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USAID Associate Award Number 617-A-00-02-00005-00

**CONSERVATION OF AFRO-MONTANE FOREST AND MOUNTAIN
GORILLAS IN A LANDSCAPE CONTEXT**

FINAL REPORT

Submitted to:

U.S. Agency for International Development, Uganda Mission

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ACRONYMS

- AAMP – Area based Agriculture Modernization Program
- BBDA – Bwindi Beekeepers and Development Association
- BINP – Bwindi Impenetrable National Park
- CARPE – Central African Regional Program for the Environment -USAID
- CBV – Conservation Business Venture
- CCW – Community Conservation Warden
- CTPH – Conservation through Public Health
- DFGF-I – Diana Fossey Gorilla Fund International
- DGIS – Directorate General International Collaboration
- DRC – Democratic Republic of Congo
- FFI – Fauna and Flora International
- GrASP – Great Ape Survival Project
- GVL – Greater Virunga Landscape
- HCP – Heartland Conservation Planning
- HuGo – Human Gorilla Conflict resolution project
- ICCN – Institut Conglais pour la Conservation de la Nature
- ICD – Integrated Development and Conservation Projects
- ITFC – Institute of Tropical Forest Conservation
- MBIFCT – Mgahinga and Bwindi Impenetrable Forest Conservation Trust
- MGNP – Mgahinga Gorilla National Park
- MGVP – Mountain Gorilla Veterinary Project
- MoA – Memorandum of Agreement
- MoU – Memorandum of Understanding

NAADS – National Agricultural Advisory Services

NCDF – Nkuringo Conservation and Development Foundation

ORTPN – Office Rwandais du Tourisme et des Parcs Nationaux

PAA – Protected Area Authority

PAMSU – Protected Area Management Support Unit

PH&C – Public Health and Conservation

PMA – Program to Modernize Agriculture

PMT – Project Management Team

PNRMPP – Participatory Natural Resource Management for Peace and Posterity

PNV – Parc National des Volcans

PNVi – Parc National des Virunga

UCOTA – Uganda Community Tourism Association

UNEP – United Nations Environment Program

UNESCO – United Nations Education, Science and Cultural Organization

USFS – United States Forest Service

USFWS-United States Fish and Wildlife Service

UWA – Uganda Wildlife Authority

WCS-Wildlife Conservation Society

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I. EXECUTIVE SUMMARY

The African Wildlife Foundation (AWF) was awarded a three-year (2002-2005) Associate Award from USAID Uganda in order to implement the project entitled, “Conservation of Afro-Montane Forest and Mountain Gorillas in a Landscape Context”. In implementing this project, AWF worked primarily through its International Gorilla Conservation Program (IGCP), a coalition of the African Wildlife Foundation, Fauna and Flora International and World Wide Fund for Nature. Key collaborating project partners included the Uganda Wildlife Authority (UWA), the Institute of Tropical Forest Conservation (ITFC), and the Uganda Community Tourism Association (UCOTA).

The highly endangered mountain gorillas are both a key reason for conserving the forests of Southwestern Uganda, and one of the most important opportunities for generating benefits for UWA and for local communities. The mountain gorilla population living in the afro-montane forests in both Bwindi Impenetrable and Mgahinga National Parks are small and isolated, making them especially vulnerable to human impacts. Loss of the mountain gorillas would not only result in a significant loss of ecological value, but would also remove one of the most important economic values of the forests to the local and national communities.

Recognizing the fragility of this species, and its considerable value, the Uganda program activities were designed to place the conservation of the remaining approximately 700 mountain gorillas and their afro-montane habitat in a broader “landscape context”—the Greater Virunga Landscape, straddling southwestern Uganda, eastern Democratic Republic of Congo (DRC) and northwestern Rwanda. These activities supported landscape level conservation management of both the highly endangered mountain gorilla and its critical habitat, as a means for expanded sustainable economic opportunities that also contribute to improved landscape management in rural communities.

Through USAID Uganda Mission support, several achievements in the conservation of this highly endangered species have been accomplished. Foremost was the Virunga mountain gorilla census, conducted between September and October 2003, and in collaboration with the three conservation authorities in Uganda, Rwanda, and the DRC. Census results indicated a 17 percent increase over the 1989 estimated population in this region. This growth is particularly notable, given it occurred in the midst of intense regional political instability. The 2003 census is one example of how AWF and its conservation partners work in Uganda to support landscape level mountain gorilla conservation progress.

USAID assistance for this project also enabled UWA to improve the management of the National Parks in the project area, and thereby making them available for expanded economic opportunities for the rural communities surrounding critical mountain gorilla habitat. The community economic benefits from the UWA managed PAs ranged from capacity building for conservation based income generating projects, such as bamboo, mushroom and honey production, to the creation of an eco-lodge at Nkuringo and strengthening of business practices at the community campgrounds at Mgahinga and Bwindi Impenetrable National Parks. Both the Nkuringo eco-lodge and the Mgahinga community campground fostered the development of private-public partnerships aimed at improving livelihoods in Uganda. AWF also worked closely with UWA and other conservation partners to design a visitors’ center in the Mgahinga Gorilla National Park. The new center will help to educate visitors from Uganda and beyond about the importance of mountain gorilla conservation, and increase opportunities for community livelihoods from tourism based businesses.

Overall, the project was successful in incorporating the landscape approach to the conservation of the mountain gorilla habitat, expanding opportunities for mitigating the threats due to the surrounding circumstances in the vicinity of these critical ecosystems. The additional results made significant contributions to strengthening the ability of permanent institutions (i.e. UWA and ITFC) to manage these forests as well as effectively monitor any changes.

African Wildlife Foundation's mountain gorilla conservation achievements would not have been possible without the leadership support of USAID Uganda. The Uganda mountain gorilla conservation project exemplified the success of collaborative conservation efforts to build sustainable linkages between biodiversity conservation and improved livelihoods.

