartheid times. South Africa is now committed to promote a concept of conservation linked to issues of development and human needs, which is based on building an harmonious relationship between people and parks.

For ecotourism and conservation policies to be successful in PAs, the attitudes and level of participation of local communities play a major role. The general attitudes of community residents towards tourism can be improved by both tangible and intangible benefits that these populations receive from being involved directly in decision-making processes. In each community, there are different groups of people who need different levers for motivation and satisfaction. These levers should be identified so as to promote good attitudes towards ecotourism and conservation in PAs.

A study aiming at evaluating the socio-economic impacts of ecotourism in rural areas adjacent to HiP with specific reference to Nompondo community was launched in 2013. HiP is regarded as an area of international significance in terms of biodiversity conservation and ecotourism, as it includes a large population of white rhinos. HiP lies in a remote area and is the most impoverished region in KZN, with a poverty rate of 75%. The tourism industry of HiP is a significant employer in the region and contributes more than R7.5 million to the local economy in wages alone.

PARTICIPATION OF COMMUNITY RESIDENTS IN ECOTOURISM AND CONSERVATION ACTIVITIES IN THE HiP

It is important to be aware of the value local communities attach to ecotourism development projects and to natural resources. This will help park managers with regards to decisions concerning how to organise an ecotourism project to benefit more individuals in local communities. The results from the Nompondo community survey indicate that a small
percentage of the locals participate in the operation and/or management of the park. Some of the community members are either employed as game guards, game capturers, general assistants or serve as community liaison officers with the park management staff. The majority (86%) of respondents from the Nompondolo community were of the opinion that locals should decide on the nature of ecotourism and conservation ventures and only 14% agreed that they should even decide on the profit sharing formula. Although a lot of entrepreneurship opportunities are provided by HiP to the local people, very little true ownership is being instilled in the residents. This could be caused by the fact that the way of including these people in ecotourism and conservation ventures is still inappropriate and doesn’t take into account their low level of education. As a consequence, the majority of people from the community were not of the opinion that ecotourism and conservation programs in HiP would help maintain their traditional skills.

A Local Board comprising representatives from different sectors impacted by the management of PAs (tribal and local authorities, regional tourism, environmental groups and business sectors) has been set up to deal with this issue. Its role is to promote local decision making related to the management of the park and to promote the integration of adjacent communities into the activities of the park. However it is important to note that community members are not given equal participatory roles. The majority are men, except in the case of handicraft private enterprises, where women dominate.

**Benefits received by community residents from the HiP**

The park system attempts to empower some of the community members as much as possible by giving them opportunities to sell their products in the park. These residents’ incomes have generally increased thanks to conservation and ecotourism projects. This resulted in the establishment of the Vukuzame craft market and the Nselweni Bush Lodge. HiP offers some community services to the residents through HIV/AIDS education and improvement of linking roads to communities. The park also provides environmental education through the *Sifundimvelo* programme (Learning nature) for high school groups of learners and the People and Parks programme. Even though many other respondents indicated that their income had increased thanks to the ecotourism and conservation businesses, a majority of respondents still think that the distribution of revenue from ecotourism and conservation ventures are not fair and transparent enough. Communities wish that ecotourism would generate increased revenues, and provide more infrastructures such as roads, electricity, schools and health clinics.
CONFLICTS BETWEEN RESIDENTS AND PARK MANAGEMENT

The Nompondo community complains about having only restricted access to the park’s resources. However, they also indicated that the curtailed access to the park’s wildlife resources and recreational resources is legitimate to some extent since free access could endanger conservation agendas. Of the Nompondo community respondents, 44.4% deplore the fact that locals do not have the priority over jobs in the park. This is mainly due to the low educational background of the majority of the residents. Many might not be employable by the park. Another source of conflict comes from the fact that some of the residents did not receive accrued benefits from conservation and ecotourism ventures. 42% agreed that this was driven by the fact that the opinion of locals are not taken into consideration when developing ecotourism and conservation projects. As a result of these conflicts, a third of the respondents stated that the number of poachers hiding within the community has increased.

