20 Years of IGCP: LESSONS LEARNED IN MOUNTAIN GORILLA CONSERVATION

COMMUNITY CONSERVATION
CAPACITY BUILDING
TRANSBOUNDARY NATURAL RESOURCE MANAGEMENT
REGIONAL MEETINGS
BUFFER ZONE AND HUMAN-WILDLIFE CONFLICT MANAGEMENT

A coalition of:

AFRICAN WILDLIFE FOUNDATION
FAUNA & FLORA INTERNATIONAL
WWF
Published: International Gorilla Conservation Programme, 2011


Funded: Howard G. Buffett Foundation through the Enterprise, Environment, and Equity in the Virunga Landscape of the Great Lakes Region (EEEGL) Project www.virunga.net

Edited: Maryke Gray and Eugène Rutagarama

Cover Photos: Anna Behm Masozera/IGCP and Rebecca Lomax-Sumner

Layout: Anna Behm Masozera
The International Gorilla Conservation Programme (IGCP) was established in 1991 with the mission “to empower people to jointly manage a network of transboundary protected areas that contributes significantly to sustainable development and protects the endangered mountain gorillas and their habitat”. IGCP is a unique coalition of three international conservation NGOs: the African Wildlife Foundation (AWF), Fauna & Flora International (FFI) and the World Wide Fund for Nature (WWF). IGCP works in partnership with the governments of Rwanda, Uganda and the Democratic Republic of Congo (DRC) through the collaboration with the respective Protected Areas Authorities: the Rwanda Development Board (RDB) in Rwanda, Uganda Wildlife Authority (UWA) in Uganda, and the Institut Congolais pour la Conservation de la Nature (ICCN) in DRC. IGCP also places importance on partnerships with local communities to enhance their livelihoods and the security of protected areas, based on the high population pressure on protected areas in the region.

The Lessons Learned reports which are collected in this document describe and analyze various components of IGCP’s long-term engagement to conserve the mountain gorilla and its forest habitat. These components include 1) Community conservation; 2) Capacity building; 3) Transboundary natural resource management; 4) Buffer zone and human wildlife conflict management; and 5) Regional meetings.

Lessons Learned: Community Conservation

IGCP's work with communities can be classified into three main types of activity:

1. Strengthening policies and institutions, which includes some advocacy work and support for developing community conservation efforts within government park authorities.

2. Resolving human-wildlife conflict, which includes efforts to alleviate the costs to local people from park animals raiding their crops.

3. Conservation-related enterprise, which includes IGCP’s innovative model for developing multi-sector partnerships which involve a strong role for private businesses as well as communities and government agencies.

As has been the experience for most conservation practitioners, IGCP has faced difficulties with implementing community conservation projects. These difficulties have often arisen from the socio-economic situation of the communities living around the parks. Typically, these communities are resource poor, do not have strong local institutions and have limited skills for managing collective action and business enterprises. IGCP’s efforts to facilitate the establishment of robust, sustainable, community-run enterprises often takes more time, and more staff resources than initial plans expected.

The difficulties that have been faced working with local communities generate some of the 'lessons learned' in this report. These difficulties have often arisen from the socio-economic situation of the communities living around the parks. Typically, these communities are resource poor, do not have strong local institutions and have limited skills for managing collective action and business enterprises. IGCP’s efforts to facilitate the establishment of robust, sustainable, community-run enterprises often takes more time, and more staff resources than initial plans expected. However, these difficulties should not distract from IGCP’s considerable achievements in the field. Indeed, it is IGCP’s successes, set against the tough economic and political contexts of the region, that offer lessons that are likely to be of most interest, and practical value, to the wider conservation community.
Lessons Learned: Capacity Building

In this report, capacity building was considered at three different levels: individual, institutional and system levels. The analysis shows that IGCP's capacity building interventions are spread at different levels and particularly at institutional and system level, for example in terms of establishing mechanisms for exchange between key partners, regional monitoring and transboundary collaboration. Lessons learnt include the need to always remain focused on the organizational vision and mandate, the importance of working at different levels and from the bottom-up rather than top-down. Partnerships should be encouraged and stakeholders must be listened to in a process of mutual transparency, and feedback and communication is essential. Finally it is vital to invest in internal capacity.

Lessons Learned: Transboundary Natural Resource Management

The study focuses on one of the overriding strategies of IGCP: a regional approach based on transboundary collaboration. Whilst transboundary natural resource management (TBNRM) is now widespread, IGCP’s experience has some unusual aspects that make an original contribution to conservation learning. Firstly, the cooperation between the three nations has been developed and sustained during an era of very poor international relations including various times when partner countries have been fighting each other. The second unusual aspect is that TBNRM in the Virunga region has developed from informal field level cooperation and only relatively recently moved up to ministerial level and formal agreements. Finally the third aspect is the unusual but effective model of facilitation of the transboundary process involving an NGO-state model.

An assessment was also done of the IGCP experience of facilitating transboundary regional meetings. Regional meetings are recognized as having contributed positively to enhance conservation in the Virunga-Bwindi region, despite political troubles that have characterized the region over the last twenty years.

Lessons Learned: Buffer Zone and Human-Wildlife Conflict Management

This report documents and analyses the experience of IGCP in trying to prevent, respond to and mitigate the effects of human-wildlife conflicts around the four protected areas where the programme has been active since 1991. The difficulties faced while working on human-wildlife issues generate some of the ‘lessons learned’ in this report. These difficulties include the adaptability of wildlife to the conflict mitigation solutions that have been designed; finding the level of participation of local communities that has real meaning and chance of success; and assessing and securing the leadership among local communities. Although these difficulties have undoubtedly impacted on the programme they should not detract from IGCP’s considerable accomplishments in this area. Instead it can be seen that IGCP’s successes, set against the challenging conservation context of the region, have generated lessons that are of interest and practical value to the wider conservation community at the local, regional and international level.

Conclusion

Overall, for nearly 20 years, IGCP has been working on the various components outlined in the Lessons Learned series, and many challenges have been confronted along the way. Even if some of the challenges are still valid or have become even more critical, IGCP’s work has followed many positive features as outlined in the different reports. However, this is no reason to feel complacent and IGCP needs to continue to focus on these and other programmatic areas in order to achieve long-lasting results, have long-lasting impact in the area of mountain gorilla conservation and reach the goal “To conserve gorillas and their habitat through partnering with key stakeholders while significantly contributing to sustainable livelihood development”.

# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Summary</td>
<td>i</td>
</tr>
<tr>
<td>Acronyms</td>
<td>iv</td>
</tr>
<tr>
<td>Lessons Learned: Community Conservation</td>
<td>1</td>
</tr>
<tr>
<td>Authors: Adrian Martin, Eugène Rutagarama, Maryke Gray, Stephen Asuma, Mediatrice Bana, Augustin Basabose, and Mark Mwine</td>
<td></td>
</tr>
<tr>
<td>June 2008</td>
<td></td>
</tr>
<tr>
<td>Lessons Learned: Capacity Building</td>
<td>33</td>
</tr>
<tr>
<td>Authors: Samuel Kanyamibwa, Eugène Rutagarama, Maryke Gray, Mediatrice Bana, and Stephen Asuma</td>
<td></td>
</tr>
<tr>
<td>May 2008</td>
<td></td>
</tr>
<tr>
<td>Lessons Learned: Transboundary Natural Resource Management</td>
<td>59</td>
</tr>
<tr>
<td>Authors: Adrian Martin, Eugène Rutagarama, Maryke Gray, Anecto Kayitare, and Vasudha Chhotray</td>
<td></td>
</tr>
<tr>
<td>February 2009</td>
<td></td>
</tr>
<tr>
<td>Lessons Learned: Regional Meetings</td>
<td>91</td>
</tr>
<tr>
<td>Authors: Anecto Kayitare, Eugène Rutagarama, and Maryke Gray</td>
<td></td>
</tr>
<tr>
<td>July 2010</td>
<td></td>
</tr>
<tr>
<td>Lessons Learned: Buffer Zone and Human-Wildlife Conflict Management</td>
<td>105</td>
</tr>
<tr>
<td>Authors: José Kalpers, Maryke Gray, Stephen Asuma, Eugène Rutagarama, Wellard Makambo, and Eugène Rurangwa</td>
<td></td>
</tr>
<tr>
<td>November 2010</td>
<td></td>
</tr>
</tbody>
</table>
Acronyms

ANICO  Animateurs de Conservation
ANP    Akagera National Park
ARCOS  Albertine Rift Conservation Society
ARDI   Association Rwandaise pour la promotion du Développement Intégré
AWF    African Wildlife Foundation
BCDA   Buhoma Community Development Association
BINP   Bwindi Impenetrable National Park
BMCT   Bwindi Mgahinga Conservation Trust
BRD    Berggorilla und Regenwald Direkthilfe
BZ     Buffer Zone
CAR    Central Albertine Rift
CARE   CARE International
CBO    Community-Based Organization
CCR    Community Conservation Ranger
CNDP   Congrès National pour la Défense du Peuple
CS     Core Secretariat
DFGFE  Dian Fossey Gorilla Fund Europe (now the Gorilla Organization)
DFGFI  Dian Fossey Gorilla Fund International
DGIS   Netherlands Directorate General for International Cooperation
DRC    Democratic Republic of Congo
EU     European Union
FAV    Forum des Apiculteurs des Volcans
FDLR   Forces Démocratiques de Libération du Rwanda
FFI    Fauna & Flora International
GEF    Global Environment Facility
GIS    Geographic Information System
GMRT   Gorilla Monitoring Response Team
GPS    Global Positioning System
GTZ    German Technical Agency for Development
GVTES  Greater Virunga Transboundary Executive Secretariat
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUGO</td>
<td>Human Gorilla Conflict Resolution</td>
</tr>
<tr>
<td>HWC</td>
<td>Human-Wildlife Conflict</td>
</tr>
<tr>
<td>ICCN</td>
<td>Institut Congolais pour la Conservation de la Nature</td>
</tr>
<tr>
<td>ICDP</td>
<td>Integrated Conservation and Development Project</td>
</tr>
<tr>
<td>IGCP</td>
<td>International Gorilla Conservation Programme</td>
</tr>
<tr>
<td>ITFC</td>
<td>Institute for Tropical Forest Conservation</td>
</tr>
<tr>
<td>IUCN</td>
<td>International Union for Conservation of Nature</td>
</tr>
<tr>
<td>KRC</td>
<td>Karisoke Research Center</td>
</tr>
<tr>
<td>LG</td>
<td>Local Government</td>
</tr>
<tr>
<td>MBIFCT</td>
<td>Mgahinga and Bwindi Impenetrable Forest Conservation Trust</td>
</tr>
<tr>
<td>MEA</td>
<td>Millennium Ecosystem Assessment</td>
</tr>
<tr>
<td>MGNP</td>
<td>Mgahinga Gorilla National Park</td>
</tr>
<tr>
<td>MGP</td>
<td>Mountain Gorilla Project</td>
</tr>
<tr>
<td>MGVP</td>
<td>Mountain Gorilla Veterinary Project</td>
</tr>
<tr>
<td>MSF</td>
<td>Médecins Sans Frontières</td>
</tr>
<tr>
<td>MUIENR</td>
<td>Makerere University Institute of Environment and Natural Resources</td>
</tr>
<tr>
<td>NCCDF</td>
<td>Nkuringo Community Conservation and Development Foundation</td>
</tr>
<tr>
<td>NCDF</td>
<td>Nkuringo Conservation and Development Foundation (now Nkuringo Community Conservation and Development Foundation)</td>
</tr>
<tr>
<td>NEPAD</td>
<td>New Partnership for Africa’s Development</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-Governmental Organization</td>
</tr>
<tr>
<td>NLC</td>
<td>National Land Center</td>
</tr>
<tr>
<td>NNP</td>
<td>Nyungwe National Park</td>
</tr>
<tr>
<td>NP</td>
<td>National Park</td>
</tr>
<tr>
<td>NRM</td>
<td>Natural Resource Management</td>
</tr>
<tr>
<td>ORTPN</td>
<td>Office Rwandais du Tourisme et des Parcs Nationaux (incorporated into RDB in 2008)</td>
</tr>
<tr>
<td>PAA</td>
<td>Protected Area Authority</td>
</tr>
<tr>
<td>PAC</td>
<td>Problem Animal Control</td>
</tr>
<tr>
<td>PADDEP</td>
<td>Programme d’Appui a la Decentralisation et au Developpement Economique</td>
</tr>
<tr>
<td>PNV</td>
<td>Volcanoes National Park (formerly Parc National des Volcans)</td>
</tr>
</tbody>
</table>
Acronyms, cont.

PNVi  Virunga National Park
QENP  Queen Elizabeth National Park
RBM   Ranger-Based Monitoring
RDB   Rwanda Development Board
REMA  Rwanda Environment Management Authority
RM    Regional Meeting
RwF   Rwandan Franc
SACOLA Sabyinyo Community Livelihoods Association
SO    Strategic Objective
TBNRM Transboundary Natural Resource Management
TBPA  Transboundary Protected Area
TCS   Transboundary Core Secretary
TES   Transboundary Executive Secretary
TSP   Transboundary Strategic Plan
UDAEMINYA Union des Apiculteurs du Secteur Mikeno et Nyamulagira
UNESCO United Nations Educational, Scientific and Cultural Organization
UNHCR United Nations High Commissioner for Refugees
UNICEF United Nations Children's Fund
UNOCHA United Nations Office for the Coordination of Humanitarian Affairs
UOBDU United Organisation for Batwa Development in Uganda
USAID United States Agency for International Development
USD   US Dollar
UWA   Uganda Wildlife Authority
WCS   Wildlife Conservation Society
WFP   World Food Program
WWF   World Wide Fund for Nature
WWF PEVi WWF Virunga Environmental Programme
LESSONS LEARNED: COMMUNITY CONSERVATION

Adrian Martin¹, Eugène Rutagarama², Maryke Gray², Stephen Asuma², Medatrice Bana², Augustin Basabose², and Mark Mwine²

June 2008
Edited by Maryke Gray in 2011

¹ University of East Anglia
² International Gorilla Conservation Programme
Executive Summary

This report describes and analyses the community conservation component of IGCP’s long-term programme to conserve the mountain gorilla and its forest habitat.

IGCP’s work with communities can be classified into three main types of activity:

1. Strengthening policies and institutions, which includes some advocacy work and support for developing community conservation efforts within government park authorities.

2. Resolving human-wildlife conflict, which includes efforts to alleviate the costs to local people from park animals raiding their crops.

3. Conservation-related enterprise, which includes IGCP’s innovative model for developing multi-sector partnerships which involve a strong role for private businesses as well as communities and government agencies.

Globally, the record of community conservation initiatives has been mixed, with some reports of disappointing performance, especially for Integrated Conservation and Development Projects around protected areas. As has been the experience for most conservation practitioners, IGCP has faced difficulties with implementing community conservation projects. These difficulties have often arisen from the socio-economic situation of the communities living around the parks. Typically, these communities are resource poor, do not have strong local institutions and have limited skills for managing collective action and business enterprises. IGCP’s efforts to facilitate the establishment of robust, sustainable, community-run enterprises often takes more time, and more staff resources than initial plans expected.

The difficulties that have been faced working with local communities generate some of the ‘lessons learned’ in this report. However, these difficulties should not distract from IGCP’s considerable achievements in the field. Indeed, it is IGCP’s successes, set against the tough economic and political contexts of the region, that offer lessons that are likely to be of most interest, and practical value, to the wider conservation community.

Lesson 1: Conservation activities are aligned and support each other

For conservation organizations who are planning to, or are in the process of moving more into community conservation, there is a lesson to be learned from this experience. Alignment of conservation activities contributes to both the effectiveness and efficiency of interventions, enabling work with a wide range of partners to build synergies that contribute to achieving the core goal. It is recommended that other components of the organisation’s work be audited to identify the potential positive linkages with community conservation, as well as potential negative or constraining linkages. A strategy can then be developed to build alignment into a set of activities and develop the positive feedbacks between them.

Lesson 2: Conservation will only be achieved through development when there is a strong conservation logic

IGCP’s most significant and successful community conservation ventures have a strong connection between conservation and development objectives. This connection is strongest where it involves two forms of linkage. Firstly, development outcomes are dependent in the long term on successful conservation and second, there is some contractual understanding that development benefits are provided with the expectation of certain conservation duties. IGCP and other conservation practitioners will benefit from regularly reflecting on the conservation logic underpinning their development projects, asking whether this is robust, and thinking creatively about ways to enhance this.
Lesson 3: Strong information systems facilitate good planning

Ranger Based Monitoring (RBM) data has been used to establish the link between threats to the park and the livelihoods of people living around the park, and thus to provide an essential knowledge base for well conceived community conservation projects. Such linkage between monitoring data and community conservation design is excellent practice. IGCP is really quite unique in this ability to confidently establish conservation-livelihood linkages and to thereby design projects which are win-win in nature. It is the failure to identify genuinely win-win interventions that has contributed to the disappointing results for community conservation elsewhere. We certainly recommend that IGCP continues to explore the potential to integrate some easy-to-collect socio-economic data into RBM and to consider how this might further strengthen the design and monitoring of community conservation enterprises. For conservation practitioners without such extensive involvement in monitoring it might be possible to explore collaboration that could enrich the information base upon which community interventions are designed.

Lesson 4: The need for cross-scale and cross-sectoral partnerships

Community conservation benefits from linkages to other scales of activity. Particular policies (TBNRM, Revenue sharing) and institutions (ANICO, HUGO) can help to form bridges between different scales, to share resources such as information. Community conservation has also benefited from moving beyond community actors to involve private sector partners. IGCP’s new financial and managerial model for community enterprises is innovative and shows promise at this stage. We would recommend continuation of this approach, ideally with a shift away from dependence on foreign aid.

Lesson 5: Real partnerships require new ways of working with communities

As IGCP engages in closer partnerships with communities, development NGOs, and private businesses, there are benefits to be gained by moving towards more equal partnerships in which agendas are shared, incentive structures aligned and decision-making collectivized. In the Virunga-Bwindi region, there is little opportunity for co-management of resources within park boundaries. IGCP has created opportunities outside of the park boundaries, enabling experimentation with transfers of tenure and associated transfers of power. These are exciting developments and we recommend further creativity in linking enterprise with community empowerment.

Lesson 6: Interventions need to be durable and flexible

The low level of skills and organization in local communities means that long duration support will be necessary in many cases. Whilst IGCP’s innovative models of working with highly capable private sector partners
The International Gorilla Conservation Programme (IGCP), a coalition of the African Wildlife Foundation, Fauna & Flora International and World Wide Fund for Nature, has been supporting conservation in the Virunga-Bwindi region since 1991. The goal of IGCP is the long-term conservation of the mountain gorilla and its forest habitat in the Democratic Republic of Congo, Rwanda and Uganda. To achieve this goal IGCP employs a three-pronged strategy:

1. Establishing a strong information base to allow decision-makers to understand the dynamic between the human population and the natural habitat/wildlife.

2. Strengthening protection of the habitat and the mountain gorillas through regional collaboration by the three countries and structured mechanisms for transboundary natural resource management.

3. Reducing the threat to the conservation targets by assisting the human population in developing livelihood strategies that are complementary with and even contribute to conservation objectives.

(IGCP, 2008, Strategy document)

Whilst it will become apparent that these three axes of IGCP’s operations are connected and mutually supportive, the principle focus of this report is on the third axis, ‘community conservation’.

The aim of this report is to analyse IGCP’s experience with community-based ventures and to identify key lessons learned. This analysis will articulate the experiences, successes and weaknesses of a long-term conservation programme, contributing to conservation learning both in IGCP and the wider scientific and practitioner community.

Methods

The main approach has been to synthesise existing knowledge. This has been captured in three ways. Firstly, a review of secondary data including published scientific work as well as internal IGCP documents and data. Secondly, key people within IGCP and partner organizations were contacted by email as a scoping exercise. The purpose of this was to prioritise elements of the IGCP experience for more intense analysis, as well as to ensure that critical issues were not overlooked. Thirdly, a series of consultation meetings and site visits were held in March/April 2008 in DRC, Rwanda and Uganda.

We have relied heavily on the testimony of key stakeholders: IGCP staff, staff from ORTPN, UWA and ICCN, and leaders/representatives of communities where IGCP works. Where possible we have backed up this testimony with other sources of information, including scientific research published in journals, and IGCP and consultant evaluations of particular programmes and projects.

Having described achievements, the study proceeds to an analysis of lessons learned, focusing on five positive features of IGCP’s work: 1) the strength of the conservation logic; 2) the relationship between information and practice; 3) the embedding of local community scale work in wider scales of activity; 4) evolving partnerships; and 5) flexibility.
Process of the Theme

Community Conservation: rationale, problems, responses

Despite large investments – decades of work, hundreds of projects, thousands of trained professionals, and millions of dollars – progress in conservation has been slow and erratic. We have yet to fully discover the secrets of effective conservation. (Salafsky et al., 2002, p. 1470)

Tropical forests provide some of the planet’s richest sources of biodiversity but amidst and adjacent to this biological wealth live many of the world’s poorest people. Whilst National Parks and other Protected Areas have had some success in conserving forest biodiversity, it is often the poor who have shouldered the costs for this (Adams et al., 2004). It has been estimated that 90% of the world’s poorest people ‘depend substantially on forests for their livelihoods’ (Scherr et al., 2004) and these people often lose access to resources when local forests become designated for strict preservation. IGCP operates in just such a context, and conservation of mountain gorilla habitat cannot ignore the livelihoods of those living adjacent to the region’s parks.

Prior to the 1980s, Protected Areas were largely managed through methods that have been described as ‘fortress conservation’: the exclusion of local people both from the park and from decision making. Since the 1980s, there has been a global shift towards management approaches that seek to reconcile biodiversity conservation with local livelihoods. This has partly been driven by simple moral assertions regarding the perverse consequences of actions that worsen the situation of the poorest. Equally importantly it has been driven by pragmatic concerns about the long-term effectiveness of a strategy that alienates its nearest neighbours.

In the Virunga-Bwindi region, the link between gorilla conservation and local people’s welfare began to be taken seriously in 1979 with the formation of the Mountain Gorilla Project (MGP: the predecessor to IGCP). The MGP sought to base conservation on an understanding of relationships between park and people, and engaged with the need to address local livelihoods (Weber and Vedder, 2001). In Uganda, these new approaches to conservation began to be practiced by CARE whose Development through Conservation project began in BINP in March 1988 and subsequently widened to MGNP.

Community conservation covers a broad spectrum of initiatives. At one end of this spectrum is the devolution of management control to local communities, with the emphasis on development. At the other end lie initiatives to support national parks by improving relations with local people (Barrow and Murphree, 2001). Initiatives in areas adjacent to parks are also commonly described as Integrated Conservation and Development Projects (ICDPs), which prioritise conservation, but which practice development. In ICDPs development activities might be described as ‘instrumental’, in the sense that improvements to livelihoods are the means to achieve conservation goals (conservation through development). ICDPs mainly occur in buffer zones and settlements adjacent to park boundaries. They involve activities that seek to enhance income through provision of substitute natural resources, enhancement of agricultural income and livelihood diversification into tourism and other park-related enterprises.

It is clear that although we may be winning a few battles, we are losing the war. With perhaps only another 20 years or so left to turn the tide, it is worth asking why. (Balmford and Cowling, 2006)

The performance of ICDPs has often been disappointing and some authors have suggested that this lack of success might prove an obstacle to future funding of people friendly conservation. One method of evaluating ICDPs has been to question park managers and other ‘experts’ to collate their experience in the field. Bruner et al. (2001) surveyed 93 protected areas in 22 tropical countries and found a) that the parks system has been much more successful (at conservation) than is often stated, b) that park effectiveness is most strongly correlated to the density of guards and c) that there is no significant correlation between conservation effectiveness and community participation. Similarly, Struhsaker et al. (2005) surveyed 16 African rainforest protected areas and found that success is correlated with strong public support, but that such support is not itself correlated with ICDPs or provision of employment benefits. Such reliance on the views of protected area managers has drawn
Community conservation strategies in the region

Since 1991, the opportunities for community conservation have grown dramatically. Firstly, IGCP and others have contributed to the strengthening of the capacity of ICCN, ORTPN and UWA, enabling these park authorities to take increasing responsibility for law enforcement activities. Secondly, the political situation has improved. The fall of the Amin regime in Uganda in 1979 and the defeat of Obote's unpopular rule in 1986 had paved the way for better relations with conservation NGOs and greater opportunities for collaboration; the fall of the Mobutu regime in DRC in 1997 had a similar impact. Together with the improvement in the security situation in Rwanda and Uganda, such changes have enabled IGCP to shift its attention from urgent park protection activities towards its longer term conservation and livelihood objectives. Such a shift has been encouraged by donors who have come to favour community conservation approaches over fortress conservation. In DRC the situation is rather different, with continued war in the east making it essential for IGCP to maintain support for ICCN with urgent park protection activities. Nevertheless, FFI are currently supporting ICCN in developing a national level community conservation strategy.

The genocide of 1994 saw a sea-change in working relationships in Rwanda. With ORTPN's capacity reduced to a largely symbolic presence, IGCP and others had to make the difficult decision to remain in the field. Inevitably, this led to a period in which IGCP had to focus its efforts and funds to protection-oriented activities: trying to maintain a flow of wages and equipment to those field staff who chose to remain in post, and subsequently helping to rebuild the capacity of ORTPN. In the aftermath of the genocide, the focus was very much on rebuilding state management capacity, with WCS and IGCP in particular helping with funding, training and equipment, and forming a strong alliance with ORTPN. On the one hand, the government of Paul Kagame presented greater opportunity for partnership than the previous, more authoritarian, regime. On the other hand, events had revealed starkly the need to work together. With the huge pressure for land for returning refugees, protected areas, including PNV, were under threat, and there was an urgent need for conservation NGOs to work with government agencies. Partnerships were thus forged by crisis, by opportunities presented by new political regimes, and by pragmatic decisions.

Partnerships with local government administrations, as well as community-based associations, did not begin in earnest until the early 2000s. With IGCP support and funding, ORTPN began working with sector administrations in 1996. However, it took wider trends in both politics and conservation to really begin the era of community conservation. On the political side, Kagame proved open to ‘good governance’ agendas that were prevailing within International Financial Institutions. Decentralisation was not only a policy direction that would be attractive to international aid donors, but also a policy that appeared to fit the particular Rwandan context, with the emphasis on building consensus politics and rebuilding Rwandan identity through local institutions. The Programme d'Appui a la Decentralisation et au Developpement Economique (PADDEP) proved an early catalyst for building relationships with local actors. With funding from USAID and the Dutch Embassy, and NGOs with rich experience in community-based approaches (Care International and HelpAge), links were made, for example, to the African Indigenous and Minority Peoples Organisation and ARDI in 1999 and Imbaraga, who became working partners with the Gorilla Organisation (then DFGFE). On the conservation side, Rwanda clearly lagged behind new community-based approaches that had become increasingly popular in East Africa, and elsewhere, since the mid 1980s. This was not so much a result of the ethos of IGCP but a response to the priorities in the field. In Uganda, the political and legal context in which conservation interventions must be designed has been, and continues to be, more conducive to community conservation. The UWA's mission is to manage parks ‘in partnership with neighbouring communities’ and the capacity to do this is enshrined in 1996 Uganda Wildlife Statute that gives UWA the power to ‘issue a permit to any person for the use of resources in wildlife protected areas’ (Blomley, 2003). Unlike the legal context in Rwanda and DRC, local...
people can, in principle, be given genuine co-management roles. Even before this Statute, local people around BINP and MGNP had been granted some rights of resource collection in ‘multiple use zones’.

IGCP community conservation strategy

If asked to evaluate IGCP’s achievements in relation to the three strategies stated in the introduction to this report, most would highlight a) the contribution of Ranger Based Monitoring to establishing a strong information base and b) the contribution of transboundary natural resource management to effective regional collaboration. Assisting local people with their livelihood strategies does not usually feature in initial reflections on IGCP’s big achievements. However, close observers of IGCP’s work recognize that this area of activity has been ‘coming up fast’. In this section we briefly describe the kinds of community conservation ventures that IGCP has been involved with. We begin with a reflection on the importance of gorilla tourism, not perhaps the most obvious venture for inclusion under IGCP community conservation, but arguably one of the most significant.

In Rwanda, 10,000 hectares of the lower altitude habitat in PNV, valued by gorillas for its bamboo as well as its warmer climate, was cleared in 1968-9 for Pyrethrum cultivation. In 1978, PNV was again under threat from agriculture, this time under a government plan to clear 12,500 hectares for cattle raising. This was at a time of great global publicity for gorilla conservation, following the work of Dian Fossey and the killing of Digit. Whilst Dian Fossey launched the Digit Fund, the Fauna and Flora Preservation Fund (now FFI) soon collected more than $100,000 from the UK public. Joining forces with the African Wildlife Leadership Foundation (now AWF) and the World Wide Fund for Nature (WWF), the Mountain Gorilla Project was launched in 1979, and soon included a program to develop gorilla tourism (Weber and Vedder, 2001). For the pioneers of tourism development, this was the only way to change perceptions of the park – both politicians and local people viewed the park as potential agricultural land and both constituencies had to start seeing the park itself as a source of income and employment.

Whilst gorilla tourism has proved highly vulnerable to insecurity, it is probably fair to say that its development is one of MGP/IGCPs crowning achievements, benefiting from the depth of IGCP expertise of mountain gorilla behaviour and its accrued experience with ecotourism. The income derived from gorilla tourism has contributed to the transformation of government attitudes towards conservation, especially in Rwanda and Uganda, and forms the basis for much community conservation work today.

IGCP’s recent work with communities can be classified under three broad headings, which include 1) strengthening policies and institutions, 2) resolving human-wildlife conflict, and 3) conservation-related enterprises.

Strengthening policies and institutions

In Rwanda in particular, but also in Uganda and DR Congo, IGCP have become part of core policy-making communities consisting of state agencies and a small number of influential non-state stakeholders. In this role, IGCP has helped to introduce a number of policies and practices, including ranger-based monitoring and transboundary management. In relation to community conservation, IGCP and partners played an advisory role in establishing revenue sharing policy in Uganda in 1994 and then a central role in spreading this to Rwanda in 2005 and, most recently, DRC (See Box 1).

It is worth noting that IGCP’s niche as an ‘insider’ within the policy community, and especially the closeness of relationship to the state, creates opportunities but also problems. Around parts of PNVi for example, relationships between local people and ICCN are poor and this tension can extend to closely associated partners. More generally, an ‘insider’ role somewhat reduces the opportunity to serve as an advocate for the rights of local people. For example, whilst IGCP has long worked to try to alleviate problems of crop-raiding, it has not become an advocate for community calls for compensation schemes.

Instead of a focus on advocacy, it is probably fair to say that IGCP has concentrated on institutionalizing community conservation within park authority practices, leading to a situation where these authorities themselves become advocates for communities. An important example is IGCPs support for the restructuring of ORTPN in 2003, which included the creation of a community conservation unit, headed by a community conservation manager in Kigali and with community conservation wardens at park level. Community conservation is institutionalized within similar structures in ICCN and UWA.
The importance of work to institutionalize community conservation can be illustrated through an example from the Nkuringo Conservation and Development Foundation at BINP (see Box 2). UWA strongly supported this IGCP project by agreeing to allocate the Foundation first refusal on 6 of the 8 daily gorilla trekking permits. This decision has not pleased all and there is currently a challenge from hotels in Kisoro which will suffer from this advantage given to NCDF. However, UWA staff at all levels appear adamant that local communities deserve such opportunities to receive benefits and look set to hold strong on their initial decision. The relationship appears to work both ways. Whilst UWA supports IGCP strategies, senior UWA staff are quick to explain that IGCP respond to UWA strategies. In particular, Uganda has a national framework, the National Environment Action Plan, which is strong on community conservation and which serves as a basis for coordinating activities.

**Box 1: Revenue Sharing in Uganda and Rwanda**

As has been stated, the designation of MGNP and BINP was initially marred by poor relations with communities including the deliberate use of fire to destroy areas of Bwindi. IGCP’s early work in Uganda was largely focused on its expertise in gorilla tourism, which began in Mgahinga in 1993, providing technical expertise for gorilla habituation and training of trackers. However, from its origins in Rwanda, IGCP always saw tourism as an activity that should benefit local people and, along with CARE, played a role in advocating for sharing revenue from gorilla tourism with local communities. This was piloted in 1994 and started in earnest in 1996. Whilst revenue sharing has contributed to improvements in park-community relations, the going has not been smooth. The initial scheme provided for 12% of total revenue from tourism to be shared. However, in 1996 revenue sharing became institutionalized in the national Uganda Wildlife Statute, with a provision for 20% of gate receipts. This represented a large reduction in funds. Today, of the $500 paid for a gorilla trekking permit, only $25 is for the entry permit (gate receipt), so only $5 (or a mere 1% of total revenue) is collected. A partial response has been to institute a new $10 ‘gorilla levy’.

Projects in communities around PNV have focused on water and schools. Projects in communities around BINP have mainly involved schools, health centres, roads and more recently, goat rearing.

<table>
<thead>
<tr>
<th>Year</th>
<th>BINP</th>
<th>PNV</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>47,500</td>
<td>29,000</td>
</tr>
<tr>
<td>2002</td>
<td>55,500</td>
<td>136,500</td>
</tr>
<tr>
<td>2006</td>
<td>71,500</td>
<td>109,000</td>
</tr>
</tbody>
</table>

**Revenue Sharing, Bwindi Impenetrable NP (BINP) and Volcanoes NP (PNV)**

IGCP played a central role in the introduction of revenue sharing to Rwanda. Since 2005, 5% of ORTPN’s tourism revenue (largely from gorilla permits) is set aside for investment in community projects, with 40% allocated to PNV and 30% each to Nyungwe National Park (NNP) and Akagera National Park (ANP).

ORTPN manage revenue sharing in partnership with district and sector governments. The impact of revenue sharing in Rwanda remains uncertain and has yet to be evaluated. There is a feeling that the size of the fund is too small to make a big difference because the projects are few and far between. Amongst ORTPN staff there is concern about having devolved responsibility for project selection to districts. They see a tendency for district and sector officials to select social infrastructure projects such as schools and health centres, partly as this helps them meet their own performance targets introduced through decentralisation. ORTPN see two major problems with this. First, it lacks a conservation logic because people do not understand that these projects are linked to the park and do not see a link to the damage they suffer from crop-raiding. Second, it is doubtful whether the poorest prioritise social infrastructure and it is therefore assumed that the poor are not finding a voice. We see a broader issue here which will benefit from attention. Neither ORTPN nor IGCP have the strongest records of working with local government, which has been growing in capacity through decentralisation. The Dutch Embassy has now pledged 2 million Euros to boost revenue sharing, which will be channeled via IGCP to the Transboundary Core Secretariat. How this relates to true ‘revenue sharing’ is a matter of lively debate.
Resolving human-wildlife conflict

In the absence of compensation systems for crop-raiding, local people bear some of the costs of successful conservation. In BINP, for example, the numbers of gorillas is known to be rising and the Chief Warden also believes that numbers of elephants and bush pig have been rising. These increases in wildlife place greater pressure on local livelihoods.

Whilst tourism and other enterprises have established some benefits for local people, it is clear that the immediate costs of conservation outweigh the benefits for very many households. IGCP has recognized this as a real threat to long-term conservation in the region.

Around the Virungas, but not Bwindi, IGCP has contributed to the construction of a buffalo wall, made of lava stones which have been collected from surrounding community fields. This has been constructed with assistance of local communities through voluntary labour. Whilst the wall is easily passable by humans, it serves to demarcate the park as well as preventing problems with buffaloes. The work began in Uganda in the early 1990s, through Berggorilla & Regenwald Direkthilfe, and was taken up by CARE in 1995, and by IGCP in 2004. The wall is now nearly complete in Uganda, DRC and Rwanda. It is not a complete solution as it is aimed mainly at one species, and there are gaps for ravines (although these are being addressed), and places where maintenance is not good. Nevertheless, it is held to be a success by all stakeholders – a genuine ‘win-win’ project - and IGCP staff are proud of their association with this.

One of the toughest human-wildlife conflicts faced by IGCP has been the human-gorilla conflict around Bwindi, focused on Nteko and Mukono parishes. Whilst the problem has been largely caused by habituated gorilla groups, the more fundamental cause of human-gorilla conflict is the expansion of human settlement into territory previously part of the gorilla habitat (Figure 1).

![Figure 1. Change in Bwindi forest cover 1954-1990. Source: Macfie, 2000](image)

The problem in Bwindi has been quite pronounced, with heavy loss of crops such as bananas and a number of attacks on humans, some resulting in injury. There is some uncertainty about whether habituation is a cause of this behaviour, but it is widely perceived as such amongst local people and park staff. This conflict was exacerbated by local people seeing UWA and others make money from the problem through gorilla trekking. Tourism also became problematic because tourists wish to see gorillas in their natural habitat, not devastating local livelihoods.

IGCP was involved in two responses to this problem. The HUGO (Human Gorilla Conflict Resolution) programme was established in 1998. This involves the creation of teams, including volunteer members from local
communities, to chase gorillas back to the park. IGCP provided training and equipment and also provides funding to UWA which can be used, e.g. to pay for lunch for volunteers. It is proving popular, starting with 18 volunteers, currently up to 42, and more and more reportedly wanting to join. Similar systems exist in DRC and in Rwanda communities are represented by Animateurs de Conservation (ANICO). The impact of HUGO appears to be good, with initial evaluations suggesting a reduction in crop loss and in threats to human life (Musaasizi, 2006). However, it is understood that gorilla learning requires long-term reinforcement and chasing may not be a durable solution to the problem. As a result, IGCP and UWA decided that land-use change was necessary for the long-term, and set about purchasing a 12 km strip of land in the Nkuringo area (Nteko and Rubuguri parishes), along the border demarcated by the Kashasha River (Figure 2). The strip is 350 metres wide and consists of two zones:

1. **Inner Zone**: actively managed. This zone is 200 metres wide and solely owned and managed by UWA for alleviating problems with wildlife, and for research and gorilla tracking.

2. **Outer Zone**: community exclusive use. This zone is 150 metres wide and co-owned by NCDF and UWA. In addition to control of problem animals, the zone is also for initiatives to support livelihoods.

Mauritius thorn has been planted along the outer boundary as a barrier to wildlife and non-palatable crops planted such as wheat, lemon grass and *Artemesia annua* (an anti-malarial), as well as pasture for heifers and beekeeping are being tested in the outer zone.

![Figure 2. Nkuringo buffer zone. Source: NCDF, 2007, p.2](image)

The process of establishing the buffer zone has come under some critical scrutiny. Namara (2006) suggests that local farmers only sold their land because it had become useless for agriculture due to the gorillas, and that the process of valuing and purchasing land was undertaken without proper consultation and was characterized by unequal power relations. She states that the land purchase shows a reluctance to work as partners with the community, a missed opportunity for co-management, and suspicion from local people. The current study found no evidence in support of this account and we feel it is important to present the version of events that was revealed by our own research. The process of land purchase took place between 1999 and 2004 and involved extensive consultation with the land owners, their local leaders, neighbours, and the district administration. The valuing of land and property was undertaken by a government valuer, using government rates for land in rural areas. Property on the land was also valued and compensated. In addition, each land owner who sold up was also paid a resettlement package. IGCP/UWA engaged a land lawyer to advise landowners during this transaction. As far as we are aware, neither IGCP nor UWA have received a single complaint from sellers, either about the process or the outcome. The testimonies provided by stakeholders in this study gave a dif-
ferent picture, in which local people were given a very generous rate, and were able to buy larger and better land elsewhere. Some have built better houses; opened businesses and can now afford to send their children to better schools. One family bought two trucks and now provides a previously unavailable transport service between Nteko and Kisoro. In response to these positive experiences, UWA have found themselves being approached by more people who want them to buy their land.

It is true to say that local communities are in a position of educational, organisational and economic weakness compared to UWA and IGCP. In the past, park authorities and conservation NGOs sometimes exploited such weakness in the pursuit of fortress conservation. However, many of those we consulted now view such weakness as a constraint rather than an opportunity. Conservation professionals now understand that it is an advantage to work with communities who are well educated, well organized and less impoverished. Thus IGCP and partners are seeking to empower the community through creation of NCDF. Whether such empowerment currently extends to the more marginal members of communities is more doubtful, an issue that will be discussed later.

**Conservation-related enterprise**

IGCP enterprise projects support local people to develop livelihood opportunities that are complementary with conservation. The objectives are to:

1. *Develop linkages between conservation and community livelihood improvement using conservation income generating activities as a tool for fighting poverty;*
2. *To reduce the pressure of the population on the PA through diversification of livelihoods;*
3. *To ensure that the poor as compared to the government and private sector also capture a share of economic benefits from wildlife and other conservation based enterprises.*

The main types of enterprise are tourism accommodation, beekeeping, crafts, mushroom cultivation and medicinal plants.

As has just been mentioned, one of the great challenges for community conservation, is the rather weak starting point for local civil society, both in terms of individual learning and skills, and in terms of the level of social organization and capacity for collective action.

In Uganda, IGCP and partners have sometimes been able to build on existing social organization, working with established societies, such as stretcher-bearer societies. In DRC, the same has to some extent been true where, for example, associations were established through previous WWF activities. In Rwanda, however, the local institutional landscape was pretty bare post-genocide and IGCP has had to facilitate the creation of associations and co-operatives largely from scratch (Table 1). This is a crucial and yet extremely challenging part of IGCP’s work.