II. INTRODUCTION

The international community has recognized the afro-montane forests of southwest Uganda and neighboring countries as one of the world's most ecologically rich habitats (see project site map below). In addition to serving as home to the critically endangered mountain gorilla, these forests harbor many other important species and provide crucial environmental services to surrounding human communities.

For a number of decades, the African Wildlife Foundation (AWF) and various other conservation organizations have invested in the protection, care and study of the mountain gorillas and the parks that are their home. The International Gorilla Conservation Program (IGCP), a collaborative program of AWF, Fauna and Flora International (FFI) and the World Wide Fund for Nature (WWF) has become the principal mechanism to support the conservation of the mountain gorillas throughout their habitat spanning three countries, as well as a model for transboundary cooperation. IGCP efforts to conserve the mountain gorilla have been successful. Despite civil and military strife in the region, few individual gorillas have been lost and the total population has grown by approximately 17% over the last decade.

While these natural resources of international significance have been successfully conserved, there have been two prevailing conditions that demand a more integrated and broadly based effort to conserve mountain gorillas and their critical habitat:

- During this period of conservation action, the threats posed to gorillas by human populations and activities have changed;
- Despite the high inherent value of this species and the importance attached to it by the international community and the three national governments, the human communities living around the parks remain some of the poorest in Africa, and thus, in the world.

In order to address the above issues, AWF was awarded the Associate Award No. 617-A-00-02-00005-00 on April 24, 2002. The three-year program activities were designed to place the conservation of the remaining approximately 700 endangered mountain gorillas and their afro-montane habitat in a broader "landscape context". This landscape context includes looking at key parks in Uganda that constitute the Greater Virunga Landscape (GVL); the threats to these parks that originate in the surrounding areas of human settlement; the social and economic requirements of the interface between the parks and adjacent communities; and the transboundary and international nature of these critical resources. Each of these activities supports mountain gorilla conservation as a means for expanded sustainable economic opportunities and improved landscape management in Uganda. Additionally, these activities

were informed and supported by the AWF African Heartlands Program, a systematic approach to landscape level conservation in Africa.

The project design was appropriately based on the AWF Heartlands Program model, and focused on conservation-based development interventions in the Virunga Heartland within the GVL. Similarly, the Results Framework in Figure 1 (below) was developed at project inception. Activities and workplans were aligned with this framework, and aimed at achieving greater conservation in the GVL through a variety of priority interventions together with key conservation partners. In implementing this fundamental project, AWF worked primarily through the IGCP and in close collaboration with key institutions, notably the Uganda Wildlife Authority (UWA), the Institute of Tropical Forest Conservation (ITFC) and Uganda Community Tourism Association (UCOTA).

The project was designed in a participatory manner and was intended to contribute to USAID Uganda Mission's Strategic Objective 2 (SO2), "critical ecosystems conserved to sustain biological diversity and to enhance benefits to society." However, at the time the project was being formulated, USAID was also revising its strategic plans. As a result, SO2 was subsumed into SO7, which focused on "expanded sustainable economic opportunities for rural sector growth." This final technical report highlights progress achieved under each of the six intermediate results (IRs) under SO7 over the course of this grant to enhance the management of the Virunga landscape in Uganda. These IRs are comprised of major activities that focus on integrated conservation management and conservation business ventures.

Conservation management of the mountain gorillas continues to pose challenges in terms of the long-term viability of these small populations, as well as immediate direct threats such as crop-raiding or the impacts of tourism. To ensure long-term viability of the population, regular monitoring of mountain gorillas is providing information on demographic patterns and population dynamics. Joint ITFC-IGCP research and monitoring results throughout this project were integrated into protected area management for improved landscape level planning, threat abatement strategies, and national and regional policies governing Uganda's natural resources.

AWF has also worked with local people to establish community business ventures aimed to increase income for the people who are dependent on resources from Uganda's protected areas. These efforts concentrated on working with community members whose activities or livelihoods are impacted or affected by the management of the gorillas and/or afro-montane forests. Under this grant, innovative and effective initiatives to integrate conservation and economic development in the region, as well as research methodologies needed to increase understanding of park-community relationship dynamics, have been implemented.