CONCLUSION

It is important to be aware of the value that local communities attach to ecotourism development projects and to natural resources. This will help park managers with regards to decisions on how to organise an ecotourism project to benefit more individuals in local communities. However, HiP residents are not yet fully integrated into the development and planning of these projects. Yet the conflicts faced by the tourism operators are costly in terms of lack of trust, financial overruns, project delays and loss of opportunities. That is the reason why the support of local communities is often required for the sustainable development of ecotourism and conservation ventures. Besides, local communities need to accept the principle of joint responsibility of natural resources management and should be encouraged to learn more about the values of protected natural resources as well as their role in depleting or maintaining them.

Ezemvelo KZN Wildlife, park management and local communities should be encouraged to collaborate and work in partnership with both government and Non-Governmental Organisations (NGOs) to increase the expenditure of tourists among the communities within the respective regions. Possible ventures may include the organisation of more attractions (like traditional dancing and singing, storytelling, traditional healing and other related activities) as well as tours to persuade tourists to stay longer than they had originally planned; and motivating the local communities to develop more tourist accommodation facilities outside the HiP in suitable and safe areas close to HiP boundary. This could minimise further disruption of the ecology of the HiP and provide economic benefits for the community, provided that there is proper and careful planning.
Marine conservation by communities, for communities

Alasdair Harris, Blue Venture, Madagascar

Introduction

At least 97% of the world’s fishers live in developing countries, the vast majority working in small-scale fisheries in the tropics. These artisanal and traditional fisheries are vital to hundreds of millions of people, providing a lifeline for families and coastal economies, and underpinning food security for entire nations. Already one-and-a-half billion people live around our tropical coasts, dependent on the planet’s richest yet most threatened marine biodiversity. They include some of the poorest and most vulnerable people on earth. Throughout the world’s oceans, there is growing evidence that marine conservation works best when local communities are responsible for fisheries management. This is particularly the case in low-income countries, where national capacity for enforcement of marine and fisheries legislation may be weak.

Locally Managed Marine Areas (LMMAs) are areas of ocean managed by coastal communities to help protect fisheries and safeguard marine biodiversity. Found throughout the world’s tropical and subtropical seas, and encompassing diverse approaches to coastal management and governance, their sizes and contexts vary widely, but all share the common theme of involving coastal communities in marine and fisheries management.

The role of Blue Venture in empowering coastal communities

For over a decade, marine conservation NGO Blue Ventures has been supporting coastal communities in Madagascar to establish dynamic and locally appropriate conservation strategies and governance systems that improve fisheries sustainability and climate change resilience.

With some of the world’s largest locally led marine conservation initiatives, Madagascar is leading the way in the Indian Ocean’s rapidly growing LMMA movement. Most are currently being incorporated into the Madagascar PAs System (SAPM) as sustainable use areas, conforming to the IUCN Category V and VI classifications.

There are currently 36 LMMAs in Madagascar; the majority focused on the vast coral reef and mangrove ecosystems of the country’s west coast, together covering nearly 11,000km²; some 11% of Madagascar’s continental shelf. Blue Ventures’ LMMA programme focuses on three zones along Madagascar’s west coast, where fishing communities have experienced severe declines in catches over recent decades.
for all harvested species, especially high-value fisheries such as sea cucumbers, sharks, and large pelagic and reef fish.

Activities are focused on training and supporting communities throughout these LMMAs to monitor their natural resources and establish management systems that will enable them to reverse this decline. Through the use of dina – community bylaws that are recognised by the government – many of our partner communities have designed effective rules that can be enforced locally to ban destructive fishing practices, protect endangered species, and designate priority marine and coastal areas for protection.

**LONG-TERM SUSTAINABILITY**

To ensure the long-term financial sustainability of these LMMAs, Blue Ventures is working to develop market-based incentives for communities to conserve the ecosystems that underpin their livelihoods. Among these mechanisms are innovative marine ecotourism programmes, voluntary payment schemes and eco-certifications for sustainable fisheries, and the production of carbon credits through mangrove REDD+. All or these initiatives are focused on creating meaningful financial incentives to communities, to make marine management make economic sense at a local level.