**Table 1. Associations and Co-operatives supported by IGCP**

<table>
<thead>
<tr>
<th>Rwanda</th>
<th>Imbaraga</th>
<th>Association Abunganirana</th>
<th>SACOLA</th>
</tr>
</thead>
</table>
Neither IGCP nor local CBOs have all the skills necessary for establishing profitable and sustainable business ventures, and partnership with private sector organizations is one feature of the enterprise strategy. Ideally, private partners will bring investment as well as skills, although the programme remains highly dependent on donor funding. It has been possible to find private partners for eco-lodges (Box 2) because USAID grants make these ventures fairly gilt-edged business opportunities. However, it has proved harder to find private sector management or venture capital for honey production ventures (Box 3), partly because the production costs are relatively high (casting doubt on the feasibility of international marketing) and partly because of difficulties establishing timely supplies that meet quality standards.
Box 2. Community Lodges

IGCP’s involvement in community-based tourism began in Uganda. In particular, there has been a long association with Buhoma Community Rest Campsite and the Buhoma Community Development Association (BCDA) which owns the camp. This was the first accommodation in Bwindi, opening in 1993 and has remained a viable business despite a glut of new lodges and around 150 bed spaces in the area. BCDA has used 10% of profits to support schools in particular, but also a health centre and other projects. Despite the effectiveness of BCDA, it is not a model that IGCP wishes to replicate due to the level of dependence that persists. On the one hand, IGCP’s endurance as a partner is a great strength, providing the kind of durable commitment needed to build capacity in CBOs. On the other hand, IGCP has limited staff and is now reluctant to continue with such a model for community ventures. The community lodges represent a conscious change in strategy towards new forms of partnership in which private sector operators take on much of the management, leaving IGCP with a quick, if partial, exit strategy. The community lodges also involve a move into the serious luxury end of the tourism market.

The first luxury ($700 per night) community lodge was constructed at the base of Mt. Sabyinyo, PNV and opened for business in August 2007. It was constructed by a grant from USAID, as well as support from IGCP/AFW and ORTPN. The lodge is owned by SACOLA (Sabyinyo Community Livelihoods Association) who have granted a 15 year lease to a private company to operate the business. The Kenyan company, Musiara Ltd (Governors’ Camp), is contracted to pay SACOLA a ‘bed-night fee’ of $50 plus 7.5% of income. Between August 2007 and February 2008, SACOLA received US$ 34,500. SACOLA membership extends to those in cells adjacent to the park in Kinigi and Nyange sectors, a total of approximately 33,000 beneficiaries. A committee of 11 members decides on projects to spend profits on and have so far prioritized road improvements, building houses for marginalized members of the community, water tanks, schools and health centers. Other benefits include employment, with 70% of jobs currently filled by local people; the hotel buys local produce from the community and the potential for supplying further services and attractions to tourists.

Members of SACOLA spoken with were not aware of any particular duties on their part, although they said they had undertaken some sensitization in January. They have not been much involved with planning and management, nor do they intend to take on such responsibility when they have the option in 15 years time.

This innovative financing and management model has been replicated, with minor differences at Nkuringo on the southern edge of Bwindi, a site where local communities have suffered particularly from crop damage from gorilla leaving the park. USAID once again provided funding for construction, with facility ownership going to the Nkuringo Conservation and Development Foundation. The operator is the Uganda Safari Company who will give a bed night fee of $30 plus an annual rent of $5000. The lodge is not fully completed but is virtually guaranteed success due to the NCDF having the right of first refusal on 6 of the 8 gorilla permits available. Members of the Foundation were aware of obligations on their part to ensure that the park is well protected.
Box 3 Beekeeping

The rationale for supporting beekeeping in the region is very strong indeed:

1. It addresses a problem (beehives in the forest) that was identified through Ranger Based Monitoring;
2. The use of fire led to problems of dry season fires, especially in Bwindi;
3. Beekeepers undertook other activities whilst visiting hives, including laying and checking snares, and firewood collection;
4. Apiary in park-adjacent communities is dependent on forest flora: income is linked to conservation;
5. If total bee numbers are increased, an additional pollination service is provided, potentially increasing yields of certain crops (this requires study).
6. There are local and national markets for honey and related products;
7. Bee-keeping is not labour intensive and can be combined with other livelihood strategies as a form of diversification.

The conservation and livelihood logic of supporting beekeeping on the edge of the forest is excellent. In Rwanda, IGCP and partners support beekeeping through work with the Forum des Apiculteurs des Volcans (FAV). This is the umbrella group for 77 local associations with a combined membership of about 1500 beekeepers. In DRC, IGCP support the Union des Apiculteurs du Secteur Mikeno et Nyamulagira, (UDASEMINYA) an umbrella organization for 7 associations of beekeepers with about 980 members. Support is for technical advice, training, purchase of refinery equipment, construction of refinery premise, loans for purchase of modern beehives and harvesting equipment (smokers, veils), and marketing. Members of the associations receive a fixed price for their honey (currently $2 per kg) and are obliged to provide a certain quantity during the year. FAV/UDASEMINYA refine and market the honey. At the end of the financial year, 20% of profits are re-invested whilst 80% is distributed to members.

For those who can afford the joining fee of roughly $120 (a problem for poor people who want to be members) the returns can be good. Looking at cases of 'model' members, Case 1 allocated 20% of his labour time to apiculture and made $800 (400,000 RwF) per year. Case 2 visited hives three times a week and drew on family labour during harvest time, making $400 (200,000 RwF). More typically, the average beekeeper in the association has 6 traditional hives, with average production of 10 kg per year each. Whilst few have done this, the addition of a modern hive would produce another 40 kg per year, giving a total of 100 kg (a potential for $200 in sales plus a profit share). Furthermore, those beekeepers consulted in Rwanda and DRC emphasized the use of some of this money for school fees, a highly desirable use from a development perspective.
Whilst the rationale and potential are good, and whilst considerable progress has been made, FAV and UDASEMINYA face some operational difficulties. Firstly, building robust and effective local associations requires more effort, over a longer period, than is generally anticipated. This is due to the inherent difficulty of the challenge, together with the particularly low levels of technical and organization skills at the outset. Providing such intense and extended support does not always fit donor expectations for creating successful enterprises and it is important that IGCP does not over-state the potential for exit strategies: constancy of support is a strength of IGCP which cannot be easily given up, especially in the absence of a strong private sector partner. As IGCP scaled down its field level staffing support for FAV, problems were reported with the quality of honey, with use of modern hives and so on. Targets have not been met for the introduction of new hives, nor for increased production (Dushimimana, 2007). The marketing of premium honey has not been fully developed, with no apparent outlet for Virunga honey in Kigali supermarkets, despite other Rwandan honeys available at $2-3 per 500 g.

The second problem is one that has plagued community conservation projects throughout the world. ‘Communities’ are not homogenous and egalitarian entities with members who all prioritise the common good. Assumptions of homogeneity lead development workers to communicate with local elite who they assume to represent all people, including the most vulnerable. At worst, the outcome is ‘elite capture’ of benefits in which influential local actors manage to subjugate project activities to their own interests. Whilst we don’t have particular evidence, such concerns were mentioned by a number of those consulted and a 2007 evaluation of FAV suggests that this perception exists amongst some beekeepers. Nevertheless, IGCP field staff are well trained and sufficiently in touch to recognize such problems as they arise, although rectifying local leadership problems is not always easy. In DRC for example, there is no suggestion of malpractice, but the president is obviously hard to work with and probably not very good for the success of the venture. IGCP rightly insists on local election to such positions and this is one of those cases where the need for legitimacy (by allowing local people to select) must trade off against effectiveness.

The third problem is a lack of traceability in the supply chain, which can potentially undermine the conservation logic and premium market opportunities. An example of this problem stems from the fact that members are expected to sell honey to FAV/UDASEMINYA. If they are unable to produce this themselves, it is acceptable to buy honey from a third party to sell on. This can undermine conservation logic in that honey might be bought from poachers. It can undermine possible future marketing strategies (‘fair trade’ or ‘gorilla friendly’) because the origins of all the honey is unknown.

The fourth problem is specific to DRC, where the operation has been spoilt by break-in and looting at its property in Kibumba. This apparently local act of sabotage is a sad reflection on the difficulty of trying to undertake any development activity in a war zone. However, it is also useful to reflect that this may not have occurred if the premise had been more integrated into the local community – if it had not stood out as a relatively grand structure; if it had been located within the community rather than standing alone on the other side of the road (Figure 3); if its large water storage tanks had provided for some community use.

Figure 3. Recently looted UDASEMINYA premise (top centre) and market place, Kibumba, North Kivu. Photo by authors.
Achievements

Before explaining the lessons learned from IGCP’s community conservation work, it is important to understand something of the achievements to date. In this section, we patch together the existing evidence to consider the impact of projects on livelihoods, but most particularly, the impact on IGCP’s goal to conserve mountain gorillas and their habitat.

Achievements are considered within a framework that identifies four main criteria:

1. **Effectiveness**, which is a measure of the extent to which project-specific objectives are met, as well as IGCP’s broader objectives. This involves asking questions about the kind of changes to livelihood opportunities and, crucially, the extent to which these are complementary with conservation objectives.

2. **Efficiency**, a measure that asks whether achievements have been secured at reasonable cost, and whether more cost-efficient means of achieving the same outcomes are readily available.

3. **Legitimacy**, a measure of how acceptable the approach is to various stakeholders. The importance of this criterion is that interventions are less likely to be sustainable where they do not achieve buy-in from key stakeholders.

4. **Equity**, a measure of the distributional implications of community conservation, in relation to gender, wealth and other forms of social stratification. Equity can refer to the distribution of power as well as the distribution of more tangible costs and benefits flowing from project implementation.

**Effectiveness**

The impact of IGCP activities on livelihoods has not been measured in any formal way, although it is clear that successful ventures bring a range of direct benefits such as increased investment in social infrastructure, new job opportunities and increased income from sales of honey or crafts.

Individual cases of successful honey producers, mushroom growers and basket weavers tell us that IGCP enterprises can dramatically affect the fortunes of some beneficiaries. It is also clear that these ventures bring indirect benefits to education, by investing in infrastructure and teacher education (e.g. Buhoma campsite), by alleviating the need for children to guard crops (e.g. Nkuringo buffer zone and HUGO/ANICO), and by securing income that can be spent on school fees.

In this region, education can be argued to be a very special asset to build because it provides flexibility and options and because of its resilience in the face of social and environmental threats.

Those consulted also believe that, in Uganda and Rwanda at least, this support to livelihoods has translated into conservation benefits. Around BINP, a park that had poor relationships with local people in the mid 1990s, we heard repeatedly that relationships are now good, with the majority (not all) having positive attitudes towards the park. UWA staff described it as one of the most stable parks in Uganda in terms of community-park relations. Ten years ago, rangers and even IGCP staff would be called ‘baboons’ (or worse) by local people and would feel threatened if their vehicle broke down in the field. Now they feel safe and are confident they would be helped. This is a remarkable transformation. IGCP’s contribution cannot be isolated from the interventions of many other NGOs in this area, although revenue sharing, HUGO and tourism (in combination with effective monitoring) have all contributed to the change.

Whilst internally consistent, our information is nonetheless largely based on hearsay. Where possible, we have therefore triangulated with earlier surveys, and RBM data. Surveys by CARE in the late 1990s provide some support for our findings in BINP, highlighting a fairly dramatic shift, over just two years, in perceptions of costs and benefits of living next to the park (Table 2). In 1997 they found that the majority believed that the costs of living next to a park outweighed the benefits. In 1999 the majority believed the benefits exceed the costs. This
is also largely supported by a survey by WCS, IGCP and CARE in which field data was collected in 2002 (Table 3).


<table>
<thead>
<tr>
<th>Year</th>
<th>Men</th>
<th>Women</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1997</td>
<td>1999</td>
<td>1997</td>
</tr>
<tr>
<td>Costs exceeded benefits (%)</td>
<td>66</td>
<td>36</td>
<td>71</td>
</tr>
<tr>
<td>Benefits exceeded costs (%)</td>
<td>34</td>
<td>64</td>
<td>29</td>
</tr>
</tbody>
</table>

Table 3. Percentage of respondents perceiving benefits and problems from parks. Source: Plumptre et al., 2004

<table>
<thead>
<tr>
<th></th>
<th>Personal benefit from park</th>
<th>Community benefit from park</th>
<th>Benefit from conservation organisations</th>
<th>Problems with the PA</th>
<th>Problems with staff of PA</th>
</tr>
</thead>
<tbody>
<tr>
<td>BINP</td>
<td>54</td>
<td>79</td>
<td>77</td>
<td>48</td>
<td>13</td>
</tr>
<tr>
<td>MGNP</td>
<td>73</td>
<td>77</td>
<td>95</td>
<td>81</td>
<td>12</td>
</tr>
<tr>
<td>PNV</td>
<td>88</td>
<td>67</td>
<td>77</td>
<td>27</td>
<td>10</td>
</tr>
<tr>
<td>PNvi</td>
<td>61</td>
<td>30</td>
<td>88</td>
<td>73</td>
<td>15</td>
</tr>
</tbody>
</table>

Slightly confusingly, some of the least positive findings came from locations which have received the greatest benefits from tourism and community conservation. The majority at Kinigi (PNV) felt that the community did not benefit from the park whilst there were relatively low levels of perceived personal benefit around BINP (Plumptre et al., 2004). One reason for this is likely to be the lack of diffusion of tourism benefits. Firstly, tourism enterprises are concentrated in specific locations, such that only 2 of the 24 parishes around BINP have tourism sites. Secondly, to be able to personally benefit from tourism either requires some level on entrepreneurship, skills and capital, or, for those lacking such means of direct involvement, a mechanism for benefit sharing within the community.

In principle, georeferenced RBM data can be used to support an evaluation of the conservation impact of selected IGCP activities. For example, it might be possible to test whether observations of beehives in the park are associated with rates of membership of beekeeping associations in adjacent sectors of the park. Similarly, where water collection has been reduced by provision of water tanks, it would be possible to test whether this is associated with reduced wood-cutting. In other words, the conservation logic underpinning some of IGCP’s community conservation ventures might be explored using RBM data, albeit there would be difficulties identifying causation. Whilst such an analysis has not been possible as part of this study, example data for PNV (Figure 4) suggests that some illegal activities in the park may have reduced in recent years (although it is not possible to isolate particular causes of this). For PNV, notable changes during this period were the creation of a community conservation unit in 2003, the launch of FAV in the same year, and the introduction of revenue sharing in 2005.

Whilst earlier reductions in illegal activities have been observed, for example between 1991 and 1997 in MGNP (Infield and Adams, 1999), this earlier data is less reliable in terms of data collection methods, and is more likely to reflect increasing levels of law enforcement. Both data collection and law enforcement have been more consistent in the 2000s.
Box 4. Women’s Associations, Rumangabo, DRC

There are two women’s associations supported by IGCP in DRC, one for the wives of park rangers and the other for widows. Both are based in the ICCN compound in Rumangabo. Neither have been effective, due to war but also due to insufficient support.

The widows association was initially given $3000 and has 42 members; and the wives given $3200 with 72 members. The intention is to promote enterprise but unfortunately these have mainly failed:

- A canteen was invested in but meals were given on credit to people outside the compound and money was lost.
- Goat rearing was promoted but goats could not be kept securely and were stolen.
- Mushroom growing was attempted but production failed.
- Money-lending was tried but they lent to people from Jomba who left their debts unpaid when they fled war.
- Onions and cabbages are grown with some success.

For one group, the loss of money through failed enterprises was compounded by fraudulent withdrawal of money from their account.

The unfortunate outcome is that several women are worse off than when they started. A typical case involves a woman being given $50 credit from the fund, with the objective to begin a profitable enterprise. With few options, she spends $30 of this on a goat which has to be kept outside the compound and is...
quickly looted. She has to pay back the $50 at $2 per month.

It is extraordinarily difficult to make things work here. Rumangabo is surrounded by rebel held territory and it is perhaps unwise to expect successful enterprises to flourish. The institutional infrastructure for savings and credit – and even secure banking – appears to have failed these women, and the scope for building physical assets is equally problematic, as the beekeepers have also found. Added to this, the women simply don’t have the functional literacy and other skills to operate ventures without systematic and regular support and it is not clear whether IGCP has the field staff to offer this level of support at this time. Without such support, a rethink is needed of the kind of support that can be provided to these women, and the kind of assets that can be built. Plans for a second attempt at mushroom growing might be worthwhile if sufficient training and reinforcement can be given. At least the laboratory in ICCN compound should be secure. However, this needs careful thought.

**Efficiency**

It is hard to identify a sensible basis for evaluating efficiency. We could pose the question of whether similar conservation impacts could be achieved at lower cost, through for example additional law enforcement efforts. However, even if the data were available to enable such a cost-benefit analysis of different approaches to conservation, the usefulness would still be doubtful. Building the state’s capacity to enforce rules might be a very efficient means of achieving goals during times of peace, but might offer very little resilience in times of insecurity or even during times of particular economic hardship.

In other words, the true value of community conservation is only likely to be realized under non-normal ‘shock’ conditions.

In principle, substantial efficiency gains can be achieved through the use of RBM data to identify problems (with beekeeping, with water collection, etc) and to tailor the type and location of its interventions accordingly. We will say a bit more about this advantage in the section on specific lessons learned.

The ability to gauge effectiveness and efficiency is likely to improve in the future. Firstly, because IGCP planning now includes a much stronger basis for evaluation including a system of measurable indicators. Secondly, there are plans for RBM to be broadened to include collection of some social indicators in neighbouring communities. In addition it might be useful to consider some simple and quick forms of community-based monitoring. For example, beekeepers or mushroom growers might keep simple diaries.

**Equity**

There are pragmatic and moral reasons for ensuring equitable treatment of potential beneficiaries. The pragmatic reasons are rooted in the view that the poorest are the most often involved in illegal activities in the park. Morally, it is a blemish on the conservation fraternity if certain groups are marginalized in the process of achieving conservation goals.
In the Virunga-Bwindi region, perhaps the greatest moral hazard relates to the indigenous tribal people known as the Batwa, or pygmies, who previously lived as hunter-gatherers in the forests but have been evicted to surrounding areas over the last eighty years.

The survey by Plumptre et al. (2004) found some stark differences between the Batwa and the rest of the population. For example, only 10% of the Batwa around MGNP said that they benefited from conservation organizations, and only 8% of those around PNV. The corresponding figures for non-Batwa were 95% and 77%. Likewise, 80% of Batwa around MGNP, and 71% around PNV said that relationships with park authorities were getting worse (20 and 18% for non-Batwa). Neither park authorities nor IGCP have had much of an appetite for specifically targeting the Batwa for development projects, partly as a result of the significant difficulties of working with this group. There are histories of failed projects in large part arising from the lack of specialist skills needed to work with Batwa people. Despite the undoubted difficulties, it is probably fair to say that a failure to do more to help alleviate the Batwa’s problems will continue to blemish the conservation success story in this region. Recent initiatives are beginning to address this problem. In Uganda, there is a programme for developing culture based tourism whereby the Batwa are organized, trained and equipped to interpret the forest and their culture. This is a joint project between the Batwa, under their organization UOBDU that has been facilitated by AWF/IGCP over the last two years. The development stage was completed in May 2008 and so benefits have not started flowing.

There is a wider concern about whether interventions such as revenue sharing, community lodges and beekeeping benefit the poorest. One of the problems for the poorest is having the assets needed to access new opportunities, frequently lacking the social capital (social status and networks), human capital (education, skills), physical capital (land, buildings) and/or financial capital (cash, access to credit) to take advantage of NGO projects.

For example, IGCP-supported associations for crafts, beekeeping and mushroom growing in Rwanda mainly require a 60,000 RwF ($120) joining fee; tourism jobs often require some level of education; mushroom growing requires use of an indoor room.

A number of those consulted suggested that the social infrastructure projects funded by revenue sharing tend not to be priorities for the poor. The poorest are less likely to see e.g. an improved school building as symmetrical compensation for their losses from crop-raiding and therefore there is a break-down in the conservation logic.

Gender is another issue which has been considered under the title of equity. Women are often key users of forest products and therefore important stakeholders. There are also many women-headed households in the region and these are often amongst the more vulnerable.

It is therefore important to ask whether ventures are accessible to women. Whilst IGCP does not have specific gender policies, their recruitment policy does ensure that field staff are sensitive to gender issues and consultations bore this out. It is also encouraging to note that activities that began as heavily male dominated – such as beekeeping and mushroom growing – now show a widening of participation.

Finally, some concern has been expressed about the distribution of IGCP effort across the three countries, and especially with regards the limited programme in DRC. This issue is raised in the context of transboundary management and the potential for communities to perceive inequitable treatment across boundaries. The cause of this situation is of course war and insecurity, and there is little IGCP can do to resolve this. IGCP has already ensured that an equitable share of its core funding goes to DRC. The difference comes in the project funding that comes from a range of donors, many of whom are understandably nervous about funding projects in a war zone and where it is hard to achieve success.
Legitimacy

Conservation interventions often fail because local people, or some other constituency, simply don’t recognize the validity of what is being done. The principle way to test and build legitimacy and establish community ‘buy-in’ is through consultation and other procedural aspects of project planning. IGCP uses a number of tactics to build local support for its actions, such as consultation meetings, exposure visits to other sites/countries and democratic processes for election of leaders. Furthermore, IGCP seeks to test local commitment by a) not paying for attendance at meetings and b) where possible securing voluntary contributions of labour or other resources. Not paying participants can be difficult to keep up, especially in war zones where people are used to handouts, and where other organizations typically pay some per diem for attendance. As has been noted previously, the commitment to democratic process can sometimes cause problems, mainly where a difficult character is elected. It is also recognized that such elections will tend to reflect pre-existing social hierarchies within an area, thus elections can serve to consolidate positions of already powerful men (rarely women).

Despite some difficulties, IGCP appears to have secured a good relationship with communities and all of its work with communities is supported. In the case of the buffalo wall, for example, community labour for construction and maintenance was important in Uganda and Rwanda, whilst around Mikeno in DRC, construction labour was secured through the “Food for Work” programme. As ever, DRC poses the greatest challenge.

Lessons Learned

Inevitably for an ambitious, long-term and wide-ranging programme of conservation intervention, there have been successes and failures over the years. In previous sections of this report we saw that the global trend towards community conservation has often led to disappointing results. We have also seen that IGCP’s efforts at community conservation have faced difficulties, but have in many cases been effective. Furthermore, there are signs that these interventions are becoming more sustainable, due to improving relations between park and people, core funding that enables long-term support, and innovative exit strategies based on involvement of private partners.

In this section we build on this evaluation of outcomes in order to identify and analyse some of the reasons behind successes, as well as their constraints. These are the lessons to be learned from IGCP’s experience with community conservation.

Lesson 1: Conservation activities are aligned and support each other.

IGCP is involved in a wide range of activities relevant to its goal of conserving mountain gorillas in their natural habitat:

- Community conservation
- Protection and law enforcement (including Ranger Based Monitoring)
- Capacity building
- Transboundary Natural Resource Management
- Tourism development
- Policy advocacy

Looked at from the perspective of community conservation, these different components of IGCP’s work also appear to be aligned and mutually supporting. The following are example of this alignment:

- Law enforcement is valued by local people who, on the whole, expect ICCN, UWA and ORTPN to uphold park regulations for all. It is important to remember that the large majority of people living around forests, here and elsewhere, want to see rules upheld, especially in respect to outsiders undertaking illicit activities. IGCP’s long-term support for law enforcement has not only helped to control illegal use of park resources, but also helped to establish the credibility of park authorities and the basis for cooperation. For example, when local people report illicit activities, they can increasingly expect the park authority to respond in an appropriate way.

- Ranger Based Monitoring has not only contributed to law enforcement and tourism development, but also to efficient identification of priorities for community conservation. For example, data collected on collection of water from inside the parks has been used to identify priority areas for provision of water facilities.

- Capacity building interventions have helped to train rangers and others to work in cooperation with community members. At a larger scale, capacity building has also helped to strengthen national level community conservation functions. For example, in Rwanda the 2003 restructuring of ORTPN involved building the capacity for community conservation through creation of a dedicated unit.

- Transboundary Natural Resource Management operates at a completely different scale to community conservation. However, even this component of IGCP’s work has positive outcomes for community conservation, for example through the improvements in law enforcement activities, in the opportunities for communities to visit and learn from successful initiatives across borders, and in the potential to develop cross-border markets for products such as crafts and honey.

- Tourism development has been another central component of IGCP’s work over the last fifteen years. Gorilla tourism is widely held to have had positive impacts on government commitment to conservation, and financing law enforcement activities. It has also provided opportunities for community conservation, through community based tourism accommodation and revenue sharing schemes.

- As has been described, IGCP works very closely with governments through their park authorities. This work has
sometimes involved providing the impetus, advice and support for new policy initiatives such as TBNRM. Some policy areas, such as TBNRM and RBM have positive knock-on impacts for community conservation; others, such as revenue sharing have more direct impacts.

Lesson 1: For conservation organizations who are planning to, or are in the process of moving more into community conservation, there is a lesson to be learned from this experience. Alignment of conservation activities contributes to both the effectiveness and efficiency of interventions, enabling work with a wide range of partners to build synergies that contribute to achieving the core goal.

Lesson 2: Conservation will only be achieved through development when there is a strong conservation logic.

Attempts to integrate conservation and development objectives through community development projects often achieve some success in their development objective but little or no success in their conservation objective. Thus, the ‘disappointment’ with the impact of community conservation is often directed at what IGCP has called the ‘conservation logic’ of the intervention. This is the component of project design that should ‘integrate’ conservation and development. For example, a water resource project may have a conservation logic where it provides an attractive alternative to people who previously entered the forest to collect water. On the other hand, it may not have a conservation logic, for example in cases where the community never relied on the park as a source of water, and where the community does not know why the water facility has been provided. In the latter case, the water facility might be very good for livelihood improvements, helping to reduce health problems from unclean water, and reducing time spent on water collection. However, it would probably not lead to any desired change in behaviour with respect to the park.

In an attempt to understand and learn from IGCP practice, it is useful to ask ‘what was the conservation logic?’ of particular interventions and ‘was this logic robust?’ In order to do this we consider three different types of conservation logic.

i) Development outcome is dependent on the conservation outcome

Some forms of income generating activities seem very well suited to conservation because their success is in some way linked to successful conservation. As a rule of thumb, if the income from the activity would decline as a direct result of forest degradation, it falls into this category. In the Virunga-Bwindi region, beekeeping and ecotourism are examples of income generating activities that depend upon conservation. If the forest were degraded, it would undermine the resource upon which the enterprise depends. Clearly the level of dependence can vary considerably, which makes this quite a broad ‘type’ of conservation logic. Ecotourism, for example, relies on fairly strong protection of ecosystem functions and services, and may even rely upon biodiversity itself, or upon the achievement of the principal goal (in this case gorilla conservation). Beekeeping on the other hand is dependent on suitable flora, but is probably less vulnerable to changes in the natural flora, and may even tolerate considerable loss of native species.

This type of conservation logic may only be effective where sufficient income can be derived from the conservation-dependent activity. In principle, the benefits should be enough to tip the balance between choosing to behave in ways that degrade the park and ways that conserve it. For example, when a significant proportion of a household’s income comes from tourist-related activities, they may cease activities such as poaching that could be detrimental to the future of tourism.

This is theoretically robust and can in principle be successful where the conservation-dependent activity is subsidized in such a way that it becomes more attractive than alternative sources of income that are less compatible with conservation. Academic studies tend to find that this type of conservation logic is most likely to result in integrated conservation and development (e.g. Salafsky and Wollenberg, 2000).

Whilst the logic is good, conservation practitioners will be aware that there are relatively few income generating activities that fall into this category and few locations where such conservation-dependent activities can become viable enterprises. Fortunately, the Virunga-Bwindi region is quite well off in this respect, mainly due to a world class tourism product and flora that supports bee-keeping. The harvest of some (but not all) non-
timber forest products also falls into this category of activity. In principle, for example, sustainable harvesting of medicinal plants is strongly dependent on conservation: it is an activity that is dependent on intact forest and on biodiversity. So far the model employed in Uganda for collection of medicinal plants has not been replicated in Rwanda or DRC.

Before moving on it is worth highlighting the buffalo wall which illustrates this type of logic in its most simple and irrefutable form. The development benefits (reduced crop loss) are completely dependent on construction of the wall, which is good for conservation because it effectively demarcates the park.

**ii) The development outcome is linked to conservation through an agreement**

Even when projects are not physically dependent on biodiversity conservation, it is possible to introduce some contingency to the provision of support, such that a form of dependence is established. For example, mushroom culture is not at all physically dependent on forest conservation but, in principle, an agreement could be drawn up in which beneficiaries agree to certain conservation duties in return for the livelihood support being offered. Not all examples are as clear cut as this, as our water tank example will illustrate. In this case, we talked of a water collection and storage facility being provided in a location where people had not collected much water from the forest. Here, you could argue that the new facility is dependent on the forest due to the hydrological services provided by trees. For that reason, park sensitization processes often involve explaining to local people that there is a relationship between forest, local climate, and run-off regimes. This education effort may serve to establish ‘dependence’ on conservation. However, the link is not that strong (and the science is context-specific – in some situations trees reduce run-off due to enhanced evapo-transpiration). So in this case, it is probably best to augment scientific arguments with a more contractual form of linkage such as a Memorandum of Understanding. This might be formal or informal; anything that clearly establishes why the benefit is being provided and perhaps what is expected in return for this provision. A similar analysis can be made of enterprises such as Abunganirana that are mainly dependent on ex situ conservation (i.e. cultivated medicinal plants) rather than in situ conservation. Although it can be argued that this enterprise relies on wild, in situ conservation for its gene bank and future stock, such logic may well benefit from a second, more contractual form of logic.

Drawing on the IGCP experience, it seems that these first two types of conservation logic can work well in combination. Many of IGCP’s community enterprises are either very clearly and directly dependent on conservation of intact ecosystems (gorilla tourism), or partly dependent on conservation (beekeeping, medicinal plants, water collection). However, this form of logic is sometimes backed up by explicit forms of contingency: you will receive this development support if and only if you agree to this support for conservation. For example, support for beekeeping outside the forest is contingent on beekeepers removing hives from inside the park and, more generally, supporting park management. Furthermore, membership rules for beekeeping associations exclude poachers from being beneficiaries, a rule which seems to be monitored by local communities. Eco-lodges provide a similar example: ecotourism is clearly dependent in the long term on the conservation of mountain gorillas and their habitats. But this logic can again be backed up through clear understanding that support for lodge development is contingent on beneficiaries taking on certain responsibilities towards the park. In Nkuringo, such linkage is understood by those we met; in Sabyinyo we found people to be less aware of responsibilities, and this is something that IGCP might develop further.

**iii) Higher income leads to reduced demand for forest resources.**

In the absence of either of the first two types of conservation, this is the most likely default position. This conservation logic assumes that rising income leads to reduced demand for natural resources. It is not often explicitly stated in project rationales, but it is nonetheless the most common form of conservation logic underpinning ICDP design. It is an appealing form of conservation logic, based on a very prevalent view that poor people are the ones who are most responsible for illicit activities in the parks. This view was endorsed by nearly everybody we met in the field.

In order to fully understand this logic it is necessary to dig a bit deeper and to identify some of its key assumptions:

Firstly, it tends to assume that people have a finite need for certain resources, especially the kind of goods that come from forests. If projects can help people to meet this required resource level from activities outside of the park, then people will have no need to go into the park. So, for example, if people earn enough money to be able to buy meat in markets, they will satisfy that need from outside the park and not need to go poaching.
Second, it assumes that people are busy and have to allocate and prioritize use of their own time. When out-of-park activities are subsidized, they will therefore switch their time allocation away from in-park activities. An example will help illustrate this. Suppose that you allocated 3 hours a day to collecting fuelwood from the forest. A project then comes along that provides employment opportunities at $2 a day wage. You accept this new income generating activity despite the fact that you will no longer have time to collect fuelwood – you have to re-allocate your labour. The reason you do this is that you will be earning enough to purchase fuel at a market.

Third, for the above two assumptions to hold, it must also be assumed that substitution between resources is possible. In other words, you need to be able to get what you need through a market. If you don’t poach, you buy meat at a market; if you don’t collect bamboo from the forest, you buy alternative bean poles at a market; and so on. Markets enable people to specialize in out-of-park activities such as agriculture and use the derived income to purchase substitutes for forest-based resources.

One quite well known example of this kind of logic is the ‘fuel ladder hypothesis’. This hypothesis states that as people become wealthier they tend to switch away from self-collected or lower order types of fuel such as wood, crop residues and dung. Instead, they use their extra income to purchase substitutes. The ladder might eventually take people from wood and crop residues through charcoal, to gas or electricity. The switch is based on the perceived inferior nature of lower order fuels, the fact that it starts to make poor economic sense to allocate your time to collecting such fuel, and the availability of alternatives in local markets.

This conservation logic is extremely important and very commonly asserted, but it is not very reliable. The main reasons to be cautious with this conservation logic are:

In the Virunga-Bwindi region, the relationship between poverty and forest use is not that well known. It is widely believed that the poorest are the biggest illicit users but this needs confirmation.

Studies from elsewhere in Africa suggest that the link between income and demand for natural resources are not straightforward. In fact, for the poor, demand for forest products such as fuel and meat often grows with wealth - as your income increases you consume more of them, not less (see e.g. Cavendish, 2000).

The lack of efficient labour markets often limits the ability of people to re-allocate their labour from forest to non-forest enterprises, whilst the lack of markets for substitute resources can make it hard to move up the fuel, or any other, ladder.

It is noticeable that IGCP projects tend not to fall into this conservation logic, which is almost certainly a good thing and a good lesson to take away. There is a danger that some activities could veer towards this logic in the future if there is not sustained effort to insist on a contractual type linkage: mushroom growing and even craft enterprises need careful handling in this respect.
Whilst IGCP tends not to rely on this form of conservation logic for its enterprise strategy, it does largely underpin revenue sharing. The problem we have seen with this logic is that local people do not make the association between the revenue sharing projects and conservation. They do not see a new school or health centre as compensation for losses from crop-raiding and there is therefore reason to doubt the robustness of the conservation logic.

Lesson 2: IGCP’s most significant and successful community conservation ventures have a strong connection between conservation and development objectives. This linkage is strongest where it involves two forms of linkage. Firstly, development outcomes are dependent in the long term on successful conservation and second, there is some contractual understanding that development benefits are provided with the expectation of certain conservation duties.

Lesson 3: Strong information systems facilitate good planning.

IGCP’s ability to establish strong conservation logic is greatly enhanced by its emphasis on building a strong information base and in particular the establishment of RBM across all four parks. RBM was developed in PNVi in 1997, and introduced to PNV and MGNP in 1998 and BINP in 1999. It is primarily a monitoring programme that directs law enforcement activities by guiding park wardens in where to send patrols. However, the systematically collected data on human exploitation of park resources, as well as locations of selected species including gorillas, can also serve to target community conservation interventions. RBM has been used to identify and clarify the causes of park-people conflicts, enabling effective and efficient responses. For example, Figure 5 uses geo-referenced ranger monitoring data to describe the nature of the human-gorilla conflict in western BINP. Such detailed ranger monitoring information can clarify the nature and extent of a problem and provide the necessary basis for designing solutions. Ranger-based monitoring can also identify and provide information about cases in which the livelihood needs of local people is linked to illicit forms of park use. Examples we have seen of this include the collection of water and bean sticks. Whilst such information has historically been met by intensification of law enforcement, it has more recently been met by targeted activities to meet community needs in alternative ways. Principle examples are the decision to help with provision of water in places where run-off from the hills occurs too deep for dry season access; and support for beekeeping following observation of beehives in the park.

Figure 5. The ranging area for habituated gorillas, 1998-2000, showing time spent outside the park. Source: NCDF, 2007, p.1
Whilst it is important to highlight this as good practice and as a key lesson learned, it is also fair to say that the capacity to use RBM data for directing community conservation is not yet fully realized, nor should it be the only method for targeting activities. RBM is mainly viewed as a tool for directing law enforcement patrols and only within IGCP is its secondary importance recognized. Partly as a result, this secondary purpose is not that well exploited. IGCP is currently planning to develop and pilot the integration of some socio-economic data collection into RBM, presumably by identifying some easy-to-monitor livelihood indicators. If developed, this might further extend the usefulness of RBM as a tool for park-people planning. Elsewhere, conservation organizations have experimented with community involvement in monitoring and there might be scope for this. One possible entry point is local schools, with the possibility of introducing simple survey work into science curriculums.

Lesson 3: RBM data has been used to establish the link between threats to the park and the livelihoods of people living around the park, and thus to provide an essential knowledge base for well conceived community conservation projects. Such linkage between monitoring data and community conservation design is excellent practice. IGCP is really quite unique in this ability to confidently establish conservation-livelihood linkages and to thereby design projects which are win-win in nature. It is the failure to identify genuinely win-win interventions that has contributed to the disappointing results for community conservation elsewhere.

Lesson 4: The need for cross-scale and cross-sectoral partnerships.

One of the lessons learned from the first generation of community conservation projects in Africa is that conservation could not often be carried out by communities alone – there needed to be collaborations with governments and other partners. As we have previously discussed, one of the most theoretically robust approaches to integrating conservation and development is to develop opportunities for local people to earn income from enterprises that are dependent on conservation and/or which are linked to conservation through some contractual mechanism. Such enterprises typically require a range of skills, assets and authority that will not be found in any individual partner. In the past, IGCP projects have worked by building partnerships with the community, park authorities and other NGOs (such as CARE) whose development expertise complements IGCP’s conservation expertise. More recently, there has been a strategy to work more closely with the private sector. Private sector partners have become involved in tourism and handicrafts enterprises, and there is potential for partners in other enterprises such as honey and mushroom production. The example of eco-lodges (Box 2) showed that such innovative conservation partnerships can yield rapid results and can produce a better exit strategy for IGCP. Having demonstrated the potential for such multi-sectoral partnerships, the next stage will be to leverage more private sector capital investment, thus reducing reliance on donor funding. There will also be a need to reflect on the particular
challenges of working with both private sector and community partners. For example, differences in attitude towards the speed of progress, or towards the priority outcomes, can sometimes result in conflict.

Cross-scale and transboundary partnerships may seem peripheral to learning lessons about community conservation, but in fact such integration of conservation effort is essential. It is worth reflecting further on some of the causes of failure of community conservation efforts elsewhere in Africa and the rest of the world.

Table 4. Benefits of cross-sectoral and cross-scale partnerships.

<table>
<thead>
<tr>
<th>Scale related reasons for community conservation failure</th>
<th>Benefits of cross-sectoral and cross-scale partnerships</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mis-match between desired work with local communities and national legal or policy provisions.</td>
<td>In the Virunga-Bwindi region, revenue sharing is a key example of the need to work at national level in order to facilitate community level intervention. IGCP advocacy and support for revenue sharing has (work at national scale with government as key partners) has facilitated the objective to support local livelihoods (work at local scale with community as key partner).</td>
</tr>
<tr>
<td>This involves a misfit between the scale at which a problem is identified and the scale of management. Community conservation has often suffered from the fact that local management cannot deal with large-scale problems or problems that require wide networks. This kind of conservation problem can often be compounded by problems of information – where information is collected at the wrong scale and therefore cannot establish the true nature of a problem.</td>
<td>For example, in the Virunga forest block, an increase in problems with elephants and buffalo were reported in DRC, Rwanda and Uganda. These problems may initially have appeared as discrete events that required local community-level solutions. However, transboundary communication between rangers established likely association between these events and helped to identify the cause. For security reasons, the Mwaro corridor between Mikeno and Nyamulagira sectors in PNVi had been deforested. This had cut off normal migration routes, leading to unprecedented crop-raiding by elephants (Gray and Kalpers, 2005). Cross-scale partnership had enabled knowledge to be collated at a scale that matched the scale of the problem, and also identified that this was not a problem that could be dealt with at community level.</td>
</tr>
<tr>
<td>Mis-match between location of costs and benefits of conservation. Costs such as crop-raiding tend to be felt locally whilst the benefits from conservation (biodiversity, carbon storage, hydrological services) are enjoyed at a range of scales up to the global. Thus work with communities can benefit from institutional mechanisms that create ‘bridges’ across scales. Bridging institutions can help with the sharing of information and other resources.</td>
<td>For example, one outcome of transboundary collaboration is that IGCP brokered an agreement for sharing tourism income between countries to reflect the roving nature of the resource. This arose particularly because one of DRC’s habituated gorilla groups migrated into Rwanda, where tourism revenue could accrue. The arrangement to share the income from this gorilla group will help in the current move to establish revenue sharing in DRC despite the collapse of tourism. More generally, arrangements at this scale can provide some resilience to the unpredictability of nature, making revenue sharing more stable in all countries.</td>
</tr>
<tr>
<td>Law enforcement failures. One of the interesting features of community conservation initiatives is that they often increase community demands for law enforcement. Local communities can find themselves with responsibilities to help reduce illegal activities by providing information and can develop high expectations of the rule of law to prevent free-riding – one of the most common causes for the failure of collective action.</td>
<td>In the Virunga-Bwindi region law enforcement has to operate beyond community level and has even benefited from transboundary collaboration. IGCP has helped to link communities and park authorities through ANICO and HUGO initiatives and more general attempts to facilitate information sharing for law enforcement. Communities regularly contact UWA and ORTPN with information. Transboundary collaboration has also helped with law enforcement – especially where offenders could previously escape across borders.</td>
</tr>
</tbody>
</table>
The fact that IGCP operates across the three countries and four parks also brings some direct benefits to enterprises, both through opportunities for learning and for marketing. Tourism, craft and bee-keeping enterprises have all benefited from transboundary links in some way.

Lesson 4: Community conservation benefits from linkages to other scales of activity. Particular policies (TBNRM, Revenue sharing) and institutions (ANICO, HUGO) can help to form bridges between different scales, to share resources such as information. Community conservation has also benefited from moving beyond community actors to involve private sector partners.