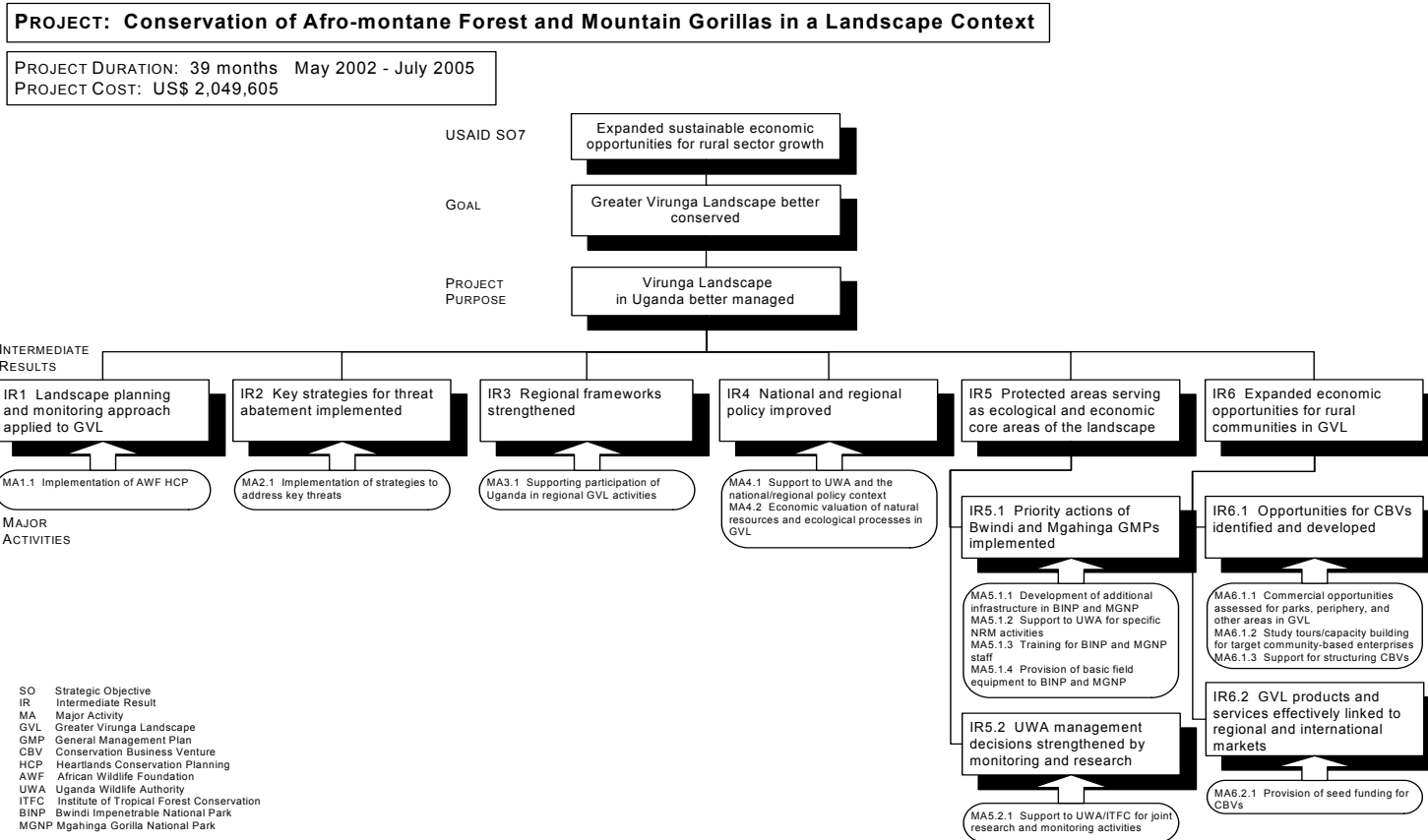
The following report presents the achievements, challenges and lessons learned during this three-year (April 2002 to July 2005), USD\$2.0 million project. The report also addresses sustainability issues significant to conservation-based development initiatives implemented under this grant. Through this collaborative conservation-based development project, the integration of interventions designed to meet the two prevailing challenges facing the GVL led to overall biodiversity threat reduction, ensuring the future of the endangered mountain gorilla and its forest habitat, together with the people of Southwest Uganda.

Map 1: Project Site



Figure 1. Results Framework for “Conservation of Afro-montane Forest and Mountain Gorillas in a Landscape Context”

Results Framework



The original agreement with USAID was signed on the 24th April 2002 for a total of USD 1,999,959. Upon initiation of the project, the USAID CTO felt that additional baseline data needed to be collected and provided additional funds to implement an aerial survey of Bwindi Impenetrable and Mgahinga Gorilla National Parks. The table below outlines the schedule of assistance and obligation from USAID throughout the life of the project.

Table 1: Modification of Assistance and Obligation Schedule

DATE	ACTIVITY	DESCRIPTION OF MODIFICATION	AMOUNT (USD)
24 th April 2002	Project contract signed for USD 1,999,959		
24 th April 2002	USAID obligation		1,207,199
10 th April 2003	Modification of Assistance –1	To provide additional funds to: 1) increase the agreement total estimated amount by USD 49,646 2) to cover costs for aerial photography, and obligate the USD 49,646 in incremental funding	49,646
28 th November 2003	Modification of Assistance –2	1) obligate USD 300,000 in incremental funding 2) designate Ms Nightingale Nantamu as the new CTO for this activity 3) incorporate new requirement for reporting of foreign taxes	300,000
1 st December 2004	Modification of Assistance-3	To obligate USD 492,760 to fully fund the agreement at the level of USD 2,049,605, revise the agreement budget to reflect implementation realities experiences, and incorporate new applicable provisions	492,760
8 th April 2005	Modification of Assistance -4	To extend the completion date at no additional cost to the total estimated amount from April 24, 2005 to July 24, 2005	
		Total obligated by USAID	2,049,605

Throughout the project, changes to activities were made as a result of delays, increases in costs of priority activities and indirect costs. Table 2 below outlines the changes in the project activities and rationale.

Table 2: Changes in Project Activity

ACTIVITY	RATIONALE	AMOUNT
Remove construction of administrative blocks for Uganda Wildlife Authority	<ol style="list-style-type: none"> 1) UWA has allocated funds under PAMSU to support the development of the administrative blocks 2) Additional funds are required to support the construction of the VC MGNP and the Nkuringo tourism development process 	92,000
Remove mid-term evaluation	Lack of appointed project manager meant this activity was not contracted at the appropriate time	
Increase in AWF indirect cost from 11.36% to 18.75%	<p>In order to absorb the increase in AWF indirect costs – cuts were made to the following budgets:</p> <ul style="list-style-type: none"> • Personnel costs • Final evaluation • ITFC sub-grant • Conflict resolution specialist • Support to UWA veterinary • Threat abatement strategies • Heartland Planning meetings <p>Funds to support completion of the aforementioned activities were supplemented by IGCP and AWF through other donors</p>	112,517.24
Remove repair of signs	UWA developing new national signage plan	
Exclude support to gateways	Delay in receiving approval from UWA and lack of funding within the grant	25,750

Overall, the project accomplished much of what it set out to achieve. Many lessons have been learned and many projects have been established which will continue to strengthen and contribute to conservation in the region. The remainder of this report will be structured as follows; each Intermediate Result (IR) will be dealt with individually with sections that address the following:

- A: Expected results and implementation
- B: Problems encountered
- C: Lessons learned
- D: Sustainability

The concluding chapter will bring together the key findings of the evaluation (see Annex 3) of the project and highlight the main recommendations.