**BEYOND MADAGASCAR**

Madagascar isn’t the only country in the region where this revolution in marine management is underway. Almost half of the Western Indian Ocean's (WIO) PAs are under some form of community stewardship. And in Kenya, Mozambique and Tanzania especially, LMMAs are proving themselves to be a cost-effective, scaleable, resilient and more socially acceptable alternative to more traditional ‘top-down’ methods of marine resource management. Taken together, these sites are protecting more than 11,000km2 of marine resources helping local communities to manage and conserve their natural resources and rebuild tropical fisheries.

Opportunities for local management differ from country to country based on what governance systems and tools are available to empower communities for fisheries management. Despite emerging as a tool of choice in parts of the WIO, LMMAs are often hampered by underdeveloped legal structures and enforcement mechanisms. To address these issues, work is underway in both Madagascar and across the region to establish LMMA networks which allow practitioners to share best practice and promote local management to other communities and governments.

Communities and their supporting partners can experience difficulties communicating between sites, and especially across national borders. Following a series of regional and international LMMA workshops, Blue Ventures is working to encourage communication and
information exchange between LMMAs across the Indian Ocean, with LMMA communities in Madagascar hosting visitors from Kenya, Tanzania, Seychelles, Mauritius, and Comoros.

CONCLUSION

The LMMA approach to coastal management is gaining momentum and popularity among communities, government authorities and conservation organisations throughout Madagascar and the broader western Indian Ocean region. Yet despite notable successes, many of these pioneering grassroots conservation initiatives are being developed in isolation, with limited communication or sharing of lessons learned between isolated communities. Blue Ventures’ experience in Madagascar has shown that peer-to-peer learning is a highly effective tool for building local capacity and confidence for fisheries management and catalysing the adoption of community-led conservation efforts. With this in mind, we are supporting Madagascar’s growing network of LMMAs to promote the exchange of know-how, experiences and best practice. The cornerstone of this network is a regular meeting of LMMA representatives from throughout Madagascar, providing an invaluable opportunity to meet face-to-face, share experiences, explore common issues and develop collaborative solutions.
INTRODUCTION

The W-Arly-Pendjari (WAP) complex - a three million hectare transfrontier park located in Burkina Faso, Benin and Niger - is highly threatened by anthropogenic pressures coming from the surrounding villages. The threats that it faces are the consequence of a top-down approach that does not include the local population in decision-making processes and that leads to poaching, overexploitation of fisheries resources, illegal grazing, etc.

In the Burkinabe part of the complex, the AFAUDEB (Association Faune et Développement au Burkina – Association for Wildlife and Development in Burkina Faso) managed to implement processes of shared governance for natural resources management in the villages surrounding the WAP. This has enabled the reconciliation of nature conservation and socio-economic benefits at local level.

CONTROLLED HUNTING ZONES

The Controlled Hunting Zones (CHZ) are community-based PAs that have been established with the participation of local communities and local authority. These PAs are forest areas that one or several villages decided to protect while maintaining sustainable harvesting of wildlife (birds and small mammals) and non-timber forestry products (NTFP) such as medicinal plants, vegetal oil, honey, etc.

The natural resources of the CHZ are directly used by the populations themselves or by private guides approved by the populations. The CHZ thus generates revenue for the population through the selling of non-timber forest products and ecotourism activities that are based on the specificities of the areas’ wildlife, landscapes and culture. The CHZ all together covers an area of about 40,000 ha and represents the main source of collective revenue of the villagers (up to 1,500 USD per year per village). These activities represent a strong alternative to other activities that may be destructive for the PAs.

"Processes of shared governance"
IDENTIFYING AND INVOLVING STAKEHOLDERS IN CHZ GOVERNANCE

Many stakeholders take part in the CHZ decision making process: traditional authorities, associations of villagers, local authorities, local forestry administrations, local land tenure administrations, managers of private hunting zones and research institutions. In addition to mobilizing technical and financial resources, AFAUDEB acts as a mediator for the inclusion of all stakeholders and organizes dialogues and cooperation between them.