Lesson 5: Real partnerships require new ways of working with communities.

Community conservation in the region has grown to involve a wider range of activities, beginning with sensitization and branching out into revenue sharing and community-based business enterprises. Most recently, IGCP has begun working with a form of co-management involving community partners, notably in the outer buffer zone at Nkuringo, for which the Foundation has joint tenure. This progression of approaches has required changes in the relationship between IGCP, its partners, and the community.

Figure 6 provides a generalized view of different ways in which conservation practitioners have engaged communities as partners, and looks at how these changing forms of engagement have involved changes in how partnerships are structured. The overall picture is of evolution towards more equal partnerships.

The first type of engagement is purely focused on law enforcement and not a genuine partnership. This is typical of ‘fortress conservation’ and represents a stage of relationships with communities that pre-dates the transition towards community conservation. There is little or no sharing of resources with communities, conservation management is determined by expert, scientific knowledge (with little emphasis on local knowledge), and decision-making is top-down in nature. All-in-all this can be considered a coercive relationship in which communities are required to adhere to imposed rules, under threat of fines or other sanctions.

As different types of community conservation begin to be introduced, including sensitization, revenue sharing and enterprise development, relationships with communities begin to develop into partnerships. Firstly, there is sharing of resources. The sharing of funds is an important but one-way process whereas the sharing of knowledge can involve mutual learning, including consultation processes that seek to collect local knowledge and opinions. Decision making tends to remain largely top-down in orientation but involves increasingly more participation through consultation. Partnerships are not equal, but communities are increasingly in a position where they can negotiate the details of projects and take on certain management functions. For example, revenue sharing programmes allow communities to discuss social development priorities and to propose projects that they have prioritized through some process of local participation.

In the last few years, IGCP has introduced new forms of partnership with communities which involve transfer of tenure to communities. The principle examples are the tourism lodges at Sabyinyo and Nkuringo, and the buffer zone management plan undertaken in partnership with the Nkuringo Conservation and Development Foundation. These latest initiatives might be viewed as a move towards genuine co-management arrangements in which community associations are further empowered. In the case of the lodges, genuine decision-making powers have been devolved and enshrined within legal provisions. As a result community associations should be able to play a fuller role in agenda setting and neither local nor expert knowledge are prioritized: knowledge is co-produced in the sense that problems and solutions are identified through multi-stakeholder discussions.

It is perhaps too early to identify the outcomes of IGCP’s more recent ventures into ways of working that devolve tenure and control to local communities. However, it appears that the further partnerships with communities evolve, and the more equal the partnership, the more that interests are aligned. Interests become aligned when all stakeholders want much the same outcomes – or to put it another way, incentive structures are the same. For example, all partners at Nkuringo have an interest in resolving the problem with gorilla crop- raiding. When interests are aligned, there is a strong basis for collective action. However, IGCP staff also have some
concerns: such loosening of control over the agenda is well and good if it tightens protection of the park and enables IGCP to achieve its primary goal of mountain gorilla conservation, but given the high stakes, and the track record of community conservation elsewhere, cautious progress is the byword.

Lesson 5: As IGCP engages in closer partnerships with communities, development NGOs, and private businesses, there are benefits to be gained by moving towards more equal partnerships in which agendas are shared, incentive structures aligned and decision-making collectivized.

Lesson 6: Interventions need to be durable and flexible

IGCP has learnt that community conservation in the region requires long-term commitment. Local communities typically have low levels of organization and lack important skills in business and management. The challenge has proved a difficult one, often with slow progress, requiring time-scales that don’t fit neatly with donor project cycles. It is therefore important that IGCP has achieved consistency in support, something which has been strongly emphasized to us, both by community groups, park authorities and other partners. This is partly achieved through its own model of core funding for long-term commitment. However, it is also facilitated by support for the institutionalization of community conservation in the region within organizational structures of park authorities and through revenue sharing policies. An example of this that has previously been discussed is the support for the restructuring of ORTPN in 2003.

Community and other partners value flexibility and responsiveness as much as they value consistency. We have previously noted the importance of a strong information system in order to identify and analyse problems as they arise. Socio-ecological systems are unpredictable and it is sometimes necessary to respond to unanticipated problems. For example, at Nkuringo, one of the ‘solutions’ for improving park-people relations was to habituate a gorilla group for generating tourism benefits. The solution, according to many at least, turned out to be a cause of another problem: the gorillas leaving the park to feed on agricultural lands. Whether this version of events is strictly correct, is not essential here. The point is that, even with the best available information, combined with expert analysis, surprising and sometimes undesirable outcomes will happen. In this particular
example, IGCP was able to respond relatively quickly due to the monitoring systems in place, the availability of resources, and the strong partnership with UWA. This ability to respond to demand, sometimes arising from new information being fed into management decision-making, is well valued by park authorities who often struggle with bureaucracies that make it hard to spend money on anything not in a management plan.

Lesson 6: IGCP has found balance between being driven by its own agendas and methods whilst also operating a more demand-driven, responsive mode. In other words, IGCP has its own goal and priority, and it pursues this through specific strategies and ways of working. However, partners also greatly value the fact that there is also flexibility to respond to emerging problems in timely ways, sometimes breaking with old ways of doing things.

Recommendations

1. **Conservation activities are aligned and support each other.**

For conservation organizations who are planning to, or are in the process of moving more into community conservation, it is recommended that other components of the organisation’s work be audited to identify the potential positive linkages with community conservation, as well as potential negative or constraining linkages. A strategy can then be developed to build alignment into a set of activities and develop the positive feedback between them.

2. **Conservation will only be achieved through development when there is a strong conservation logic.**

IGCP and other conservation practitioners will benefit from regularly reflecting on the conservation logic underpinning their development projects, asking whether this is robust, and thinking creatively about ways to enhance this.

3. **Strong information systems facilitate good planning.**

We certainly recommend that IGCP continues to explore the potential to integrate some easy-to-collect socio-economic data into RBM and to consider how this might further strengthen the design and monitoring of community conservation enterprises. For conservation practitioners without such extensive involvement in monitoring it might be possible to explore collaboration that could enrich the information base upon which community interventions are designed.

4. **The need for cross-scale and cross-sectoral partnerships.**

IGCP’s new financial and managerial model for community enterprises is innovative and shows promise at this stage. We would recommend continuation of this approach, ideally with a shift away from dependence on foreign aid.

5. **Real partnerships require new ways of working with communities.**

In the Virunga-Bwindi region, there is little opportunity for co-management of resources within park boundaries. IGCP has created opportunities outside of the park boundaries, enabling experimentation with transfers of tenure and associated transfers of power. These are exciting developments and we recommend further creativity in linking enterprise with community empowerment.

6. **Interventions need to be durable and flexible**

The low level of skills and organization in local communities means that long duration support will be necessary in many cases. Whilst IGCP’s innovative models of working with highly capable private sector partners appears to offer earlier opportunities for taking a less active role, we would not recommend that this were to entirely replace the longer-term and more resource-intensive methods of building community capacity that IGCP has been gaining experience with elsewhere.


LESSONS LEARNED: CAPACITY BUILDING

Samuel Kanyamibwa¹, Eugène Rutagarama², Maryke Gray², Medatrice Bana², and Stephen Asuma²

May 2008
Edited by Maryke Gray in 2011

¹Independent Consultant
²International Gorilla Conservation Programme
The International Gorilla Conservation Programme (IGCP) was established in 1991 by a coalition of three international conservation NGOs: the African Wildlife Foundation (AWF), Fauna & Flora International (FFI) and the World Wide Fund for Nature (WWF) with the mission “to conserve gorillas and their habitat through partnering with key stakeholders while significantly contributing to sustainable livelihood development”. The empowerment focus in IGCP’s mission is centered on two main stakeholders: firstly the three Protected Areas Authorities; in Rwanda (Rwanda Development Board, RDB; formerly the Office Rwandais du Tourisme et des Parcs Nationaux, ORTPN), in Uganda (Uganda Wildlife Authority, UWA) and in DRC (Institut Congolais pour la Conservation de la Nature, ICCN) and secondly local communities around the four national parks and one forest reserve of the transboundary ecosystem of the Virunga-Bwindi region.

This report highlights the results of a consultation process that involved IGCP stakeholders, notably the three protected area authorities, the coalition members, communities and IGCP staff. We have considered capacity building activities at three different levels: individual, institutional and system levels. Our analysis shows that IGCP’s capacity building interventions spread at different levels and particularly at institutional and system level, for example in terms of establishing mechanisms for exchange between key partners, regional monitoring and transboundary collaboration.

Lessons:

1. Capacity building is a complex domain. Do not lose focus, always focus on organizational vision and mandate.
2. Work at different levels as they are all linked and complementary.
4. Recognize that you cannot do it alone – partnership and linkages with other players are important.
5. Learn to listen to stakeholders and encourage mutual transparency.
6. Soft training can be easy but change of values takes time.
7. Ensure communication, feedback and follow-up activities.
8. Institutional capacity is not only providing skills. Ownership is important for sustainability.
9. Develop a stable funding base and contingency plan for fragile situations.
10. Invest in internal capacity.

Recommendations:

1. Develop a Regional Capacity Building Strategy

Capacity building constitutes the central part of IGCP activities. Stakeholders recognize IGCP’s contribution to capacity building in the region. However, neither IGCP nor its partners have a common understanding of IGCP’s capacity building strategy.

2. Partnership, coordination and synergies with other actors

While the Virunga-Bwindi region is known for the multiplicity of actors in conservation and development, the coordination mechanisms and synergy among the actors is still limited in general and particularly in capacity building. The development of the capacity building strategy proposed above should consider other ongoing initiatives in the region in order to build linkages and synergy, particularly for same target institutions.
3. **Sustainable financing**

While securing adequate financing for capacity building is one of the most difficult aspects in environmental conservation, it is important to maintain efforts and successive results can be reached as demonstrated recently by IGCP in facilitating the establishment of a regional Secretariat for the Trans-boundary activities.

4. **Monitoring and Evaluation**

In the development of a regional capacity building strategy, IGCP should take the opportunity to assess baseline data and put in place a clear monitoring system for capacity building activities. A set of criteria and indicators should be defined and assessed regularly, for example every 3-5 years. This can be linked to the successful Ranger-Based-Monitoring programme.

**Specific recommendations include:**

1. **Overall coordination of capacity building programme**
   
i. Capacity building being a cross-cutting programme and the core of all activities, IGCP should recruit or designate within existing staff one person in charge of capacity building activities.
   
   ii. IGCP should improve external communication and outreach, it is important to recruit or designate a Communication Officer.
   
   iii. Funding for capacity building should be increased and better mainstreamed in relation to other activities.

2. **Capacity building at the individual level**
   
i. There is a need to develop long-term career development linked to partner institutional development.
   
   ii. Need better coordination and consistency with the Human Resources Departments of partner institutions.
   
   iii. Given the turnover of staff, IGCP and PAAs should explore joint induction for new staff.

3. **Capacity building at institutional level**
   
i. A joint analysis between IGCP and individual PAAs should be conducted to look at the whole institution and undertake a bold restructuring process.
   
   ii. To avoid misunderstanding IGCP should clarify and communicate its capacity building vision to partners.

4. **Capacity building at system level**
   
i. IGCP should explore more partnership with other organizations in the field (e.g. with WWF PEVI in the Virungas Southern Sector and ARCOS in NGO capacity building).
   
   ii. A regional Monitoring and Evaluation System for capacity building should be set up by IGCP and linked to the existing Ranger Based-Monitoring as much as possible.
   
   iii. IGCP Coalition Members should assist IGCP in the establishment and maintenance of a regional sustainable financing mechanism for capacity building.
IGCP has identified four strategic objectives in support of its mission and Strategic Framework for 2009-2013 (IGCP, 2009). Each strategic objective (SO) is attained through the implementation of specific activities, and achievement of intermediate results or outputs.

- **SO1:** Comprehensive monitoring and evaluation programme and management oriented research to provide information on management of keystone species within the Virunga-Bwindi ecosystem is undertaken;
- **SO2:** Transboundary Natural Resource Management processes and mechanisms strengthened and promoted;
- **SO3:** Support for the conservation of mountain gorillas and their habitat increased;
- **SO4:** Relevant Conservation Incentives that contribute to conservation of mountain gorillas and their habitats identified, developed and promoted.

IGCP does not have a separate Capacity Building Programme as such or Capacity Building Strategy. However, capacity building is well integrated in the IGCP Strategy as a cross-cutting activity. The mission of IGCP itself places emphasis on the empowerment of people and the interlinked four Strategic Objectives articulate around the development of individual and organizational capacity, the joint management and protection of biodiversity, the development of community enterprises and establishment of management systems as well as influencing policy change.

**Methods**

The focus of our analysis was related to the IGCP programme both in terms of vision and geographical focus, particularly the conservation of mountain gorillas and their habitats, the empowerment of protected area authorities and local communities. In the identification and analysis of IGCP lessons learned on capacity building, we have put emphasis on aspects of training strategy and approach. Including the factors and mechanisms that have contributed to the success or failure; the importance attached to the needs assessment and how stakeholders, particularly the protected area authorities and communities, have responded; how limited resources have been used and the issue of sustainability. Another important aspect is the link between lessons learned and identification of common problems, and finally linking these aspects to opportunities and constraints for future actions and recommendations.

A variety of methods were used to collected data during the consultations:

- Desk study based on materials available from IGCP to understand IGCP’s work and the external environment and background materials related to the theme in order to have a broad overview of other experiences;
- One-to-one (semi-structured) interviews through face-to-face meetings and telephone calls;
- A questionnaire for semi-structured interviews;
- Group working sessions during the field visits in Virunga-Bwindi region and interaction with different stakeholders;
- Identification and analysis of lessons learned.

In terms of period covered, there is generally little agreement on time period within which to assess progress and lessons learned on capacity building issues and particularly the connections between capacity building and subsequent effects and outcomes such as conservation achievements. In addition, the context varies from one country to another and from one recipient of training (individual or organization) due to staff change and other factors. However, this study covered 17 years starting from the creation of IGCP in 1991 to March 2008.
Process of the Theme

Rationale

Capacity building is important in this region which is marked by poverty and poor management of natural resources. Pressures on natural resources and the environment are enormous. Building capacity to promote sustainable use and benefit sharing is critical to the sustainability of ecological functions and the conservation of assets in the region.

The focus of IGCP in the Virunga-Bwindi region transboundary ecosystem has been primarily on strengthening the capacity of each of the three park authorities to effectively manage the forested parks as a regional ecosystem. Facilitating the harmonisation of approaches and promoting collaborative mechanisms for management enhance the potential for each PAA performance and effective natural resource management and therefore better protection of the mountain gorillas and its habitats. At the same time, working with local communities in participatory management and to promote benefit sharing is important to ensure the ownership of key resource users in long-term management of the parks.

History

IGCP’s capacity building has evolved from individual training to institutional development and regional systems of transboundary collaboration. Increasingly, IGCP has focused its capacity building activities giving priority to the empowerment of protected area authorities (PAAs), IGCP staff and communities around the parks and during the last few years to regional transboundary collaboration. IGCP has developed sustained partnerships with the PAAs in the region and benefited from continuous support from its Coalition Members.

Individual Training

Individual training has embraced a range of topics, mostly based on the practical needs of the protected area authorities, varying from monitoring (ecological monitoring, gorilla identification and the use of GPS) patrol, community skills, language, time management, communications, computer skills, tourism, GIS, administration and finance management. Training has also involved exchange of experiences and study visits to neighbouring countries.

Due to the problems of insecurity in the region, training has involved both rangers and military. The rangers have received military training from the military while the military receive training from the park authorities on the ecological role of the forest, the health, behaviour and social structure of gorillas and park rules and regulations.

Other types of training has focused on academic training for university degrees and diplomas while short-term professional training activities and on-the job training has targeted groups such as community associations (beekeepers, mushroom growers, etc.), in areas of marketing, finance management, etc.

Finally, IGCP has also paid special attention to internal training of its own staff and individual development. As a result, the IGCP Directorate and core programmes are today managed by a team of African professionals. For example, the IGCP Director and the Transboundary Programme Manager among others have received high level academic training while working for IGCP.

Institutional level

IGCP’s efforts in institutional capacity building are observed with respect to: the protected area authorities, the local community associations and internal IGCP capacity. The first regular mechanism contributing to the capacity building of protected area authorities is the exchange of information through quarterly meetings bringing the 4 parks together. IGCP also supports the PAAs in terms of infrastructure development such as road maintenance and the construction of outposts, and office and field equipment ranging from radio-communica-
tion material, GPS units, altimeters, vehicles, tents, rain coats etc. IGCP also supports the PAAs in strategic and business planning. The most significant case study is with ORTPN (see Box 1). More recently, IGCP has facilitated the establishment of two regional initiatives: the Regional Training Centre in Kitabi (Rwanda) with funding from the MacArthur Foundation and the Regional Secretariat for the Virunga-Bwindi region funded by the Dutch Government. Thanks to funds secured from the MacArthur Foundation support has also been provided to the National University of Rwanda for streamlining the curriculum of the BSc and the setting of a MSc in Biology Conservation. These initiatives are among the significant pillars for sustainable actions in the region.

At the community level, community conservation has evolved from narrow interventions and awareness raising, to a well structured and effective Regional Enterprise Programme. IGCP has facilitated the establishment of community enterprises ranging from small income generation activities to Community Eco-lodges (Box 3).

Finally, the last aspect of institutional capacity is that of internal IGCP capacity. Not only is IGCP committed to the continuing empowerment of staff but also IGCP pays special attention to the establishment of effective internal systems such as financial management.

System level

IGCP activities have scaled up over time through a gradual process from the field level to establishing a regional transboundary mechanism bringing together three protected area authorities and the four national parks of the Virunga-Bwindi region. A number of initiatives, such as Ranger Based Monitoring, have been facilitated by IGCP, aimed at improving regional collaboration, building on collaborative structures and mechanisms with government institutions responsible for protected area management. The signing of a transboundary collaboration agreement by the Ministers of Environment of the three countries constitutes the highest achievement attained so far by this process and there is room for further developments. The next step aimed by IGCP is for example the establishment of a transboundary protected area (TBPA).

IGCP strategy, phases and emphasis

IGCP strategy for Capacity Building

While there is no defined capacity building strategy for IGCP, there are a number of activities conducted by IGCP and linked to capacity building that can be simplified in a diagram below (Figure 1). These are characterized by the following:

- Multi-level interventions (local and individual level) to the promotion of regional mechanisms and policy influencing.
- While acting at different levels, special focus on institutional capacity (Box 1).
- Regional dimension in order to maximize on timing and staff availability and limited resources.
- Trainers-training: training people who can serve as trainers in each country. The trainees have also helped provide training in neighbouring countries, to strengthen the regional links. Examples of regional or joint training have included training in community-based conservation, monitoring, gorilla tourism, protection/anti-poaching, foreign languages and management.

IGCP phased approach to capacity building

IGCP’s capacity building activities are marked by three phases, 1) identification of needs and resource mobilization, 2) capacity empowerment, 3) follow up support and monitoring.

IGCP’s capacity building activities start with a long and participatory process of identification of needs, matched as much as possible with the resources available. IGCP always begins the process with consultation with stakeholders, making it a bottom-up approach. After the identification of needs, the implementation is characterized by the involvement of IGCP staff, the coalition partners and resource persons. IGCP recognizes that capacity building is a long-term process and the follow-up activities are an integral part of IGCP’s capacity building activities. Overall, the phased approach is characterized by three stages – from the action on the ground to institutional capacity building and regional collaboration mechanisms.
Box 1: Institutional Development – ORTPN (ORTPN, 2002)

Rationale/objectives

IGCP has provided technical and financial support to the process of restructuring ORTPN. The process was undertaken in 2002 with the following objectives: 1) to clarify the ORTPN mission and role, 2) to identify priority areas, 3) to propose a new organizational structure and key positions, and 4) to define an action plan with details of objectives and strategies for the ORTPN.

Activities/operations

IGCP has been at the forefront of the restructuring process of ORTPN. IGCP provided a Technical Advisor to work closely with ORTPN management in the restructuring process and straight after this, IGCP helped to strengthen the capacity of the institution by providing the services for one-year of a Technical Adviser. Also several short courses as well as study tours for ORTPN staff were organized with IGCP support.

Major achievements

Since this restructuring, ORTPN has been steadily performing to achieve its mission of both conservation of national parks and tourism promotion. It has helped particularly to bring about the change in conservation business with more professionalism. This is in many ways a tangible example of the IGCP success in capacity building both at individual, institutional and systems levels.

ORTPN is now operating under a strategic plan developed with support of IGCP. With the support of IGCP, ORTPN has also secured funding from the MacArthur Foundation to establish the Kitabi Conservation Training Center which will soon be fully involved in building individual capacity, targeting primarily people working in conservation, as well as those in the environment in general within the Albertine Rift Region.

Key lessons learned

- Effective organizational development and structuring must involve all levels of the organization. The ORTPN restructuring involved not only the Senior ORTPN Management team but also technical staff at the headquarters as well as field staff (wardens and rangers).
- Organization restructuring is not one of activity but a long process. One of the success factors in the ORTPN restructuring has been IGCP commitment to provide follow-up support to ORTPN.
The IGCP Strategy is based on two major factors resulting from the scope and conditions of its work: 1) the regional and transboundary activities scale of interventions and 2) the volatile and unstable environment.

The regional and transboundary dimension involving three countries and four national parks leads to differences in needs and priorities. IGCP has optimized on opportunities presented in each of the three countries, as well as targeted specific regional activities. The conservation actions developed to respond to these needs were then utilized to forge regional links, to ensure that all three countries benefited from the actions.

In terms of the volatile and unstable environment, IGCP has been working with calculated plans and being opportunistic focusing on where it can deliver best but at the same time, ensuring a continuous presence in areas affected by insecurity.

Mechanisms Established

IGCP is a well established organization with over 17 years experience in the Virunga-Bwindi region. Despite the very challenging working environment, a number of mechanisms have been established such as setting regional standards for gorilla tourism, revenue sharing, community participation and regional collaboration. There are a number of other mechanisms which don’t have a regional dimension but are still very important. We will look at a few of these mechanisms at the institutional level, as well as the economic, legal and political, social and financial level and provide separate case study analysis for the Regional Enterprise Programme and the Ranger Based Monitoring Initiatives.

Institutional

a) Regional experience and skills exchange

In the past, the three protected area authorities sharing the management responsibility of the Virungas managed the parks in their respective country separately. No mechanisms existed for regional communication and collaboration between the park authorities at each level. Today, the regional meetings facilitated by IGCP, have been identified by the staff of the protected area authorities as the cornerstone of the transboundary collaboration between the three countries, and have contributed to the development of a team spirit between them. The regional meetings involved partner organizations and other non-governmental organizations, from a number of different sectors such as development and humanitarian organizations, and constitute the primary mechanism for the organization of joint activities, and updating colleagues on the situation, both political/security and environmental issues in all four parks.

b) Cooperation mechanisms: Regional Ranger-Based Monitoring

The regional-level ecological monitoring system, also known as Ranger Based Monitoring (RBM) entails regular monitoring of the forest by park rangers, for human use of the habitat (poaching, woodcutting, etc), ecological processes in the forest and for specific key species (including monitoring of the mountain gorilla (see Box 2). The monitoring feeds directly into the day-to-day management of the park and enables surveillance and
specific interventions to be based on solid data. The monitoring programme was developed first in DRC, then in Rwanda and finally in Uganda. Several meetings bringing together protected area authorities, and NGOs were held and lots of training conducted to ensure quality control, etc. At present, the data is being analysed in each park, as well as at the headquarters of the protected area authorities. As a result, the census of the gorillas is today harmonized across the 4 parks, involving staff from the UWA in Uganda, RDB in Rwanda and the ICCN in DRC.

**Box 2. Regional Ranger Based Monitoring**

**Rationale/objectives**

The Ranger Based Monitoring (RBM) programme is a basic management tool that provides a standard for data collection and ecosystem surveillance in the Virungas and Bwindi Impenetrable National Park. The RBM programme strengthens capacity of PAAs and adjacent communities in a participative approach through training and field equipment support for collaborative and efficient PA management.

**Activities/operations**

The RBM programme started with a simple, regional model adapted to rangers patrolling activities. Training modules are designed according to identified needs, and integrated training involves many topics. The intention here is to have a common understanding of the programme and to ensure all the involved partners have the appropriate capacity to execute their duties as required in the process. Additionally, technical and conceptual workshops for building monitoring capacity are conducted in order to strengthen the overall scientific and technical capacities of IGCP and PAA staff.

**Major achievements**

At the regional level, the RBM programme has established a standardized system for data collection and analysis across the three countries, providing reliable information on events happening inside the protected areas that is crucial for making management decisions and is an essential instrument for transboundary natural resource management in the Virunga-Bwindi region. The RBM provides results that help PAs to take prompt and important decisions about where to intervene, what to do and how to proceed to reach targeted conservation outcomes.

Specific achievements include the following:

- **Ability to precisely locate illegal activities and plan adequate strategies to address them**
- **Precisely locate tourism gorilla groups for visitor satisfaction.**
- **Effective park zoning during planning process, e.g. areas that were formally zoned for resource access in Nkuringo (Bwindi Impenetrable National Park) have been turned into a tourism zone after noticing that it constitutes the gorilla home range**
- **Joint management of the PA resources with local community (e.g. Nkuringo).**
- **MoU signed to collaboratively manage the transboundary gorilla tourist groups.**

**Lessons learned**

- **Make sure to involve people from the beginning, avoid a top-down approach and make sure that everyone understands the process**
- **Get basic funding – While the RBM is cost-effective, it is important to ensure minimum funding to sustain basic costs such as computers, field equipment and human capacity (IGCP had a full time RBM Officer).**
- **It is important to ensure feedback and follow-up training, coaching and mentoring.**
- **Be patient, it takes time.**
**Economic**

IGCP support to economic activities has focused on the promotion of effective eco-tourism by promoting sustainable mechanisms at the national and regional level; working with the protected area authorities, and at the local level working with the local communities in promoting enterprises (see Box 3).

a) Promoting Ecotourism

IGCP has worked with the RDB, UWA and ICCN staff to establish common rules, applied in all three countries, to manage and control gorilla tourism. These rules focus on reducing the risks of disease transmission, over-exploitation of the gorillas for tourism and reducing the stress to the gorillas (e.g. minimum 7 metres distance between the gorillas and the tourists; 1 hour with the gorillas only; maximum of 8 visitors per group; maximum of 1 group per day). At the same time, having the same rules in each tourism site strengthens collaboration and reduces competition between the countries. The three countries jointly developed the harmonized tourism rules and regulations. Common approaches are also being applied with respect to interpretation and development of joint messages for conservation, handling procedures, and training for tourism staff. The opportunity to strengthen regional collaboration through harmonized tourism approaches, and to develop the effectiveness of nature-based tourism in and around the afro-montane forests as a funding mechanism and economic option for the three countries, is therefore a focus of IGCP.

b) Promoting community enterprises

In the past, tourism has been benefiting mostly tour operators, local people being only involved as porters or selling crafts. To spread the economic benefits of tourism to the local communities around the parks, IGCP has worked towards developing tourism-linked enterprises for the local communities to ensure economic benefits flow to the communities and to strengthen the links between the local people and the parks in the three countries. The initiatives are well advanced in Uganda, and a recent community lodge was inaugurated in Rwanda but unfortunately activities are not yet advanced in DRC due to the security issues. IGCP is promoting various forms of community enterprises based on the specific principles such as focus on mountain gorillas, private sector involvement, community ownership, cooperation with protected area and government authorities among others.

The implementation of community enterprises is based on a system of community associations. IGCP facilitates the creation of the associations and provides necessary skills for financial and administrative management and build linkages between the groups.

### Box 3. Case Study 3: Sustainable Community Enterprises

**Rationale/objectives**

Capacity building and empowerment is central to the IGCP enterprise programme as reflected in the following specific objectives:

1. Establish sustainable financing mechanisms for conservation enterprises
2. Build the capacity of communities to initiate and manage conservation enterprises
3. Facilitate market linkages for conservation enterprises at local and international levels.
4. Translate equitable benefits management to conservation friendly practices with in target communities
5. Develop IGCP’s internal capacity to support conservation enterprises

In addition to conservation logic and livelihoods, one of the pillars of the enterprise programme is business viability through a business plan demonstrating viability, diversified spin-off potential, high visibility value, must produce immediate benefits to target beneficiaries.
**Activities/operations**

The programme has focused on the development of sustainable financing for conservation enterprises, the development of community capacity to initiate and manage conservation enterprises through the securing of property rights and development of training manuals and business development, the development of market linkages locally and internationally, development of IGCP internal capacity for conservation enterprises and the development of community benefits management plan to ensure that substantial, diverse, equitable and frequent benefits are generated by conservation enterprises.

**Major achievements**

- Built two community lodges (one in Rwanda completed and another in Uganda to be completed by the end of July 2008).
- Making beekeeping a business through improving the traditional methods and use of by-products. Honey is now refined and sold in packed branded bottles and propolis, candles and honey wine are now made locally.
- Mushroom growing as a micro-enterprise for local people in DRC and Rwanda
- Cultural tourism especially the community walks in Rwanda and Uganda are in the design stage with the goal of diversifying tourism products and increasing revenue from tourism to local people.
- Capacity building and institutional establishment for community management through legal frameworks and skills training.

**Key lessons learned**

- The enterprise programme requires a lot of capacity building because the partners (i.e. the local communities) are still lacking skills with respect to management capacity, accountability and transparency, institutional structures and business mentality.
- To be successful the enterprises require private sector partnerships and these are not forthcoming. The private sector in the three countries is not developed and the people from outside require critical mass which is not there. The only area that attracts external players is tourism and even this is limited as gorilla tourism is limited in numbers.
- To succeed in community enterprises, one requires support of the local government to give the legal framework for implementation.
- Insecurity dis-empowers people and they no longer think about development but survival. Therefore in the case of insecurity the enterprise to be developed needs to be addressing survival needs.
**Social**

Three main approaches have marked the development of social mechanisms by IGCP aimed at enhancing the linkages between the protected areas and surrounding local communities. These include: 1) the involvement of women in sustainable income generation activities; 2) the promotion of community associations; and 3) language training.

IGCP has worked on strategies to mitigate the conflict between humans and gorillas by the creation of HUGO (Human Gorilla conflict resolution) groups in Uganda and the Para-ORTPN and ANICO (Animateurs de la Conservation) groups in Rwanda. These community groups operate in administrative units around the parks and help the protected area authorities to liaise with local communities.

Another social issue in the region is related to the language barrier. IGCP has facilitated language training in the three countries in order to promote language skills and to facilitate communication. However, even when park staff cannot communicate with each other in French or English, a common local language can always be found. Most of the people along the borders are motivated to work together, due to shared background and culture. This has been a strength in the regional program.

**Legal/political**

Despite the importance of natural resources for community livelihoods and the national economy for countries in the region, influencing legal change and political commitment is a big challenge in the region. Environmental mainstreaming in national development agendas is not reflected in budget allocation to the environment and national investment policy in general, particularly in a context of political and civil unrest.

IGCP’s work has focused on the formalization of regional mechanisms for collaboration across international borders. This has involved a number of high-level political consultations and has also involved other partners such as IUCN and UNESCO to continue the political discussions for the institutionalization of regional collaborative approaches. In 1995, IGCP was also involved in the development of a Strategic Action Plan for the Great Lakes region. The Strategic Action Plan for the Environment provided a series of policy and legal recommendations for the resolution of a range of environmental problems, including those that resulted from the war, as well as those that were not a consequence of the war.

IGCP has catalyzed enabling environment and frameworks in many aspects, including the development of General Management Plans for the PAs; Gorilla Tourism policies in Rwanda and Uganda; review of Natural Resource Management (NRM) policies in the region and each country; development of the Revenue Sharing Policy in Rwanda and contribution to one in Uganda, with work also starting on the one for DRC; the Land Acquisition policy for UWA, etc.

**Financial**

As seen earlier, capacity building requires a combination of interventions at different levels and over a long time. In addition, capacity building is a dynamic intervention, particularly in environmental conservation as the needs and concepts keep changing. Having a solid and sustainable financial base is therefore important for any effective capacity building programme.

One of the strengths of IGCP is that capacity building is at the core of the IGCP mission and capacity building is incorporated in all programme activities and budgeting. IGCP’s capacity building budget as it is the same for other activities, has changed over the years but specific capacity building components have always covered approximately 25% of the IGCP overall budget.

**Implementation Partners**

Firstly, the original idea of IGCP itself from conception was a joint venture through which a coalition of three respected international organizations (AWF, FFI and WWF) came together to create the transboundary pro-
Secondly, the ultimate goal of IGCP is to strengthen the capacity of the three protected area authorities in Rwanda, DRC and in Uganda.

These organizations were chosen strategically given their mandate and responsibility to protect and manage the natural resources within the protected area system in their countries. In addition, IGCP has consistently ensured the enhancement of relationships between PAAs and surrounding communities. As such, the key strategic partners for protected area management have been identified.

Finally, IGCP has developed close relationships with a number of conservation and development agencies on the ground, to rationalize inputs and enhance the impact of activities. These organizations provide important input to IGCP activities for example or participate in experience exchange [e.g. specific input of the Mountain Gorilla Veterinary Project (MGVP) on gorilla health, exchange of research results with the Karisoke Research Centre and CARE on community livelihoods]. Other organizations collaborate with IGCP in various forms. These partners include the Wildlife Conservation Society (WCS), Mgahinga and Bwindi Impenetrable Forest Conservation Trust (MBIFCT), Institute of Tropical Forest Conservation (ITFC), Dian Fossey Gorilla Fund International (DFGFI), Mountain Gorilla Veterinary Project (MGVP), German Technical Agency for Development (GTZ), United Nations High Commissioner for Refugees (UNHCR), United Nations World Food Program (WFP), Médecins Sans Frontières (MSF), European Union (EU), United Nations Office for the Coordination of Humanitarian Affairs (UN OCHA), United Nations International Children’s Education Fund (UNICEF), etc.

Analysis of the Theme

Introduction

Before the identification of IGCP’s lessons learned in capacity building, it is important to examine what has worked well or not, in other words what are the strengths and weaknesses of the programme.

Our analysis of IGCP’s capacity building first of all looked at IGCP’s strategic interventions which show that the majority of IGCP’s activities and indicative outputs put special emphasize on changing the systems (Figure 2). While Strategic Objective 1 is more related to individual training and institutional capacity development, the activities under Strategic Objectives 2, 3 and 4 aim at establishing the mechanisms for exchange between key partners, for regional monitoring and transboundary collaboration, etc.

Secondly, in order to have a clear picture of the situation, we have conducted interviews and questionnaire focusing on the following indicators:

- Capacity building strategy and design;
- Effectiveness and impact of the capacity building programme;
- Efficiency;
- Sustainability of actions;
- Monitoring and evaluation and adaptive management.

Overall, responding stakeholders judge that the IGCP’s approach to capacity building is good and key issues are addressed, particularly in terms of handling the working environment of conflicts and instability in the region and dealing with the transboundary nature of the programme. However, most respondents are not aware of IGCP’s capacity building strategy and this is an issue to be addressed in the future. Concerning the impact and effectiveness, most of the respondents recognize the efforts done by IGCP and the mechanisms established leading to long-term impact and sustainability.
Another message coming out strongly from stakeholders is related to the working environment under which IGCP operates. Overall, IGCP’s capacity building programme is well received by the partners (see Figure 3) despite the political, social, economic and institutional context of operation. However, most respondent’s judge that the impact is not felt as it should due to the conditions of conflicts and limited resources as the needs are very high. Others see this as an achievement for being able to show some results despite these challenging conditions. However, there are no clear mechanisms for monitoring the impact of IGCP capacity building activities.
## Strengths and weaknesses

This section is presented as a table of strengths and weaknesses by theme.

### Capacity building strategy and design

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>- IGCP has kept focus, using as a flagship the gorillas, their habitats and the transboundary approach;</td>
<td>- IGCP Strategy is not well known by stakeholders and staff. The lack of strategy and clarity leads to confusion. Some partners for example raise the issue that there is too much focus on institutional capacity and IGCP’s interventions are seen as ad-hoc by some stakeholders;</td>
</tr>
<tr>
<td>- Regional programmes have marked the regional mandate of IGCP and at the same time responded to the regional priorities (e.g. socio-economic needs through the Regional Enterprise Programme);</td>
<td>- The needs assessment is done when there is a funding opportunity. This is good but it does not take a holistic picture and long-term dimension. Given the scope of the IGCP programme, the capacity building needs assessment should be conducted at all levels.</td>
</tr>
<tr>
<td>- Focus on PAAs has built long-term capacity and sustainability, using limited resources;</td>
<td></td>
</tr>
<tr>
<td>- IGCP strategy has been the continuity and persistence but with flexibility during the times of political instability;</td>
<td></td>
</tr>
<tr>
<td>- While the training needs assessment has not been conducted systematically, IGCP strategy is based on the needs of partners and takes into account the big picture.</td>
<td></td>
</tr>
</tbody>
</table>

### Effectiveness and impact of the capacity building programme

<table>
<thead>
<tr>
<th>Strengths</th>
</tr>
</thead>
<tbody>
<tr>
<td>- IGCP is on track towards its conservation goal “the population of mountain gorillas has been increasing over the years and the habitat integrity has been more or less stable”;</td>
</tr>
<tr>
<td>- The success of regional programmes: the transboundary conservation programme which has led to the signing of a regional MoU, the Ranger-Based Monitoring Programme and facilitating leading examples of community enterprises in the region;</td>
</tr>
<tr>
<td>- Catalyzing and supporting solid initiatives in the region such as the Regional Training Centre in Kitabi;</td>
</tr>
<tr>
<td>- In terms of internal capacity, IGCP has changed from a small team of expatriates to a diverse, skilled and committed team of local professionals with effective internal systems.</td>
</tr>
<tr>
<td>Weaknesses</td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>IGCP's capacity building programme appears activity based without a clear strategy;</td>
</tr>
<tr>
<td>Poor advocacy skills;</td>
</tr>
<tr>
<td>Training activities are often over a short-time period and are not frequent;</td>
</tr>
<tr>
<td>Lack of resources;</td>
</tr>
<tr>
<td>Limited capacity of partners to assimilate.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weaknesses</th>
<th>Sustainability of Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limited resources;</td>
<td>IGCP focus on institutional mission and institutional needs;</td>
</tr>
<tr>
<td>Lack of relevant local institutions to partner with (e.g. on enterprise development);</td>
<td>There is a good level of trust between partners even in times of conflicts;</td>
</tr>
<tr>
<td>Staff turnover.</td>
<td>The regional transboundary mechanisms in place are crucial for sustaining conservation activities during conflicts;</td>
</tr>
<tr>
<td></td>
<td>The new Regional Permanent Secretariat is a significant pillar for long-term action in the region.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weaknesses</th>
<th>Monitoring and Evaluation and adaptive management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limited room for creativity due to the unstable environment leading to long-term dependence on outside input;</td>
<td>IGCP does not have a clear strategy for monitoring and evaluation;</td>
</tr>
<tr>
<td>Little funding as most resources are focused on emergency needs and short-term outputs;</td>
<td>IGCP does not have a clear strategy for adaptive management;</td>
</tr>
<tr>
<td>Sustaining strong institutions is always a challenge due to staff turnover.</td>
<td></td>
</tr>
</tbody>
</table>

**Monitoring and Evaluation and adaptive management**
### Strengths
- Despite working in a volatile environment, IGCP has been flexible and able to adapt to the situation without losing focus;
- The support from coalition members both in terms of funding and technical has allowed IGCP to maintain its capacity building activities.

### Weaknesses
- Undertaking too many activities;
- No long-term capacity building indicators set up due to short-term interventions;
- External communication and information sharing has been poor, leading to misunderstanding with partners and other organizations;
- Turnover of Board members and lack of a system for the induction of new Board members leads to weak advice to the IGCP Director on strategic directions.

---

**Figure 4.** Percentage level of stakeholders in relation to IGCP’s programme in considering major issues in the region.

**Figure 5.** Percentage level of stakeholders in relation to the level of intervention.
Opportunities, constraints and challenges

The Virunga-Bwindi region is the centre of great conservation assets and enormous constraints and challenges. The need for conservation is unique due to the presence of endangered species and enormous population pressure in a context of poverty and political instability. Because of this situation, we don’t pretend to provide an exhaustive list of constraints, challenges and opportunities in the region but we will focus on the most important ones identified by stakeholders.

Opportunities

a) Institutional framework

IGCP has established a long working relationship with the three protected area authorities in the Virunga-Bwindi region. All of them are supportive of IGCP actions and still value IGCP support in the future as instrumental. Despite the institutional weaknesses, there are motivated and experienced staff on the ground, and a long history of protected area management in the region. The presence of conservation and development organizations in the region constitutes also a great opportunity. In the past, IGCP has been a neutral and effective partner. Working closely with the three governments and park authorities has promoted linkages and trust.

b) Regional Transboundary coordination dynamics

In the past, IGCP has provided technical input, funds and tools for collaboration, thus allowing the park authorities to move forward along the continuum of transboundary collaboration. The recently formalized regional transboundary conservation system offers more opportunities for harmonized actions, as the three protected areas are still at different level of capacity. The recent establishment of a Regional Secretariat for Transboundary Collaboration is a good achievement to build on.

c) Political support to conservation and development and capacity building

The need to enhance the scientific and technical capacity of African Governments to address environmental challenges is repeatedly highlighted at national and international environmental meetings as well as by the African States themselves, as it is articulated in the New Partnership for Africa’s Development (NEPAD), particularly its Environment Initiative. The NEPAD Environmental Action Plan is part of Africa’s response to meeting the Millennium Development Goals and has put capacity building as key priority to address the increasingly complex emerging issues such as climate change as well as environmental economics. In the Virunga-Bwindi region particularly, there are opportunities that nature-based tourism has been a major component of the economies of the three countries for many years and has provided strong arguments for conservation. This situation offers good arguments for the capacity building of government agencies responsible for protected area management.

d) Donor interest in capacity building

As a response to clear needs for capacity building and particularly for African governments as mentioned above, most donors recognize the importance of capacity building for environmental sustainability in general and particularly the empowerment of local institutions and communities as IGCP is doing. Donors have generally responded well to capacity building initiatives in countries showing a period of peace and stability. Funding for regional initiatives has been a challenge in the past but it is encouraging to note recent interest in regional initiatives such as the Regional Secretariat funded by the Netherlands Government. While the integration of environment in the refugee crisis and emergency situations is still very weak, humanitarian organizations have demonstrated strong willingness to contribute to environmental conservation even if this was not part of their core mandate with some funds and material assistance reaching the park authorities, and contributing to conservation objectives (Lanjouw et. al., 2001).