III. PROJECT RESULTS

IR1: Landscape level planning and monitoring approach applied to the GVL

A. Expected results and implementation

Under this result area, the key output leading to this result would be the creation of a framework that places the conservation of mountain gorillas and afro-montane forest in a more landscape level, strategic context. To achieve this, the AWF worked with a range of stakeholders/partners in the landscape to implement the Heartland Conservation Planning (HCP) process.

The HCP process was developed by AWF to establish conservation goals, identify conservation targets most important in the Heartland, threats to the targets and design interventions to these threats across 'Heartlands'. Heartlands comprise land units under different management and ownership regimes – national parks, private land and community land in a single ecological system which has been prioritized for their exceptional wildlife and natural value and where AWF works with a variety of partners, including local communities, governments and other resource users to conserve wild species, ecological communities and natural processes.

The Greater Virunga Landscape was defined, during the initial HCP meeting in February 2003, to include the following focal sites; Bwindi Impenetrable National Park, Mgahinga Gorilla National Park, Echuya Forest Reserve, Volcano National Park and southern sector (including Nyamulagira and Mikeno sub-sectors) of the Virunga National Park, and their immediate surroundings. The immediate surroundings include the agricultural and pastoral lands around the protected areas, surrounding urban and rural areas and the watercourses, wetlands and lakes.

The key output was achieved and a Conservation Plan for the Greater Virunga Landscape was developed in February 2003. A monitoring plan was also designed for the Uganda portion of the landscape through a series of meetings that involved a range of stakeholders. The Uganda Wildlife Authority and other partners working in Southwest Uganda have adopted the HCP process as their coordinating mechanism for the gorilla parks and the HCP has also been used to inform the Annual Operational Plan for Bwindi and Mgahinga.

The stakeholders in the Greater Virunga Landscape also formed a five member Steering Committee to take the process of HCP forward. A follow-up meeting was held in August 2005 with the following objectives:

- Review strategies and threats to conservation in the Virunga-Bwindi region
- Update rankings and weightings of threats to establish any change
- Strengthen regional strategies to contribute to conservation

In the meeting, the representatives from the three countries in the GVL observed that the conservation targets and critical threats to the targets that were identified in the February 2003 HCP workshop were still valid, though the rankings have changed in some situations. For example the threat from agricultural conversion still remained very high. This was attributed to continued human population increase, reduced productivity of land and spatially limited implementation of strategies to alleviate the threat.

The threat of poaching was reported to have reduced in Rwanda and Uganda but instead increased in DRC. Insecurity was rated medium in 2003, in the three counties, but was a low threat in Rwanda and Uganda in 2005, though it featured as a very high threat in DRC.

The meeting also observed that through the project, the objectives and advantages of the landscape level planning had been clarified, and stakeholders were fairly well engaged in the process. Further, the conservation targets in the landscape, the threats to the targets and strategies to ameliorate these threats were clearly identified and articulated. However, there are still challenges on communication amongst the stakeholders, as well as adoption of the HCP into other sectoral plans or local planning processes. It was also observed that there is need to increase funding to implement the strategies identified during the HCP.

The meeting noted the uneven levels of implementation of strategies across the GVL. This was attributed to the varying priorities of the planning agencies in the region and limitation of resources to address major threats e.g., agricultural conversion.

The Landscape level monitoring plan was further updated and refined and will be presented to the wider stakeholders for adoption in the near future.

The HCP process has therefore been implemented at several levels:

- Regional plan– developed 3rd–4th February 2003.
- Uganda-specific plan– developed on 5th February 2003. Note that this was already 9 months into the 3-year program.
- Development of detailed monitoring plan for the HCP–4 to 5 meetings held so far, including:
 - First major meeting to prepare a monitoring plan was held in November 2003
 - Second major meeting to finalize the plan was held in November 2004
 - Various other meetings have been held to develop the monitoring plan
 - Steering committee meetings were also held to chart the way forward for consolidating collaboration in the GVL
 - Meeting to review the HCP was held on 2nd-4th August 2005

B. Problems encountered

Although a landscape level framework has been successfully developed the main problem encountered in relation to the development of the plan was the slow assumption of ownership by the various stakeholders in the region. The review held in August 2005 should go some way to address this lack of ownership and understanding about the process.

In addition, the HCP for the Virunga-Bwindi region has been adopted by a range of partners to support coordination. However, AWF/IGCP will have to maintain the momentum created in the August meeting to ensure that ownership and therefore implementation of key strategies across the landscape are implemented.

Further, being all-inclusive, the HCP almost reads as a plan for the sustainable development of the entire region and can appear daunting and to some extent fails to recognize the limitations of its protagonists to implement the wide array of envisaged activities. As a result some partners risk taking on responsibilities that lie beyond their core competencies. For the conservation partners, the “think globally, act locally” mantra is equally relevant at the Landscape scale, however, the process forces the selection of those interventions that are important, manageable, yet significant activities that, if carefully implemented, would contribute towards a build up of results leading to landscape level conservation.

The HCP process has also been one of many trying to achieve a landscape approach, but over different geographical boundaries:

- The Albertine Rift strategic planning process (covering the entire Rift);
- The Heartland Conservation Plan (taking a broader landscape approach to the Virunga/Bwindi section of the Rift)
- The Transfrontier Management Plan (focusing on the Protected Areas); and
- District Environment Action Plans (focusing on the Districts within Uganda).

While there is a logical hierarchy of plans, this has probably resulted in planning fatigue and may have diluted the value of the HCP.