ALTERNATIVE INCOMES FOR NEIGHBOURING COMMUNITIES

Thanks to AFAUDEB sustainable ways of harvesting and processing NTFP have spread to the villages surrounding the WAP. Thousands of women and men have benefited from technical training developed by AFAUDEB in order to strengthen the internal organization of the local associations in charge of processing the NFTP. The associations of villagers are responsible for harvesting, processing and selling NTFP. All villagers’ associations are united under a regional cooperative that is responsible for extending the market outlet and the diversity of products made out of NTFP. It also promotes good practices of harvesting and processing NTFP (environmental friendly methods of processing that use less firewood, for instance).

The products extracted from NTFP range from oil (of shea, baobab, balanites, neem) to soap (made from shea butter), juices (of baobab, tamarind and balanites) and biscuits (of baobab, and honey). This production contributes significantly to the livelihood of the community. The families of the community use part of it and the rest is sold on local or urban market, providing them with an additional incomes that can replace the illegal and unsustainable use of natural resources (such as poaching, overexploitation of timber).

CONCRETE OUTPUTS OF SHARED GOVERNANCE

After a decade, the results of AFAUDEB programmes are clearly visible: i.e. the increase of the number and superficies of CHZ, legal recognition of its institutions, enforcement of the agreement signed between local communities and administrations, diversifications of sources of income, etc.
Local communities are better organized and work together with new key partners (local authority), and a local agreement is established between communities and validated by the administration which sets up the rules of a sustainable use of natural resources (NTFP, ecotourism). Moreover, villagers themselves implement the ecological monitoring of the CHZ and can then adapt their practices according to the evolution of natural resources that they themselves witness.

CONCLUSION

The success of this tangible experience of shared governance is based on a bottom-up approach of joint decision-making at local level. Indeed, the rules dealing with the management of natural resources and the allocation of the sales benefits take into consideration the interests and the traditional habits of local communities. Only then did the local and national authorities formalize these rules.

The model of PAs management promoted by AFAUDEB demonstrates that one of the best ways to set up shared governance is to ensure sustainable and profitable ways of adding value to natural resources of PAs and their periphery. Good organization, appropriate capacity building and innovative practices are essential.
When protected areas sustain life and support development: myth or reality?

Ravaka N. Ranavoson, Fondation Tany Meva

Introduction

Madagascar hosts 1/20th of the world’s biodiversity and has a high rate of endemism (more than 70%) which has led to rate the island among the 34 biodiversity hotspots in the world. Among others, species of lemurs, amphibians, birds, baobabs and orchids are unique to this place. The area dedicated to conserving this rich diversity of fauna, flora and different picturesque habitats covers 12% of the national territory.

However, different pressures, mainly driven by poverty, threaten this biodiversity: i.e. slash and burn, poaching, small-scale mining, wood fuel and charcoal production. Such practices contribute to the loss of 0.53% of forest on the island per year. Local people often ignore the important role provided by natural resources such as ecosystem services (global water supply and alleviation of risk of disaster) and the incomes it can generate (from ecotourism for instance).

The Tany Meva Foundation promotes the valuation of natural resources to the stakeholders living around PAs in order to better involve them in their preservation. Initiatives aiming at integrating conservation and development are already emerging around some PAs in Madagascar. In the eastern part of the island, the people living around the Andasibe-Mantadia National Park have built schools and increased the area of rice plots thanks to the allocation of 50% of entrances fees that they get from Madagascar National Parks. In Makira New PA, the Wildlife Conservation Society, in partnership with the Foundation Tany Meva, has implemented a “green belt” around the park in order to preserve the integrity of the park while improving the livelihoods of local communities.

Regarding carbon offsets in Madagascar, the global trend seems to show that 50% of the carbon credit that will be allocated to Madagascar will be given to the communities living around the targeted forest and will be dedicated to support local development projects.