Constraints

a) Insecurity and political instability

The Great Lakes Region has been the scene of a number of different conflicts over the past 10 years. This has affected security and the ability of the park authorities to effectively manage their parks. The breakdown of
social, economic, and politico/administrative structures in the region have severely impeded the normal functioning of the protected area authorities. Governments have tended to focus on immediate, short-term needs, and the longer-term objectives of conservation and sustainable management of natural resources are considered a lower priority. During the last 10 years, the three parks in the Virunga massif have had to be closed for short or long period due to security, and in DRC, community enterprises initiated by IGCP (beekeeping) have been destroyed. From time to time, the political crisis in DRC has led to the split between rebel-held eastern DRC and government-controlled Kinshasa.

b) Institutional

Despite the great progress made and willingness of the three protected areas agencies, the existence of different administration systems within the three countries, and especially between the francophone countries (Rwanda and DRC) and the anglophone (Uganda) constitute a major constraint in harmonizing management approaches between the countries. The language issue is also a constraint, although because the local language is often shared or similar across the borders, this is less of a constraint than it could be. Translation is often needed, and documentation always has to be produced in both French and English. An additional constraint is that within each PAA staff turnover is quite significant.

c) Funding

The most important constraint in relation to funding for capacity building is that funding is generally for ad-hoc interventions while capacity building takes time, particularly at institutional and system level. Another issue is the regional nature of the IGCP interventions; most donors still have a national focus despite the recognition of the importance of collaboration in shared ecosystems. Finally, as a result of long periods of conflict and political instability, the environment is well behind in terms of national budget and donor support is concentrated primarily on the relief/emergency sectors and infrastructure development. Finally, while the countries in the region are recovering from war and building peace, most donors are still reluctant to support activities in DRC and this leads to fragmented results at regional level.

Challenges

IGCP has contributed significantly to the development of skills, institutions and systems in the Virunga-Bwindi region. However, this endeavour of capacity building has not been addressed as systematically as it could have been, in part because the donor funds have not prioritized it in comparison with other areas such as monitoring, gorilla tourism, regional collaboration and conservation-enterprise development, but most importantly because of the enabling environment. Nevertheless, despite these challenges, IGCP has build a strong foundation which once strengthened will contribute to sustainable development and biodiversity conservation in the region. Two major challenges will continue to affect IGCP’s capacity building programme:

a) Building sustainable capacity in an unstable environment

On the one hand, IGCP as many other organizations has invested significant resources in capacity building at different levels but on the other hand, these efforts have been affected by insecurity and instability. This is reflected both at the local and national levels. At the local level, people are more concerned about their daily survival and can easily shift to opportunistic and unsustainable exploitation of resources if capacity building efforts are not maintained. At the national level, poverty in the region forces countries to put priority on sectors other than environment in general and capacity building in particular. This justifies the crucial role of conservation NGOs to local community organizations.

b) Sustainable funding for capacity building activities

Despite donor interest and political commitment in environment capacity building as reflected in the NEPAD Environment Initiative, the real commitment to capacity building in national priorities is still very weak. The government commitment to improving community activities should be better reflected in mainstreaming the environment in development agenda and the development of enabling policies in support of community based natural resource management and benefit sharing and in the national budgeting. Another problem is the donor community. Capacity building is often considered as an ad-hoc intervention and/or part of other programmes. As such, capacity building does not receive adequate attention. There is a need to have sustained funding support for capacity building activities.
Looking at the IGCP capacity building programme and placing it in the political and social context of the region, a number of lessons can be identified. We have grouped these lessons into three categories: 1) the programme design, 2) the stakeholder consideration and 3) the balance between the individual and institutional angle.

**Programme design**

“When you operate in an unstable environment, it is important to focus on your mission”. Eugene Rutagarama, IGCP Director.

**Lesson 1: Capacity building is a complex domain. Do not lose focus, always focus on organization vision and mandate.**

Context: Demands for capacity building are always high and diverse. IGCP has been operating in a volatile environment with long-term uncertainty. Yet, capacity building efforts have always focused on the IGCP mission.

*Key principles*

- In an unstable environment, limit efforts to priorities and achievable actions.
- Make sure your partners understand your boundaries and theirs. This helps to work towards a shared agenda.

*Examples*

- IGCP has focused on gorillas from the start. All capacity building activities have direct or indirect links to gorilla conservation.
- IGCP took the holistic view of gorilla habitat. The up-scaling of IGCP activities has been based on the overall gorilla distribution along the transboundary forest ecosystems.

**Lesson 2: Work at different levels as they are all linked and complementary.**

Context: The more people, levels, institutions and sectors are involved, the more difficult regional collaboration becomes. It is therefore often necessary to meet the needs at all levels.

*Key principles*

- Capacity building should be at individual, institutional and system level but it is important to know the critical level for achieving conservation goals.
- Train junior and senior staff. Junior staff are often more open to changes.
- Ensure that relevant government authorities are aware of your activities.
- Exchange visits are important.
Examples

- IGCP’s capacity building programme focusing on investment in organizational capacity and people has proven to be most successful during conflicts.

**Lesson 3: Use a bottom-up approach rather than top-down**

Context: There is always a risk to respecting existing decision-making structures and regulations, often marked by heavy bureaucracy at the higher level. However, starting at a low level can also be seen as ignoring the established structures. This is a dilemma often faced by programmes that need to work at different levels. Where to start? Where to focus?

**Key principles**

- Work with communities; decide with them not for them.
- For CBO development, start with people having the same values and a shared vision.
- Ask local communities for ideas not only local authorities.
- Consulting local leaders only might misrepresent the overall community interests.
- Involve maximum stakeholders on the ground to ensure all needs are addressed.

**Examples**

- IGCP has started with the federation of carvers at the communal level. It would have been better to start with small groups then expand.
- Transboundary activities started with the rangers, now they are at the ministerial level.

**Lesson 4: Recognize that you cannot do it alone – partnership and linkages with other players is important**

Context: Community conservation and development is very complex and requires multi-disciplinary interventions. No organization can claim to have all the required expertise and resources. Promoting development activities is particularly challenging for classic conservation organizations like IGCP. The lack of strategic partnerships has been identified in many sectors as the critical gap in effective realization of programme goals and objectives.

**Key principles**

- Establish a minimum financial base.
- Involve private sector in community enterprises. Their business can be productive while they also get some management experience.

**Examples**

- The community lodges are managed by private companies.
- The synergy with other organizations was missing at the beginning. As a result, parallel activities are concentrated in one area (Kinigi).
- IGCP has benefited from its Coalition Members (e.g. AWF on enterprises, FFI on communications strategy, WWF on financial strategy).
- IGCP collaborates with CARE on livelihoods, MGVP on gorilla health, Karisoke Research Center on research.
Stakeholders

“Work with communities, decide with them, not for them”. Mediatrice Bana, IGCP Programme Officer, Rwanda.

Lesson 5: Learn to listen to stakeholders and encourage mutual transparency

Context: Introducing new concepts to stakeholders is often planned according to organizational resources and plans. Instead of dictating the concepts, it is important to ensure that key priorities of stakeholders are taken into consideration.

Key principles

- Conduct training needs assessment.
- Know the socio-economic context of the area before implementing any activities.
- Take time to introduce the new ideas.
- While the process is important, the results count most.
- Be transparent when it comes to funds.

Examples

- Beekeeping in Rwanda failed initially because the feasibility study was not done properly.
- The restructuring of ORTPN involved a long consultation process.

Lesson 6: Soft training can be easy but change of value takes time.

Context: Capacity building is not just providing skills and setting up systems. In a context of poverty, conflicts and transboundary divisions, behavioral change can be challenging.

Key principles

- Because capacity building is not a quick fix, ensure the momentum is maintained through a minimum long-term financial base.
- To collaborate effectively with the recipients, a basic level of trust and understanding is required.

Examples

- Despite receiving required training and modern beehive equipment to use outside the forest, some beekeepers are still going to the forest with smokers.
- The SACOLA Lodge in Rwanda took several years to finalize. A large amount of time was taken to build trust with communities.
- Transboundary ecosystems take several years to materialize; it has been a challenge to bring stakeholders from different countries.

Lesson 7: Ensure communication, feedback and follow-up activities.

Context: Capacity building is often designed for specific activities with limited funding for extra activities such as communication over a certain period of time. Trainer-training systems requires follow-up particularly in the context of conservation and development dynamics.

Key principles

- Plan extra appropriate funding and extra activities for communication and follow-up.
Give feedback to stakeholders on activities, funding opportunities, etc.

Plan together and share the results of planning.

Examples

- During the conception of the SACOLA community Lodge, IGCP organized several meetings with communities and is still following-up.
- Beekeeping activities are successful but IGCP continues to assist.
- Despite having been implemented over the years, there has been something to learn from Ranger-Based Monitoring every year.

Individual versus institutional context

Lesson 8: Institutional capacity is not only providing skills. Ownership is important for sustainability

Context: Capacity building is not an isolated activity from the organization. It must be part of the human resource development strategy and organization strategy.

Key principles

- Institutional performance depends on individual skills. Also, focus on institutional restructuring instead of individuals.
- Avoid long-term dependence. Have an exit strategy and share it with stakeholders.
- Staff turnover within institutions can be tricky, involve as many individuals as possible.
- Beware of existing mechanisms within institutions that can inhibit new changes.

Examples

- When there was no long-term institutional strategy, IGCP realized that the same officers were often trained for similar topics or staff turnover was heavily felt.
- Working with established communities around Mgahinga Gorilla National Park proved to be more challenging than starting a fresh system with NCDF.
- Having good planning in place and institutional leadership were crucial in institutional development in Uganda.

Lesson 9: Develop a stable funding base and contingency plan for fragile situations

Context: IGCP has been in a war zone for years working with fragile communities. Funding for capacity building particularly in conflict zones is not easy to mobilize.

Top: Francis Tumwebaze is a beekeeper near Bwindi Impenetrable National Park, Uganda.

Bottom: IGCP staff and members of the UDASEMINYA cooperative in the Democratic Republic of Congo.

Photos by A. B. Masozera/IGCP.
Key principles

- Having flexible un-restricted funding for ad-hoc interventions is crucial.
- In volatile environments, closely support fragile groups as they can be easily manipulated.

Examples

- The IGCP has shifted its response to the changing situations, and as the needs arise in the region.
- The women’s association gave confidence in a community member who in the end used the money unwisely. The governance structure was not well thought through.

Lesson 10: Invest in internal capacity

Context: Capacity building requires specific skills. Conservation and development are complex sectors requiring multidisciplinary teams.

Key principles

- Invest both in short and long-term training of staff.
- Set up a system of mentoring.

Examples

- IGCP has improved staff capacity over the years, improved its systems and involved external expertise.
- IGCP has evolved to a professional and credible NGO with African leadership.

Recommendations and Conclusion

IGCP has established remarkably successful regional initiatives in the areas of regional collaboration, monitoring (Ranger-Based and socio-economic), tourism development and community-participation in conservation and conservation enterprise. The following priorities should be considered in the future:

Developing the Regional Capacity Building Strategy

Capacity building constitutes the central part of IGCP activities. Stakeholders recognize IGCP’s contribution to capacity building in the region. However, neither IGCP nor its partners have a common understanding of IGCP’s capacity building strategy. While the strategy should not be a rigid set of instructions and can be adapted, a capacity building strategy will increase the opportunity to operate in the unstable environment and optimize on limited resources. The strategy will also help to bring all partners to a common understanding and shared vision of IGCP.
Partnership, coordination and synergies with other actors

While the Virunga-Bwindi region is known for the multiplicity of actors in conservation and development, the coordination mechanisms and synergy among the actors is still limited in general and particularly in capacity building. The development of the capacity building strategy proposed above should consider other ongoing initiatives in the region in order to build linkages and synergy, particularly for same target institutions. Such initiatives include conservation NGOs such as the ARCOS NGO capacity building in the region, government initiatives such as the Nile Initiative Programme, the development and humanitarian organizations and the private sector partnerships.

Sustainable financing

Securing significant funding for capacity building over a long period of time remains a challenge. While securing adequate financing for capacity building is one of the most difficult aspects in environmental conservation, it is important to maintain efforts and successive results can be reached as demonstrated recently by IGCP in facilitating the establishment of a regional Secretariat for the Transboundary activities. Three principal funding mechanisms have been already proposed for IGCP: classical funding sources, the establishment of a Trust Fund and establishment of a body. Advantages and disadvantages have been described (Lanjouw et al. 2001).

Monitoring and Evaluation

In the development of a regional capacity building strategy, IGCP should take the opportunity to assess baseline data and put in place a clear monitoring system for capacity building activities. A set of criteria and indicators should be defined and assessed regularly, for example every 3-5 years. This can be linked to the successful Ranger-Based-Monitoring programme.

Specific recommendations can be grouped into four categories: overall coordination; capacity building at individual level, institutional level and system level.

Overall coordination of capacity building programme

- Capacity building being a cross-cutting programme and the core of all activities, IGCP should recruit or designate within existing staff one person in charge of capacity building activities.
- IGCP should improve external communication and outreach, it is important to recruit or designate a Communication Officer.
- Funding for capacity building should be increased and better mainstreamed in relation to other activities.

Capacity building at the individual level

- There is a need to develop long-term career development linked to partner institutional development.
- Need better coordination and consistency with the Human Resource Departments of partner institutions
- Given the turnover of staff, IGCP and PAAs should explore joint induction for new staff.

Capacity building at institutional level

- A joint analysis between IGCP and individual PAAs should be conducted to look at the whole institution and undertake a bold restructuring process.
- To avoid misunderstanding IGCP should clarify and communicate its capacity building vision to partners.
Capacity building at system level

- IGCP should explore more partnerships with other organizations in the field (e.g. with WWF PEVi in the Virungas Southern sector, ARCOS in NGO capacity building).
- A regional Monitoring and Evaluation System for capacity building should be set up by IGCP and linked to the existing Ranger Based-Monitoring programme as much as possible.
- IGCP Coalition Members should assist IGCP in the establishment and maintenance of a regional sustainable financing mechanism for capacity building.

Conclusion

IGCP has laid a solid foundation in building conservation capacity in the Virunga-Bwindi region. When IGCP started, rangers were not interested in biodiversity; today, they can identify individual gorillas and different species of plants and animals. Before, the PAAs were working separately; today, there is a solid institutional system and regional transboundary framework. Before, the PAs and communities were enemies; today, communities are benefiting from conservation.

IGCP has a long experience of institutional development and transboundary collaboration under the challenging conditions of poverty and conflicts. A lot has been achieved despite war. This has required creativity, flexibility and adaptability and a number of lessons have been learned. The success of this in the future will very much depend on peace and continuing funding commitment from all players involved because not only does capacity building need resources, but also it takes time (Morrison 2005; Efroymson, D. 2007).

This study has highlighted some selected examples of IGCP’s lessons in capacity building. We believe that these lessons do reflect the most important aspects of IGCP’s capacity building successes and sometimes failures. More importantly, we hope that these lessons will help IGCP and its partners to shape better the capacity building programme and that these findings will inspire other organisations interested in promoting effective capacity building programmes.

References


LESSONS LEARNED: TRANSBOUNDARY NATURAL RESOURCE MANAGEMENT

Adrian Martin¹, Eugène Rutagarama², Maryke Gray², Anecto Kayitare², and Vasudha Chhotray¹

February 2009
Edited by Maryke Gray in 2011

¹ University of East Anglia
² International Gorilla Conservation Programme
Executive Summary

The International Gorilla Conservation Programme (IGCP) was established in 1991 by a coalition of three international conservation NGOs: the African Wildlife Foundation (AWF), Fauna & Flora International (FFI) and the World Wide Fund for Nature (WWF) with the mission “to conserve gorillas and their habitat through partnering with key stakeholders while significantly contributing to sustainable livelihood development”. The empowerment focus in IGCP’s mission is centered on two main stakeholders: firstly the three Protected Areas Authorities; in Rwanda (Rwanda Development Board, RDB; formerly the Office Rwandais du Tourisme et des Parcs Nationaux, ORTPN), in Uganda (Uganda Wildlife Authority, UWA) and in DRC (Institut Congolais pour la Conservation de la Nature, ICCN) and secondly local communities around the four national parks and one forest reserve of the transboundary ecosystem of the Virunga-Bwindi region.

The current study focuses on one of the overriding strategies of IGCP: a regional approach based on transboundary collaboration. Whilst transboundary natural resource management (TBNRM) is now widespread, IGCP’s experience has some unusual aspects that make an original contribution to conservation learning. Firstly, the cooperation between the three nations has been developed and sustained during an era of very poor international relations including various times when partner countries have been fighting each other. The second unusual aspect is that TBNRM in the Virunga region has developed from informal field level cooperation and only relatively recently moved up to ministerial level and formal agreements.

Lesson 1: Leadership and Partnership – an NGO-State model of TBNRM can be effective.

Given a context of inter-state conflict, an NGO-State model of TBNRM can be effective in the short-term through commitment to equitable partnership. We are careful to emphasise that this model may only be suitable in the short-term as there is now an important question about how that model needs to evolve to reflect the improving relations between the three countries, the more balanced capacity across the three PAAs, and the wider evolution of the TBNRM model towards more formal institutions.

Lesson 2: Phases - the level or scale of TBNRM activities is closely related to the institutional design and means of coordination that is appropriate.

The level or scale of TBNRM activities is closely related to the institutional design and the means of co-ordination that is appropriate. For example, local level cooperation can be ad hoc and informally co-ordinated, whilst inter-ministerial cooperation normally requires more formal co-ordination through some form of signed agreement.

Lesson 3: Cooperation and conflict

In academic parlance, institutions refer not so much to organisations as to the ‘rules of the game’ - the formal and informal rules that determine how actors can and should behave. Thus, cultural taboos against killing and eating gorillas are institutions, as are the judicial laws that forbid this. In the process of this study, we have learned that this aspect of institutionalisation is just as important as organisational structure, because, depending on the nature of rules, different actors can be encouraged either to co-operate or compete. Inappropriate rules of the game can lead to competitive behaviour that result in ‘tragic’ environmental outcomes for all parties.
Lesson 4: Communication

One of the lessons from the ‘tragedy of the commons’ (Hardin, 1968) is that the likelihood of ruinous non-cooperative behaviour is increased by an inability to communicate and an absence of trust. It is perhaps not surprising then that IGCP’s work to bring about TB communication, through regional meetings, and more recently through the TCS and TES meetings, is widely believed to have been critical to the success of TBNRM in the region.

Lesson 5: Mutuality

Another lesson is that stakeholders are unlikely to invest heavily in protection of a resource when the benefits of this effort will fall to others. IGCP has supported the introduction of mechanisms for distributing the benefits from tourism and this has been an important step towards structuring ‘the game’ in ways that ensure that all players believe that they will be beneficiaries of conservation behaviour.

Lesson 6: Rules

Consistent and well defined rules are seen as essential pre-requisite for collective action. Again, revenue sharing is an example, but so too is the harmonisation of the standards for tourism. The tripartite agreement is itself an important step towards creating a formal institutional context that favours cooperation and the on-going project to incorporate PNV and Mgahinga parks into the Virunga World Heritage Site will go further to establish harmonised commitment and rules.

Lesson 7: Ownership

The structure of the current TES and TCS provides for co-ownership of the TBNRM process and establishes conditions favourable to collective action.

Lesson 8: Relationships

The kind of relationships that might be important to TBNRM are those between parties at a range of scales, from individuals operating in the field, up to large state ministries. IGCP’s regional work since 1991 has served to create a platform for relationship building in two key ways. First, it has created the opportunity for engagement in a range of joint activities such as planning meetings and wildlife monitoring. Second, by reconfiguring the parks in people’s imagination – from separate parks to an integrated landscape. Relationships are built at multiple levels and, importantly, over long periods of time.

Lesson 9: Scale and Politics

Constructing a scale of governance is an inherently political act that requires careful negotiation. An example that underlines this point was the decision about who would co-ordinate the larger process of Transboundary management for the Albertine Rift. In some ways, IGCP or WCS would have been more obvious candidates for this due to their history with regional conservation, their established relationships of trust with PAAs and their proven capacity. And yet it was readily agreed that ARCOS would take on the role, despite more limited history and capacity. Seen in hindsight, this is a lesson in how politics can effect quite profound decisions that determine the direction and ultimately the success of TBNRM initiatives.

Lesson 10: Leadership

Finally, we tend not to highlight leadership when looking for ‘lessons’ about conservation effectiveness. This is for the obvious reason that it is so hard a condition to replicate – it is not very useful to be told that ‘good leadership is important’. But nonetheless, consistent fairness and commitment in leadership plays an important role in achieving trust and co-operation, especially when political events threaten to undermine this.
Introduction

The current study focuses on one of the overriding strategies of IGCP: a regional approach based on transboundary collaboration. Whilst transboundary natural resource management (TBNRM) is now widespread, IGCP’s experience has some unusual aspects that make an original contribution to conservation learning. Firstly, the cooperation between the three nations has been developed and sustained during an era of very poor international relations including various times when partner countries have been fighting each other. Even as we were conducting this study, diplomatic relations between DRC and Rwanda had been broken off, yet the Greater Virunga Transboundary Core Secretariat still managed to meet on December 1st 2008. The second unusual aspect is that TBNRM in the Virunga region has developed from informal field level cooperation and only relatively recently moved up to ministerial level and formal agreements.

Methods

The main approach has been to synthesise existing knowledge. This has been captured in three ways. Firstly, a review of secondary data including published scientific work as well as internal IGCP documents and data. Secondly, key people within IGCP and partner organizations were contacted by email as a scoping exercise. The purpose of this was to prioritise elements of the IGCP experience for more intense analysis, as well as to ensure that critical issues were not overlooked. Thirdly, a series of consultation meetings and site visits were held in October 2008 in DRC, Rwanda and Uganda.

We have relied heavily on the testimony of key stakeholders: IGCP staff, staff from RDB, UWA and ICCN, and representatives from conservation partners who work with IGCP. Where possible we have backed up this testimony with other sources of information, including scientific research published in journals, and IGCP and consultant evaluations of particular programmes and projects.

Having described the background and analysed TBNRM in the region, the study proceeds to an analysis of lessons learned, focusing on four areas of IGCP’s work: 1) an NGO-state model of TBNRM; 2) cooperation and conflict; 3) scale and function of TBNRM; and 4) environmental peacemaking.

Process of the Theme

Transboundary Natural Resource Management (TBNRM) is a process for promoting cooperative management of resources that cut across national borders or which are affected by activities across borders. The promotion of TBNRM sometimes involves the removal of physical partitions such as fences and always involves the removal of institutional barriers to cooperative behaviour. Some institutional changes, such as joint committees, are typically directed towards improving personal relations between international partners whilst others, such as revenue sharing, are geared towards structuring the economic environment in ways that render cooperation
more rational and advantageous than competition. At the most fundamental level, TBNRM is about creating a scale of governance that is appropriate for agreed management objectives whilst also being politically workable.

Since the early 1990s it has become common to associate transboundary management of African protected areas with attempts to establish and maintain peace:

Parks for peace are transboundary protected areas that are formally dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and to the promotion of peace and cooperation (Sandwith et al., 2001, p.3).

Not all transboundary protected areas are peace parks. In addition to ecological objectives, peace parks usually aim to strengthen international friendships as well as regional sustainable economic development. The current name given to TBNRM in the Virungas (and the wider region) is the Central Albertine Rift Transboundary Protected Area Network. Whilst this name does not make either peace or economic development objectives explicit, we will see below that these objectives are prominent in the international agreements that have been drafted to date.

History of Transboundary Protected Areas

The first use of the term ‘peace park’ is widely attributed to the merger of the Glacier National Park in the US with Waterton Lakes National Park in Canada in 1932, forming the Waterton Lakes Glacier International Peace Park. It was not until much more recently that the idea has been employed in a region experiencing armed conflict, which was the 1998 peace agreement between Ecuador and Peru in the Cordillera del Condor border region (Ali, 2007). The number of Transboundary Protected Areas (TBPAs) has grown fairly quickly, from 59 TBPAs in 1988 to 188 in 2005 (Ali, 2007).

The Albert National Park, established by the Belgians in 1925, was the first African park to cross international borders, between the then Ruanda-Urundi and Congo. Van der Linde et al. (2001) suggests that the first post-colonial African transboundary park was Kgalagadi Transfrontier Park, established between South Africa and Botswana in April 1999. Two years previous to that, the Peace Parks Foundation was formed in South Africa, funded by the businessman, Anton Rupert. In a conference held that year, participants endorsed proposals to establish peace parks in a number of regions, with the mountain gorilla habitats being one of the targets (Wilkie et al., 2001). According to Van Amerom and Buscher (2005) and Hughes (2003), South African politicians have been strong backers of the peace park idea, partly because it fits with larger political agendas linked to an ‘African Renaissance’. This agenda of African solutions for African problems arose in post-apartheid South Africa, and is embodied in a new generation of African statesmen such as Kagame in Rwanda and Museveni in Uganda.

Nelson Mandela himself endorsed the peace parks movement “I know of no political movement, no philosophy, no ideology, which does not agree with the peace parks concept as we see it going into fruition today. It is a concept that can be embraced by all. In a world beset by conflict and division, peace is one of the cornerstones of the future. Peace parks are a building block in this process, not only in our region but potentially in the entire world.” (cited in Van Amerom and Buscher, 2005, p. 168).

Rationale for Transboundary Protected Areas

As Mandela’s statement indicates, the idea of transboundary parks appeals across a range of actors. African politicians can rally around the idea of African solutions, sitting alongside regional economic cooperation; conservationists can see efficiencies arising from scale and harmonisation of protection efforts; businesses can see opportunities for expanded tourism; local governments and NGOs can see prospects for community based approaches and benefit sharing. In this section we review the potential benefits of TBPAs, as perceived by some of these stakeholders. Whilst the broad appeal of TBPAs is helpful for building coalitions, IGCP and others also need to recognise the potential problems that arise from agendas that are only superficially the same. The fact that different stakeholders support TBNRM for different reasons, and that these reasons are often built on naïve assumptions about what TBNRM can realistically deliver, is a potential source of tensions that requires managing.
Ecological rationale

The ecological case for transboundary management rests not with the need for inter-agency cooperation, but with the need for larger scales of management, and the need for conservation to go beyond the boundaries of existing protected areas. The need to operate at the scale of ‘landscape’ is necessary where landscape level ecological structures are expected to have a significant effect on variables such as species abundance and distribution (Fahrig, 2005). Where this is the case, success in conservation will require a shift from managing single species to entire ecosystems and from managing just parks to managing the land around and between parks, i.e. the whole landscape rather than fragments of it (With, 2005). Many protected areas are not solely large enough to preserve biodiversity over long time periods, with particular difficulties maintaining viable populations in the face of inevitable disturbances. We know that species can go extinct even when they exist within Protected Areas (PAs) (Wilkie et al., 2008), and we know that PAs are often too small to maintain evolutionary and ecological processes (Danby and Slocombe, 2005).

Advances in radiotelemetry in the 1960s (Rolstad, 2005) and spatial analysis technologies in the 1980s (especially Geographical Information Systems) enhanced the potential for conservation managers to understand how species interact with landscapes. In the Albertine Rift, for example, there is now a better understanding of how species such as elephants move around within landscapes (Plumptre et al., 2007, 2008) and there are plans to extend this understanding by, for example, tagging lions.

“For us, the landscape approach is based on the identification of threats and targets. First we identify the target, then the threats, and finally we work on mitigation strategies. Some conservation targets may be local, but threats are often external and operate on a wider scale, and so too must our efforts to reduce those threats.” Eugène Rutagarama, IGCP Director

The main ecological arguments for TBNRM are:

- Larger contiguous areas reduce the impact of disturbance on ecological communities, reducing the risk of extinction.
- Larger contiguous areas help to maintain viable populations, especially of large carnivores.
- Ease of control of pests and alien invasive species.
- Ease of control of poaching and illegal trades.
- Facilitation of adaptation to climate change, especially where species may be forced to migrate away from protected areas.
- Maintaining ecological processes and functions (though this is mainly a benefit where previously there were physical barriers to movement across borders).

Peace Building Rationale

There is an unfortunate geographical association between tropical forests and violent conflicts, including many conflicts in the vicinity of African rainforests such as in the Democratic Republic of Congo (DRC), Burundi, Rwanda, Liberia, Sierra Leone, Guinea and Cote d’Ivoire. Forests provide cover for rebel armies as well as lootable resources that can sustain armed conflicts. Their adjacent lands also harbour some of the world’s poorest people, providing opportunities for recruitment of soldiers, including children. José Kalpers (2001) notes that the Virunga massif is not only a magnet for military forces operating in the region, but also a refuge for civilians seeking escape.

Whilst conflict is often disastrous for conservation, post-conflict situations can be equally bad (McNeeley, 2003), with difficulties in natural resource management arising from: low capacity in state authorities, the removal of infrastructure constraints to resource extraction, the demand for land for returnees, the need to exploit resources to repay war debts, the need to bestow patronage on allies, the growth of the informal ‘war economy’, deepened dependence of local livelihoods on natural resources, slow recovery of civil society and insufficient power for local people to represent their interests through democratic channels. Perhaps of even
greater concern is the danger of a vicious spiral in which such weak post-conflict governance provides conditions that favour renewed conflict, such as deepening poverty and inequality. The post-war resource economy can be disastrous for the poor and can undermine long-term peace-building efforts, by exacerbating some of the very insecurities that fuelled social hostilities in the first place. According to some research, the window of opportunity for getting resource management right is fairly narrow, not only for sustainability but also for forestalling the likelihood of further grievance. Collier et al. (2003) found that 44% of countries having a violent conflict are back at war within 5 years of a cease-fire, whilst the World Bank found that 50% return to violence within a decade due to misappropriation of funds from natural resources.

Transboundary Protected Areas are seen by some stakeholders as a vehicle for breaking out from vicious cycles of environmental conflict and working for a more virtuous circle of environmental peacemaking. The main arguments for believing TBPAs capable of delivering such outcomes are that cooperative and effective natural resource management can help to support: the revenue base for strengthening the state; investment in development infrastructure and social provision; a focus for rebuilding civil society; and environmental peacemaking through addressing social inequality (Conca, 2002).

**Economic Development Rationale**

The third common rationale and objective for TBNRM is economic development, with opportunities arising out of the intended benefits of scaling up, the intended peace dividend and, more generally from cooperation across national borders. Placing an emphasis on economic development is a reflection of government and private sector priorities. However, it is also a rationale that is supported by a landscape perspective on conservation, in which conservation is understood to be dependent not only on protected areas but on the human settlements in which they are situated. For some stakeholders, economic development tends to be an end in itself; for others it tends to be more a means towards a conservation end, based on the assumption that economic development is a necessary condition for conservation oriented behaviour.

In relation to transboundary parks, economic benefits can arise from nature based tourism through the packaging of multiple sites and from easier movement between attractions. For example, one of the attractions to the private sector of the Great Limpopo Transfrontier Park was the possibility to market a ‘Kruger plus’ tourism package (Wolmer, 2003), whilst in the Albertine Rift, there is potential to package the combined attractions of the Semuliki Game Reserve, Rwenzori Mountains and Virunga National Park (Sandwith et al., 2001). The emphasis on tourism, especially in the Great Limpopo Transfrontier Park, has led to some concern about the motives and beneficiaries of TBNRM. Van Amerom and Busher (2005), Hughes (2003) and Wolmer (2003) all point to an explicit neoliberal ideology underpinning the peace parks movement, illustrated by a progressive commoditization of nature and commercialization of conservation. In Southern African TBPAs, the benefits of such commercialization have not always lived up to expectations, mainly because private sector investment has remained relatively low and growth in tourism has been modest (Van Amerom and Busher, 2005).

Set against the possible commercial gains from expanding conservation frontiers, it is important to consider the possible threats to local communities – ‘transboundary’ is typically applied to animals and governance arrangements, whilst for local people boundaries become less permeable leading to reduced livelihood options (Kayitare, 2005). The Southern African experience suggests that IGCP and partners need to recognize that the interests of stakeholders who benefit from tourism are not always aligned with the interests of other stakeholders and also that the promise of tourism expansion has sometimes exceeded the reality.

**Theorising TBNRM**

A basic ambition of TBNRM is to transform the relationship between transnational actors from competition/conflict to cooperation. Such a transformation is often presented as movement along a linear spectrum, with conflict at one end and cooperation at the other. For example, Sandwith et al. (2001) identify six ‘levels of cooperation’:

- No cooperation
- Communication
- Consultation
• Collaboration
• Coordination of planning
• Full cooperation

More recently, researchers studying transboundary water management have observed that ‘it is possible for states to engage in modes of high cooperation and high conflict at the same time’ (Mirumachi, 2007, p.4). This re-conceptualisation of the relationship between cooperation and conflict would seem highly pertinent for TBNRM in the Central Albertine Rift. Thinking historically, we might even propose that over time, border parks such as those of the Virunga massif have become arenas for increasingly securitised and even violent conflicts between states, at the same time as becoming arenas for progressively intense cooperation over park management. This is not to say that there is a positive relationship between conflict and cooperation but only to state that conflict and cooperation are not mutually exclusive and that it is an oversimplification to map them at different ends of a spectrum.

Lejano (2006) describes two models of cooperation that can explain the behaviour of actors in transboundary parks. The first model he describes as a ‘game-theoretic lens’ which essentially boils down to rational self-interest. From this perspective, stakeholders will move towards cooperation because the economic and other institutions become restructured in ways that make cooperation the best choice of action for all parties. Such restructuring can be achieved, for example, through revenue sharing agreements that ensure that both sides of a border will benefit from growth in total park revenue – ‘an emergent property of the system becomes a plus-plus outcome achieved in the context of a benefit sharing framework’ (Heyns et al., 2008, p. 381). This contrasts with a situation where there is no regime of cooperation, where the rational way to respond to others is through un-coordinated independent choice – or in other words, the Nash Solution (Dombromsky, 2008). Suppose there are a thousand people living around a forest and they don’t communicate and they don’t have enforced rules. From their isolated, individual perspectives, it is in their interest to take advantage of the resource by cutting trees – they receive all the benefit from the effort of cutting down a tree and if they don’t do it, others surely will. On the other hand it makes no sense for them to plant trees – because the benefit arising from their effort will be enjoyed – a long time in the future - by 999 other people. So the individually rational behaviour is to cut trees but not replant. Collectively, such ‘rational’ behaviour is of course disastrous - it is a ‘Nash Solution’ best known in conservation circles as the ‘tragedy of the commons’. Governance interventions, including rules about benefit sharing, can change the ‘rules of the game’, adjusting the economic structure of the situation in ways that favour behaviour that is collectively rational.

The alternative to emphasising economic rationality as the explanation for behaviour is to emphasise human relationships (Lejano, 2006). Building relationships between conservation partners entails going beyond developing mutual interests to developing mutual identities, which can be built around shared symbols such as the park or charismatic species such as the mountain gorilla. Activities implemented jointly, such as ranger patrols and gorilla censuses, enable participants on both sides of the border to see themselves as a group, with a collective identity. In a 2003 study of 136 transboundary park complexes, Zbicz found the presence of interpersonal contacts to be the strongest determinant of active cooperation (Lejano, 2006). Viewing cooperation through the lens of interpersonal relationships, with the strength of TB institutions linked to the breadth and
depth of these relationships, enables a better understanding of the importance of the past. With rational choice analysis, the past is largely irrelevant as current choices are based on expectations of future benefits. With an emphasis on relationships, the past is very important, because features of strong relationships, such as trust, build from past experience.

**Analysis of the Theme**

**The early years of informal collaboration**

Early attempts to develop bilateral and trilateral cooperation over park management failed to gain traction. For example, a tripartite meeting for Regional Development of Tourism met in Kigali in 1973 to develop a regional action plan, but failed to deliver action (d’Huart, 1989). IGCP’s predecessor, the Mountain Gorilla Project (MGP), was formed in 1979 with a mandate to work in Rwanda only. The need to operate across national borders arose from the MGP’s own experience of the realities of mountain gorilla conservation, but also from a growing awareness amongst other conservation agencies operating in the Albertine Rift. In the late 1980s, recognition of the importance of transboundary collaboration really began to take hold. In 1989, a regional forum for afro-montane forest ecosystems was formed and its first conference was held that year in Cyangugu, with follow ups in Bujumbura in 1992 and Mbarara in 1994 (Lanjouw et al., 2001). Also in the late 1980s, the EU was looking at ways of joining up its work in Eastern DRC and across the border in Uganda. The result was a recommended action plan that involved, amongst other things, the expansion of World Heritage Status across the border from PNVi into the Ugandan side of the ecosystem; the spread and harmonisation of gorilla tourism; harmonisation of management plans, and the establishment of a Regional Resources Management Committee (d’Huart, 1989).

War gripped the region in 1990, with the Ugandan-based RPF fighting for power in Rwanda. DRC was embroiled in its own problems, with economic and political crises leading to violent riots in September 1991, and the withdrawal of most donor agencies. Relations between DRC, Rwanda and Uganda were such that the borders were closed throughout the 1990-1994 Rwandan war. Set against this, it is really quite remarkable that the MGP partners were able to bring together the three Protected Area Authorities (PAAs) in 1991 and reach agreement on a conservation programme involving all three countries with an evolving framework for regional collaboration. At this point in the report, we need to highlight this as critical to the IGCP transboundary story. Learning lessons from the IGCP experience is in large part about trying to understand this achievement. In the remaining sections of this chapter of the report we continue to describe IGCP’s activities. In the chapter that follows we take a more analytical approach in order to get at that understanding.

IGCP’s early activities largely involved supporting the three PAAs, providing basic equipment which was frequently looted due to conflict. During 1991-1994, IGCP’s transboundary activities were largely confined to DRC and Rwanda, with bilateral meetings with representatives of the two PAAs and cross-border visits by field personnel. From November 1993 until the genocide of April 1994, there was a brief period of organising joint ORTPN-ICCN patrols with teams of around ten rangers spending about a week working and camping together. At that time, relations between Rwanda and Uganda were too poor to engage in these patrols. There was however limited cooperation between Congo and Uganda. For example, gorillas occasionally cross the border from Bwindi into the Sarambwe Forest Reserve, an event that has always caused great concern due to the lower level of protection in Sarambwe. When this occurred in 1993 IGCP were able to contact ICCN staff at Rumangabo who agreed to send a patrol to the area. In the later 1990s there were informal meetings between PAAs for QENP and PNVi, especially over the use of lake fisheries, but these did not always result in cooperation.

“The joint patrols worked very well for six months or so before the genocide. They were really quite remarkable – so much more effective, partly because each team wanted to show off to the others how good they were. There was real brotherhood in these events. I saw Congolese wearing Rwandan shirts and vice versa – they exchanged shirts like football players.” José Kalpers, Programme Manager African Parks Network and former IGCP Coordinator.

“The regional meetings were a foundation for building trust and collegiality. Friendships formed and wardens were able to deal with problems that otherwise might have involved the police. There were many examples of small conflicts being resolved when they were still small. For
example cows grazing on the wrong side of the boundaries had been exactly the kind of thing that had previously escalated into major incidents. Regional meetings had a deep impact”. Annette Lanjouw, Director Great Apes Program, Arcus Foundation and former Director of IGCP.

After the genocide, collaboration between Rwanda and DRC became more difficult as governments clashed over the refugee crisis and as DRC itself fell into civil war. By early 1997, with the fall of Mobutu, a rather better climate for cooperation had arisen (Kalpers, 2001) and the following became the principle IGCP facilitated activities:-

- **First and foremost, IGCP had national programmes in each country.**

- **Communication and information sharing.** PAA staff increasingly shared information with counterparts in neighbouring countries, including information on gorilla movements, poaching, and monitoring data. In the early years, when good relations between Rwanda and Congo were sealed by the friendship between Mobutu and Habyarimana, IGCP managed to negotiate a license for radio communication between Ruhengeri and Rumangabo, enabling daily communication. Whilst this has not been possible since the genocide, the use of cell phones and email has helped maintain and strengthen communication. This has made it increasingly possible to manage cooperatively potential conflict situations such as where gorilla groups crossed borders.

- **Bilateral meetings between Rwanda and DRC began in 1992, then later between DRC and Uganda, and finally regional meetings between the three countries started in 1995.** These quarterly regional meetings took place involving staff from headquarters and field offices from the three PAAs, organised, funded and facilitated by IGCP. As is still the case today, each meeting lasts two to three days and includes a focus on a particular theme, involving training and discussion. Themes have included, for example, Ranger Based Monitoring, enterprise development, law enforcement, ecotourism, disease transmission and peace parks.

- **Regional training programmes were developed, reflecting IGCP’s prioritisation of PAA capacity building both as a basis for national and regional management.** Programmes have included community conservation, Ranger Based Monitoring, gorilla tourism, foreign languages, and anti-poaching (Lanjouw et al., 2001).