C. Lessons learned

The evaluation report makes several recommendations to mitigate the problems encountered in the development of the HCP. The main recommendation related to the recruitment of a heartland contact pacemaker who coordinates the development of the plan and ensures that information is being shared amongst the stakeholders regarding the implementation of strategies. The evaluation team recommended the following organogram in relation to ensuring that momentum in relation to the implementation of the plan is not lost:

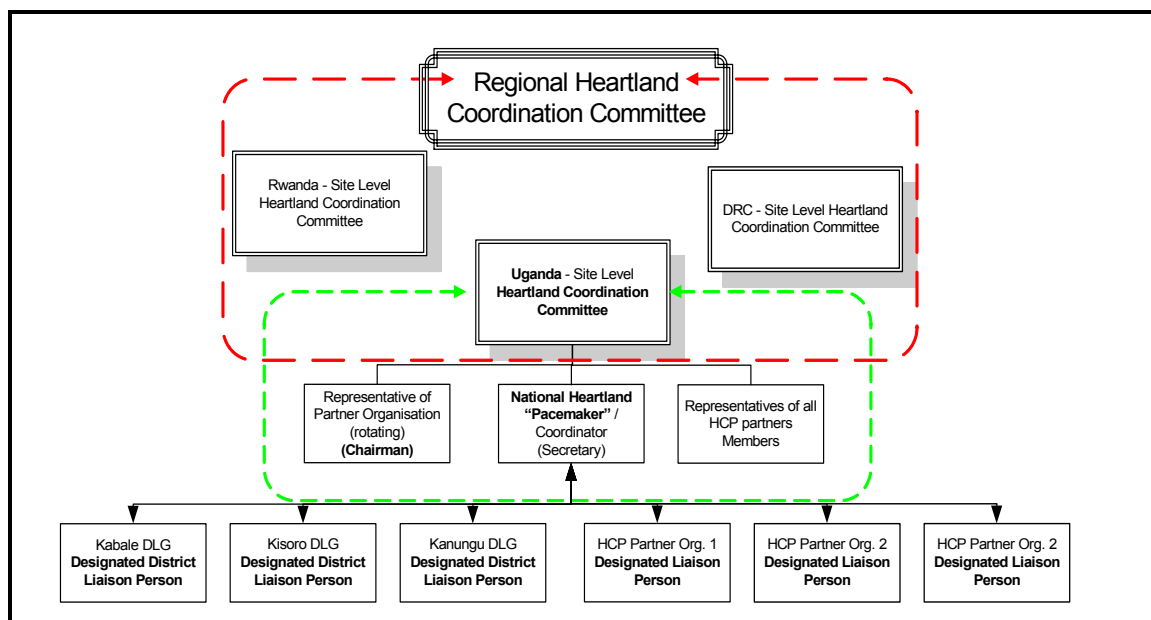


Figure 2. Suggested organogram for Heartland Coordination (Final Evaluation Report, August 2005)

The above recommendation will be proposed amongst stakeholders for further discussion.

D. Sustainability

Although the AWF/IGCP is committed to supporting the HCP and will continue to solicit funding from other sources, buy-in by other stakeholders and a willingness to support the costs of this initiative would significantly contribute to joint implementation of the plan and to sustainability of this process.

IR2: Key strategies for threat abatement

A. Expected results and implementation

Clear identification of key threats was established through the HCP process. The project then identified the following strategies for implementation following the identification of threats in the Feb 2002 HCP meeting.

Table 3: Major Threats and Threat Reduction Strategies

SOURCE OF THREAT	STRATEGY
Fire	Prevention and control of fire outbreaks Develop and implement a fire management plan
Disease	Develop an integrated disease prevention and control program
Agricultural conversion	Work with partners to improve agricultural conversion
Poaching	Improve and diversify income generating/livelihood options in particular Target groups and site e.g., Batwa, Echuya Agricultural produce for niche markets
Control/ownership of natural resources	Work with partners to review natural resource management practices

Below is an outline of the results realized to help mitigate each identified threat:

Disease

A framework was developed to integrate human, wildlife and livestock health. Its development involved the inputs from all three-health sectors. The objective has been to mitigate the risk of transmission of diseases between any three of these sectors. Implementation of the framework has included:

- Health education is being conducted by Conservation Through Public Health (partially funded by AWF/IGCP, but not from the USAID grant).
- Clean-up exercise within the six adjacent parishes where gorillas exit the park.
- Monitoring of human, wildlife, and livestock health.
- Ranger-based monitoring. Rangers identify any unusual signs and report to vets who then make professional assessment.
- Fundraising to continue supporting the framework.

To date, some aspects of the framework have been implemented although final approval and adoption of the framework by districts and the wildlife authority is still pending.

Fire

Fire fighting training has been completed with support from the U.S. Department of Interior, and guidelines for fire control developed. Management recommendations have been developed for both Bwindi and Mgahinga NPs.



Figure 3. Staff of BMCA undergoing field instruction of fire management by USFWS staff

Fires are weather dependent and 1999 was a particularly dry year that experienced a large number of fires. After a severe fire season in 1999 (a very dry year), there have been fewer fires (none in Bwindi in 2001 or 2002, only 2 in 2003, and 3 in 2004) (see Annex 2 for final PMP reference to IR 5.1E). Notably the area damaged per fire has decreased in recent years, and there are fewer fires caused by wild honey collection. Community response to fires is much better. People are much more willing to go and help fight fires than before.

Agricultural Conversion

The proposal highlighted the increasing poverty of the surrounding community over time, due in large part to reduction in soil fertility undermining sustainability of agriculture. Although the project did not achieve much in terms of working with partners to improve agricultural practices except for through the HCP and development of the subsequent monitoring plan. Additional land was acquired on the southern side of Bwindi with funding from the IGCP coalition. Although this activity does not directly address the issue of depleted soils, it has expanded park land and the incorporation of a buffer zone in this land will be utilized to establish appropriate land use practices on the boundary of the park that contribute to conservation.

Poaching

The project focused on establishing agricultural products for niche markets as a strategy to contribute to the threat of poaching. Most of the work completed in the section focused on the buffer zone that was purchased during the course of the meeting. Although a full feasibility study has not been completed. In addition to this, support to law enforcement was provided by provision of equipment and training in Ranger-based Monitoring (see IR 5.1).

Control/Ownership

The threat identified was “*insufficient control/ ownership*” of natural resources, in the form of “*denial of ownership rights, undermining of local knowledge and unfair negotiation*”. The main strategies have been to engage the communities surrounding the Nkuringo Sector of Bwindi in the management of the buffer zone and in the negotiation of the terms of a forthcoming Eco-lodge with UWA and potential private sector partners.