In the current Malagasy context where development of tourism is still fragile, and the benefit coming out of the carbon market still uncertain, the
main challenge is to find a suitable way to upscale the achievements of the above-mentioned Andasibe and Makira reserves so as to cover Madagascar’s six million hectares of PAs. Meanwhile, this would help reduce the number of people living in poverty (currently more than 75% of Malagasy people) and malnutrition, as well as increase access to drinking water and electricity. Assessing the economic value of the biodiversity and using this value as a way to support development may be a solution to cope this challenge.

**CONSIDERING SHORT, MID AND LONG TERM VALUE OF NATURAL RESOURCES TO SUPPORT DECISION MAKING**

While assessing the economic value of natural resources, it is important to compare their short-term value - if they are used and destroyed - with their long-term value - if they are maintained. In both cases, the assessment has to consider the advantages and drawbacks of each option regarding social aspects (health and education), environmental aspects (ecosystem services such as water supply) and economic aspects (income, employment and agriculture).

One key element that impacts the success of this approach is the involvement of the population surrounding the parks in the economic assessment process of the natural resource, so that they can take part in the analysis of the projects to be developed in the future. Indeed, those projects must also consider the specifics of the local context (social, economic and environmental) and the needs of the local population (technical needs, capacity building and financial support).

**MADAGASCAR’S NATURAL CAPITAL SHOULD BE CONSIDERED “ECONOMIC WEALTH”**

Its biodiversity is certainly one of the main incentives for people to travel in Madagascar.

“The degradation of its natural resource costs Madagascar 450 to 500 million USD every year”

Nature-based tourism, and in particular in PAs, is a leading sector in Madagascar, which generated around six million USD in 2010. However, on the other hand, the degradation of its natural resources costs Madagascar 450 to 500 million USD per year, approximately 9% of its GDP.

In order to consider natural resource as part of a country’s wealth, one key step is to “value” the natural resources and to include them in the national accounting. This accounting will thus help choosing, in each case, what the best option would be between conservation and development (with the required compensation if needed). Identifying the stakeholders to be involved in the conservation and development programs is key as they have an important role to play in defining the suitable measures to implement in terms of policy, regulation and strategy.
TOOLS TO SENSITIZE STAKEHOLDERS TO THE IMPORTANCE OF NATURAL RESOURCES FOR THEIR OWN DEVELOPMENT

Assessing the economic value of natural resources is one of the key steps in sensitizing people on the importance of preserving them or at least rationally exploiting this wealth while considering the required compensation if needed.

The economic value of natural resources can feed a strong argumentation in order to convince targeted audiences to get involved in initiatives combining conservation and development: local communities, authorities, private sectors, donors and decision-makers. Therefore, it is important to make sure that all the stakeholders have access to these data and that they can understand and use them adequately.

“Convince targeted audiences to get involved in initiatives combining conservation and development”

PRAGMATIC AND REPLICABLE METHOD

Pragmatic

The assessment of the value of natural resource is always based on real facts. Indeed, populations living around the parks and private companies are already exploiting natural resources with their own objectives: exploitation for subsistence or for commercial use, whether this exploitation is sustainable or not. The value of natural resources can for example be calculated through ecosystem services that improve the well-being and livelihood of people living around the parks: global water supply (for irrigation as well as for

“Ecosystem services that improve the well-being and livelihood of people living around the parks”
consumption), alleviation of risk and disaster, food supply (beekeeping, responsible fishery), carbon sequestration where credit will support development activities in the vicinity of the PAs, etc.

However, even though scientific knowledge and tools for economic assessment of natural resources exist, they are rarely used. That is why it is important to disseminate these tools dedicated to assessing the economic value of natural resources.

**Replicable and adaptable**

The value of natural resources for local populations is different depending on locations and countries, however the aim of their exploitation remains the same: for subsistence or for profit. Tools for economic assessment are the same (i.e. the System of Environmental Economic Accounting established by the United Nations) and can be applied in different countries. Moreover, these tools apply to every type of governance of PAs.