- **Ranger Based Monitoring (RBM) was developed in PNVi DRC in 1997 and ‘regionalised’ through introduction to Rwanda and Uganda in 1998/99.**

- **Joint activities, including joint and then co-ordinated patrols, gorilla censuses, and anti-poaching activities.** Joint patrols were restarted after the genocide and by 2006 there had even been tri-national patrols. However, security forces raised concerns about crossing borders, particularly carrying arms, and co-ordinated patrols replaced joint patrols. Co-ordinated patrols between ICCN and ORTPN had been on hold since 2007 but began again in January 2009; they also continue between ORTPN and UWA.

- **Helping with equipment, including provision of GPS units, binoculars and digital cameras.**

- **Work with armed forces and other partners to improve the security of park staff and visitors.**

- **Sharing experiences of adopting community conservation interventions.**

“TBNRM has offered a chance for the three PAAs to learn from each other. For example, UWA’s experience of working with local communities has provided an example to ORTPN and ICCN, helping them to decide that building community benefits is the right way to progress”. Eugène Rutagarama, IGCP Director

**Formalisation and Institutionalisation**

UWA, ICCN and ORTPN have made considerable progress through informal and field level co-operation. Nonetheless, it became widely felt that the involvement of governments in more formal arrangements was a neces-
sary and viable progression, albeit with certain risks. In February 2001, the MacArthur Foundation funded a meeting of PAAs and NGOs to initiate a process of strategic planning for the entire Albertine Rift. The Albertine Rift Conservation Society (ARCOS) was selected to facilitate the planning process, together with a steering committee consisting of the Dian Fossey Gorilla Fund International (DFGFI), Institute for Tropical Forest Conservation (ITFC), Makerere University Institute of Environment and Natural Resources (MUIENR), Wildlife Conservation Society (WCS), IGCP and WWF. The MacArthur process was followed up with scientific assessment work and with A Framework for Conservation in the Albertine Rift 2004-2030 which established a set of objectives for the AR and six landscapes (named ‘planning units’) around which planning partnerships would develop (Figure 1). Planning Unit 2 of this Framework is the Greater Virunga Landscape.

In January 2004, a smaller scale Transboundary process was launched through a meeting in Goma facilitated by IGCP and attended by the Executive Directors of ORTPN, ICCN and UWA. This culminated in a Memorandum of Understanding (MoU) for the Central Albertine Rift Protected Area Network. As defined within this new process, the Central Albertine Rift included the six national parks that had made up Unit 2 in the MacArthur/ARCOS process, but not the forest and wildlife reserves. Perhaps for this reason, some people see the IGCP process as sitting within the 2004-2030 Framework whilst others see it as an alternative. Key elements of the MoU were an agreement to develop a Transfrontier Strategic Plan, an undertaking to co-ordinate management of the parks, and to establish the Transfrontier Core Secretariat (TCS), with two members from each of the PAAs and from IGCP. In October 2005, this MoU was further strengthened by the Tripartite Declaration of Goma, which stressed that efforts would be made to move towards formal agreement for transboundary management and to ‘lobby’ respective governments for financial commitment to implement the strategic plan. This declaration was signed by state ministers in charge of natural resource management from the three countries. In May 2006, directors of the three PAAs signed off on a Ten Year Transboundary Strategic Plan produced by the TCS with support from IGCP. At the same time, the directors also signed a Trilateral MoU on the Collaborative Monitoring of and Sharing Revenues from Transfrontier Tourism Gorilla Groups.

Figure 1. The 6 Planning Units contained in the 2004-30 Framework for Conservation in the Albertine Rift.

In January 2004, a smaller scale Transboundary process was launched through a meeting in Goma facilitated by IGCP and attended by the Executive Directors of ORTPN, ICCN and UWA. This culminated in a Memorandum of Understanding (MoU) for the Central Albertine Rift Protected Area Network. As defined within this new process, the Central Albertine Rift included the six national parks that had made up Unit 2 in the MacArthur/ARCOS process, but not the forest and wildlife reserves. Perhaps for this reason, some people see the IGCP process as sitting within the 2004-2030 Framework whilst others see it as an alternative. Key elements of the MoU were an agreement to develop a Transfrontier Strategic Plan, an undertaking to co-ordinate management of the parks, and to establish the Transfrontier Core Secretariat (TCS), with two members from each of the PAAs and from IGCP. In October 2005, this MoU was further strengthened by the Tripartite Declaration of Goma, which stressed that efforts would be made to move towards formal agreement for transboundary management and to ‘lobby’ respective governments for financial commitment to implement the strategic plan. This declaration was signed by state ministers in charge of natural resource management from the three countries. In May 2006, directors of the three PAAs signed off on a Ten Year Transboundary Strategic Plan produced by the TCS with support from IGCP. At the same time, the directors also signed a Trilateral MoU on the Collaborative Monitoring of and Sharing Revenues from Transfrontier Tourism Gorilla Groups.
Summary of the 10 year Strategic Plan

The plan establishes an institutional structure for implementation of TBNRM. This involves:

- Transboundary Inter-Ministerial Council: Representatives from the three relevant government ministries.
- The Transboundary Core Secretariat (TCS): The Executive Director and a Technical Associate from each PAA.
- The Transboundary Executive Secretariat (TES): This was not named as such in the Strategic Plan, but was referred to as a full time secretariat. Membership is three full time staff, one from each country.
- Four Regional Technical Committees: Research, Tourism, Community Conservation and Enterprise, Security and Law Enforcement. Membership consists of representatives from the three PAAs, plus six other members.

The plan is intended to work towards the objective of “Sustainable conservation of the CAR biodiversity for long-term socio-economic development through strategic transboundary collaborative management”. In building towards this objective, the plan identifies eight ‘key result areas’:

2. Landscape Management.
3. Effective Management Capacity
4. Collaboration
5. Law Enforcement
6. Education and Awareness
7. Economic Development
8. Financial Sustainability

In this chapter, we have summarised the context and development of TBNRM in the Central Albertine Rift. In the next chapter, we analyse this experience in more depth, identifying lessons for IGCP and for the wider conservation community.

Lessons Learned

An NGO-State Model of TBNRM?

At the beginning, IGCP partners did not conceive of a particular model for TBNRM – at least not in the sense of identifying and choosing between possible alternatives. Those involved in the early years refer to the very heavy constraints under which they operated, and which dictated the approaches taken. For example, more formal international agreement might have been a suitable starting point for some Southern African peace parks but was not an option in the Great Lakes region. Despite a reported lack of options, a distinctive (perhaps unique) model of TBNRM evolved. We call this model an NGO-State model. At the outset, we simply define this as a model of TBNRM with two basic features: first, that the process is initially led by an NGO (or NGOs), and second, that state agencies become the most important planning and implementation partners.

We propose that the NGO-State model is critical to understanding the successful development of TBNRM in a region experiencing conflict. We examine this proposal in more detail by looking at four elements of the evolution of TBNRM in the region:
1. **Leadership and partnership:** in particular, we reflect on the lessons to be learned from NGO leadership.

2. **Phases:** we employ this term to refer to the scales at which co-operation is active and the type of mechanism in place for co-ordinating this co-operation. Scales and co-ordination change over time and therefore the different ‘phases’ represent stages in the maturity of TBNRM. We tentatively suggest that these phases can be looked at alongside observed trends in the lifecycle of NGOs.

3. **Institutionalisation:** this is really one aspect of the co-ordination of collaboration, but its importance merits a separate section. It raises important questions about the fit between the administrative structures and the tasks at hand.

4. **Funding:** funding determines the kind of activities, the scale and structures that can be developed, as well as their sustainability. Here too, there are questions about ‘fit’, given that donor agendas and time-frames are unlikely to be optimal for all aspects of TBNRM.

**Leadership and Partnerships**

“It is a striking NGO-PAA partnership – striking and effective. It is both a realistic and an exciting model, especially for working with governments whose wider relations have been so difficult”. Giuseppe Daconto, CARE International, Kigali

Whilst it is common for NGOs to play some role in TBNRM, it is less usual for this role to be one of enduring leadership. Great Limpopo, the Nile Basin Initiative and other well known examples either began with government leadership or quickly moved towards it. Those interviewed provide three main sets of reasons for why this model has been effective: the context of the situation, the style of leadership, and the characteristics of IGCP.

With regards to the situation, it is recognised that the severe and prolonged instability in the region has required a facilitator which strives (with varying degrees of success) to be seen as neutral and to serve as a catalyst for dialogue and collaboration between the three PAAs and their supporting ministries. In other words, an NGO-State model is an appropriate ‘conflict model’ for TBNRM. With regards leadership style, previous Lessons Learned have reported in detail about IGCP’s mandate to work intimately with PAAs, helping to build their capacity and achieving equitable partnerships. We will not repeat the details of this approach here, but do stress that it is this strategy that underpins IGCP’s view of itself as a facilitator as much as a driver of TBNRM. With regards the characteristics of IGCP, we should remind ourselves that technically IGCP is not an NGO but a programme that is a product of partnership; this background has influenced IGCP’s cultural orientation towards working in partnerships. It is also noteworthy that IGCP has three very significant ‘parents’, providing it with a level of organisational credibility from its inception. Perhaps more importantly, these parents have worked together very well, reportedly with a level of trust and transparency that is not altogether typical of high level conservation coalitions.

Top: Christopher Masaba with the Uganda Wildlife Authority participates in the census of mountain gorillas in the Virunga Massif, here photographed in Volcanoes National Park, Rwanda.

Bottom: Census teams are comprised of members from all three countries. Here they break camp.

Photos provided by IGCP.
The lesson here is that, given a context of inter-state conflict, an NGO-State model of TBNRM can be effective in the short-term through commitment to equitable partnership. We are careful to emphasise that this model may only be suitable in the short-term as there is now an important question about how that model needs to evolve to reflect the improving relations between the three countries, the more balanced capacity across the three PAAs, and the wider evolution of the TBNRM model towards more formal institutions. For example, when reviewing the initial funding proposal for the DGIS project, the Dutch Embassy engaged IGCP in critical debate about the appropriate role for an NGO, a subject which continues to be debated intensely both within IGCP and between partners. The general consensus is that IGCP’s role will be increasingly one of supportive backstopping, and less that of directorship or even facilitator. This change in role has been in some measure driven by donor prescriptions but more importantly, and most satisfying, is the demand from the PAAs themselves, and most recently from the new Greater Virunga Transboundary Executive Secretariat (GVTES) which is in the process of developing the self-confidence to operate directly through the PAAs. How far and how quickly such confidence and capacity develops, remains to be seen, and there are certainly obstacles to this. Firstly, working through IGCP remains an easier option for many transboundary activities, simply because IGCP has the experience and capacity. Thus, for example, it remains relatively easy for wardens to organise joint patrols through IGCP, difficult to do this directly through PAAs, and probably inappropriate to do this through the GVTES. So there are interesting debates still to take place about the pace and extent of the transition to a secretariat that works exclusively with PAA line management.

A minority of respondents felt it would be a mistake for IGCP to fully hand over leadership, believing that if PAAs were left to manage the secretariat, political interference would weaken its neutrality and effectiveness. Whilst there is inevitably some nervousness about this important transition, we find the arguments in favour of IGCP continuing its strategy to empower the PAAs, and to support the institutionalisation of the GVTES to be persuasive. Vitaly, these strategies help to ensure PAA ownership of, and commitment to the transboundary process and to conservation in general. The removal of IGCP dominance in the process also makes it much easier for the secretariat to bring other players on board which is necessary for the effectiveness and sustainability of the collaboration. Clearly IGCP will maintain old roles and develop new roles as this transition evolves. As stated above, there are things that IGCP currently does more efficiently than other partners, such as facilitating joint patrols. IGCP will no doubt maintain some such transboundary functions, working under the mandate of PAAs. At the same time, once distanced from running of the secretariat, IGCP will be more able to advocate for its conservation objectives through the secretariat.

Phases

“TBNRM is not really a model for bottom up governance. It is more a catalyst for momentum around the park”. Anecto Kayitare, former Regional Transboundary Officer, IGCP, Kigali.

TBNRM is fundamentally about creating new scales of governance and managing links between scales. Transboundary co-operation can be active at a number of levels. At the local level, for example, there might be co-operation between park rangers to deal with problems arising from livestock grazing in border areas. Moving up a level, park level cooperation over organised trafficking of wildlife might operate through cooperation between chief wardens and district police chiefs. To collaborate over wildlife monitoring and census work might require moving up another level, to agreement between national PAAs, whilst co-ordination of tourism policies might require the involvement of ministers of state and perhaps regional forum such as the East African Development Community. The experience in the Virunga-Bwindi region reveals that the level or scale at which TBNRM activities is closely related to the institutional design and the means of co-ordination that is appropriate. For example, local level cooperation can be ad hoc and informally co-ordinated, whilst inter-ministerial cooperation normally requires more formal co-ordination through some form of signed agreement. In relation to TBNRM in the Central Albertine Rift, we identify three phases of TBNRM.

Phase 1 began at ground level with informal co-ordination, involving field activities of the three PAAs. As described above, this approach to TBNRM was adopted at a time when more formal, ministerial level cooperation was not possible.

“We have been developing transboundary collaboration for more than ten years and without politicians being involved it did work. It was important for UWA, ICCN and ORTPN to do this - it was important to them despite all the wars.” Norbert Mushenzi, Deputy Director, ICCN, Rumangabo.
**Phase 1: Operational Level, Informal**  
**Actors:** Guards, Rangers, Wardens, Chief Wardens, NGOs  
**Activities:** Co-ordinated patrols, law enforcement, monitoring and censuses, regional meetings, joint training, enterprise

**Phase 2: Ministerial Level, Institutionalised**  
**Actors:** PAA Directors, State Ministers  
**Activities:** Transboundary Secretariat, joint planning, World Heritage Site, revenue sharing, funding, emergency response

**Phase 3: Transfrontier Park**  
**Actors:** Ministers, Presidents  
**Activities:** Unitary authority and plan

Figure 2. Three Phases of collaboration in the Greater Virunga Transboundary Protected Area Network.

Phase 1 has involved some concrete achievements that have undoubtedly contributed to conservation effectiveness. These include:

- *Joint and then co-ordinated patrols,*
- *Regional meetings,*
- *Collaborations to fight against poaching and trafficking,*
- *Arrangements for helping injured and orphaned gorillas,*
- *Data sharing,*
- *Harmonised monitoring through RBM,*
- *Harmonised gorilla tourism protocol,*
- *Collaborative wildlife censuses,*
- *Learning and dissemination of community conservation practices,*
- *Revenue sharing with communities (Uganda and Rwanda),*
- *Conservation enterprise program,*
- *Activities to reduce human-wildlife conflict,* and
- *Work with armies and police forces to improve security for park staff and visitors.*

“If it had not happened, the fate of the gorillas in the Southern Sector would have been totally different. I am sure of that.” Jean-Pierre d’Huart, Conservation Consultancy Services, Belgium.

Phase 1 in the Virungas can be viewed as:-

1. *The only way TBNRM could have been attempted during the 1990s and early 2000s,*
2. *A success in its own right,*
3. *Having reached its limits,* and
4. *A necessary foundation for moving on to Phase 2 activities.*
In terms of reaching its limits, it has become clear that some desirable collaborative actions can be better facilitated through higher level involvement. Some of the things that require high level negotiation are quite simple improvements to the effectiveness of field operations such as joint (as opposed to co-ordinated) ranger patrols and shared radio frequencies. But there are also more complex matters requiring government commitment, such as the proposed extension of the Virunga World Heritage Site. Participants have noticed more and more ‘simple’ and ‘complex’ initiatives that would benefit from higher level political intervention and such observations have driven the evolution of TBNRM.

“When it comes to security problems, the big lesson is to implicate governments in collaboration. IGCP’s challenge is to facilitate improving the involvement of each country”. Charles Nsabimana, Law Enforcement Warden, ORTPN PNV.

“Gaining political will is crucial. If you have a government that is really behind you, saying that poaching must be stopped, then it will happen. It is about national polity – if the government is not involved then the people will decide. In Rwanda, it became relatively easy for me to arrest someone because the army was behind me and the police were behind me – because they know that the president supports this.” Justin Rurangirwa, former Chief Park Warden, ORTPN PNV.

In DRC, by contrast, it has emphatically not been easy for ICCN to uphold park rules, and the Congolese army has not always been supportive.

Phase 2 refers to the move towards formal agreements at a ministerial level. Whilst the first landmark of success was the signing of the 2004 tripartite MoU, it is vital to understand that it had taken 13 years to get to that point. We should also note that Phase 2 does not describe a move away from Phase 1 activities, but rather an additional set of relations and partners that broadens the scope of TBNRM, hopefully unlocking the potential for deeper cooperation at all levels. The two levels of operation are designed to be compatible and even synergistic, in the sense that high level and formal collaboration should protect the successful ground level activities. On the other hand IGCP and partners recognise that there is also a danger that formalisation can lead to loss of control at lower levels. For example, it was mentioned that it has become very complex to organise co-ordinated patrols now that you cannot simply work on a warden-to-warden basis across parks. There are also considerable financial costs arising from Phase 2 administrative structures, not least the three full time executives who manage the secretariat. So far, this has not subtracted from funds available from field level operations, because IGCP has been able to raise additional funds to pay for these costs, but this is something to monitor. The recent (February 2009) ministerial agreement that makes the secretariat a legal entity means that the GVTES can itself work to secure funding for core and other costs.

Phase 3 remains hypothetical although it very much exists in the imaginations of key partners in the Greater Virunga area. It refers to progression from cooperation and co-ordination over separate, contiguous parks, to the creation of an integrated Transfrontier Protected Area with unitary management authority. This would require agreement at presidential level. Whilst this remains some way off, it is viewed as both desirable and realistic in the longer term by many of those interviewed.

There are two points to make about this pyramid of Transboundary activities (Figure 2). In other contexts, especially under more peaceful conditions, it has been possible to begin with Phase 2 or even Phase 3 activities, although TBNRM is ultimately hollow if it does not eventually reach down to operational levels. Secondly, looked at as a progression from bottom to top, each new phase expands the range of activities and does not replace those of the previous stage.

Whilst an investigation of NGO life-cycles is beyond the scope of the present study, it is tempting to suggest a relationship between the evolution of TBNRM and the evolution of IGCP: in particular, both have grown and both have become more formally structured. Previous studies of NGOs have tried to identify generic stages of NGO life, such as Avina (1993) who suggested a four stage life-cycle of start-up, expansion, consolidation and closeout. Others have related organisational stages to types of leadership and institutionalisation: at the foundational stages of NGO life there tends to be heavy reliance on charismatic leadership and relationships tend to be personal and informal. During expansion, partnerships become more complex and staff become more expert and specialised, leading to the need for more formal structures (Siddiqui, 2000).
Institutionalisation

It has become felt that Phase 1 approaches to TBNRM have suffered from the reliance on personal relationships between individuals and that more formal structures are needed. For example, when a chief warden changes, there is a feeling that it takes significant time and effort just to regain the level of trust and cooperation achieved prior to the change.

“Institutions are the key to TBNRM, especially government ones. They are more stable than individuals who move away and more stable than NGOs who depend on short-term funds.”
Arthur Mugisha, IGCP Programme Manager, Kigali.

There are two key aspects of what we here term ‘institutionalisation’. The first refers to the organisational structure and the second, the legislative structure. The organisational structure is centred upon the Greater Virunga Transboundary Executive Secretariat (GVTES) which came into existence in February 2008 and which gained a legal personality a year later. A permanent and independent secretariat was selected, with one full time staff member from each country, and a permanent office in Kigali. There was some consideration of alternatives to this model, including the use of staff seconded from the three PAAs, and hosted by each PAA in rotation. This is a model that was initially used in Great Limpopo. However, it was felt that a permanent and autonomous secretariat could more easily be perceived as neutral, even given the caveat that it would have to be physically situated in one place.

The creation of an international secretariat has the potential to resolve some of the problems associated with reliance on individual relations. Organisations can themselves develop memories, relations and norms, and these form part of a dynamic that is bigger than any component individual. On the other hand, the creation of an international institution provides no guarantees of improved cooperation or management and the effectiveness is likely to depend on whether the design of the institution fits the purpose and the context (Dombrowsky, 2008). The institutional design of the GVTES will ultimately be measured by its effectiveness over a long period. The early signs are widely viewed positively, with a few issues that will require monitoring. Perhaps the key concern is that the orientation of the TES is currently determined by the project that provides its funding. This has a number of implications for its sustainability, for IGCP’s relationship with it, and for its work plan. With regards the work plan, a tension between the TES role as project implementer and its wider role as the co-ordinator of transboundary collaboration has just begun to emerge and will be one of the delicate challenges to be negotiated in the coming months and years. The difficulty is that the TES is a small team with a large, 4 million Euro project to deliver on. That project does not only require delivery on process-oriented objectives related to developing TES capacity, such as securing its own legal status and its own long term funding arrangements, but also delivery on substantive operational outputs including expansion of park-community revenue sharing schemes. What remains to be determined, is how the TES staff can fulfil their role as project implementation team whilst also maintaining the space to think and act more strategically for the planning of TBNRM across the Greater Virungas and indeed across the Central Albertine Rift and beyond. It is clear that one of the strategies for fulfilling these roles will be the continued and growing partnership with a range of highly experienced partners operating within the Central Albertine Rift landscape.

The second aspect of institutionalisation worth mentioning here is the type of agreement needed to operationalise the activities of the secretariat, and the legal status of the secretariat itself. The current MoU and Tripartite Declaration offer non-binding commitments to strive towards collaboration, but there is a desire for more robust agreement. During the December 2008 meeting of the secretariat, three principle options were considered:-

1. A negotiated signed treaty creating the GVTES. This would be negotiated at presidential level (although Uganda’s constitution does allow for delegation). This is the deepest level of commitment as its ratification would result in binding legal agreement to implement the content of the treaty. Such treaties have been employed elsewhere, for example to create the Kgalagadi Transfrontier Park.

2. A less substantive treaty, providing the GVTES with a legal personality but committing countries only to co-operation and not to a set of binding actions. The Nile Basin Initiative is an example of a real, functional agreement that nonetheless lacks formal treaty that determines use of the Nile.
3. Establish the GVTES as an NGO. This was not seriously considered as the secretariat would then lack state authority.

Whilst option 1 was considered the most desirable, consensus was easily reached to go for option 2 as an immediate step. This was largely due to the prevailing political situation in which it would be unrealistic to get Presidents Kabila, Kagame and Museveni to meet to negotiate park management. It was also clear that option 2 does not preclude a later attempt to negotiate a substantive treaty.

Whilst the political situation may not currently favour a treaty, it is not the only issue that will eventually need to be resolved. One issue is that Uganda has developed a much stronger legal framework for environmental management and it will be hard for DRC and Rwanda to operate to a harmonised standard. Uganda’s 1991 National Environmental Action Plan and the 2004 Environmental Management Policy provide the kind of frameworks that cannot be reproduced overnight in other countries. A broader issue relating to developing a binding treaty is finding the right balance between the constraints of legally bound collective action and the ability of nations to respond to their own needs. For the Nile Basin Initiative, for example, some consider that a treaty might reduce the ability of nations to develop decisive mechanisms for adapting to climate change.

Funding

The move from Phase 1 to Phase 2 has involved the establishment of a secretariat with considerable core costs. This has a number of implications.

- First, as mentioned, it required donor funding and therefore tied the GVTES to delivering on a four year project in parallel with its wider commitment to a ten year plan across a bigger geographical area.

- Second, the shift creates wider opportunities for leveraging funds, for example DRC has approached donors such as the European Union’s National Indicative Programme and the French GEF programme.

- Thirdly, fund-raising might be easier for work in mountain gorilla habitats, raising the issue of how funds are distributed within the Central Albertine Rift, especially if further progress is made towards integration within a single management structure.

- Fourthly, and a more immediate agenda item, the GVTES is seeking a mechanism for funding core costs beyond the Dutch project period.

Indeed, the Dutch project requires a mechanism to be identified during the second (current) reporting period, based on a commitment from the PAAs to fund it themselves. During the December 2008 meeting, PAA representatives expressed good intentions towards such funding although it should be recognised that finding funds is not easy given that budgets are tight and PAAs are expected to be largely self-funding.

Cooperation and Conflict

In academic parlance, institutions refer not so much to organisations as to the ‘rules of the game’ - the formal and informal rules that determine how
actors can and should behave. Thus, cultural taboos against killing and eating gorillas are institutions, as are the judicial laws that forbid this. In the process of this study, we have learned that this aspect of institutionalisation is just as important as organisational structure, because, depending on the nature of rules, different actors can be encouraged either to co-operate or compete. As was detailed earlier, inappropriate rules of the game can lead to competitive behaviour that result in ‘tragic’ environmental outcomes for all parties. In this section, we offer two main explanations for the successful growth of co-operation. The first considers more structural explanations for co-operation (and conflict), including rules of the game and the exercise of power. The second is about the importance of relationships between both individuals and organisations.

**Structuring the game**

In areas with a recent history of violent conflict, theory suggests that parks in border areas might best be committed as neutral buffer zones without shared activities. The premise for this is that any shared activity (such as tourism revenue sharing) presents an intolerable potential to trigger conflicts. For example, the demilitarised zone between North and South Korea remains vacant and is considered to have made a lasting contribution to peace because there are no activities there (Lejano, 2006). However, there are cases in which the risk of creating hostility is tolerated in lieu of the greater potential reward to be gained from creating an area of active cooperation, such as the case of the Red Sea Marine Peace Park between Jordan and Israel (Lejano, 2006) and the proposed peace park at the Golan Heights between Syria and Israel. There is a large body of research that investigates the conditions under which stakeholders successfully cooperate to manage environmental resources. Here we consider four such conditions: communication, mutuality, rules and ownership.

**a) Communication.**

One of the lessons from the ‘tragedy of the commons’ (Hardin, 1968) is that the likelihood of ruinous non-cooperative behaviour is increased by an inability to communicate and an absence of trust. Through the well known Prisoners’ Dilemma game, for example, theorists show that two prisoners confined in individual cells and unable to communicate, make decisions that appear rational to each alone, but when combined, become poor. It is perhaps not surprising then that IGCP’s work to bring about TB communication, through regional meetings, and more recently through the TCS and TES meetings, is widely believed to have been critical.

**b) Mutuality.**

Another lesson is that stakeholders are unlikely to invest heavily in protection of a resource when the benefits of this effort will fall to others. IGCP has supported the introduction of mechanisms for distributing the benefits from tourism and this has been an important step towards structuring ‘the game’ in ways that ensure that all players believe that they will be beneficiaries of conservation behaviour. Firstly, there are mechanisms for Revenue Sharing within individual countries (Uganda and Rwanda), whereby revenue from park-based tourism is shared with local communities. Secondly, and of most relevance to TBNRM, IGCP facilitated the signing in 2006 of the ‘Tripartite Memorandum of Understanding on the Collaborative Monitoring of and Sharing Revenues from Transfrontier Tourism Gorilla Groups’ which allows for sharing of revenue between countries, where groups of gorillas habituated in one country have crossed over into a neighbouring country. This latter scheme is considered an important component of TBNRM in the Virunga landscape:

> “Due to the gorilla revenue sharing agreement, all sides have an interest in gorilla safety. They used to be suspicious when habituated gorillas crossed boundaries, for example thinking that the Rwandans had used sugar canes to entice the Nyakagezi group across from Uganda.”
> James Byamukama, IGCP Programme Officer, Kabale

> “50% sharing of gorilla revenue can create a lot of peace!” John Makombo, UWA Deputy Director, Kampala.

Such attempts to assure mutual benefit from TBNRM stands in contrast to the concerns about asymmetrical benefits in Limpopo where South Africa is perceived to benefit most from the transboundary tourism package (Wolmer, 2003).

**c) Rules.**

Consistent and well defined rules are seen as essential pre-requisite for collective action. Again, revenue sharing is an example, but so too is the harmonisation of the standards for tourism. The tripartite agreement is
itself an important step towards creating a formal institutional context that favours cooperation and the on-going project to incorporate PNV and Mgahinga parks into the Virunga World Heritage Site will go further to establish harmonised commitment and rules.

d) Ownership.

The structure of the current TES and TCS provides for co-ownership of the TBNRM process.

“It does not make sense for a PAA Director or Minister not to cooperate with the strategy – they would be killing their own baby.” Tom Sengalama, Executive Secretary, GV'TES.

“There is no question about our commitment to making this sustainable – it is our own creation.” Moses Mapesa, Executive Director, UWA.

Despite these important attempts to establish conditions favourable to collective action, we should note that valuable resources will continue to present possible causes for disagreement. This is not just about gorilla tourism, but other revenue from donors and from exploitation of charcoal, coltan, oil and other mineral resources. Issues that might require some debate include:

- Whilst gorillas provide a powerful basis for cooperation, there may in future be an issue about the extent to which gorilla habituation continues. Whilst over 70% of gorillas in the Virunga massif are now habituated, conservation groups are likely to resist such a high rate for Bwindi.

- Another issue raised by respondents was the wider issue of the distribution of any revenue generated directly through the secretariat. For example, if it were money for the Virunga Massif, would Uganda warrant an equal share despite the small size of Mgahinga?

- In the wider Central Albertine Rift, oil is viewed by some as a potential source of conflict, especially in the Lake Albert area between DRC and Uganda.

Relationships

“One day you start to market one another instead of making yourself look good by making others look bad”. Kule Asa Musinguzi, Chief Conservation Warden, BMCA.

Whilst an emphasis on institutional structures can help to explain the ability to reconcile material interests, especially over mountain gorilla conservation, it omits an important component that has been articulated by nearly everyone we have spoken with: the importance of relationships. It is clear that we need to go beyond explanations found of game theorists, based on an understanding of actors acting rationally and materially. It may be that transboundary parks work precisely where the behaviour of actors is driven not just by mutual self-interest but by the ways actors relate to each other and operate in union with each other (Lejano, 2006). The kind of relationships that might be important to TBNRM are those between parties at a range of scales, from individuals operating in the field, up to large state ministries.

IGCP’s regional work since 1991 has served to create a platform for relationship building in two key ways. First, it has created the opportunity for engagement in a range of joint activities such as planning meetings and wildlife monitoring. Second, by reconfiguring the parks in people’s imagination – from separate parks to an integrated landscape. This way of thinking, acting and talking about the Greater Virunga landscape creates a single focal point (a single conservation target) around which PAA staff can build shared professional identities. Theorists such as Lejano (2006) suggest that having such a basis for building a shared identity is an important aspect of relationship building. A simple way of thinking about this is that it provides an arena in which staff can perceive themselves as part of the same group, rather than members of different groups. The mountain gorilla is itself an important shared symbol that facilitates the forging of shared identities: an opportunity for individuals to define their identities as professionals seeking to protect this species.

When social psychologists refer to inter-group relations, they tend to ascribe conflict to situations in which people are perceived according to their group, rather than as individuals (Martin, 2005). Hence, where wardens see their international counterparts as ‘Rwandans’ ‘Congolese’ or ‘Ugandans’, rather than as unique individuals, or as committed conservation professionals, they are less likely to co-operate. Drawing further on this literature, we now seek to understand the achievements of transboundary work by considering one type
of situation that is widely felt to deepen and entrench inter-group hostilities, and by contrast, a set of interventions that are widely felt to relieve them.

**a) Relative Deprivation as a Barrier to Co-operation.**

Conflicts can be entrenched by perceptions of ‘relative deprivation’ – the perception that your group is gaining less benefits, bearing more costs, or in some way being treated less well than the other groups. Even quite trivial differences can be perceived as important and hamper efforts at cooperation (Jackson and Smith, 1999). This is critical for IGCP and for the GVTES who are acutely aware of the difficulties of achieving equality of benefits for DRC. There are a number of reasons why some stakeholders perceive DRC to get less from transboundary conservation than its partners:

- There is no national Revenue Sharing scheme yet, for sharing tourism revenues with local communities;
- Many NGOs won’t work there;
- Renewed fighting in October 2008 led some NGOs to withdraw their funding;
- The security situation makes it extremely difficult to sustain community conservation projects;
- There are few prospects for tourism development in the near future;
- The location of IGCP and the GVTES in Rwanda;
- The nationality of IGCP leaders.

For its part, IGCP has worked hard to try to equalise benefits, ensuring that at least a fair share of core funds is allocated for DRC, but of course it cannot dictate the spending of its donors.

“We are trying to rise above political sentiments – to forget nationalities and think about professions. But people ultimately gravitate towards national identities. For example, with money from the Buffett Foundation we agreed to invest in tourism in DRC, but then due to security problems we took the money to Uganda. We could see that people in DRC were hurt and could feel it in relationships.” Arthur Mugisha, IGCP Programme Manager, Kigali.

**b) Shared Activities as a Stimulant to Co-operation**

Conflicts can be alleviated through the use of well-tested strategies which include:

1. Face to face contact to establish shared goals,
2. Cooperative activities in pursuit of these goals,
3. Equality of status during meetings,
4. Support from relevant authorities and/or an independent facilitator.

(Hewstone and Greenland, 2000; Fiske, 2002).

When we look back at Phase 1 of TBNRM, we can see that the regional meetings, joint patrols and other shared activities fitted very precisely with these well established approaches for building inter-group co-operation.

“More structural things have also happened but these regional meetings were the roots: they had a deep impact”. Annette Lanjouw, Director, Arcus Foundation Great Apes Programme; former Director of IGCP.

“It has been about confidence building through continuous interaction. At times we thought that others were bad, but this changes when you have met them a few times”. Kule Asa Musinguzi, Chief Conservation Warden, BMCA.
“TB management is a good tool for bringing together the park – for having things to do together. We don’t think of them as from another country”. Charles Nsabimana, Law Enforcement Warden, PNV.

One key aspect of relationship building is IGCP’s own relationship with PAAs and other close partners. Relationships are built at multiple levels and, importantly, over long periods of time.

“We capitalise on what we have – history - even when there is fighting going on”. Altorm Musema, IGCP Programme Officer, Goma.

“The long duration of our work leads to credit. We maintain a presence and we build credit and draw on this when necessary”. Thierry Bodson, Programme Coordinator, WWF, Goma.

Such credit does not always have immediate impacts, but it will often show through. For example, Eugene Rutagarama, the current IGCP director recalls attending a meeting in Naivasha, Kenya in 1999 to discuss the World Heritage Site, at a time when relations between Rwanda and DRC were poor. The presence of Eugene in this meeting was not accepted by his DRC colleagues and he had to leave, but later that evening ICCN colleagues came to his hotel and apologised because they knew that they were really on the same side. Relationships based on professional respect may suffer as a result of political events but they do not disappear overnight.

The significance of building historically deep relationships is well illustrated through comparison with the process for co-ordinating the 2004-2030 framework for the whole Albertine Rift. As mentioned earlier, the co-ordination role was given to ARCOS, and they have recently faced difficulties with reaching signed agreements that contrasts with the speed of progress with the Greater Virunga process. For example, recent attempts to get ORTPN to sign a data sharing agreement have so far failed, arguably because ARCOS don’t have the historically rooted relationships of trust with PAAs, and are therefore forced to seek formal agreements before they have established the kind of relationships that seem capable of cutting through bureaucratic sinkholes. Both IGCP and the GVTES have structured their staffing to help with such relationships, for example it remains necessary to have IGCP staff representing each country, and to have a GVTES with staff from each country. This is not just about having country expertise, but also recognition of the need to avoid perceived bias and that it is sometimes useful to have a Ugandan to negotiate with Ugandans, and so on.

“Dealings between countries can be very difficult when they are fighting. One of IGCP’s strategies is to empower local staff who can manage these politics. It is easier for them to gain trust and easier for them to lobby – they can really say things how they are.” Augustin Basabose, IGCP Conservation Science Officer, Goma.

Finally, we tend not to highlight leadership when looking for ‘lessons’ about conservation effectiveness. This is for the obvious reason that it is so hard a condition to replicate – it is not very useful to be told that ‘good leadership is important’. But nonetheless, consistent fairness and commitment in leadership plays an important role in achieving trust and co-operation, especially when political events threaten to undermine this.

Scale and Function of TBNRM

IGCP was formed to support the protection of mountain gorillas and their habitats. Regional activities were implemented because mountain gorillas are a transboundary species. In other words, IGCP defines the appropriate scale of observation and intervention by looking through the particular lens of its conservation target and, within limits, the threats facing that target. On the other hand, the PAAs and some of the other NGOs that IGCP works with have a rather different way of seeing and defining the conservation landscape that, for example, takes into account a wider range of species that rely upon transboundary conservation. Plumptre et al. (2008) lists the following as species that require a transboundary landscape in order to survive in the Central Albertine Rift: elephants, hippopotami, lions, leopards, hyenas, golden cats, chimpanzees, gorillas, giant forest hogs and topi.

As has been described, the MacArthur-ARCOS process developed a 30 year plan for the entire Albertine Rift. However, scaling up conservation governance involves increasing the number of nations (Burundi, DRC, Rwanda, Tanzania, and Uganda), and the range of stakeholders, of land uses and tenure arrangements, and so on. In
other words, governance of a complex mosaic landscape becomes extremely complicated. For practical purposes, the Albertine Rift was therefore divided into 6 management units, including the Central Albertine Rift which was defined as a conservation landscape made up of:

- Virunga NP (DRC),
- Volcanoes NP (Rwanda),
- Mgahinga Gorilla NP (Uganda),
- Bwindi Impenetrable NP (Uganda),
- Queen Elizabeth NP (Uganda),
- Ruwenzori Mountains NP (Uganda),
- Semuliki NP (Uganda),
- Kibale NP (Uganda),
- Kasyoха-kitomi forest reserve (Uganda),
- Kalinzu forest reserve (Uganda),
- Kyambura wildlife reserve (Uganda),
- Kigezi wildlife reserve (Uganda).

In theory, there are now four transboundary governance scales that include IGCP’s focus on mountain gorilla habitats:

- The smallest unit is IGCP’s own regional programme focused on mountain gorillas (the first four parks on the above list).
- The Central Albertine Rift Transboundary Network as defined in the Ten Year Plan and co-ordinated by the Transboundary Core Secretariat and Executive Secretariat (the 8 National Parks on the above list) (Figure 3).

- The Central Albertine Rift unit as defined by the MacArthur-ARCOS process (all protected areas in the above list).
- The Albertine Rift as a single unit (the above plus five other planning units).

This rather complex nesting of governance arrangements raises two important issues that we turn to now.

**From Gorilla-scape to Landscape**

The GVTCS/TES officially operates across 8 national parks from Volcanoes National Park, Rwanda in the south to Semuliki National Park, Uganda in the north. However, the TES is funded under a donor project that focuses only on the three southernmost parks. We have already considered the difficulty for the TES to work on more strategic planning issues, including the co-ordination of activities across the Central Albertine Rift, whilst it is busy meeting legitimate project outcomes. It is probably also fair to say that, so long as the TES remained very close to IGCP, it would not have been pushed to look further north for partnership. Nevertheless there is a wide belief, especially in the northern sector, that:
• North and south should become more integrated within this process, and

• That the TES has now begun to facilitate this, for example through contact with the Wildlife Conservation Society.

WCS have been playing a co-ordinating role along the Uganda-DRC border areas and more recently with Sudan, and will be a crucial partner in any unification of transboundary governance across the Central Albertine Rift.

“Queen Elizabeth, Rwenzori etc all share borders. It would be a huge benefit to Uganda if we expanded transboundary management so that all these came together”. Kule Asa Musinguzi, Chief Conservation Warden, BMCA.

Figure 3. The Central Albertine Rift Transboundary Protected Area Network. Source: Ten Year Transboundary Strategic Plan 2006-2016.

The decision to include only National Parks within the TES planning mandate may be prudent in the short term in light of our comments about the complexities of incorporating territories under different land uses, tenures and management regimes. In the longer term, however, this is likely to be reviewed in favour of a more pure
Beyond the Transboundary Protected Area?

“The century of working inside parks to conserve wildlife has ended. Conservationists have learned that to conserve wildlife and other valued biodiversity we must now work outside of parks and reserves in complex areas designed for economic development.” (Wilkie, Adams and Redford, 2008, p. 3)

Whilst this is not intended as an obituary for conservation within parks, the arguments for working beyond park boundaries are well established and were even visible in the rise of community conservation in the 1980s. There are three principle arguments for thinking and operating beyond park gates, and beyond the ‘fortress’ model of conservation that these gates represent. The first and most familiar is that the PAs are too small for long term viability of some target species. The second is that there is unavoidable connectivity within landscapes and that resilience is a feature of social-ecological systems rather than something that can be achieved for isolated system components. The third point is related to this and became popularised through the 2005 Millennium Ecosystem Assessment (MEA) which emphasised the value of ecosystem services. These are functional dynamics of ecosystems that are demonstrably beneficial to humans (Westman, 1977; Myers, 1997). We are beginning to learn how biodiversity contributes to these functional dynamics, providing an understanding of both the processes and the scales at which biodiversity conservation contributes to human wellbeing.

Figure 4 indicates the link between ecosystem services and human well-being. It also highlights that the drivers of ecosystem change, both the direct drivers and the indirect processes that underpin these, originate beyond park boundaries.

As this quote suggests, if a landscape perspective is to be genuinely engaged, it requires a radical change in the way that conservationists perceive their role in a bigger economic picture characterised by livelihood insecurities that will not be addressed even by the more community-oriented conservation interventions. These are quite profound and difficult points for conservationists to engage with. Some of the basic premises are beyond

---

Figure 4. Ecosystems and Human Well-being (Adapted from Millennium Ecosystems Assessment, 2005).