Improving natural resources management

This approach to threat abatement is mainly tackled under IR 6.1. More analysis is provided in that section. Criteria for selecting conservation business ventures included the need for a conservation “logic” to the new enterprises, i.e. to ensure that they in some way address threats, through the following:

- Substituting for products from PAs by increasing on-farm supplies:
 - Beekeeping, mushrooms, bamboo cultivation
- Reducing costs of conservation (crop raiding/exclusion from PA):
 - Human Gorilla Conflict Resolution– HuGo
 - High value crops (which are unpalatable to wildlife) in buffer zones
 - Community campgrounds/tourism

B. Problems encountered

Results were mostly achieved except for in relation to Agricultural Conversion. Although some meetings were held with agricultural organizations, they did not result in any direct partnering to link the implementation of their strategies to conservation. This is likely due to the lack of sufficient expertise within the project to target discussions.

C. Lessons learned

Agricultural conversion

The need to bring in or partner with the relevant expertise in relation to preventing loss of soil fertility will need to be strengthened. In addition to this, the project did not develop a monitoring system that measures changes in soil loss or soil fertility, so even if there had been some changes, it would have been difficult to track their impact.

Poaching

The Integrated Conservation Development Assessment (also completed under this project – see IR 5.2) highlighted the importance of supporting “law enforcement” of in-park rules as the main strategy that clearly addresses poaching. Although this is necessary, the project should have focused some outside the park activities to establish whom the poachers are and target strategies to work with them and understand what drives them to poach. This recommendation was also strongly highlighted in the final evaluation.

D. Sustainability

The AWF/IGCP have developed a proposal to PRIME West to support some of the activities initiated under this project e.g., Nkuringo eco-lodge, buffer zone management, HuGo groups. In addition to this PRIME/West that has taken up responsibility to implement some of the activities (promotion of new buffer crops, and reverse-slope terraces).

IR3: Regional frameworks strengthened

A. Expected results and implementation

As the GVL is a transboundary ecosystem, many of its resources, notably the mountain gorillas, are shared across borders. Transboundary collaboration is therefore essential for effective management of this system and the IGCP has been supporting regional collaboration and coordination for a number of years. This result's main output is to further strengthen the regional basis for collaboration, moving towards more formalization of this collaboration at higher levels.

The activities under this result continued to support ongoing regional activities such as:

- Regional meetings
- Regional training
- Regional Wardens coordination meetings

In addition to the above the project also contributed to the development of new regional activities such as:

- Action Plan for regional tourism
- Regional socio-economic survey
- Regional review of policy and legislation

One of the major accomplishments in relation to formalizing the regional work was the signing of a Memorandum of Agreement between the PAAs of Uganda, Rwanda and DRC in relation to the management of shared resources. The MoU was signed in January 2004 and underscored the desire of the three PAAs to extend, maintain and protect the unique ecosystem of the Albertine Rift Transfrontier Protected Area Network through the collaborative management of eight protected areas shared between Uganda, Rwanda and DRC. A Transfrontier Core Secretariat has been appointed and the IGCP has been nominated as the facilitator for this secretariat.

Overall, regional collaboration has been strengthened as result of project support and the establishment of a core-secretariat will ensure that further contributions will be made. The increasing sense of common purpose and “partnership” between the PA authorities and project partners between the three countries is one of the key achievements of the project, although the AWF/IGCP contribution is one of many that are aiming to build such alliances.

B. Problems encountered

In spite of some setbacks and strains on relations (such as the disappearance of the Nyakagezi Group from Mgahinga NP to the Rwandan sector of the Virungas), there is a perceived commitment to develop mitigating measures to address this. Ongoing discussions include sharing revenues between countries, although there are many challenges before this will be achieved.



Figure 4. A Young gorilla from Nyakagezi Group relaxed in Rwanda

C. Lessons learned

The importance of communication to promote and develop regional collaborations continues to be highlighted as the key role the project has played in this process. By supporting the regular meeting of regional stakeholders much has been achieved as indicated by the signing of a tripartite MoU. It is however important to strengthen this collaboration by developing mechanisms for reinforcing legal validity and impacts of decisions taken in the respective countries.

D. Sustainability

The establishment of the core secretariat is key to implementing the objectives of the MoU. In addition, some regional activities are already supported by the PAAs e.g., joint patrols. However, IGCP is committed to supporting regional processes until it is further formalized at higher levels.

IR4: National and regional policies improved

A. Expected results and implementation

It is essential that conservation work in the GVL is both informed by, and contributes to the evolution of national policy context on wildlife, tourism, environmental governance and other relevant areas, as well as expertise and perspectives from the region.

The main activities under this IR contributed to the compilation of relevant information that can inform policy makers. This included the following:

- Economic Valuation of the Mountain Gorilla parks
- Regional and National Review of Policies and Legislation (in partnership with the GrASP project)

Policy Review

The National Policy Review report was completed in April last year (Wabenoha, 2004-see Annex 4). Findings have been presented to the National GrASP committee (most of the members being within UWA) and national stakeholders in a meeting in August 2005. No impacts have yet been achieved in terms of “improving” the national or regional policies reviewed in this report.