**CONCLUSION**

PAs may participate in development as long as all the stakeholders are involved in the process. Therefore, all the targeted audiences - local communities, population, authorities, donors, decision makers - need to have the right information on: (i) the reasons why they have to conserve the biodiversity, (ii) the reasons why they should get involved, (iii) and the ways for them to contribute to this initiative.

In the context of extreme poverty, environmental and conservation issues are relegated to the background. But in fact, there is an urgent need to “value” natural resources in order to qualify them as “economic wealth”. Therefore, their integration in public finance may be one of the solutions to reinforce citizen commitment from local populations with authorities and private sectors.

Neither conservation nor development are optional, but both sectors could work in synergy. The results of the assessment of the economic values of natural resources can be used as a tool to do so.
MANAGING IMPACTS OF OIL & GAS EXPLORATION IN MURCHISON FALLS N.P: SEEKING A CRITICAL BALANCE BETWEEN UGANDA’S DEVELOPMENT NEEDS AND CONSERVATION

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INTRODUCTION

In Uganda, commercially viable quantities of oil and gas resources have been discovered in the country’s Albertine Rift region. These resources are estimated to yield up to 3.5 billion barrels of oil. The country is excited by this discovery and is fast tracking exploration and development efforts. Like other oil producing countries, Uganda expects to earn foreign exchange from export of petroleum products as well as taxes levied on oil companies and service providers. The oil sector is also expected to create jobs and contribute to household income and to generate electricity, which is an important driver for industrial development. Unfortunately, the Albertine Rift region, where the oil and gas reserves have been discovered, has the highest biodiversity rate in the country. The area has five national parks, eight wildlife reserves and several forest reserves. Within MFNP, 5 oil fields have been discovered and efforts are underway to start the field development program. Therefore a project has been developed in order to enable legal instruments, policies and practices in place, and to mitigate the impacts of oil and gas exploration and development in PAs and thus prevent from the ultimate loss of biodiversity.

“This Albertine rift region, where the oil and gas reserves have been discovered, has the highest biodiversity rate in the country”

“This critical balance between getting oil out of the reservoirs while not compromising conservation”

This presentation aims at exploring the best practices that Uganda governmental institutions responsible for environmental, PA and oil and gas management, as well as other stakeholders, are pursuing to achieve this critical balance between getting oil out of the reservoirs while not compromising conservation in Uganda’s largest and oldest national park, the Murchison Falls national park (MFNP).
UNDERLYING VALUES AND IMPORTANCE OF THE PROTECTED AREAS

Five oil fields have been discovered, drilled and appraised in Murchison Falls National Park. The fields are estimated to contain over 300 million barrels of crude oil. After over five years of exploration activities involving seismic studies, exploration and appraisal drilling of 33 wells as well as feasibility studies for production infrastructure, the Ugandan government, in partnership with two oil companies, is in the final stage of the preparation of the production phase. However these activities are being undertaken in an ecologically sensitive area of MFNP while part of it is designated Ramsar site and Important Bird Area. The fields lie astride the mighty River Nile which is the habitat to the last breeding population of Nile crocodiles and home to thousands of Hippopotamus. Because of scenic landscape and varieties of game, tourism has been a leading activity in this national park. The benefit generated by the PA go over 4 million dollars annually and part of this money is ploughed back in funding conservation efforts in the PA. Unfortunately, the tourism site directly overlaps with the oil fields and there are fears of loss of this revenue once field development activities will start.

ENABLING POLICIES AND LEGISLATION

In October 2009, a national committee comprising The Uganda Wildlife Act (Cap 200 of the Laws of Uganda 2000) mandates the PA Management Authority (Uganda Wildlife Authority) to control and monitor industrial and mining developments in wildlife PA. The Act also mandates the authority to develop plans and guidelines that will promote conservation. Objective 9 of the National Oil and Gas Policy provides guidance for ensuring that oil and gas activities are undertaken in a manner that conserves the environment and biodiversity. According to this policy, UWA is the entity in charge of monitoring the compliance of oil and gas activities to the regulations governing wildlife operations in PAs and of monitoring the impacts of oil and gas activities on wildlife.