“If you zoom in on the park, the question is conservation; if you zoom out, you are no longer talking about how you share some small revenues, but about the future of conservation in the long term scenario for the landscape. What is driving change in the landscape? It’s not just parks and reserves. What is the economic answer for the landscape? It won’t be just parks and tourism.” Giuseppe Daconto, CARE International.
doubt: that conservation of targets often depends on whole landscapes, including agricultural areas around and between PAs; that threats to the park are driven by sometimes distant events and processes that impact on the choices that people have about how to interact with the parks; and that conservation will not itself provide economic solutions for landscapes. The creation of the GVTES provides an opportunity for a broader-based partnership for the landscape and a way for IGCP to think and operate at this scale whilst also retaining its focus on a single species that is widely regarded as a source of strength.

At Great Limpopo, there are two geographies of scale: the first defines a transfrontier park, the second a much larger ‘transfrontier conservation area’ that covers a whole landscape, beyond park borders (Spenceley and Schoon, 2007). However, extending conservation beyond the park boundaries has proved extremely sensitive for those making a living there (Wolmer, 2003; Hughes, 2003; van Van Amerom and Buscher, 2005). Thus, whilst the technical arguments for addressing whole landscapes are persuasive, the consortium of partners working for the GVTES would need to pay careful attention to the process and the nature of such expansion. In Limpopo, the perception is of conservation agencies expanding their own interests and overpowering other constituencies.

**Scale and politics**

Constructing a scale of governance is an inherently political act that requires careful negotiation. An example that underlines this point was the decision about who would co-ordinate the larger process of Transboundary management for the Albertine Rift. In some ways, IGCP or WCS would have been more obvious candidates for this due to their history with regional conservation, their established relationships of trust with PAs and their proven capacity. And yet it was readily agreed that ARCOS would take on the role, despite more limited history and capacity. Part of the resistance to IGCP taking a lead came from other conservation NGOs. What is typically referred to as ‘NGO politics’ arose from concerns about IGCP exerting its influence beyond its Virunga heartland, which some would have perceived as a display of IGCP hegemony. Competition for funds may also underpin such concerns because whichever NGO can claim credit for leading such an initiative is likely to gain some fund-raising advantage. Seen in hindsight, this is a lesson in how politics can effect quite profound decisions that determine the direction and ultimately the success of TBNRM initiatives. However there was also understandable resistance within the IGCP partnership, for example from FFI, who envisaged that taking on this role would dilute IGCP’s focus and effectiveness.

**Environmental Peacemaking**

Whilst some commentators remain rather skeptical of the peace and security potential of TBNRM (e.g. Wolmer, 2003), others consider that the institutional changes that are part of the process can genuinely contribute to a transformation from insecurity to peace (Ali, 2007; Hammill and Besancon, 2007; Lejano, 2006). As we have seen in this study, conflict and cooperation live side by side in the Albertine Rift, and there is no simple movement along a pathway from conflict to cooperation. In the first part of this section, we review the ways in which TBNRM has facilitated inter-state cooperation over conservation at the same time as those states have been in political dispute. In the second part, we ask whether this successful level of intervention has an impact on the prevailing security situation. In other words, is there a contribution to peacemaking?

**Conflict and Conservation**

IGCP’s experience of supporting conservation during conflict and post-conflict situations has been reported in detail elsewhere (Lanjouw, 2003), as has the impact of conflict on conservation in the Virungas (Kalpers, 2001; Kalpers et al., 2003; Glew and Hudson, 2007). We will not revise this literature here, but we will attempt to bring the story up to date by reflecting on IGCP’s role in the North Kivu conflict since September 2007. In that month, the CNDP, under the rebel leader Laurent Nkunda, took control of the Mikeno sector of the PNVi. Whilst most of the rangers fled their posts, 16-20 remained in occupied territory. For political reasons, ICCN were unable to communicate and cooperate with these rangers, and therefore IGCP took the step of making contact, with consent from rebel leaders, and eventually supported the rangers with food rations and equipment. This situation initially created some tensions between IGCP and ICCN which eased somewhat following a meeting in Goma in January 2008. In the overall picture, ICCN was left with no access to Mikeno and no direct communication with rangers who remained under Nkunda’s occupation – clearly an intolerable position which raised grave fears about the safety of wildlife.
The CNDP are not seriously co-operating over conservation as they won’t respect ICCN or the remaining rangers that they are controlling. We have had no access to the sector since 2nd September 2007 and communication through IGCP is not enough for us”. Norbert Mushenzi, ICCN Deputy Director, PNVi South, Rumangabo.

In October 2008, the situation worsened once again, with the CNDP taking the area around Rumangabo, forcing the park headquarters to be abandoned. In late November, around 200 ICCN staff fled across the border into Uganda whilst others remained with their families in refugee camps. In the face of this fresh intensification of violence, IGCP decided to maintain contact with the CNDP and continued to support the rangers. At the same time, they brokered the opening of direct communications between ICCN and CNDP leaders. The IGCP Director also travelled to Rumangabo soon after ICCN had re-occupied the park headquarters, to help develop an emergency plan for supporting ICCN activities. Since then, there has been regular communication and in January 2009, ICCN and IGCP were able to arrange a survey of habituated gorillas in Mikeno sector, finding 81 habituated gorillas in the sector (compared to a 2007 count of 72). The Congolese and Rwandan armies are undertaking joint operations against the FDLR (a Hutu rebel force and a principle enemy of the CNDP), have captured Laurent Nkunda, and there are glimmers of hope. Nonetheless the situation is extremely tense.

The vacuum of authority and the war economy have proved a great threat to the park. Whilst the survey confirms that the rebels have not harmed gorillas, conflict has seen a surge in poaching and trade in charcoal. Conflict and corruption associated with these park resources have also been linked to the execution of at least ten gorillas in July 2007, just prior to Nkunda occupying the area. One of the great current concerns is the looming fuel wood crisis, driven by the rapid population growth of Goma from 200,000 to 600,000 in the last decade, the demand from large refugee camps and from armies, and the continued illicit trade in charcoal domestically and to Rwanda. Eucalyptus plantations are in many cases exhausted and there is little alternative to wood and charcoal as a fuel. At the meeting of the GVTCS on December 1st 2008, the Congolese delegation and IGCP presented the current situation to the secretariat who devoted part of the meeting to identifying collective actions to offer moral and material support to ICCN.

The key thing to consider here is IGCP’s response to this crisis, set against its role as facilitator of TBNRM. It has been an effective action that emphasizes the unwavering focus on mountain gorilla monitoring and protection. And it has been a bold intervention because of the political tightrope it traversed. In a nutshell, many observers of the war see the CNDP as having the backing of Rwanda whilst the FDLR are supported by the Congolese army. Thus it can be characterized as a continued Tutsi-Hutu war that has spilled across the border into DRC, and as a war by proxy between Rwanda and DRC. IGCP is already perceived as being Rwandan-oriented due to its pre-1991 origins, its location and its leadership. It was therefore bold in the sense that it exposed itself to possible misinterpretation and smear campaigns by being so overtly linked to the CNDP. To have emerged from this situation with distinction, having resolved many (though inevitably not all) of the suspicions within ICCN, is a credit to IGCP’s leadership.

One thing that enabled IGCP to facilitate conservation in rebel occupied territory was its NGO status. That may seem obvious, but it also raises two
important and related questions:-

- First, given the current situation of conflict, can TBNRM operate without an NGO facilitating? Or put another way; is it too early for IGCP to consider scaling back its role?
- Second, if IGCP is to remain free to act boldly in the face of political crisis, will it have to distance itself in order to protect the TCS’s perceived neutrality?

Contribution to Peacemaking

“I am often asked how co-operation over gorilla conservation can be used as an entry point to facilitate wider government discussion about peace”. Katie Fawcett, Director, DFGFI Karisoke Research Centre.

The fact that TBNRM is capable of getting officials from the three countries to sit down and talk to each other is a good thing, but those who participate in this are not the same people who sit down and make decisions about security. How then, if at all, can transboundary conservation contribute to peacemaking? At local levels, we can point to specific examples of how conservation interventions and governance structures have resolved conflicts (e.g. over habituated gorillas crossing borders) or occasionally stimulated minor conflicts (e.g. a conflict over distribution of gorilla permits at Nkuringo). But here we are interested not in local conflicts, but in a war that, taken in its totality, has directly and indirectly claimed an estimated 5 million lives, and left countless more men, women and children bearing the mental scars of atrocities. Can conservation really touch those who believe they can profit from this catastrophe?

Whilst we can’t measure the impact, there are two ways in which TBNRM may play a role in peacemaking. Firstly, whilst the war in North Kivu is not primarily a war over resources, it is certainly prolonged and intensified by the existence of lootable resources such as coltan and charcoal. Transboundary governance may help to structure and strengthen resource management in ways that render peace a more profitable option for governments. This can happen, for example, where tourism offers a good income.

“Gorilla tourism is at the heart of our tourism industry. We think that this will help to bring peace because governments will look to get rid of rebel groups that threaten that industry.” John Makombo, Deputy Director, UWA.

In addition to contributing to economic conditions that favour peace, conservation might also carry its dynamic of transnational cooperation to more sensitive issues of state. As one respondent put it: if we get along well, it becomes a bit easier for our ‘parents’ to get along too.

“At the conference in April 2008, government ministers chaired small discussion groups and became so involved that they kept these going until 7 pm on the first day. They then reported these discussions at cabinet level in their countries.” Therese Musabe, Deputy Executive Secretary, GVTES.
“Yes, of course, with time this can work. The pressure for this idea is building progressively and taking root. There has not yet been enough time to push this all the way, and now is not the right time. But the single fact that the strategic plan has been endorsed by 3 countries is a victory. Nothing can now stop eventual approaches to Kabila, Kagame and Museveni.” Jean-Pierre d’Huart.

Conclusion

The formal phase of TBNRM in the Central Albertine Rift is relatively young: the Transboundary Executive Secretariat is only a year old, and has only recently become a legal reality, achieving independence from IGCP. Nevertheless, as has been explained in detail, the process has roots and relationships are good. Whilst it was not easy to organise the most recent meeting in Kampala, it did take place despite the problems between DRC and Rwanda. And those involved in the process have a lot in common and enjoy working with each other: over a drink at the end of this meeting, the Rwandan and DRC delegates were laughing so hard at each other’s jokes, they had to mop the tears from their faces.

Over the past 18 years, TBNRM has made a tangible contribution to conservation by improving the effectiveness of everyday field activities such as monitoring, law enforcement, tourism management and community conservation. It is now set to work towards collective political support to ensure those victories are maintained in the face of potential threats.

As that work progresses, IGCP will undoubtedly continue to play an important role although exactly what that role is, remains open to consideration. Critical to the decisions ahead will be the need to adapt to the evolving political circumstances in the region. TBNRM in a time of war will hopefully evolve into TBNRM at a time of peace.

Such a transition in the security situation might provide the opportunity to move more decisively away from an NGO-State model of TBNRM which may have less of an advantage during peacetime. This would not involve the disappearance of NGOs, but a change of role, with IGCP likely becoming one amongst several NGOs working with the technical committees to deliver on the current and future strategic plans.

Security is one of the key contexts that will guide the pace and shape of the Core and Executive Secretariats, and IGCP’s relationship to them. Another is the collective appetite to extend the geographical territory of transboundary governance along three dimensions: extension to those northern parks already included in the Strategic Plan, extension to forest and wildlife reserves, and extension beyond protected area boundaries. This will partly be determined by the capacity for the GVTES to devote time and other resources to such strategic planning activities, and this will in turn depend on emerging structures for funding and the new processes and models of implementation that develop alongside this.

Finally, the future of TBNRM will also be shaped by the prioritisation of its three principle objectives: conservation, peace and economic development.

In a previous report we have looked at the relationship between TBNRM and community conservation. There are at least two tensions here, firstly between the desire to centralise decision making and the desire to empower local people, and second, between the prioritisation of conservation and the acknowledgement that local livelihoods are vital to conservation. The latter tension might be resolved through an eventual shift towards a more inclusive ‘landscape’ perspective. Such a perspective will introduce the rather awkward reality that conservation is unlikely by itself to ever lift more than a small minority of local people out of poverty.
References


Sandwith, T., Shine, C., Hamilton, L., Sheppard, D. (2001) Transboundary Protected Areas for Peace and Cooperation, World Commission on Protected Areas, Best Practice Protected Areas Guidelines Series No. 7, IUCN.


LESSONS LEARNED: REGIONAL MEETINGS

Anecto Kayitare\textsuperscript{1}, Eugène Rutagarama\textsuperscript{1}, and Maryke Gray\textsuperscript{1}

July 2010
Edited by Maryke Gray in 2011

\textsuperscript{1} International Gorilla Conservation Programme
Executive Summary

The IGCP’s strategy in the development of transboundary collaboration has followed a bottom up approach and has arisen out of a clear need to respond to the conservation objectives of the park authorities in the three countries. The quarterly regional meetings that bring together staff of the Protected Area Authorities (from the field and headquarters), and the NGOs and partner organisations in the region working for conservation and development, have played a key role in supporting regional collaboration. Regional meetings are recognized as having contributed positively to enhance conservation in the Virunga-Bwindi region, despite political troubles that have characterised the region over the last twenty years. However, recently IGCP has come to realise that there are some issues pertaining to the organisation of these regional meetings that need to be addressed in order to improve the efficiency and relevance of the regional meetings. These issues include: the cost of the meetings; the low participation displayed by some partners including PAA senior Managers and NGOs; the selection and facilitation of the themes to be discussed in the meetings; and their regularity. It is therefore in the context of trying to find solutions to these issues and to improve the efficiency of the regional meetings that IGCP and the TES recommended undertaking an assessment of the whole regional meeting process.

The following recommendations were made as a result of this assessment:

1. **Regional meetings are important to support conservation in the region and should continue being organised because:**
   - Regional meetings are important to build trust and reciprocal knowledge among stakeholders in the region;
   - Regional meetings offer an opportunity to discuss key conservation issues and practical solutions to address them;
   - Regional meetings offer an opportunity to exchange on the best conservation practices and learning in the region.

2. **In order to be effective and address the issue of the high cost of the meetings, the regional meetings should be organised twice a year as opposed to quarterly meetings. The duration of the meetings should be two days outside of the travelling days. The two day meeting should allow deep discussion on the country updates, fruitful discussion on the regional meeting theme and avail enough time to discuss the follow up of the regional meeting recommendations.**

3. **The Core Secretariat (CS)/TES should facilitate the regional meetings in partnership with the PAAs and other conservations partners in the region. The stakeholders in the region have recognised that the coordination of conservation activities is under the mandate of the CS/TES and therefore, they should facilitate the meetings.**

4. **TBNRM in the CAR needs to bring other partners on board including: local authorities, socio-economic development actors and other government institutions. The regional meetings may not themselves respond to this need. It may be required to have specific community and local authority forums to exchange on conservation and other related development issues in the region outside of the regional meetings.**

Introduction

The IGCP’s strategy in the development of transboundary collaboration has followed a bottom up approach and has arisen out of a clear need to respond to the conservation objectives of the park authorities in the three countries. The IGCP transboundary collaboration model was developed following the process of a continuum, evolving from the absence of transboundary collaboration at one end, towards formal designation of a transboundary protected area at the other, and moving through a number of steps, as shown in the figure below:
Figure 1. Continuum of Transboundary Collaboration process.

The IGCP’s facilitation of regional collaboration has been geared toward steering the collaboration towards formalization between the different players, in order to sustain the results as these were being achieved along the continuum.

Recognising the importance of building regional collaboration along the continuum, IGCP’s regional collaboration strategy has defined 3 phases:

1. **Field-based coordination and collaboration:** From the beginning IGCP has supported regional collaboration at the field level. The approach involved informal regular communication and planning between wardens and staff of the different protected areas in the three countries that contributed to the harmonization and coordination of management approaches. This phase dominated regional collaboration from 1990 through to the beginning of 2000. The positive results of the regional collaboration during that period were encouraging and it was decided to move to the next phase in order to sustain and further develop the investment already made in the region.

2. **Formalisation of regional collaboration:** The need to formalize the field based collaboration and coordination activities was important to ensure that collaboration principles are institutionalised and not dependent on individuals, who regularly change positions. It is also recognised that formalising the transboundary process can result in resistance to the ever changing political and economic situation in the region. This institutionalisation should pave the way for official involvement of decision makers in all matters requiring their intervention. During the last decade IGCP has achieved good progress in this phase, which is marked by:
   
   i. The signature of the Nairobi declaration by the three Park Authorities, in 2001.
   
   ii. The signature of the Memorandum of Understanding (MoU) guiding the regional collaboration by the Directors of UWA, ORTPN and ICCN in January 2004.
   
   iii. The signature of the Tripartite Declaration of Goma signed by the Ministries in charge of the PAAs, in October 2005.
   
   iv. The adoption of the “Ten Year Transboundary Strategic Plan” by the Directors of the three Protected Areas Authorities (PAAs) in May 2006.
   
   v. The signature in May 2006 of the Trilateral MoU on the Collaborative Monitoring of and Sharing Revenues from Transfrontier Tourism Gorilla Groups by the PAAs.
   
   vi. The establishment of the Transboundary Executive Secretariat (TES) for the Transboundary Collaboration and the recruitment of the TES staff to implement the TSP.
The ongoing discussions on a tripartite Treaty at higher political levels.

3. The last and ultimate phase refers to the formal designation of a transboundary protected area. It is about the creation of an integrated Transfrontier Protected Area with unitary management authority. This is yet to be achieved for the Virunga-Bwindi Massif Transboundary Collaboration process.

It is important to note that regional collaboration to support conservation in the Virunga-Bwindi region has been made through different mechanisms. These include regular communication and joint planning (regional meetings being the key aspect in this regard), regional habitat and gorilla monitoring, tourism development, joint activities, exchange of experiences and good practices for conservation, community initiatives, and harmonization of rules and regulations.

The quarterly regional meetings that bring together staff of the Protected Area Authorities (from the field and headquarters), and the NGOs and partner organisations in the region working for conservation and development, have played a key role in supporting regional collaboration. The regional meetings create an opportunity to share information and update participants on the conservation status, and political and security situation in the region. During these meetings, different joint activities and initiatives are planned, and one important topic for conservation, chosen by the team in the previous meeting, is discussed.

Regional meetings are recognized as having contributed positively to enhance conservation in the Virunga-Bwindi region, despite political troubles that have characterised the region over the last twenty years. However, recently IGCP has come to realise that there are some issues pertaining to the organisation of these regional meetings that need to be addressed in order to improve the efficiency and relevance of the regional meetings. These issues include: the cost of the meetings; the low participation displayed by some partners including PAA senior Managers and NGOs; the selection and facilitation of the themes to be discussed in the meetings; and their regularity.

It is therefore in the context of trying to find solutions to these issues and to improve the efficiency of the regional meetings that IGCP and the TES recommended undertaking an assessment of the whole regional meeting process. The objective of this study is specifically to assess the regional meetings by involving all the interested partners (PAAs, NGOs and other partners) and come out with responses to the following key questions:

1. Are the regional meetings objectives still relevant?
2. Following the progress that has been made in regional collaboration, is it still worthwhile to continue organising quarterly regional meetings?
3. What are the aspects that need to change in the regional meetings?
4. With the presence of the TCS/TES whose mandate is the coordination of regional collaboration activities; does IGCP have to continue facilitating the regional meetings?

It is important to specify that this assessment will not analyse the IGCP regional collaboration experience as a whole (which has been documented by Martin et al., 2009), but will focus only on the component related to the regional meetings.

Methods

The methodology for assessing the IGCP regional meetings was based on individual interviews and focus group discussions with partners in the region (Rwanda, Uganda and DRC) who regularly attend the regional meetings. These included the protected area authorities at headquarter and field level, the NGOs representatives working in conservation, and the TES and IGCP (who requested and funded this assessment). The assessment used a combination of primary sources (interviews, focus group discussions and observation) and secondary data (official publications and grey literature including regional meetings minutes). The methodology of combining primary sources and secondary data is considered most relevant to avoid the negative consequences of
possible researcher’s bias attitude and thus this was chosen as the method for this study. The study was conducted over the months of March to July 2010.

The discussions focused on the regional meetings and transboundary collaboration in the past, present and formulation of recommendations for the future. The partial first draft of compiled consultative findings was then presented to participants for discussion during a regional meeting held in Kabale on 23-24th June 2010. At this meeting the assessment of the regional meetings was openly discussed through individual interviews and discussions, focus group discussions and open debates. The participants of this regional meeting analysed the results and came out with key recommendations for the organisation of future regional meetings.

**Process of the Theme**

The organisation of the regional meetings started in 1992; one year after IGCP was created. The very first regional meeting was organised as an informal meeting, which brought together the wardens and other park staff from the three countries of Rwanda, Uganda and DRC, during an afromontane forest workshop that was held in Bujumbura in 1992. This meeting was followed by a second meeting in Kisoro, Uganda in 1995, whose main topic was a discussion on the gorilla poaching that was rampant at that time due to the political insecurity and conflict in the region. Since 1997, regional meetings facilitated by IGCP have been regularly organised bringing together representatives from the three park authorities of DRC, Rwanda and Uganda (ICCN, RDB and UWA respectively) both from the institutions’ headquarters as well as the field level, together with local and international NGOs active in the region. Depending on the theme of the regional meeting, other key partners including the local authorities, police and army, immigration officers, researchers, and community members are also invited to take part. The venue for the regional meetings rotates regularly between the three different countries (DRC, Rwanda, and Uganda).

In one of the regional meetings that took place in 1999, the participants defined a set of objectives for the regional meetings, which are as follows:

1. To create and enhance the awareness of conservation and management issues in all four mountain gorilla parks and three countries and exploration of ways and means for potential collaboration between parks in conservation and management activities.

2. To increase awareness of thematic conservation issues raised.

3. To instill collaborative development and implementation of activities.

4. To encourage joint planning between PAAs and partners of programmes so as to ensure a holistic and « regional » approach.

Over the years, duration of the meetings has varied between two and three days. Currently each meeting lasts two days and is structured as follow:

1. **Country Updates:** On the first morning of the first day, representatives from the three PAAs make presentations aimed at sharing with participants the conservation status of their respective protected areas at the country level. Ideally, the PAA presentations include key elements from the PAAs and their partners to share with all the partners. The presentation generally covers aspects related to the conservation issues of the protected areas; policy and institutional changes; ecological monitoring; gorilla monitoring; tourism; and major collaboration activities or key events related to conservation in the country. The country updates are important to share experiences and to inform participants about the progress in the conservation programmes, to better understand challenges in coordination between the PAAs themselves, and to define areas of emergencies that warrant particular attention and / or support.

2. **Discussion on a particular theme:** The country updates are followed by discussion on the theme of the meeting. A topic is always selected during the previous RM which is discussed during the afternoon of the first day and the morning of the second day. The themes so far discussed have included: the Ranger Based Monitoring programme, conservation enterprise development, law enforcement, ecotourism, disease transmission, TBNRM & peace parks, gorilla poaching, and conservation legal policies. The list of the topics discussed in the regional meetings is attached as an Annex to this document.
3. Communication from participants and selection of the theme for the following regional meeting follow from the discussion of the meetings topic. At the end of the meeting in the evening of the second day, participants are given an opportunity to make an announcement on any communication related to conservation in the region (e.g. training opportunities, funding opportunities for key conservation activities, conservation events). Then the last activity is to select a theme to be the focus for discussion in the following regional meeting. For this purpose, participants regularly update the list of key conservation issues in the region and through a consensual or electoral process they choose the topic for the next regional meeting.

It is relevant to note here the additional importance of regional meetings in the facilitation of informal discussions between meeting participants when they are all together before or after the meeting or during working sessions.

Because the regional meetings key objective was to facilitate exchange between park staff across the region, with time and based on the strong institutional and personal links that have developed between park wardens and other relevant staff, a need has emerged to have a separate park wardens meeting without any external facilitation. As a result of the regional meetings, the four wardens of the involved parks [Mgahinga Gorilla National Park (MGNP), Bwindi Impenetrable National Park (BINP), Parc National des Volcans (PNV), Parc National des Virunga (PNVi)] have now established a Management and Coordination Committee to ensure effective coordination between the four parks.

Finally, it is worth reporting that because of the importance and success of Regional Meetings to support conservation in the Virunga-Bwindi region, the Wildlife Conservation Society (WCS) supporting the transboundary collaboration process in the Central Albertine Rift, has extended regular Regional Meetings north of the Virunga-Bwindi region, bringing together UWA and ICCN staff working in Queen Elizabeth National Park and Parc National des Virunga respectively.

Analysis of the Theme

The regional meetings have covered many conservation aspects over the years in the Virunga-Bwindi Region and it is beyond the scope of this report to discuss all the subjects treated in the meetings. This first section of the discussion will analyse key elements of regional meetings that are recognised to have contributed to supporting conservation including:

- **Regional meetings and Transboundary collaboration in the Virunga-Bwindi region**
- **Regional meetings and conservation during periods of conflict in the region**
- **Regional meetings and conservation partners**
- **Regional meetings and key conservation issues in the Virunga-Bwindi region**

Top: Participants at a regional workshop on climate change.

Bottom: Muhavura and Gahinga peaks as seen from Uganda.

Photos by Jamie Kemsey/IGCP
The second part of the discussion assesses the objectives, content and structure of the regional meetings and discusses the institutional facilitation.

Key aspects of Regional Meetings

**Regional Meetings and Transboundary Collaboration in the Virunga-Bwindi**

The regional meetings have been the initial step of IGCP Transboundary Collaboration in the Virunga-Bwindi Region and a tool for building trust among partners.

“The regional meetings were a foundation for building trust and collegiality. Friendships formed and wardens were able to deal with problems that otherwise might have involved the police. There were many examples of small conflicts being resolved when they were still small. For example cows grazing on the wrong side of the boundaries had been exactly the kind of thing that had previously escalated into major incidents. Regional meetings had a deep impact”. Dr. Annette Lanjouw in Martin et al. 2009

The regional meetings are recognised by all partners to be the cornerstone of regional collaboration in the Virunga-Bwindi region. Regional meetings help the parks staff and other partners to meet, and to discuss regional conservation issues of common interest. People were able to address very challenging conservation issues in the region, to plan for joint initiatives and to learn from each other (e.g. on issues of community conservation, revenue sharing, etc).

The war and political crisis that characterised the region in the past have made conservation work difficult and have affected the lives of many conservation staff in the region. The regional meetings brought motivational support by bringing people from the region to meet together to achieve common conservation objectives. The knowledge that each person is part of a team, and that others are struggling with similar issues, has contributed to each person's motivation and ability to cope with the period of difficulties in the region (Lanjouw, et al., 2001). The regional meetings have helped to create a team spirit among the PA personnel in the region and all the people met during the assessment have recognised that. Therefore, it is important to maintain this practice of organising a regional forum that will constantly help to nurture the team spirit and facilitate exchange of experiences and planning of coordinated activities.

**Regional meetings and conservation during the conflict period in the region**

The Regional Meetings have been a key important element to support conservation during the difficult times of insecurity and conflicts in the region. They created strong ties that enabled conservation during conflict periods and this is recognised by key partners.

“IGCP Regional meetings were able to bring together people from the 3 countries to work together for conservation purpose even when the three countries were fighting each other, no one could think that can be possible.” Pontious Ezuma, MGNP warden.

It was very difficult for park authorities or other governmental institutions to initiate any cross border initiative during times of conflict and IGCP's role of facilitation was very important and is appreciated by all the partners. It has been recognised that conflict can be addressed through different mechanisms such as the use of key strategies including face-to-face contact to establish shared goals; cooperative activities in pursuit of these goals; equality status during the meetings; and support from relevant authorities or an independent facilitator (Hewstone and Greenland, 2000; Fiske, 2002 cited in Martin, et. al. 2009). The regional meetings are a good example of where the four above strategies were applied. The park staff and other partners from the region could meet and see each other as conservation colleagues rather than people coming from different countries. By facilitating people from the region to meet for the same objectives during the conflict periods and address the same issues, strong relationships were created among the people. The knowledge that each person is part of a team, and that others are struggling with similar issues, has contributed to each person's motivation and ability to cope with the hard situation (Lanjouw, et. al. 2001).

During the regional meeting organised in 1999, the continuation of the organisation of regional meetings during times of conflict was recognised as important to support conservation in the Virunga-Bwindi region. With
time, it has also been interesting to see how many participants started to be interested in other colleagues’ culture and language; many started to learn either English or French from colleagues during the regional meetings. It has become common that English speakers introduce themselves in French and French speakers introduce themselves in English during the meetings. The good relationships developed over the years among conservation staff from the three countries have helped with the implementation of regional conservation activities including the coordinated patrols, gorilla census, and regional Ranger Based Monitoring.

**Regional Meetings and Partners in conservation**

Regional meetings have created an enabling environment and an opportunity for partners in conservation working in the region (either from the same organisation or from different organisations or institutions) to meet and share experiences and views aimed at improving their programme and activities. The staff from different organisations working in the region, including IGCP, usually find time to discuss and align their plans and programmes, updating each other on the level of implementation of activities across the region. Dr. Iyanya Jacques from the Mountain Gorilla Veterinary Project (MGVP) reported that “because of the regional meetings we were able to plan and work at regional level”. The MGVP also found an opportunity in a regional meeting to discuss the format of the gorilla health monitoring that was adopted across the region. As was noted in the background section of this report, WCS have also extended the regional meeting initiative further north of the Virunga-Bwindi region in the Central Albertine Rift (CAR). Following the increasing interest in TBNRM at an international level, it was noted with interest during this study that many conservation organisations in the region have demonstrated their intention to work at the regional level and the regional meetings were the entry point to the regional programmes in the region.

**Regional Meetings and key conservation issues in the Virunga-Bwindi**

From the beginning the Regional Meetings have acted as a forum to address key conservation issues in the Virunga-Bwindi region. From the country updates that highlight field management issues that need attention at a regional level, to the theme discussions which analyse key conservation challenges in the region and find appropriate measures to address them. As has been previously mentioned the country updates have facilitated regular information sharing between wardens and management staff of the four mountain gorilla parks, joint planning and implementation of activities. Some themes discussed during regional meetings were able to respond to key conservation questions that were sensitive and could otherwise compromise the conservation efforts at country and regional levels. These include for example a) gorilla tourism rules and regulations, b) gorilla poaching and c) community conservation.

**a) Gorilla Tourism Rules and Regulations**

Mountain gorilla and human contact needs to be minimized because of the potential of transmissions of diseases not only from human to gorilla but also from gorilla to human. Gorilla tourism is therefore a very sensitive conservation issue at national and regional levels and it was decided by participants of the regional meetings that this would be an appropriate topic of discussion at this forum. In January 1998, the regional meeting started discussions on the harmonisation of the gorilla tourism in the region. The three park authorities then worked together to establish common rules and regulations to minimize the risk of disease transmission and to avoid competition that may jeopardize the gorilla tourism. The rules include a minimum distance of seven metres between tourists and the gorillas, maximum of 6 or 8 visitors per group and a maximum of one hour per day. Today, the gorilla tourism rules in the three countries are harmonised largely as a result of a long discussion process mainly facilitated by the regional meetings.

**b) Gorilla Poaching**

With very few mountain gorilla individuals remaining in their two natural habitats, gorilla poaching was and remains a key conservation challenge for their survival. The challenge of gorilla poaching is that it can’t be solely addressed at the country level and requires the involvement of the three countries for many reasons. Firstly, it’s often difficult to know the origin of the poaching incident/captured gorilla; secondly to identify the origin of the gorilla poacher(s) remains a challenge because the region is inhabited by the same people with the same culture, they are interconnected and they move easily between the three countries; and finally the potential buyer(s) can move easily across the borders or establish their networks in the different countries.

In early 1995, a regional meeting engaged in discussions on the gorilla poaching in the region. The regional meetings from that time have helped to bring together the protected areas authorities and other interested institutions (police and immigration) from the three countries to discuss gorilla poaching. The gorilla poaching has today decreased substantially in the region and the regional meetings have helped not only to deal with the
issue but also to create awareness on the impact of the gorilla poaching to the survival of the gorilla population in the region.

c) Community Conservation

The Community Conservation programme started in Uganda in 1990 and it has been progressively adopted in Rwanda (2003) and recently in the DRC. Community conservation activities in the region include beeking projects, tourism revenue sharing, socio-economic infrastructure development (schools, health centres, water tanks, etc) and other conservation linked enterprise projects (e.g. community lodges). The regional meetings have been the “catalyst” for the adoption of community conservation best practices in the region. In April 1997, the regional meeting discussed participation of local populations in conservation and benefit-sharing and then from there other regional meetings continued to treat the same subject. For example, in Goma, December 2005, the regional meeting analysed “Enterprises as a powerful tool for conservation” and in April 2008, in Mbarara Uganda, the regional meeting analysed “The relationship between community Conservation (enterprise, development, community livelihoods) and conservation: do efforts impact on conservation?” Others important programmes adopted in the region that were discussed in the regional meetings include the adoption of revenue sharing programme, the construction of dry stone walls (known locally as Buffalo walls) to reduce crop raiding and the human gorilla conflict resolution programmes.

Regional Meetings Objectives, Contents, Structure and Institutional Facilitation

The Regional Meetings objectives, content and structure need to evolve and adapt to a changing situation in order to remain relevant. Over time the situation in the region has altered, the TBNRM in the region has evolved along the continuum and Regional Meetings need to adapt to the new situation.

Objectives of Regional Meetings

During interviews conducted, it was found that people felt the regional meetings have achieved their original objectives which are the following:

1. To create and enhance the awareness of conservation and management issues in all four mountain gorilla parks and three countries and exploration of ways and means for potential collaboration between parks in conservation and management activities.

2. To increase awareness of thematic conservation issues raised.

3. To instill collaborative development and implementation of activities.

4. To encourage joint planning between PAAs and partners of programmes so as to ensure a holistic and « regional » approach.

Regional collaboration has evolved along the continuum and the situation in the region has also changed, and therefore the regional meeting objectives need to align with the new realities. An exercise was undertaken to assess the Regional Meetings objectives with park wardens in a meeting in Kigali in April 2010 and with participants during the regional meeting that was organised in Kabale on 23rd June, 2010. While the key objectives remain relevant, they have been reformulated to match with the new realities on the ground.

The objectives of Regional Meetings were re-formulated as follow:

1. Information sharing of conservation, management issues and best practices in all the four Parks in the three Countries enhanced.

2. Building trust and reciprocal knowledge among the stakeholders.

3. Enhancement of collaboration between parks in conservation and management activities.

4. Identify key thematic conservation issues for in deep analysis, discussion and further consideration.

5. Generate discussion and themes materials for TSP committees and Regional Forums.
While the original main objective of the regional meetings was awareness creation, today participants agree that much progress has been made in this area. Conservation awareness for mountain gorilla protection and its habitat has today increased among the different stakeholders in the region at political, local and community levels despite the continuing existence of conservation threats in the region. The governments today have taken different initiatives that support conservation and create awareness among the public in the different countries. These initiatives include Kwita Izina, the Gorilla Naming Ceremony in Rwanda, and the "Friend a Gorilla" campaign in Uganda. Community initiatives related to conservation that support community livelihoods and increase conservation awareness in the public have been initiated across the region (e.g. Sabyinyo Silverback Lodge in Rwanda and Clouds Mountain Gorilla Lodge in Uganda). The result of these initiatives is that today the perception of conservation in the region has much improved. This improvement can't be justified by the regional meeting efforts alone but a result of much greater combined efforts from different situations and activities but the importance of regional meetings is recognised by many people.

Building trust and reciprocal knowledge is still a key objective of the regional meetings as people change positions and new people come to work for conservation in the region. Others objectives to be considered include sharing information on the conservation status and particularly the best conservation practices and collaboration between parks in conservation and management activities. It's recognised that the regional meetings offer opportunities to identify and discuss key conservation issues in the region. The areas that need technical inputs and expertise will be channelled to technical committees formed under the Transboundary Strategic Plan for the Central Albertine Rift (including Research and Monitoring; Community Conservation and Enterprise Development; Tourism; and Law Enforcement and Security) for discussion and further consideration. The regional meetings will therefore serve as think-tank forums for conservation in the region.

**Structure and Contents of Regional Meetings**

From the beginning the structure and content of the regional meetings has been the same: Introduction of participants; Country Updates; Presentation of the main theme or topic of the regional meeting; Group discussions and plenary presentations of findings and recommendations; and Challenges and way forward. The meeting then finishes with discussion on the date, venue and consensus on the topic for the next regional meeting. In order for the regional meetings to stay relevant, there is now however, need for review of the structure and the content.

**a) Country updates:**

Country updates in regional meetings are currently presented in different formats by the different countries. The updates are descriptive and don't capture the work of conservation partners outside of the protected areas authorities. Additionally, the lack of follow up of recommendations taken on issues presented in country updates during previous regional meetings has been highlighted as an issue that needs to be addressed. Participants in the regional meetings would like to see well elaborated country updates presentations following a format agreed upon with detailed information on key activities from PAAs and others partners in conservation. The presentations should be more analytical with comparisons of data between certain periods for a better understanding of the trends. Currently the time allocated to the country updates is judged insufficient to allow deep discussion and the follow up of recommendations; the recommendation then is to have a full day for the country updates.

**b) Selection of theme for discussion**

During the assessment of the regional meetings, some people interviewed highlighted the issue of the selection process of regional meeting themes. Some new participants would like to propose themes that have already been discussed in the previous meetings. For example, people proposing an already discussed theme on community conservation or proposing a theme on the issue of use of biomass as Energy. However, the selection of theme is always done in a consensual manner, and the list of themes is regularly updated. Therefore even topics that have been previously discussed can be nominated for the list of themes and can be selected for discussion again if voted for by meeting participants.

It is stressed that the regional meetings are not appropriate for technical training but a forum to discuss and exchange on key conservation subjects. Therefore, the practice of organising meetings to discuss conservation topics is still recommended. The chosen theme will need to be well prepared with inputs from experts on the specific issues to allow better understanding, deep discussion and define the way forward from the discussion.
In order to respond to the participant’s expectations as regard to the theme presentation and discussion, participants in the June 2010 regional meeting in Kabale recommended planning for a full day for the presentation and discussion of the main theme.

c) Regularity and length of the regional meetings

The regional meetings are organised quarterly but almost all people interviewed have the feeling that these meetings are very close. Especially taking into consideration the current situation of peace and stability that is generally prevailing in the region, the existing communication facilities (mobile telephone, internet, etc) between countries, and the PAAs commitment to work together. Also there exists other forums that bring together partners such as the TSP technical committees, and as there is a good relationship developed among conservation partners in the region, it’s no longer considered so important to organise the regional meetings every three months. It has also been reported that there are not enough changes in conservation in three months to share with partners at the regional level. Another point to consider is that the regional meetings are expensive (an average of US $10,000 per meeting) and the organisation of meetings every quarter increases the total cost of the regional meetings. The participants in the June 2010 regional meeting in Kabale have recommended to reduce the number of meetings from a quarterly basis to a bi-annual basis and to increase the length of the regional meetings to two full days rather than one and half day inclusive.

Another important element pertaining to the regional meetings is the reporting of the regional meetings that needs to be done on time and translated in two languages (French and English) to facilitate the participation and contribution of all partners in the region.

Institutional facilitation of Regional Meetings

The development of the regional collaboration along the continuum has reached a very high step with the development of the TSP, the establishment of the Core Secretariat and the TES, and the drafting of a Treaty as the legal framework for the institutionalisation of the regional collaboration. The coordination role of the TES in the Central Albertine Rift is recognised by all the partners interviewed.

“It is important to leave TCS/TESS to undertake its roles and help it to achieve the conservation objectives and not to substitute it.” François Bizimungu, Rwanda Development Board Kigali.

In the regional meeting in Kabale in June 2010, discussion on the facilitation and coordination of regional meetings came up with the recommendation that the TCS/TESS should take the responsibility to facilitate and coordinate the organisation of regional meetings and should work in partnership with the different partners, mainly NGOs, working in conservation in the region. It was proposed that the TCS/TESS could work hand in hand with the PAA hosting the regional meeting by sharing the responsibility of organising the regional meeting.

The funding of the regional meetings was also discussed and different options need to be explored: (1) the NGOs partners can contribute to the organisation of the regional meetings; (2) the TCS/TESS can raise money to facilitate the organisation of the regional meetings; (3) the PAAs can contribute to the organisation of regional meetings or (4) a combination of two or more options. It is now time for the PAAs and the TES to take over the responsibilities related to planning, coordination and facilitation of the work of all the players involved in the transboundary collaboration. It was reported that the facilitation of the RM by the TCS/TESS may eliminate the perception that the regional meetings are IGCP meetings.

Another element that came from discussion with partners is the extension of regional meetings into other parts of the CAR. People interviewed are interested in the harmonisation of conservation initiatives in the CAR and feel that initiatives at site level should be shared during regional meetings and be incorporated in the conservation programme of all partners in conservation in the CAR region.

“Queen Elizabeth, Rwenzori, etc all share borders. It would be a huge benefit to Uganda if we expanded transboundary management so that all these came together.” Kule Asa Musinguzi, Chief Warden, BINP.

It was reported that the TCS/TESS has the responsibility to harmonize the conservation initiatives in the CAR and should be encouraged to start doing it.
The TES’ current level of capacity to undertake its responsibilities came up many times during our discussions and interviews. The TCS/TES is a young institution and will certainly need to develop its own capacity to respond to the partners expectations. During the discussion, it was clear that the different partners are willing to contribute to ease the work of the TCS/TES. In this regards, the long experience of IGCP will continue to prevail as a key resource person in organising regional meetings.

**Participation in the regional meetings**

TBNRM involves many sectors and partners and covers many objectives: biodiversity conservation, economic integration and development, political and diplomatic. The question is how to ensure that all partners are involved and properly play their roles to achieve TBNRM objectives.