Economic Valuation

An economic valuation (Hatfield & Malleret-King, 2004- see Annex 5 for summary report) has been conducted with three stated intentions:

- Provide a baseline from which to further refine and/or expand on the current study
- Draw policy conclusions
- Explore the economic impact of possible interventions

After a first phase of field data collection (2002-03) and publication of a draft report in 2004, the IGCP Directorate requested for further data collection and analysis relating to local benefits and a new survey was recently completed (early 2005). The final report is yet to be completed, but the key findings are summarized below:

Overall, gorilla tourism generates USD21.2 million per year (2000-01) in benefits, of which US\$1.1 million was gorilla tracking fees in 2001-02. This has since risen to USD 2.13 million in 2004-05. Distribution of gorilla tourism gross net economic benefits are as follows:

- 53% accrues to the national level
- 41% accrues to the international level
- 6% accrues to the local level

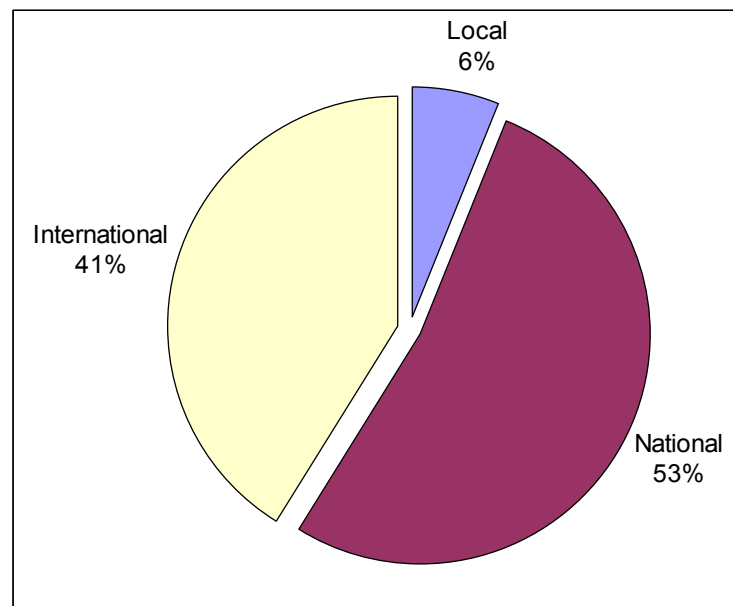


Chart 1. Distribution of gorilla tourism gross net economic benefits

Official Tourism statistics showed that for the year 2000-2001, gorilla viewing operated at 41% of full capacity, suggesting potential for increasing revenues, with a maximum attainable value of US\$51.7 Million a year¹.

Preliminary results of the report have been presented at an IGCP Regional meeting, and a meeting of the International Association of Travel Agencies (IATA) held in Munyonyo, Kampala in 2004. UWA were represented at both meetings, and the Ministry of Tourism Trade and Industry at the latter, but neither meeting were intended to be a forum for policy review at the Uganda level. The final report was only completed at the end of the project and it was therefore not possible for AWF/IGCP to use the findings to assist decision makers in relation to developing favorable policies that support the conservation of the mountain gorilla habitats over the course of this grant.

B. Problems encountered

All the planned activities have been completed but impacts of the recommendations made have yet to be felt since the Wildlife Statute is still in the early stages of review and the Tourism Bill is with Cabinet. Although the information and consultancies were completed, little was done in this respect due to delays in completion of reports and UWA's delay in leading the dissemination.

C. Lessons learned

In order to ensure that information gathered can strengthen and inform policies and legislation reaches the relevant audiences in a timely and appropriate fashion, summarizing the findings of the Economic Study with clear policy recommendations as to how to increase local and national level revenues should be completed.

D. Sustainability

In order to ensure sustainability, AWF/IGCP will continue to advocate for changes to revenue sharing. Funding for this has been included in the AWF/IGCP submission to PRIME West and IGCP will continue to support dissemination of relevant information and lobbying activities.

IR5: Protected areas serving as ecological and economic core areas of the landscape

IR5.1 Priority actions of Bwindi and Mgahinga GMPs implemented

A. Expected results and implementation

Under this result, the project has supported the development of infrastructure in both BINP and MGNP. The development of the infrastructure is guided by priorities identified by the park

¹ IR6.2 includes the objective of improving the linking of GVL products to regional and international markets. Activities under IR6.2 have not obviously focused on reducing the shortfall in the potential sales of gorilla tracking permits. This is in part due to IGCP's position on numbers of permits and the health and behavior impacts of too many visitors tracking gorillas on daily basis.

general management plans (GMPs) for the period of July 2001–June 2011. Funding for BINP provided support for signage, and a visitor center and signage were planned for MGNP. Funds budgeted for administrative blocks in the two parks had been reallocated to provide additional support to the visitors’ center in MGNP and identification of a private sector partner for the development of a high end eco-lodge in partnership with the community in Nkuringo (see IR6.1 and Annex 6 for Nkuringo Eco-lodge EIA Report). The funds for the administrative blocks became available due to UWA acquiring support from the PAMSU project.

In relation to specific activities under this IR, in Table 4 outlines the activities that have been completed.



Figure 5. Interpretation panel designs for the Mgahinga Visitors’ Center

B. Problems encountered

The main problems encountered under this result stemmed from delays in obtaining approval from UWA for the gate plan, changes in design concept of the visitors’ center and budget cuts at the onset of the project.

C. Lessons learned

The ranges of problems encountered under this result were limited and although some aspects were not completed as originally planned, little was left undone.

D. Sustainability

Provision of some equipment, especially the infrastructure, is a one off event of which UWA will take responsibility for maintenance costs associated with the buildings. Field equipment and training will continue to remain a focus of support of AWF/IGCP in future programs until UWA has the capacity to absorb these costs within their operating budgets.

IR5.2 UWA management decisions strengthened by monitoring and research

A. Expected results and implementation

The majority of Albertine Rift forests and biodiversity in southwestern Uganda, as well as the only populations of mountain gorillas, are found within national parks. UWA's capacity to manage these areas has historically been constrained by several factors, including a lack of the scientific information for decision-making critical for the management of this sensitive and valuable resource. The rationale for this IR, implemented by the Institute of Tropical Forest Conservation, was that, for the national parks to serve as the ecological and economic core of the Greater Virunga Landscape, there was a critical need for the scientific basis for UWA's management decisions to be strengthened. This component of the project included both carrying out key research and monitoring priorities and finding the means to ensure that results of these research and monitoring efforts are used in management decisions and actions. Three sub-IRs were identified to achieve IR 5.2:

5.2.1 Joint UWA-ITFC mechanisms for strengthening and integrating research and monitoring and practical park management designed and implemented.