MANAGING IMPACTS OF OIL AND GAS EXPLORATION IN UGANDA’S PROTECTED AREAS

The oil and gas industry is a recent development in Uganda. The following initiatives, tools and guidelines have been developed and implemented in order to prevent the potentially known and dangerous impacts of this development on the environment. The project first focused at national level on the following initiatives:

1. working with lead agencies to develop a Sensitivity Atlas for Albertine graben to show case the environmental sensitivity of the graben and act as baseline for monitoring oil and gas activities;
2. developing the Strategic Environment Assessment to guide decisions on planning of the development phase;
3. developing the Albertine Rift Environment Monitoring Plan;
4. developing operational guidelines to guide, coordinate and regulate the activities of oil companies while working within protected areas;
5. continuing to build capacity of PA managers on oil and gas issues through training, study tour to countries showcasing good environmental practices;
6. developing an MoU between UWA and the oil company to further guide operations in MFNP.

Then the project also worked at the protected area level by:
1. developing a detailed sensitivity atlas for the national park based on biodiversity sensitivity to oil and gas activities and other developments. Ecologically sensitive areas have been mapped out and categorized as avoidance features. These include breeding grounds, watering points for wildlife and areas with large aggregations of wildlife.
2. working with WCS to carry out research on impacts of oil on ranging patterns e.g through the collaring of elephants and lions and monitoring their movements in relation to oil activities;
3. working with oil companies in carrying out biodiversity surveys e.g surveys on birds, mammals, and fish to establish baselines;
4. convincing Oil companies to pay daily entrance fees like other visitors to the PA (negotiated as conservation fees); this money is then ploughed back into conservation;
5. establishing and equipping fully fledged oil monitoring unit at PA level to enforce daily compliance monitoring with backstopping from UWA HQs technical staff;
6. encouraging oil companies to hold quarterly stakeholders’ engagement and awareness meetings at field level to sensitize the public on their activities;
7. providing with all oil companies’ staff and staff of their sub-contractors, induction on conservation before entering to work in the national park;
8. recruiting and training 100 dedicated staff to work with oil companies and ensure their activities are within the approved guidelines;
9. taking out of the PA all drill wastes (both solid and liquid) upon completion of drilling;
10. restoring immediately all sites and access routes after completion of well testing. The restored sites are monitored for a year to ensure non-colonization by alien species.

ACHIEVEMENTS REGISTERED TO-DATE

The exploration phase is now complete and it seems to have no impact on biodiversity nor on tourism. Moreover, the routine inspections and monitoring of oil activities have pressurised the developer to adhere to the mitigation measures (e.g. improved chemical handling on drill pads, self-reporting of accidents). Those biodiversity surveys have been carried out together with the oil companies (e.g. surveys of birds, mammals, and fish to establish baselines which will be used for future monitoring).

Thanks to their competent staff to this regard, the companies have also adopted good practices such as: no flaring in PAs, reduction in drill sizes, location of the building support infrastructure (material storage and staff camps) outside of the PA.
Nowadays the control and monitoring of Oil and gas activities have been incorporated in the PA General Management Plan.

LONG-TERM SUSTAINABILITY PLAN

The PA Management Authority, the Ministry responsible for PAs and the oil company are discussing a draft of a 30 year Vision for the National Park. It is envisaged that this will form the basis for ensuring that oil is got out of the reserve without compromising conservation. The vision will also include thoughts about offsets and conservation financing.
CONCLUSION

Reconciling development objectives and conservation is a challenge that can be overcome depending on sound decision making, awareness of conservation, and involvement of all stakeholders.

The strict implementation of the tools and guidelines developed jointly with all the stakeholders helps alleviate negative impacts of development programs on the PA. Implementation of these tools however requires that capacity of PA staff should be built through training and exposure visits to enable them to grasp the proposed mitigation measures.
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