> “The century of working inside parks to conserve wildlife has ended. Conservationists have learned that to conserve wildlife and other valued biodiversity we must now work outside of parks and reserves in complex areas designed for economic development”. Wilkie, Adams and Redford in Martin et al. 2009.

IGCP has developed the TBNRM process by working with the park authorities who have the conservation mandate. However, the importance of coordination and partnership with other institutions is also well recognized. The BMCA Warden, Pontious Ezuma and the PNV Law Enforcement Warden highlighted the importance of bringing on board the local community and local authorities. The case of Sarambwe Forest and BINP was cited where the PAAs from the DRC and Uganda have worked together to try to address the issue but without success because of the lack involvement of others partners. Because the roles in government institutions tend to be divided into many departments, TBNRM requires coordinated multi-sectorial government inputs (van der Linde, 2001). This is the case particularly where there’s no good coordination of government institutions like in DRC, and where the importance of involving local administration (province, districts) in the TBNRM process can be highlighted.

During the June 2010 regional meeting, the involvement of local authorities and local communities in the meetings was discussed. Participants understand very well the importance of the participation of the two categories in the regional meetings. However, because of the high number of administrative representations (related to the number of Districts/parishes/localités) and the meeting cost, it was recommended to invite them only when the regional meeting themes require their participation. It’s very clear that the conservation agenda will dominate the discussion in the regional meetings. The ongoing formalization process at ministerial level may help to involve other partners including the local authorities and local communities. However, it has been reported that they are also represented in the general forum and it is also envisaged that the upcoming trans-boundary regional forum will include representatives from local authorities and local communities.

**Recommendations**

These recommendations are the result of discussion with many people and consensus among participants in the June 2010 regional meeting organised in Kabale, Uganda.

1. **Regional meetings are important to support conservation in the region and should continue being organised because:**
   
i. Regional meetings are important to build trust and reciprocal knowledge among stakeholders in the region;
   
ii. Regional meetings offer an opportunity to discuss key conservation issues and practical solutions to address them;
   
iii. Regional meetings offer an opportunity to exchange on the best conservation practices and learning in the region.

2. **In order to be effective and address the issue of the high cost of the meetings, the regional meetings should be organised twice a year as opposed to quarterly meetings. The duration of the**
meetings should be two days outside of the travelling days. The first day should discuss the country updates including activities from PAAs and partners. The format of the country updates presentation should be discussed, standardised and approved to facilitate the discussion. The second day should analyse a chosen conservation theme. The topic should be prepared in advance by an expert and only interested partners should be invited. The two day meeting should allow deep discussion on the country updates, fruitful discussion on the regional meeting theme and avail enough time to discuss the follow up of the regional meeting recommendations.

3. The Core Secretariat (CS)/TES should facilitate the regional meetings in partnership with the PAAs and other conservation partners in the region. The stakeholders in the region have recognised that the coordination of conservation activities is under the mandate of the CS/TES and therefore, they should facilitate the meetings.

4. TBNRM in the CAR needs to bring other partners on board including: local authorities, socio-economic development actors and other government institutions. The regional meetings may not themselves respond to this need. It may be required to have specific community and local authority forums to exchange on conservation and other related development issues in the region outside of the regional meetings.

## Annex

<table>
<thead>
<tr>
<th>Dates</th>
<th>Venue</th>
<th>Topic(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>Bujumbura, Burundi</td>
<td>Informal meeting</td>
</tr>
<tr>
<td>August 1995</td>
<td>Kisoro, Uganda</td>
<td>Gorilla poaching</td>
</tr>
<tr>
<td>February 1997</td>
<td>Kigali, Rwanda</td>
<td>Mountain Gorilla Population Habitat Viability Assessment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Communication network in the region</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Joint patrols</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gorilla tourism: risk analysis</td>
</tr>
<tr>
<td>April 1997</td>
<td>Buhoma, Uganda</td>
<td>Participation of local populations in conservation and benefit-sharing</td>
</tr>
<tr>
<td>August 1997</td>
<td>Goma, DRC</td>
<td>Monitoring</td>
</tr>
<tr>
<td>January 1998</td>
<td>Kigali, Rwanda</td>
<td>Harmonising gorilla tourism</td>
</tr>
<tr>
<td>June 1998</td>
<td>Kisoro, Uganda</td>
<td>Follow-up of the Mountain Gorilla Population and Habitat Viability Assessment</td>
</tr>
<tr>
<td>September 1998</td>
<td>Kabale, Uganda</td>
<td>Ranger-Based Monitoring</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Human Gorilla Conflict Resolution</td>
</tr>
<tr>
<td>January 1999</td>
<td>Gisakura, Rwanda</td>
<td>Peace Park for the Virunga Volcanoes Region</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disease Risk Assessment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mountain Gorilla Forum</td>
</tr>
<tr>
<td>May 1999</td>
<td>Kabale, Uganda</td>
<td>Country updates only</td>
</tr>
<tr>
<td>July 1999</td>
<td>Lake Bunyonyi, Uganda</td>
<td>Regional Tourism</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IGCP Security Strategy</td>
</tr>
<tr>
<td>November 1999</td>
<td>Gisenyi, Rwanda</td>
<td>Evaluation of the regional meetings</td>
</tr>
<tr>
<td>May 2000</td>
<td>Goma, DRC</td>
<td>Regional collaboration</td>
</tr>
<tr>
<td>August 2000</td>
<td>Kabale, Uganda</td>
<td>Conservation in conflict</td>
</tr>
<tr>
<td>February 2001</td>
<td>Kinigi, Rwanda</td>
<td>Gorilla health and contingency plan</td>
</tr>
<tr>
<td>May 2001</td>
<td>Goma, DRC</td>
<td>Research and monitoring</td>
</tr>
<tr>
<td>May 2002</td>
<td>Kabale, Uganda</td>
<td>Collaboration with communities</td>
</tr>
<tr>
<td>November 2002</td>
<td>Ruhengeri, Rwanda</td>
<td>Socio-economic survey results</td>
</tr>
<tr>
<td>December 2002</td>
<td>Kisoro, Uganda</td>
<td>Gorilla poaching</td>
</tr>
<tr>
<td>April 2003</td>
<td>Goma, DRC</td>
<td>International trade of wildlife and conventions</td>
</tr>
<tr>
<td>Date</td>
<td>Location</td>
<td>Event Title</td>
</tr>
<tr>
<td>--------------</td>
<td>---------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>July 2003</td>
<td>Uganda</td>
<td>Transboundary collaboration in the Albertine Rift region Policy</td>
</tr>
<tr>
<td>March 2004</td>
<td>Goma, DRC</td>
<td>Disease Contingency Plan Presentation</td>
</tr>
<tr>
<td>June 2004</td>
<td>Entebbe, Uganda</td>
<td>Management of confiscated primates</td>
</tr>
<tr>
<td>September 2004</td>
<td>Ruhengeri, Rwanda</td>
<td>Integration of research results into park management</td>
</tr>
<tr>
<td>February 2005</td>
<td>Goma, DRC</td>
<td>Time management and communication</td>
</tr>
<tr>
<td>May 2005</td>
<td>Mbarara, Uganda</td>
<td>Conflict Resolution</td>
</tr>
<tr>
<td>August 2005</td>
<td>Ruhengeri, Rwanda</td>
<td>Protected Area Management Effectiveness</td>
</tr>
<tr>
<td>December 2005</td>
<td>Goma, DRC</td>
<td>PCIA in the Virunga-Bwindi Region Enterprises as a powerful tool for conservation</td>
</tr>
<tr>
<td>April 2006</td>
<td>Kabale, Uganda</td>
<td>Environmental Education</td>
</tr>
<tr>
<td>August 2006</td>
<td>Musanze, Rwanda</td>
<td>Effectiveness, challenges and way forward for Transboundary collaboration</td>
</tr>
<tr>
<td>January 2007</td>
<td>Goma, DRC</td>
<td>“Ecosystem health” (key issues, management, challenges and way forward).</td>
</tr>
<tr>
<td>June 2007</td>
<td>Kabale, Uganda</td>
<td>International conventions and their role to support conservation</td>
</tr>
<tr>
<td>October 2007</td>
<td>Musanze, Rwanda</td>
<td>Collection, analysis and sharing data &amp; information Gorilla policies: HIA, tourism, confiscated infants</td>
</tr>
<tr>
<td>February 2008</td>
<td>Goma, DRC</td>
<td>Monitoring and evaluation training- project management</td>
</tr>
<tr>
<td>May 2008</td>
<td>Mbarara, Uganda</td>
<td>“The relationship between community conservation, enterprise, development, community livelihoods, and conservation: do efforts impact on conservation?”</td>
</tr>
<tr>
<td>September 2008</td>
<td>Rubavu, Rwanda</td>
<td>Regional law enforcement mechanisms and RBM, monitoring data analysis and presentation</td>
</tr>
<tr>
<td>February 2009</td>
<td>Rubavu, Rwanda</td>
<td>Training in leadership and management in conservation</td>
</tr>
<tr>
<td>May 2009</td>
<td>Kabale, Uganda</td>
<td>Community partnerships and revenue sharing</td>
</tr>
<tr>
<td>August 2009</td>
<td>Gashora, Rwanda</td>
<td>Conservation and alternative energies</td>
</tr>
<tr>
<td>June 2010</td>
<td>Kabale, Uganda</td>
<td>Assessment of regional meetings</td>
</tr>
<tr>
<td>November 2010</td>
<td>Rubavu, Rwanda</td>
<td>Fire management</td>
</tr>
<tr>
<td>May 2011</td>
<td>Goma, DRC</td>
<td>Payments for ecosystem services</td>
</tr>
</tbody>
</table>

**References**


LESSONS LEARNED: BUFFER ZONE AND HUMAN-WILDLIFE CONFLICT MANAGEMENT

José Kalpers¹, Maryke Gray², Stephen Asuma², Eugène Rutagarama², Wellard Makambo², and Eugène Rurangwa²

November 2010
Edited by Maryke Gray in 2011

¹ Independent Consultant
² International Gorilla Conservation Programme
Executive Summary

This report documents and analyses the experience of IGCP in trying to prevent, respond to and mitigate the effects of human-wildlife conflicts around the four protected areas where the programme has been active since 1991. The difficulties that have been faced working on human-wildlife issues generate some of the ‘lessons learned’ in this report. However, these difficulties should not distract from IGCP’s considerable achievements in the field. Indeed, it is IGCP’s successes, set against the challenging conservation context of the region, that offer lessons that are likely to be of most interest, and practical value, to the wider conservation community.

Lesson 1: Human-Wildlife conflict has to be viewed in the broader context of cost-benefit analysis

A general feature observed throughout the region, but also in other parts of Africa, is that the poorest of the communities tend to live near the boundaries of protected areas, where land is usually cheaper and less accessible. Being on the front-line, these communities are also logically bearing most of the costs imposed by the protected areas and suffer the most from human-wildlife conflicts. It is therefore important not only to focus on preventing or mitigating the negative impact of human-wildlife conflicts, but also to carefully consider the nature and scope of benefits that are received by those front-line communities.

Lesson 2: Solutions aimed at preventing or mitigating human-wildlife conflicts have to be carefully and continuously assessed in the long run, through sustained monitoring systems

An observation made during this assessment reveals that very little has been done in terms of monitoring the outcome and impact of the various strategies aiming at preventing or mitigating the human-wildlife conflicts throughout the region. In general, the lack of quantitative datasets represents a significant loophole in the whole programme: without these, it is extremely difficult to make informed decisions and to properly assess what works and what doesn’t, or what the general trends are over time.

Lesson 3: Solutions designed by humans are constantly challenged by adaptable wildlife. This requires constant vigilance and adaptable solutions by humans, but also basic and sustainable maintenance systems.

Once a human-wildlife conflict strategy has been designed and implemented, it needs to be properly followed up and constantly questioned. This lesson stems from two main observations: 1) never consider that only one solution will solve all problems, as wild animals will always show great adaptation skills in getting around the difficulties, and 2) if a solution requires regular follow-up and/or maintenance, reliable and long-term systems need to be worked out well before the actual solution is implemented, otherwise it is not worth the investment.

Lesson 4: Land-use practices around protected areas are usually overlooked but could bring about significant changes in decreasing conflicts.

While designing barriers such as stone walls or trenches can have some impact in reducing crop raiding by wildlife, the issue of land use in the immediate vicinity of the forest is probably even more crucial to consider. Where possible, particularly in Rwanda and Uganda, local government structures have an important role to play, for instance by integrating land-use planning and human-wildlife conflict considerations into development plans at district or lower levels.
Lesson 5: “Participation” of local communities can be envisaged at different levels, but only certain types of participation have a real meaning and a chance of success.

In the development sector, there are different levels of “participation” that range from passive participation to self-mobilization. The experience of the buffer zone in Nkuringo seems to indicate that only the lower forms of participation have so far been secured, with the notable exception of the Nyabalemura village, which is self-mobilized.

Lesson 6: Leadership among local communities has to be properly assessed and secured, and incentives revisited

Usual incentives, such as equipment or cash, don't necessarily offer guarantees of success but proper leadership motivated by the interest of the community gives better hopes. This lesson is particularly well illustrated by Nyabalemura village, which is technically not in the buffer zone but has spontaneously mobilized its own resources to tackle its own human-conflict issues, thanks to its enlightened leadership and motivated community.

Lesson 7: Once identified and agreed upon, buffer zone objectives have to be thoroughly implemented

The official management goals for the buffer zone in Nkuringo are “to reduce human-wildlife conflict while protecting the critically endangered mountain gorilla and to contribute to improved community livelihoods”. Both goals have yet to be achieved, as HWC issues are still important, and community livelihoods have been only marginally improved. The several attempts made at identifying proper buffer crops that would act as a de facto barrier for wildlife while also offering economic prospects for the community, have so far not met the initial expectations.

Lesson 8: It is important to listen to communities before embarking on experimental buffer zone programmes

Since the creation of the buffer zone, the communities and some local authorities have been advocating for the use of tea plantations as a suitable option for achieving the double goal of the buffer zone. Because of financial constraints, other options have been tried instead, with very few positive results. In this situation, the community and its leaders have not necessarily been listened to, which has created a double challenge: on the one hand, the favoured solution, which seems to meet all commercial and technical conditions, has not been implemented, and on the other hand and as a result of failed alternatives, momentum and motivation have been lost, thus leading to disappointment and lack of engagement.

Lesson 9: Land purchase for conservation is a very complex issue that requires time for proper assessment

Nowhere in Uganda has the acquisition of land for conservation been more active than in Bwindi. While the land acquisition in Buhoma was mainly done on an ad hoc basis and lacked a clear land use strategy, the experience of Nkuringo seems to suggest that it was better planned and better implemented. However, the fact that the buffer zone hasn’t yet fulfilled its double goal means that the initially high level of satisfaction of the community could slowly turn into a feeling of frustration and resentment.

Key Recommendations:

- Implement past recommendations
- Identify appropriate solutions for the sustainability of the HUGO programme
Re-establish and maintain monitoring programmes at all levels
Look for innovative strategies in addressing human-wildlife conflict issues
Consider tea plantations as ultimately the only viable and effective solution for the Buffer Zone in Nkuringo

For more than 12 years, IGCP has been trying to work out the problems of HWC and design solutions, and many challenges have been confronted along the way. Even if some of the challenges are still valid or even more critical, IGCP’s work has followed most of the positive features already highlighted in other lessons learned. On other hand, IGCP needs to focus more on a number of aspects in order to achieve long-lasting results in the area of human-wildlife conflict, such as the relationship between information and practice, the consistent support to solutions that work, or the quest for institutionalised and sustainable strategies.

Introduction

The International Gorilla Conservation Programme (IGCP) was founded in 1991 as a partnership between the African Wildlife Foundation (AWF), Fauna & Flora International (FFI) and the World Wide Fund for Nature (WWF). IGCP was established as a regional programme working in the Virunga and Bwindi afro-montane forest habitats that straddle the borders of the Democratic Republic of Congo (DRC), Rwanda and Uganda. The goal of IGCP is to ensure the conservation of mountain gorillas and their forest habitat and this is pursued through three principle strategies:

- Establishing a strong information base, including support for ranger-based monitoring;
- Strengthening regional collaboration between DRC, Rwanda and Uganda, including support for Transboundary Natural Resource Management (TBNRM); and
- Supporting the livelihoods of people living around the parks.

IGCP approaches these strategies through partnerships, first and foremost with the three national protected area authorities, but also with international NGOs, local authorities, community based organisations and private businesses in the region.

The current study focuses on Human-Wildlife Conflict Resolution which IGCP has addressed on a number of fronts, including the construction of a buffalo wall around the Virunga massif, the formation of community-based associations for managing problem animals, and recent experimentation with resilient land-uses in the Nkuringo buffer zone in Uganda. Cutting across most of these topics is the experience that IGCP has gained with operating conservation interventions in a conflict zone, an experience which sadly remains relevant in DRC.

Methods

The main approach has been to synthesise existing knowledge. This has been captured in three steps. Firstly, a review of secondary data including published scientific work as well as internal IGCP documents and data. Secondly, a series of consultation meetings (with individuals and focus groups) and site visits were held for two weeks in June/July 2010 in DRC, Rwanda and Uganda.

Thirdly, additional information was gathered after the field trip, mainly from former or current IGCP staff, in order to corroborate or complement the findings obtained during the two first steps. Throughout the process, we have relied heavily on the testimony of key stakeholders: IGCP staff, staff from RDB, UWA and ICCN, and leaders/representatives of communities where IGCP works, as well as third-party organisations (NGOs, projects, etc.). Where possible we have backed up this testimony with other sources of information, including scientific research published in journals, and IGCP and consultant evaluations of particular programmes and projects.
Having described the situation of human-wildlife conflict in the four gorilla parks, the study proceeds to the history of IGCP’s involvement in the theme, and then to an analysis of achievements, weaknesses and lessons learned.

**Process of the Theme**

**Rationale**

Human-wildlife conflict (HWC) is a major conservation and management issue where ever people and wildlife coexist. HWC can take many forms, including the destruction of crops and property, and competition for natural resources. Commonly the people worst affected by conflict are rural farmers. In many areas with community-based conservation schemes, conflict can undermine conservation efforts because the cost of living with wildlife is seen to far outweigh any benefits (Parker, 2003; Muruthi, 2005).

In the Virunga-Bwindi region, habitat destruction and human population growth mean that the mountain gorilla and other forest animals, such as bush pigs, elephant and buffalo, are increasingly coming into contact with people, often leading to conflicts. The impact on local people, many of whom are subsistence farmers, can include economic devastation through destruction of crops, living in a state of fear, inconvenience, and danger to life and limb (Macfie, 2000). For mountain gorillas, interactions with local people are a source of stress, can result in the transmission of human diseases, and can lead to direct physical attacks, disabilities such as loss of limbs from snares, and even death.

This report documents and analyses the experience of IGCP in trying to prevent, respond to and mitigate the effects of human-wildlife conflicts around the four protected areas where the programme has been active since 1991.

**Human-wildlife issues in the four gorilla parks**

Despite containing relatively similar afromontane habitats, the two forest blocks harbouring mountain gorillas show different sets of issues relating to interactions between humans and wildlife. Even within the common forest block shared by the three countries, the situation can greatly vary between countries, based on ecological features but also on social aspects and land use. This section gives a brief summary of the specifics of each park, along with general trends observed over the recent past.

**Volcanoes National Park (PNV), Rwanda**

Problem animals and crop-raiding in PNV have been part of the picture for a very long time. Historically, buffaloes, bushbucks and duikers have been the most regular problem animals, with elephants doing occasional damage (Plumptre et al., 2004). Gorillas were almost never recorded as doing significant damages, with the exception of some habituated groups (Sabyinyo and 13) sporadically visiting the park boundary and debarking a few eucalyptus trees.

Over the last few years, the situation has somehow changed, with many more incidents involving gorillas debarking eucalyptus trees and going further outside the park, and a noticeable increase in elephants exiting the
park, while buffaloes are still the main cause of crop-raiding (Ngaboyamahina, 2004; Ndimukaga, 2006; Ndagi-jimana, 2009). This increase in crop-raiding incidents seem to be somewhat in contradiction with a recent wildlife survey showing an actual decrease in large mammal populations, at least at the local level in the Karisoke area (Arakwiye, 2010). In a recent survey, Kwizera & Ndayisaba (2009) have identified the critical areas where wild animals cause the most problems in the 4 sectors of Gahunga, Nyange, Kinigi and Shingiro.

**Virunga National Park, DR Congo**

The trend observed in the Mikeno sector of Virunga National Park is also an increase of human-wildlife incidents over the years. The lower population density and regular episodes of insecurity, has led to reduced land occupation outside the park but also to disturbance on wildlife species inside the forest, explaining why problem animals tend to exit the park in bigger numbers and travel larger distances. Consequently, animals like buffaloes and elephants, but also gorillas, can potentially impact communities up to several kilometres from the park boundary.

Buffaloes and elephants exit the park anywhere along the Mikeno sector boundary, but buffaloes are more often reported in the Jomba and Bukima areas, while elephants are more active around Jomba, Bukima and Bikenge (Bichamakara, pers. comm.). For the first 6 months of year 2010 only, more than 15 buffaloes were killed while outside the forest (Mburanumwe, pers. comm.). People are regularly injured by buffaloes or elephants, and fatal accidents have also been reported.

Regarding the gorillas, the Rugendo group was historically the only group that was reported outside the forest, sometimes up to several kilometres, and feeding on crops such as maize (Madden, 1999). These days, Rugendo has continued its habit of spending large amounts of time outside the park, sometimes without returning to the forest for several days in a row. Other gorilla groups such as Humba and Mapuwa or lone silverbacks, are also now increasingly frequenting maize and banana fields on community land (ICCN, 2009) (Figure 1).

![Figure 1](image_url)

**Figure 1. Observations of gorillas outside the Mikeno sector (January 2009 to July 2010) (Source: RBM data)**

**Mgahinga Gorilla National Park, Uganda**

In villages neighbouring the eastern side of MGNP (Gitenderi parish) the major problem animals are porcupines and birds, with porcupines being regarded as the worst crop raider because they damage Irish potatoes the most economically important crop. Communities estimate the crop loss at around 40%. Before the gazett-
ing of the national park (1991), farmers used to trap them and kill them, which reduced the problem. After gazettement of the national park, this procedure stopped and since 1992 the problem has increased (Musaasizi et al., 2005).

By contrast, the communities living around the western side of MGNP (Gisozi parish) experience the most problems with buffaloes and elephants. Buffaloes in particular come out in large numbers and can be observed as far as 2 to 3 kilometres outside the park. The elephants and buffaloes prefer to eat maize but the elephants uproot other crops as well. Elephants only come twice a year when the maize is about to be harvested and they normally come in groups of four. They will only start eating the potatoes if there is not enough maize. In this parish the local community consider themselves helpless to defend their crops from these raiders (Musaasizi et al., 2005). The graph below (Figure 2) shows the recent trend in HWC relating to buffaloes and elephants incidents.

![Problem animal incidents in MGNP (2001-2008)](image)

**Figure 2. Trend in human-wildlife conflicts around Mgahinga Gorilla National Park (source: UWA-MGNP)**

There is only one habituated gorilla group, Nyakagezi, that frequents MGNP on a part-time basis, and this group has never been reported outside the park. There has been so far only one case of gorillas exiting MGNP, a silverback that stayed near a village for a few days around 2007.

**Bwindi Impenetrable National Park, Uganda**

Overall in BINP, Olupot et al. (2009) have established that the following animals come out of the forest, by order of occurrence: baboons, bushpigs, gorillas, arboreal monkeys and duikers. Elephants come out rarely, but their impact is potentially very high on the crops or the security of the communities. Crop raiding by wildlife around BINP is an issue that contributes to hostility between the park and local communities (Blomley, 2003). The frustration of local communities is heightened by somewhat unclear provisions within the Wildlife Statute and Local Government Act, leading to uncertainty over who should deal with the problem (UWA or the districts) (Republic of Uganda, 1996; UWA, 2002; Blomley et al., 2010). Even if there seems to be a clear distinction between “vermin species” such as baboons or bushpigs, and “problem animals” like gorillas, elephants or other protected species such as arboreal monkeys, the responsibility of dealing with human-wildlife incidents is still confusing (Namara, 2006).

Even if gorillas come only third on the overall list of problem animals, their high profile both as a critically endangered flagship taxon and as a major economic resource gives them a particular weight in the perception of local communities (Namara, 2006). It seems that historically, gorillas used to spend time outside what is now BINP, when those areas were still forested (Madden, 1999; Macfie, 2000). Habitat loss can partly explain why ranging patterns of some gorilla groups straddle the current park boundary. Most of the authors however suggest that gorilla habituation for tourism but also increased protection have been the main factors explaining the increasingly high numbers of exits of gorilla groups to community land, with a number of negative consequences on farm crops, personal security and disease risks (Goldsmith, 2005; Madden, 2006; Andama, 2009). The following map (Figure 3) shows the trend in gorilla groups spending time outside the forest, thus contributing to potential or actual human-wildlife conflict occurrences. A total of 9 habituated groups are known to have come out of the forest, or on the boundary, over the last 10 years. The “worst offenders” are Nkuringo, Habinyanja, Rushegura and Mubare. An interesting observation, which seems to validate the notion that ha-
bituation has a significant influence on the habit to leave the forest and engage in crop-raiding, is that groups more recently habituated, such as Shongi, Bitukura, Oruzogo and Kahungye, have not been observed outside of the forest, at least not far from the boundary. It will be important to observe the trend over the next years. An important exception to the general trend described above is the Bwindi research gorilla group, Kyarugilo, which has only been observed on the forest boundary on a couple of occasions.

Figure 3. Observations of gorillas on community land (2000-2009). Only the locations outside the forest and in the buffer zone are shown on this map (Source: RBM data).

History of human-wildlife conflict resolution by IGCP

Human-Wildlife Conflict Management

a) The HUGO programme in BINP

The Human Gorilla (HUGO) Conflict Resolution programme was established in 1998 to prevent or mitigate the effects of conflicts between mountain gorillas and the human population living close to Bwindi Impenetrable National Park (BINP). It was one of a number of responses by the Uganda Wildlife Authority (UWA) to escalating conflict between local people and Park staff that had arisen from attacks on crops and people by gorillas. HUGO was conceived as a basis for addressing gorilla crop raiding in the short-term and improving relations with local people in the long-term (Macfie, 2000; Byamukama & Asuma, 2006).

The main activity to immediately address gorilla crop-raiding was a co-ordinated effort at chasing gorillas back inside the forest whenever they leave the park. The HUGO pilot programme tested negative reinforcement in primate behaviour by chasing the gorillas to see if sustained chasing was sufficient to alter gorilla crop-raiding behaviour. The pilot programme started with two Gorilla Monitoring Response Teams (GMRTs), one from Mukono Parish, and one in Nteko Parish. GMRTs are made up of trained local volunteers chosen by their communities, supervised by a UWA ranger. The team leaders, also called HUGO supervisors, are UWA rangers, who monitor gorilla movements with GPS data, and report to the Park Warden in Buhoma. Whenever gorillas are detected out of the park, GMRT members were mobilised to chase gorillas back to the park. The HUGO programme also included components geared to preventing conflict through land purchases, and promotion of land use practices that were not attractive to gorillas (Musaasizi, 2006).

The chasing activities were designed as a short term remedy to the conflict but the broader HUGO programme also included the initial activities of the UWA veterinary unit to address disease risks which later included
Box 1: HUGO groups around the south-east of Bwindi Impenetrable National Park

The three HUGO groups located in the parishes of Kiyebe, Kitojo and Kashasa were set up in 2007. They deal mainly with elephants, but are also involved in chasing other species, like gorillas and baboons. There are 4 members of HUGO in Kiyebe, 6 in Kitojo and 10 in Kashasha.

HUGO members patrol the boundary twice a week, looking for illegal activities and for animal exits. If they see something interesting, they report it by phone to the UWA Community Conservation Ranger (CCR). Each HUGO group has a mobile phone and some airtime, provided by IGCP.

In case of crop-raiding by elephants, they will start intervening themselves, by mixing dried red chillies with sawdust, in a tin can, and the mixture will burn for approximately 3 hours. In some cases, the farmer calls the CCR, who then organise an UWA patrol that will do scare-shooting if the red chillies have not worked.

The incidents, which predominantly happen during the wet season, are increasing in all parishes, and the elephants are going further and further into the community. They used to stay in a band of less than 50 metres outside the forest, but they now venture as far as 1 km outside. Elephants are also seen more and more during the day, and they are obviously getting used to the community. The change has been noticed since last year (HUGO groups, pers. comm). The crops which are raided by elephants are mainly sorghum, Irish and sweet potatoes, yams, beans, peas and banana trees. The crop-raiding information is collected by the HUGO teams, who only record estimates and not accurate data.

The HUGO members also record information on other species, like baboons, bushpigs and monkeys. Most damage these days are done by elephants, and then baboons and bushpigs. They also now follow gorillas which are occasionally leaving the park in the area: Bitukura group (12 individuals) in the Ruhija area and which feed on eucalyptus bark; Shonji group (34 individuals) in the Rushaga area and which feed on bananas. These newly habituated gorillas don’t spend much time outside yet, never more than 1 hour at this stage, and they tend not to venture far outside. Once the information of crop-raiding gorillas received, the GMRTs organise the chasing and use mainly bells and whistles to push the gorillas back into the forest.

The HUGO members work as volunteers and receive some support from IGCP in the form of equipment such as tarpsaulins and boots, and from UWA in the form of red chillies and sawdust. Contrary to other HUGO groups, they currently don’t receive food rations from UWA, but this should be included in the next budget. They have formed ASCAs, which are an informal saving system where each member puts aside a certain predetermined amount of money every week as savings.

Even if some of the communities recognise the value of the work done by the HUGO groups, they don’t remunerate them nor give them any gratification in nature. The communities should also be more sensitised and made to understand that HUGO members are not employed by UWA nor by IGCP.
community health/hygiene sensitisation programs in human-gorilla conflict parishes. An analysis in 1999 established that there were favourable results from continuous chasing. The other benefits identified during the analysis were that communities now understood that UWA was willing to respond to their concerns and that joint park-community solutions were effective (Madden, 1999).

Subsequent to the analysis, in a joint IGCP/UWA programme, a third GMRT was started in Bujengwe Parish in 2000 and attempts at modifying land use patterns in areas frequented by gorillas especially in Nkuringo were made through land purchase between 2002 and 2004. In addition, attempts were made to strengthen the institutional arrangements surrounding human-gorilla conflict situations which provided a stable forum for regular dialogue and negotiation between community representatives and park staff (Musaasizi, 2006). In 2010, there were a total of 7 HUGO groups on the Buhoma side, covering the parishes of Mukono and Bujengwe (Figure 4).

In 2007, three HUGO groups were created in the parishes of Kiyebe (6 persons), Kitojo (6 persons) and Kashasa (10 persons), on the south-east flank of BINP. These groups deal mainly with elephants, but they are also active in chasing other species, particularly gorillas and baboons.

On the Nkuringo side, the first HUGO group was created in 1998, and a second group setup in 2007. Nteko parish currently has 29 members, and Rubuguli 15 persons. In this area, HUGO groups deal mainly with gorillas, but they also tackle other issues, especially baboons.

Figure 4. BINP: neighbouring parishes with active HUGO groups in 2010 (Source: HUGO)

b) HUGO in DR Congo

Building on the Uganda example, the HUGO programme was extended to the Mikenro sector in 2001, and three groups of 10 people each were put in place in Jomba, Bikenge and Bukima. When they were installed, the groups received training and equipment, and benefited from an income-generating programme. There is little information existing on the effectiveness and the impact of the HUGO teams in DRC, as all the data collected in the first years of the programme disappeared when the Rumangabo station was ransacked and looted by rebel groups in 2008.

Since then, ICCN has shown an interest in HUGO, but has recently decided to use the existing 40 members as patrol assistants (Mburanumwe, 2010a). As HUGO members know their respective areas quite well and they also have good intelligence, they are now mobilised by the rangers to accompany them to the peripheral parts of the forest and are particularly active in removing snares.

c) The Buffalo wall around the Virunga range

The very first buffalo wall that was erected around the forest was at Mgahinga Gorilla NP, immediately after its official gazettement as a national park in 1991. The first objective of this 7 km section of the wall, financially supported by Berggorilla und Regenwald Direkthilfe (BRD), was to serve as physical demarcation, together with concrete pyramid markers, after the previously cultivated zone “Zone 2” of the park had been
Box 2: Wall maintenance and crop guarding by Abatiganda, Volcanoes National Park, Rwanda

Abatiganda was established as a cooperative in 2008 and has currently 171 members, who work exclusively as volunteers. Their activities deal with crop protection, and the building and maintenance of the buffalo wall and trench. They cover a total distance of ca. 2.5 km of the park boundary, along three cells in the Guhanga sector (Musanze District).

On Mondays and Thursdays, cooperative members do repair work on the wall and the trench. Other groups regularly patrol the boundary during the day and report any potential problem animals, which are buffaloes and occasionally elephants (there are no gorillas in that area). During the harvesting seasons, they organise surveillance of Irish potato crops, by building basic huts where they post people during the nights, from 5 pm until 7 am, for a duration of 3 months. The crop surveillance is carried out on a depth of about 400 m from the boundary. There are regular contacts with the PNV rangers who are posted in the region, and they provide them with regular information.

Although the buffaloes can still leave the park and raid the crops, the wall and the trench have had a significant impact since they were built. The wall break-outs happen mainly during the wet season, when the buffaloes apparently are looking for drier land, and during the harvesting time. After potatoes, the crops most raided are wheat and maize. Pyrethreum crops are also eaten by buffaloes (the leaves are palatable).

There is no remuneration system, although some of the members are land owners or have crops in the area that is covered. Their only interest is for the community, although they know that they can benefit from the revenue-sharing programme and also have privileged access to tenders when RDB needs to commission certain works. For instance, this cooperative has had a RwF 2 million contract with RDB for the original construction of a segment of the wall. The members are also sometimes able to rent a plot of land from a landowner and cultivate their own crops.

Since the launch of the cooperative, 8 members have been wounded in buffalo-related incidents, and one person is paralysed. The park has not provided any assistance for those injured during the incidents.

reclaimed and left to regenerate after more than 40 years of cultivation. The second objective was to prevent large mammals, particularly buffaloes and elephants, exiting the park and causing damage on community land (UWA, 2001). In 1995, CARE Uganda supported the extension of the wall as assistance to UWA. Then in 2004/05, IGCP supported building the wall along the Uganda DRC border, which was then upgraded in 2009 (Ezuma, 2009). The total boundary length in Uganda is ca. 16 km.

Construction of the buffalo wall around PNV in Rwanda started in October 2002 and the whole perimeter of the park, 76 km, was completed by 2007 (Kwizera and Ndayisaba, 2009). The construction of the wall was initially facilitated by IGCP and CARE, and in the first few years there was no or very little maintenance performed on the wall (Bana, 2007). A first improvement

Top: A member of Abatiganda works to repair the buffalo wall of Volcanoes National Park, Rwanda. Photo by Wellard Makambo/IGCP.

Bottom: Shelter for association members who guard potato crops from raids by buffalo and elephants. Photo by authors.
of the wall was initiated in 2009 with the digging of a trench on the inside of the wall, along priority sections of the boundary. After 2007, four associations were put in place, each one being in charge of the wall and trench maintenance in the four most delicate sectors (Gahunga, Nyange, Kinigi and Shingiro) (Nielsen and Spenceley, 2010). Each association has around 150 members, and is actively involved in several activities: patrolling the boundary, fixing the wall where it has been broken, guarding the crops during the harvest season, and liaising with RDB staff when there are important issues.

Around Mikeno sector (PNVi) construction of the wall also began in 2002, and a total of 52 km was completed by mid 2007. A subsequent evaluation of the wall around the Mikeno sector gave evidence that not only had the wall helped in reducing crop raiding especially from buffalo but the wall was also limiting encroachment of the park. However, it was observed that animals do destroy the wall mainly in areas not well built or lacking height. IGCP decided then to start upgrading the wall, and two sections were completed by mid 2010, respectively between Mwaro and Gikeri over a distance of more than 5 km, and around Jomba over a distance of more than 4 km. In these sections, the wall was raised to a total height of 1.5 metre. Additionally, a new section of 0.5 km was built towards the border with Uganda (IGCP, 2010). Ultimately, the entire wall on the DRC side will have to be raised and repaired in the near future.

Buffer Zone Management

Buffer zones are blocks of land located between natural forests and cultivated areas that are managed to discourage wildlife from crossing between them. In its broadest sense, a buffer zone should be an area where land-use practices and land management are designed to reduce or prevent human-wildlife conflict. Before land-use changes were implemented at Nkuringo, there was no deterrent to habituated gorillas, which typically ranged up to 1 kilometre beyond the park boundaries (Goldsmith, 2005). In October 2000, a survey was conducted amongst the community in the affected area to solicit their views for and against sale of land. The report indicated that 93.3% of the respondents were in favour of land sale and following several consultative meetings with the community, the affected community established the amount of land that would be made available for purchase. The piece of land incorporated the range of the Nkuringo group and would extend approximately 350 metres from the park boundary (as this was the most frequently used section of the community land by the gorilla group) and stretch 12 kms along the park boundary. As the Nkuringo group was the only habituated gorilla group which ventured beyond 350 metres from the edge of the park, it was decided that this would be sufficient to significantly address the issues of problem animals, including the Nkuringo gorilla group (IGCP, 2005).

UWA bought the land from the local community with the help of IGCP and other stakeholders. The buffer zone has been divided into a ‘community exclusive use sub-zone’, which is the outermost 12 km by 150 m, and an ‘actively managed sub-zone’ which borders the park (12 km by 200 m) (see Figure 5). Activities in the former include problem animal control interventions, research and monitoring, community conservation education, and livelihood improvement initiatives (crop and animal husbandry and community tourism). In the latter subzone, activities include gorilla tracking, research and monitoring, and manipulation of the ecosystem to prevent it from developing into mature forest (NCDF and UWA, 2007).

At the policy level, the buffer zone is under the responsibility of the Joint Management Board, consisting of UWA and the Nkuringo Conservation and Development Foundation (NCDF). Under this structure, the management committee is responsible for the actual buffer zone management, while three sub-committees (Habitat and Gorilla Health; Community Participation and Livelihoods; Monitoring and Evaluation) deal with specific technical issues (NCDF and UWA, 2007).

Figure 5. BINP: Buffer Zone area, Nkuringo
Box 3: The buffer zone at Nkuringo, BINP

Officially established in 2005, the buffer zone in the Nkuringo area represents practically the only example of a buffer zone next to a protected area in Uganda. Through consultations and negotiations with a wide range of stakeholders, particularly local farmers being affected by problem animals leaving the forest, a total of 423 plots of land totalling 4200 hectares were purchased from 239 individual landowners. Funds were donated by IUCN-Netherlands, Fauna & Flora International and WWF-Sweden, and total payments of about USD 400,000 were smoothly organised between 2003 and 2005.

The land purchased for the buffer zone has been divided into two sub-zones: the inner zone, 12 km along the forest boundary and 200 m deep, is owned and managed by the Uganda Wildlife Authority (UWA), and is supposed to be “deliberately manipulated” so as not to allow it to develop into a mature forest ecosystem. The outer zone, on the other hand, is 150 m deep and is adjacent to community land. The outer zone is co-owned and co-managed by the community of Nkuringo, under NCDF, and UWA.

In 2010 and after several years of testing, it appears that the hedge of Mauritius thorn planted along the outside boundary of the outer zone is the only mechanism that has some relative success in slowing down the movements of wildlife, at least where it is properly maintained, such as in the southern part (see first photo below). Regarding the actual management of the two sub-zones, one can only notice the regeneration of the vegetation, particularly visible in the northern part (see third photo). It is now imperative to find a proper solution which would act as a buffer.
Analysis of the Theme

Phases and mechanisms

In its early stages, human-wildlife conflict management has not been the subject of any strategy from the IGCP point of view, however the following phases can be retrospectively described.

Having been intimately involved in tourism development in Bwindi since 1992, IGCP assisted UWA in all aspects of gorilla tracking, including training, organisation, implementation and monitoring. Several years later, it appeared that habituated gorilla groups were coming more and more frequently out of the forest, mainly to raid crops. This led to the establishment in 1998 of the first HUGO groups, initially as a testing phase. The HUGO experience was then extended to other parishes around BINP, and to the Mikeno sector in the Virunga range.

Regarding the buffalo wall in the Virunga range, this was also done over a phased approach, concentrating first on the most problematic sections of the parks’ boundaries, and then progressively extended to the whole perimeter. More recently, upgrading of the most critical sections has started to take place in the three countries.

The establishment of the buffer zone in Nkuringo has taken several years, also in a phased approach: statement of the problem and planning, negotiations with the communities, land purchase, testing of various buffer crops and physical barriers such as the Mauritius thorn.

a) Costs of HWC and BZ management

Over the years, IGCP and its financial partners have invested relatively large amounts of money into human-wildlife conflict solutions. It is estimated that a total of about USD 1 million has been spent in the last 10 years.

For example, for the wall upgrading campaign in DRC in 2009/2010, IGCP paid USD 4 per metre of new wall (0.5 km), and USD 2.5 for the upgrade (about 10 km) to height of 1.5 metre. For MGNP, a stretch of 1.5 km of new wall along the DRC border cost a total of USD 4.65 per metre (Ezuma, 2009).

Regarding the buffer zone in Nkuringo, a total of ca. USD 400,000 was used for the land purchase of 4.2 km² (this sum includes compensation for crops and property, disturbance allowance and bank charges) (IGCP, 2005).

Unfortunately, there is a lack of detailed information regarding the costs of HWC, and it is therefore difficult to carry out a proper financial analysis. If there were more data available, it would be particularly interesting to look at the overall effectiveness of HWC and to compare the costs of the various interventions with the baseline costs of no action.

b) Socio-economic aspects

As highlighted previously, local communities neighbouring the four protected areas that harbour mountain gorillas pay a high cost, both in social and economic terms. Besides the direct impact of HWC resolution programmes, the establishment of such initiatives in the three countries has also contributed to some direct benefits to specific groups who were involved in their implementation.

In particular, some high-intensity labour activities such as the erection of the buffalo wall have seen the involvement of several thousands of unskilled people, through contracts signed between the communities and park authorities or IGCP. For example, during the recent upgrade of several kilometres of the wall in the Mikeno sector, more than 1200 workers from the community were hired and paid to strengthen or build some portions of the wall (IGCP, 2010). Also recently, a similar exercise conducted around MGNP has involved three groups from the community, each of them being in charge of a stretch of 500 metres (Ezuma, 2009).

Tangible socio-economic benefits exist also for groups of people specialised in routine programmes, like the HUGO groups, which total ca. 150 people between Uganda and DRC, or the “crop rangers” associations in Rwanda, totalling about 600 people. Most of the HUGO members in Uganda have been enrolled in ASCA groups,
an informal system of community savings in rural areas (KCBTA, 2009; Pelrine and Kabatalya, 2005). By belonging to these associations, the members have attained special status in their communities. Finally, the experimental management of the buffer zone in Nkuringo has also brought some socio-economic benefits to the local populations in its 5 villages, although no effort has been undertaken to quantify them.

c) Institutionalisation and implementation partners

As with most of the activities developed by IGCP, the protected area authorities of the three countries have been instrumental in the implementation of human-wildlife conflict resolution and buffer zone management.

In Uganda, both the buffer zone management in Nkuringo and the HUGO programme have been an integral part of the routine work of the Uganda Wildlife Authority over the years. In Nkuringo, UWA co-owns the outer buffer zone with the community (through NCDF) and the inner zone is a de facto extension of BINP (although not officially gazetted). UWA contributes to the HUGO programme mainly by providing food rations to the members and by liaising regularly with them through the Community Conservation Rangers that are deployed in the various patrol posts around BINP. In Mgahinga, UWA is also in constant touch with the community through their specialised personnel.

In Rwanda, RDB has always been at the forefront regarding the construction, upgrade and maintenance of the buffalo wall. There are currently a total of 18 associations organised in cooperatives which are active around and in PNV: 12 cooperatives (one for each sector neighbouring the park) consist of former poachers and are involved in assisting the patrols, one is the ANICO group, one gathers all the porters involved primarily in tourism and four are the cooperatives involved in HWC (also called "crop rangers") (Kwizera and Ndayisaba, 2009). All those associations are now coordinated by RDB, and there is clearly a strong sense of bond between the cooperatives and the institutional partner.

It’s probably in DRC where the level of “ownership” of the various initiatives developed with the assistance of IGCP is less noticeable. There is currently no regular system for proper wall maintenance, and the HUGO groups that were put in place a few years ago have now been converted into patrol assistants by ICCN. From the three components making up the Virunga volcanoes range, the Mikeno sector is probably the one facing the most challenges: not only are the socio-economic situation and the security status there the least positive in the three countries, but human-wildlife conflicts around Mikeno are also the most diversified and acute. It’s the only place among the four gorilla parks where elephants, buffaloes and gorillas, together are active in crop-raiding, in addition to eucalyptus trees being damaged by gorillas.

Opportunities and Constraints

Opportunities

a) Institutionalisation of human-wildlife conflict resolution

A critical aspect, which is in fact valid for any conservation activity but even more essential in the case of human-wildlife conflict, lies in the sustainability of the various resolution initiatives. Everybody agrees that such operations cannot be sustained only through the contributions of external stakeholders such as conservation NGOs or international donors. There are in fact several potential candidates which could play a vital role in the institutionalisation of HWC resolution, especially in Uganda.

Despite the current confusion (see below under “Constraints”), the Local Government (LG) structures in Uganda are legally vested with some important responsibility related to problem animal control (PAC). Furthermore, the recent “Gorilla Levy” system is channelled through the various LG levels, with the provision that at least 15% of the funds coming from this Levy should go to PAC activities. Even if the absolute amounts generated by this mechanism are rather low (USD 5 per gorilla permit are going to the fund), these would at least provide a regular stream of funding for programmes such as HUGO around BINP, or maintenance initiatives for the buffalo wall in MGNP.

As a long-established conservation institution, the Bwindi Mgahinga Conservation Trust (BMCT) represents another potential partner which could play a role in the stability and sustainability of HWC programmes. The Trust puts a lot of emphasis on marginalised and poor communities around the two PAs where it is active, and
HWC affects more the poorest populations directly neighbouring the forests.

In the specific case of Nkuringo, NCDF could also take on some responsibility in directly supporting HWC activities in Nteko and Rubuguli parishes, being through the HUGO groups active in the area or by taking a more proactive role in the management of the buffer zone.

An area which has been recognised as needing particular attention is the systematic documentation of HWC issues: trends in HWC, efficacy and impact of resolution programmes, proximate causes for conflicts, etc. Without an institutionalised long-term monitoring component, trial-and-error projects will remain shots in the dark and elementary questions will be unanswered. Potentially and logically, institutions such as KRC in Rwanda and ITFC in Uganda could play a more permanent role in monitoring those parameters and assisting conservation practitioners in their management decisions.

At the regional level, the Transboundary Executive Secretariat for the Greater Virunga (TES) has also the opportunity to be active in HWC in the three countries. In its 5-year implementation plan, TES has recognised human-wildlife conflict as a priority area (van der Linde, 2009), however this issue has not yet been addressed due to time constraints. A first step identified for this theme is to document as much as possible from outside the region as well as in the geographic scope of TES (Musabe and Nzita, pers. comm.). There is a definite opportunity for the TES to progressively evolve as a clearing house for monitoring data coming from the four mountain gorilla parks, including observations on HWC and its resolution.

b) Towards a buffer zone around PNV in Rwanda?

There is theoretically already a “buffer zone” around some sections of PNV, a 6-metre belt of trees (mainly Eucalyptus and Grevillea) which have been planted right next to the boundary. This feature is more a demarcation system than a proper buffer zone, and the communities seem confused as to who can access it and exploit the timber. Moreover, the choice of eucalyptus in some areas is probably not the best option, given that it has the potential to attract gorillas.

For several years now, preliminary discussions have been held at the level of the Government of Rwanda regarding a possible “extension” of Volcanoes NP (van Gils and Kayijamahe, 2009). The extension would be about 3,500 hectares and would basically be a strip of land going all around the park boundary, with a depth that would vary and which would have the least impact in terms of numbers of people to displace. The extension would be left to regenerate and be planted with indigenous trees. A company has been put in place (Great Forest Holding), which will be in charge of the initiative. The scheme would involve the construction of a high-end tourism lodge, to be funded out of carbon credits (Ngoga, pers. comm.). Various levels of the government are involved in the discussions, among them REMA, the National Land Center (NLC), RDB and the carbon trading unit of the Ministry of Environment and Lands. While there is still a long way to go before any decision is made, certain concerns have been raised, most notably about the fact that several thousands of people, or perhaps more, would have to be displaced, with obvious socio-economic consequences.

At this stage, it looks like no consideration has been made regarding the use of the possible extension as a proper buffer zone, which would then act as a soft barrier between the park and the community. There is definitely a big opportunity which should not be wasted, and if this project goes on, all parties involved should see this extension not only as a way to increase the size of gorilla habitat but first and foremost as a potential solution to the current human-wildlife conflicts. For instance, there could be a proper system that would act as a natural barrier for wildlife, through a combination of non-palatable plant species, thorny shrubs or adequate land use.

c) Compensation law in Rwanda

The new law in Rwanda on compensation for damages caused by wildlife, which is still in preparation, is another opportunity that deserves particular attention (Republic of Rwanda, 2009a and 2009b). On the one hand, the law and its application orders will probably generate significant challenges for the various authorities which will be in charge of enforcing them, at least in their early stages, without mentioning how the system in Rwanda is likely to heavily affect the debate in neighbouring countries. On the other hand, these legal instruments, which specifically address the long ignored issues of human and property damages caused by wildlife, provide the possibility to influence aspects such as land use around the parks, for instance by linking the compensation for lost crops with clear conditions like the types of crops which are eligible for compensa-
tion, the distance of the crops from the park boundary, the measures taken to protect the crops and deter animals, etc. For a country with such strong governance credentials, Rwanda offers a real opportunity to properly address the usual inequities introduced by HWC, but this will require the full cooperation of central and local government structures.

**Constraints**

**a) Legal and political confusion**

In Uganda, The Uganda Wildlife Statute (1996) provides the legal framework for the management of human-wildlife conflicts in Uganda. Section 3 (1) (f) calls for the promotion of ecologically acceptable control of problem animals. The Local Government Act (1997) also gives the responsibility of managing crop-raiding animals that have been declared vermin by the Uganda Wildlife Authority (UWA) to the local government authority at district and sub county levels.

Currently the animal species declared as vermin are Olive Baboons, Bush pigs and Vervet monkeys. Note that within the natural habitat of the animals the term vermin is not recognised. Many animals not listed as vermin are legally protected outside the PAs and it remains the responsibility of UWA to control and protect them. These include animals of international significance such Mountain Gorillas, elephants, Chimpanzees etc. Important to note is that the Uganda Wildlife Statute (1996) does not provide for compensation to wild animal damages because the policy makers thought the costs would be prohibitive in the long run. Additionally, the affected farmers often over exaggerate the magnitude of crop damage, thereby bringing difficulties in the administration and implementation of such a scheme. The government has however; put in place some indirect mechanisms to benefit the affected communities. For example, through investing some of the revenue generated from the park into community development projects within the parishes adjacent to the PAs, and allowing community access to some of the park resources. Although the responsibility of management of vermin animals is constitutionally vested to the district local governments, they do not have the technical and financial capacity to deal with the problem. Additionally, UWA does not have the capacity to control all incursions into the community by non-vermin animal species. This leaves the affected farmers in a dilemma of what options to undertake to protect their property (Andama, 2009).

In Rwanda and DRC, there seems to be less confusion regarding the responsibility in human-wildlife incidents, although the challenges are still very important. The upcoming new law on compensation in Rwanda can however be seen as a double-edge sword, where opportunities will probably equally match the difficulties in implementation.

**b) Attitudes of local communities**

Along with the historical resentment having its roots in the loss of access to natural resources found in protected areas, it is generally admitted that human-wildlife conflicts explain the usually negative attitude of communities towards the national parks in the region.

According to Blomley et al. (2010), “vermins” (i.e. baboons, bushpigs and monkeys) and “problem animals” (elephants, gorillas and buffaloes) overwhelmingly represent the main reasons explaining negative attitudes of communities towards BINP and MGNP. On the other hand, it is interesting to note that the issue of crop-raiding was only raised by a few respondents.
during a survey conducted by Sandbrook (2006) and targeting villages living near tourism hotspots near BINP. There seems to be a clear link between benefits received by some segments of the community and the perception to HWC issues. Similarly, a recent socio-economic survey carried out around PNV in Rwanda concluded that crop-raiding by wild animals coming out of the park ranked only as a secondary issue expressed by the communities sampled (Bush et al., 2010).

These examples demonstrate how complex the issue of community attitudes is, and how it can interfere with HWC resolution programmes. It takes sometimes only a couple of high-profile human-wildlife incidents, such as crop-raiding by gorillas or community members being wounded or killed by wildlife, to compromise the achievements obtained by long and painstaking integrated conservation and development programmes (Blomley et al., 2010).

Lessons Learned

Lesson 1: Human-Wildlife conflict has to be viewed in the broader context of cost-benefit analysis

Communities living near protected areas have to bear multiple costs: loss of access to the natural resources in the forest, exposure to crop-raiding animals, and even physical threats to property or human lives. Furthermore, these direct effects are also usually associated with opportunity costs: time spent by the communities to guard the crops or defend their properties cannot be used in other activities that could contribute to their livelihoods or their income-generation; children can often not afford to receive proper education because of their involvement on the farm, etc. Logically, the closer the communities are to the forest, the greater the costs will be (Korbee, 2007).

On the other hand, modern conservation concepts have been advocating for many years the sharing of benefits with the communities living near protected areas. The principle is to have a better balance between the costs incurred by neighbouring communities and the benefits accrued. Ideally, the costs should be kept as low as possible and the benefits higher. In this situation, the communities would have, again theoretically, a more balanced perception of the protected area (Archabald and Naughton-Treves, 2001; Franks, 2008).

The following graphs show several scenarios with various values of costs and benefits, in relation to distance from a park boundary. In these graphs, figures are indicative and only aim at showing broad trends. The three next graphs have in common that the costs always steadily decline as one moves away from the park boundary, assuming that nothing is done in terms of preventing or mitigating human-wildlife conflicts.
In this scenario, the benefits decrease as we travel further from the park boundary. However, those benefits never manage to offset the costs experienced by the communities. In this case, the net result is negative, which can impact on the perception of the people, and generally on their attitude towards the park and its authorities.

In this case, the benefits increase as we approach the park boundary, and they manage to offset the costs. This is better than in Scenario 1, and should therefore elicit a more positive attitude among the communities. However, there seems to be little success in preventing or mitigating the effects of HWC in this situation.

This scenario is probably the closest to the current situation experienced by the communities around most of the parks. The communities receiving most of the benefits are not the ones living in close proximity to the park, and there is a skewed ratio between costs and benefits. This situation is likely to emphasise the conflicts and impact on the attitudes.

This situation is similar to Scenario 1, but in this case there are HWC strategies that seem to have an impact on the overall costs incurred by the communities immediately adjacent to the park. However, the benefits accrued to the populations cannot offset the costs.

This is probably the ideal situation, where HWC strategies are having a significant impact and benefits are much higher than the costs, while favouring the communities living immediately next to the park. This scenario would probably elicit the best response among the communities, both in terms of attitude and equity.
A general feature observed throughout the region, but also in other parts of Africa, is that the poorest of the communities tend to live near the boundaries of protected areas, where land is usually cheaper and less accessible. Being on the front-line, these communities are also logically bearing most of the costs imposed by the protected areas and suffer the most from human-wildlife conflicts (Blomley, 2003; Blomley et al., 2010; Bush and Mwesigwa, 2008; Sandbrook, 2006; Franks, 2008; CARE et al., 2003).

Many respondents interviewed during this study, particularly the communities or their representatives, complained that a lot of the benefits going to the communities were in fact targeting areas that are too far from the park boundary. There are examples of schools or other infrastructures being built with park revenues or by other conservation programmes located up to 5 or 10 kilometres from the park, and where the children of parents living near the boundary cannot even access because their presence on the farms is required for livelihood reasons or they don’t have the financial resources to send their children to schools. This overall impression should probably be verified by more systematic surveys targeting the attitudes of communities in relation to benefits accruing from the forest and conservation programmes.

Finally, one has to bear in mind that “calculating” costs and benefits of a protected area to the neighbouring communities cannot be done entirely on the basis of facts and figures. In any human society, perception to hardship is an individual feature which can be based on many different factors, some of them being purely psychological. The level of tolerance displayed by the community will not only be linked to the potential or real benefits (Romanach et al., 2007), but will also vary according for instance to history and precedents, actual or perceived relationships with leaders or organisations, patience, etc.

Lesson 2: Solutions aimed at preventing or mitigating human-wildlife conflicts have to be carefully and continuously assessed in the long run, through sustained monitoring systems

An observation made during this assessment reveals that very little has been done in terms of monitoring the outcome and impact of the various strategies aiming at preventing or mitigating the human-wildlife conflicts throughout the region. In some places such as at PNV in Rwanda, data exist for some extended periods of time, but have not been entered nor analysed. In general, the lack of quantitative datasets represents a significant loophole in the whole programme: without these, it is extremely difficult to make informed decisions and to properly assess what works and what doesn’t, or what the general trends are over time. Personal impressions and qualitative information exist, however, which seem to indicate that human-wildlife incidents are generally on the rise, and that prevention and mitigation measures are, at best, only partially answering the problems while not addressing them in a thorough manner.

Aspects which appear to be crucial in the whole understanding of HWC, and which have not been documented in the long-run include, among others:

- **Population dynamics of large mammals or known crop raiders in the Virunga massif:** most of the HWC incidents in the Virunga massif involve buffaloes and, to some extent, elephants. For these two species, it is evident that the incidents are on the rise, and there also seems to be a qualitative correlation with their direct or indirect observations made during patrols inside the forest. Even if some studies have been carried out over the years, mainly by the Karisoke Research Center, they were mainly done by undergraduate students and they lack the depth of time required to perform a proper long-term analysis. This remark is also valid for BINP and the understanding of elephant population dynamics.

- **Connectivity of Mwaro corridor:** this corridor is known to play a critical role in connecting the Virunga massif with the Nyamulagira sector of Parc National des Virunga. In historical times, herds of buffaloes and elephants, mainly, were regularly observed crossing the Goma-Rutshuru road during what appeared to be seasonal movements. For the past 20 years, the corridor has been subject to intense pressure, starting with the paving of the road in the early 1990s, then the Rwandan refugee crisis in 1994-1996 and then the two Congolese armed conflicts in 1996 and 1998. The main blow to the corridor happened in 1998, when the Congolese army decided to clear the vegetation on both sides of the road, in order to decrease the number of armed ambushes. Coupled with widespread corruption within the army that enabled hundreds of people...
to cut and sell more trees in this area, this operation led to the complete loss of connectivity of the corridor. Monitoring data of that time show a clear link between this event and a dramatic increase in HWC incidents in the three sections of the Virunga massif. For instance in Rwanda, elephants were seen coming outside of the park and raiding crops, something that have not occurred for more than 15 years. Since then very little effort has been made in trying to understand the relationships between the regeneration of Mwaro corridor, the movements of key species and the occurrence of HWC incidents in the three countries.

- Ecological and social pressures on gorilla groups: there is an obvious trend, observed both in the Virunga massif and in Bwindi, showing that more and more gorilla groups come outside the forests and damage eucalyptus trees and crops. While habituation to human presence and historical occupation of land currently lying outside gazetted protected areas have often been cited as the main reasons for this trend, little is known about food availability issues or social pressure driving some gorilla groups outside their usual home ranges. More recently, Karisoke Research Center has been working on food availability and ecological suitability in its research area (Grueter, pers. comm.) but no such analysis has been carried out on gorillas habituated to tourism. A better insight into these aspects would definitely shed some light on human-gorilla conflicts.

- Distribution and trends of human-wildlife conflicts: Despite having been involved in HWC issues for many years, IGCP and its partners have very little hard information to show in order to document the trends both in terms of distribution and intensity. According to discussions with respondents, HWC incidents seem to be significantly on the increase and spreading, but this observation is mainly based on qualitative impressions rather than real figures or geo-referenced information.

- Costs and benefits to the neighbouring communities: As highlighted in Lesson 1, HWC has to be viewed in the broader context of cost/benefit analysis. A documented and thorough study, whether it is in economic terms or on perception grounds (e.g. attitude surveys), would definitely assist the protected areas and their partners in assessing the impact of HWC strategies at the socio-economic level.

- Economics of HWC and mitigation measures: there exists only fragmentary information on the financial equation of HWC in and around the four mountain gorilla protected areas. The absence of reliable hard data on financial costs makes it very difficult to undertake a proper economic assessment of the various mitigation or prevention measures, or of the no-intervention baseline scenario.

Lesson 3: Solutions designed by humans are constantly challenged by adaptable wildlife. This requires constant vigilance and adaptable solutions by humans, but also basic and sustainable maintenance systems.

A striking observation made during this study is the fact that once a HWC solution has been implemented, its impact lasts for a certain time then fades away, sometimes to be completely obliterated. This can be attributed either to a lack of maintenance and follow-up of the solution, or to counter-solutions found by wildlife species, or most likely, a combination of both explanations.

An example is the buffalo wall built along the boundary of Volcanoes NP in Rwanda. After the construction of the first version of the wall, the level of crop-raiding observed outside the forest dropped significantly, thus showing that the solution found and implemented had an impact. However after a few months, the level of crop-raiding started to increase again. Buffaloes were seen trying, and succeeding, to find the gaps in the wall, and on the other hand the level of maintenance to the wall, particularly the repairs where it had collapsed, was not properly followed up. It was then decided to dig a trench on the inside of the wall, which had the desired effect of reducing again the level of crop-raiding. But a few months later, it was observed that animals were again
coming out, having found again loopholes in the new solution. The current view is that the entire wall should be upgraded to bigger dimensions, some people even suggesting 2 x 2 metres.

What is particularly interesting is to notice that every time a solution is adopted and implemented, most of the people are convinced that it will be the ultimate answer to the problem. We however seem to forget that even wildlife can find its own solutions to obstacles that we put in place, hoping to restrain its movements and adverse effects on crops or human livelihoods.

This lesson can then be broken down into two aspects:

- **Never consider that only one solution will solve all problems, as wild animals will always show great adaptation skills in getting around the difficulties.**
- **If a solution requires regular follow-up and/or maintenance, reliable and long-term systems need to be worked out well before the actual solution is implemented; otherwise it is not worth the investment.**

![Figure 6. Summary of a sequence of solutions and their outcome over time.](image)

Lesson 4: **Land-use practices around protected areas are usually overlooked but could bring about significant changes in decreasing conflicts.**

With the exception of the Nkuringo buffer zone, the interface between the two forests harbouring mountain gorillas and the neighbouring communities is a hard one: community land starts where protected area ends, with no transition whatsoever. While designing barriers such as stone walls or trenches can have some impact, the issue of land use in the immediate vicinity of the forest is probably even more crucial to consider. Most of the respondents recognised that land use practices could perhaps be adapted, but it appears that there is still little understanding on how to address this issue in an appropriate way. Where possible, particularly in Rwanda and Uganda, local government structures have an important role to play, for instance by integrating land-use planning and human-wildlife conflict considerations into development plans at district or lower levels. This would necessitate coordination of strategies not only with local government structures, but also with national entities such as ministries of land and agriculture.

In the case of Rwanda, where a new law instituting compensation is under review (Ngoga, pers. comm.), there could even be the opportunity to link land use aspects around protected areas to conditions for compensation.
Beyond working out policies and strategies for more sensible land-use planning and crop selection, the main obstacles that appear from the various discussions on the ground are livelihood considerations and traditional resistance. The majority of farmers in the region have very small plots at their disposal and tend to plant crops for subsistence reasons. Influencing crop selection will therefore meet strong resistance where farmers have no alternatives to fulfil their livelihood priorities.

**Lessons 5-9: Buffer zone management**

A number of specific lessons can be drawn from the experience of the buffer zone in Nkuringo, but these lessons could easily be extended to other aspects of human-conflict management, in Uganda or elsewhere.

In recent years the concept of buffer zone management has emerged as a relatively new, integrated development approach to nature conservation. Buffer zones are seen as an important tool in conserving areas of ecological importance, while at the same time addressing the development issues of the people in the areas surrounding it. Despite its perceived potential, the concept has so far hardly been made explicit within international and national nature conservation and development policies (Ebregt and De Greve, 2000). Some social science authors have even openly accused conservationists of using the concept of buffer zone in order to extend the control of protected area authorities into community land (Neumann, 1997; Laudati, 2010).

**Lesson 5: “Participation” of local communities can be envisaged at different levels, but only certain types of participation have a real meaning and a chance of success.**

Pretty (1995) describes six distinct types of participation in development projects:

1. **Passive participation**, in which people participate by being told what has been decided or has already happened;
2. **Consultative participation**, in which people participate by answering questions, with the process not conceding any share in decision making;
3. **Bought participation**, in which people participate in return for food, cash, or other material incentives;
4. **Functional participation**, in which participation is seen by external agencies as a means to achieve their goals, and people form groups to meet predetermined objectives;
5. **Interactive participation**, in which people participate in joint analysis, development of action plans, and formation or strengthening of local groups or institutions; and
6. **Self-mobilization**, in which people participate by taking initiatives independently and retain control over how resources are used.

What has become clear is that positive biodiversity outcomes do not emerge with passive, consultative, and bought types of participation (Pretty and Smith, 2004). It’s basically the levels 4 to 6 that show the best guarantees of sustainability. Interestingly, the overall feeling from the whole Nkuringo experience seems to indicate that those levels have not yet been reached, with the notable exception of Nyabalemura village, which is technically not inside the buffer zone.

This observation can in turn explain the fact that communities around Nkuringo seem to have generally lost their motivation in the management of the buffer zone. Since 1998, IGCP and its partners have tried and tested a number of strategies addressing the issues of human-wildlife conflict and buffer zone management in the region. Some of these strategies have failed, others still need more follow-up or even look promising, but at the end of the day integrated and effective solutions have not been found yet. In this trial-and-error endeavour, most of the stakeholders have been consulted and involved in testing would-be solutions, which is in itself a very positive feature.

There is however an important caveat: the more solutions that are submitted to the stakeholders over time, the
less they become motivated in implementing them. This is particularly true for communities around Nkuringo, where HWC solutions have been tested for the last ten years. As some respondents put it, they feel they are in a “wheelbarrow which is pushed around by other people”, in other words they consider themselves as guinea pigs in a kind of giant experiment. Poor communities which are on the borderline of meeting their livelihood requirements show very high expectations when offered potential solutions, at least in the beginning. Those communities don’t necessarily see the difference between trialling a solution and solving all their problems. Interviews with the villages in the Nkuringo area, being individuals or focus groups, clearly show a relatively high level of fatigue. This partly explains why some of the current solutions such as the live hedge sometimes meet so little motivation when it comes to implementation.

**Lesson 6: Leadership among local communities has to be properly assessed and secured, and incentives revisited**

Five villages have direct stakes in the management of the buffer zone: Nombe, Kahurire, Murore, Kikobero and Nteko (see Figure 7). A sixth village, Nyabalemura, is located to the south and is not directly in the buffer zone, but has been involved in the numerous meetings and discussions that have taken place since 2002. This village has always expressed an interest in methods and techniques dealing with human-wildlife conflicts, as they experience crop-raiding in the area of the village immediately adjacent to BINP. Under the impetus of the village leader, this community decided to borrow the idea of establishing a live hedge at the park boundary. They approached UWA, who supplied the Mauritius thorn seeds and some fertiliser, and planted the hedge over a distance of 4 kilometres. This barrier is now effective and the communities in this area are happy with the solution. An interesting observation is that the hedge in the Nyabalemura area is considered to be the best in the whole area, better than what is being done along the buffer zone by the other villages. This definitely shows that usual incentives, such as equipment or cash, don’t necessarily offer guarantees of success but that proper leadership motivated by the interest of the community gives better hopes.

![Image](figure7.png)

**Figure 7. More than 50% of the Buffer Zone lies in Kahurire village, with Murore and Nombe coming next.**

**Lesson 7: Once identified and agreed upon, buffer zone objectives have to be thoroughly implemented**

According to a literature review done by Martino (2001), there are two antagonistic positions which have been identified when it comes to buffer zones around protected areas. One proposes buffer zones as an extension of national parks and the other argues for buffer zones whose major role is to integrate parks and people. Interestingly, the Nkuringo buffer zone fits these two perceptions, with the inner zone as a de facto park extension and the outer zone jointly managed by UWA and NCDF, representing the communities.

The management plan for the buffer zone in Nkuringo (NCDF and UWA, 2007) stipulates as its management goal: "Reducing human-wildlife conflict while protecting the critically endangered mountain gorilla and contributing to improved community livelihoods". The four following objectives were identified under this goal:
• Reduce crop raiding and other destructive activities by wild animals and enhance the good working relations between local community and park management;

• Ensure general well being of the Mountain Gorillas and contribute towards Mountain Gorillas disease control;

• Contribute to improved household income for communities adjacent to the park and ensure sustainable use of buffer zone resources;

• Promote environmental awareness and community participation in buffer zone management;

Given the lack of objective data, one can only rely on impressions for verifying some of the objectives. Based on community accounts, particularly the “frontline” populations living next to the buffer zone boundary, the level of crop-raiding has not decreased and many even claim that it has worsened (Luseesa, 2008). This in turn has an obvious impact on the “good working relations between local community and park management”.

Regarding the second objective, recent home range data seem to indicate that, at least for Nkuringo group, the gorillas are still spending a lot of time outside the park and even on community land outside the buffer zone (see Figures 8 and 9). Even if there hasn’t been any disease epidemics reported since the scabies outbreak in the late 1990s, the simple fact that gorillas spend a fair amount of their time outside the forest creates potential disease risks for this group.

In the best-case scenario, communities would benefit from the joint utilisation of the outer buffer zone, most notably by planting and harvesting cash crops. Unfortunately, the several attempts made with various crops and land uses have not yet proved “to contribute to improved household income for communities adjacent to the park” (Luseesa, 2008; Andama, 2009). Furthermore, the increase in HWC incidents around the buffer zone is bringing an extra layer of costs to the farmers and their crops.

The fourth objective has somehow been achieved, at least partially. The populations neighbouring the buffer zone have certainly a higher level of awareness, and their “participation” has been relatively high (see the various levels of participation described above). However, it is also clear that the motivation of communities has been declining over the years, as a result of numerous solutions that have been tested and that have failed (Luseesa, 2008).

Referring again to the Nkuringo management plan produced in 2007 and comparing it to the current situation on the ground, the most striking observation is that the inner zone, which was supposed to be “actively manipulated so as to prevent the regeneration of natural forest”, has in fact been left to regenerate. This secondary vegetation represents excellent habitat for several wildlife species, particularly gorillas, which are therefore attracted into the area. Even more troubling is the fact that the outer zone, in many areas, is starting to resemble the inner zone, because attempts to cultivate buffer crops have failed and the vegetation is growing.

The unfortunate conclusion to the current state of the buffer zone is that, in the minds of many community members and critics, the park has been effectively extended. Accusations of “encroachment” of the park onto community land (Geisler, 2003; Namara, 2006; Laudati, 2010), until they are denied by corrective actions, will then be difficult to overturn.

Figure 8. Change in habitat use by Nkuringo gorilla group, in two-year periods. NB: the buffer zone was established in 2005 (Source: RBM data). This figure shows that Nkuringo group has been using the park significantly less over the years, despite the establishment of the buffer zone.
Figure 9: Two-year home ranging patterns of Nkuringo group, from 2000 to 2009, using Kernel method (50-70-95%) (Hooge and Eichenlaub, 2000). Source: RBM data
Lesson 8: It is important to listen to communities before embarking on experimental buffer zone programmes

Since 2005, the Nkuringo buffer zone has seen a number of attempts at establishing buffer crops that would achieve the double objective of preventing wildlife from crossing the area and of providing the local communities with income-generating opportunities: wheat, pasture grass, lemongrass and Artemisia are among the solutions that have been tested in various parts of the outer buffer zone (Luseesa, 2008). None of these attempts has really worked, either for commercial or marketing reasons (lemongrass and Artemisia), or because of technical challenges (wheat and pasture grass). These crops were tested after consultations with the communities, who eagerly accepted to try them with high expectations.

A common feature that emerges from all those negotiations, even before the buffer zone was officially acquired, is that both the communities in Nkuringo and the local government officials at sub-county and district levels have always suggested tea as a good solution for the area. Feasibility studies have been carried out in the past (Luseesa, 2008), showing that the Nkuringo region is perfectly suitable for tea plantations. The long-time presence of the tea factory in Kayonza, on the other side of the forest, indicates also that this solution is commercially viable in the broad region around Bwindi. The presence of that tea factory has actually led to some heated discussions over the years, when it was proposed to build a road through the forest between Nkuringo and Buhoma in order for the farmers in the Kisoro district to access the processing plant in Kayonza.

At the technical level, many observations, whether it is in the vicinity of BINP (Ishasha area) or around other protected areas in the region (for instance Nyungwe NP in Rwanda and Kahuzi-Biega NP in DRC), show that tea plantations act as an effective buffer crop for great apes (Hockings and Humle, 2009).

In this situation, the community and its leaders have not necessarily been listened to, which has created a double challenge: on the one hand, the favoured solution, which seems to meet all commercial and technical conditions, has not been implemented, and on the other hand and as a result of failed alternatives, momentum and motivation have been lost, thus leading to disappointment and lack of engagement.

A lot of time, money, hope and energy have been used in the process of designing and establishing the buffer zone in Nkuringo. In order not to lose the achievements that have been made, it is perhaps urgent to focus on solutions that have the best chance to succeed, even if those solutions entail a different level of challenge, most notably from the financial point of view.

In order for a tea project in the Nkuringo area to be technically successful and ecologically acceptable, there needs to be a processing plant within a radius of 40-45 km on the southern side of BINP. Identifying the financial resources for such an expensive project should be the first priority for IGCP and its partners.

Lesson 9: Land purchase for conservation is a very complex issue that requires time for proper assessment

Nowhere in Uganda has the acquisition of land for conservation been more active than in Bwindi. The first plots of land were bought from private landowners, mainly farmers, in the Buhoma area in the 1990s. This land was mainly used for establishing the new park headquarters, and there was no real management plan for the area. Since then, the vegetation has re-grown in the parts that were adjacent to the forest, and the park has virtually been extended, enabling several wildlife species, especially gorillas, to expand their ranging. These days, several gorilla groups regularly visit the Buhoma area, raiding crops or foraging right inside the many tourist facilities around the place. The trend observed at the beginning of the habituation programme in the early 1990s has therefore been severely aggravated, leading to worsened conflicts with the population but also to a significant increase in the risk of disease transmission between humans and gorillas (Kalema-Zikusoka, 2005). In hindsight, land acquisition in Buhoma and, more importantly, land-use planning and management would have deserved more careful consideration.

In the case of land purchase in Nkuringo, things were, at least in the initial phases of the process, probably better handled. Communities were consulted, a majority (93%) of them willing to sell their plots, and preparation
for land acquisition took several years, during which plans for land-use were discussed at all levels. Landowners received good money for their land, and the vast majority of them were happy with the operation, or so was the general feeling at the time. Five years later, the feeling might be slightly different, with an increasing number of farmers voicing their disappointment and regretting having sold their land. This sentiment has its direct roots in the way the buffer zone has been managed since then, and the fact that HWC has not yet found a real and lasting solution. This situation explains the rather mixed feelings expressed by authors who have reviewed the process and the principle of land acquisition in Nkuringo, some of them being rather negative (Namara, 2006; Laudati, 2010), and others being much more positive (Luseesa, 2008; Martin et al., 2008).

In the case of Buhoma and Nkuringo, assessing the value and merit of land acquisition is therefore a delicate undertaking which at least requires the validation of the principles and objectives at the origin of the operation. This in turn calls for enough time to pass before jumping to any conclusion, being positive or negative.

Should the PAAs and their respective partners in the three countries consider further “land purchase” initiatives in the future – whether it is to increase the size of an area under protection or to establish buffer zones, it would be worth comparing the merits of “hardcore” land acquisition with the ones of “conservation easements” where the landowner basically retains the property but rents it for conservation purposes (Watson et al., 2010).

Recommendations

Implement past recommendations

A number of recommendations that were issued in previous reports, sometimes going back more than 10 years ago, are still valid today as they were not subsequently implemented (for instance: Macfie, 2000 and Musaasizi, 2006). This is particularly true for the aspects of sustainability for the HUGO programme and monitoring of all HWC parameters (see below).

Identify appropriate solutions for the sustainability of the HUGO programme

In its first few years, the HUGO programme was perceived as being particularly successful. Today, even if the overall response of gorillas to chasing methods has become somewhat diminished, the simple fact of having a process involving community members who look at that type of conflict is definitely an asset. To make the achievements long-lasting and even more effective, it is high time to address the issue of sustainability. This report has described a few of the options that should be explored at the earliest opportunity, and which would definitely strengthen the programme as an institutionalised mechanism: gorilla levy, NCDF, MBCT or even UWA. The role of IGCP should be to advocate for this solution, and perhaps as a technical advising partner. In the case of DRC, where the HUGO programme has been somewhat put on hold, IGCP should engage ICCN and look at the options to re-establish an effective conflict resolution programme.

Re-establish and maintain monitoring programmes at all levels

This study has showed how difficult it is to objectively assess what has been done over the years in terms of human-wildlife conflict and buffer zone management, due to the absence of consistent and long-term datasets. This observation covers many facets of the problem: basic ecological answers regarding the main problem animal species, intensity and distribution of crop-raiding incidents, impact of conflict resolution strategies, etc. Without that kind of information, it is impossible to keep implementing projects or validating selected options, let alone convincing political institutions or donors.

Basic monitoring programmes should therefore be restarted as soon as possible in the three countries, in close relation with the usual partners: protected area authorities, research institutions, but also the communities themselves. Particular emphasis should be put on the HUGO programme, where the GRMTs should be given proper training and guidance in the monitoring side of their job description. Empowering HUGO members
means the empowerment of the community, who can play a crucial role in not only being a victim of problem animals or vermins, but also in finding solutions. Community-based monitoring tools exist elsewhere (Pouakouy-ou, 2008), and IGCP should initiate a wide discussion on their possible use around the four gorilla parks.

In DRC, it is essential to resume the active monitoring of the Mwaro corridor that connects the Nyamulagira sector with the Mikeno sector. Aspects that should be monitored in the long-run include, among others: vegetation cover, movements of key animal species such as elephants and buffaloes, disturbance factors (road traffic, illegal activities, etc.). Understanding the dynamics of the Mwaro corridor will be key, not only for Virunga NP but also for the entire Virunga massif.

Look for innovative strategies in addressing human-wildlife conflict issues

As highlighted in the report (cfr. Lesson 3), successful HWC strategies need to constantly assess the counter-strategies developed by the problem animals. This requires constantly questioning the validity of the strategies, and especially their long-term prospects versus the immediate results. In doing so, innovative thinking has to be used and put to the test, while at the same time caution needs to be exerted in order not to raise too many expectations or to assess the long-term sustainability. A recent example is the decision, by park management, to erect an electric fence around the Mikeno sector (Mburanumwe, 2010b). While this decision can appear valid in light of successful cases observed elsewhere, a proper discussion should include technical, financial and social angles. Sometimes, simple and innovative solutions involving local communities can also have a very positive outcome, and a thorough examination of published or grey literature could already provide valuable leads in potential solutions (Hoare, 2003; King et al, 2009).

Consider tea plantations as ultimately the only viable and effective solution for the Buffer Zone in Nkuringo

From soil suitability studies to commercial and technical prospects, everything seems to indicate that tea plantations in and around the Nkuringo buffer zone would be an effective and viable solution. Therefore instead of testing other solutions, for which there is no guarantee they would work any better than the ones already tried, efforts should be focused on tea. This solution is financially challenging, as it would require some important investments for the construction of a tea factory in the immediate vicinity of the buffer zone, and it would also require the establishment of large tree plantations for the tea processing. It is however the only option that would meet the double objective of being a buffer crop and offering commercial prospects for the local communities.

Furthermore, if UWA and its partners are not able to “actively manipulate” the inner zone in order to prevent it from growing into secondary forest, the whole of the buffer zone, i.e. the entire 350 metre band, should be used for growing tea. This would also send a strong message to the community, showing a real commitment on the side of UWA.
Even if the tea option appears to be the only lasting prospect that would fulfil the double goal of the buffer zone in Nkuringo, it will probably take some time before the required investments are identified and such a large scale project is implemented. In the meantime, resources and attention could be directed toward two interim measures: 1) intensify and consolidate the construction and the maintenance of the Mauritius thorn barrier, and 2) make sure that the vegetation doesn’t regenerate out of control in the two sections of the buffer zone. The outer zone should definitely be kept as bare and open as possible, while the inner zone should be “manipulated” as mentioned in the buffer zone management plan.

Conclusions

Being at the centre of the very delicate cost-benefit conservation conundrum, but also being a very emotional topic, the issue of human-wildlife conflict raises perhaps more questions than answers. For more than 12 years, IGCP has been trying to work out the problems and design solutions, and many challenges have been confronted along the way. Even if some of the challenges are still valid or even more critical, IGCP’s work has followed most of the positive features already highlighted in other lessons learned (Martin et al., 2008; Martin et al., 2009).

First and foremost, by trying to tackle one of the most challenging issues facing rural communities in Africa, IGCP is showing once again the strength of its conservation logic. By embedding the local populations in wider scales of activity, IGCP is also demonstrating its long-term principle of participation. The long-term presence of the programme throughout the region has also fostered real partnerships at all levels of the conservation spectrum. By positioning itself as a faithful partner, in particular of the three protected area authorities, IGCP has managed to progressively build a strong base for problem solving, even if it involves taking risks.

On other hand, IGCP needs to focus more on a number of aspects in order to achieve long-lasting results in the area of human-wildlife conflict, such as the relationship between information and practice, the consistent support to solutions that work, or the quest for institutionalised and sustainable strategies.

References


Nielsen, H., & Spenceley, A. (2010). The success of tourism in Rwanda – Gorillas and more. Area, Background paper for the African Success Stories Study (pp. 1-29).


Republic of Rwanda. (2009). Law N°... of ... determining the organisation and functioning of the Special Guarantee Fund. Draft of November 2009 (pp. 1-33).

Republic of Rwanda. (2009). Prime Minister's Order N°... of .../2009 on calculation of compensation and other indemnities to be paid granted to persons injured by or whose property has been spoiled by animals. Draft of November 2009. (pp. 1-29).


The International Gorilla Conservation Programme (IGCP) is a coalition of the African Wildlife Foundation (AWF), Fauna & Flora International (FFI) and the World Wide Fund for Nature (WWF) with the mission “to conserve gorillas and their habitat through partnering with key stakeholders while significantly contributing to sustainable livelihood development”.

International Gorilla Conservation Programme

Regional Office: PO Box 931, Kigali, RWANDA
Tele: +250 252 580 465
Email: info@igcp.org
www.igcp.org