In order to achieve forest conservation in the Greater Virunga Landscape, not only must high quality research and monitoring work addressing key management challenges be undertaken, but the research outputs must also be both relevant to, and actually incorporated into, park management decisions. For long-term sustainability, it is also critical to strengthen the capacity for management-oriented research and monitoring in the area. The activities identified under this sub-IR were designed to strengthen both capacity for research and its integration with management, with a focus on both UWA and ITFC.

5.2.2 Understanding of mountain gorilla ecology, conservation needs and management issues strengthened.

Mountain gorillas are both a key reason for conserving the forests of south-western Uganda, and one of the most important opportunities for generating economic benefits for UWA and local communities. The gorilla populations in both Bwindi and the Virungas are small and isolated, making them especially vulnerable to threats associated with such populations. Loss of the gorillas would represent not only a loss of a significant species and attendant ecological values, but would also remove one of the most important economic values of the forests to the local and national communities. Conservation management of the gorillas poses challenges in terms of the long-term viability of these small populations, as well as immediate direct threats such as crop-raiding or the impacts of tourism. Research under this sub IR was intended to address both of these elements.

Table 4: Key Activities in Completed in Bwindi and Mgahinga National Parks

ITEM	ACTIVITIES COMPLETED
Install signage for both BINP and MGNP	Completed
Initiate construction of visitors' center Mgahinga Gorilla National Park	Lynne Nakata of the Department of the Interior provided initial interpretation expertise. Themes to be displayed in the visitors' center were developed during a two-day workshop with participants from UWA, local communities and NGOs. Construction however was delayed due to the lack of adequate interpretation development prior to the penning of the conceptual design. Peter Hetz, John Kraft and Andy Roberts were subsequently brought in by AWF to develop a new design and detailed interpretation plan. This reflects lessons learned from the construction of similar centers in Tanzania implemented by AWF. At the time of writing this report, construction was well under way and USAID support towards this activity has been fully committed. Other funds will be used to complete the visitor center to expected quality.
Develop and implement gate plan	A gate plan has been developed but due to delays in obtaining approval from UWA, the funds were reallocated to absorb the increase in indirect costs and other budget lines.
Leverage for funds to complete unfounded work	The development of a visitors' center in Bwindi Impenetrable National Park was removed from this project as a result of pre-award budget cuts. AWF, IGCP and UWA have been in discussion on various options to raise funds towards completing this project. Additional funding to support the development in VC MGNP was subsequently secured from Sheraton Kampala and USAID funds. These USAID funds had originally been donated, to UWA (then Uganda National Parks) for a visitors' center in BINP.
Provision of basic field equipment to Bwindi and Mgahinga Parks	All equipment has been purchased and distributed to Uganda Wildlife Authority. Additional resources were secured from Gorilla Directive to increase the equipment contribution to UWA. Towards the end of the project the USAID mission also donated a used generator and two motorbikes for use by UWA from another USAID funded project.
Finalize framework for integrated human/livestock and wildlife health	See IR 2.1 – completed.
Training for BINP/MGNP staff	Training needs assessment conducted at the inception of the project provided the basis for developing a training schedule. Training for the park staff was completed in the following areas: guiding, customer service, culture, equipment maintenance, conflict resolution, ranger based monitoring

5.2.3 Understanding of dynamics of park community and wildlife interactions increased.

Unless poor local communities can benefit directly from their existence, the future of the forests of south-western Uganda will be exceedingly difficult to ensure. If innovative and effective initiatives are to be identified to meet communities' basic development needs, while at the same time ensuring the conservation of the national and globally significant biodiversity in the area, research is needed to improve our understanding of the dynamics of park-community relationships, and the impact of Integrated Conservation and Development (ICD) strategies on these dynamics.

Implementation of this component was initiated with a process of identifying research and monitoring priorities, along with mechanisms to ensure that research and monitoring results are integrated into protected area management. Work then carried out under the component has included priority research on the gorilla population and habitat, and on the interactions between parks and local communities and continuation of long term ecological monitoring, as well as the provision of technical support to UWA, the strengthening of infrastructure, facilities and management systems at ITFC, and the development of proposals for long term international support for ITFC. Key achievements and results under each sub-IR are highlighted below.

5.2.4 Joint UWA-ITFC mechanisms for strengthening and integrating research and monitoring and practical park management designed and implemented.

ITFC has been developing a number of mechanisms to ensure integration of research and management over the last few years, and this project at the outset worked with UWA park management and partners to identify further ways of strengthening this integration, focusing on coordination and communication between researchers and managers, and delivery mechanisms used to make research results available to management. Implementation of these measures has included:

- Development of a joint research and monitoring plan with UWA for Bwindi and Mgahinga, based on a review of priorities for management at a project initiation workshop.
- Regularly coordination of annual operations planning with that of UWA.
- Carrying out a number of specific joint research and monitoring activities with UWA staff, including gorilla censuses and projects on gorilla ranging and vegetation regeneration in MGNP, problem animal control and multiple-use.
- A series of "information for managers" workshops, where results of over 30 projects were presented to Bwindi and Mgahinga Park staff and other partners. These presentations have been found to be more effective in ensuring that the management implications of research findings are understood and agreed with park managers than traditional written reports.
- The workshops have also provided a forum for improved communication and collaboration between researchers and managers, and for identifying further priorities for follow-up research.
- Guidelines have been developed and adopted by UWA for reporting of research projects, designed to ensure that results are presented in an easily accessible way, incorporating practical management implications.
- A revised MoU between UWA and Mbarara University, the parent body of ITFC, was developed and agreed, to formalize a framework for research-management collaboration.

In addition to the specific mechanisms identified for research-management integration, ITFC has worked with UWA staff on a number of different initiatives, providing management inputs based

on research results and relevant expertise through a range of day to day contacts and collaborations. These include the development of tourism and buffer zone management in the Nkuringo buffer zone, the development of problem animal control mechanisms in other areas, reviewing and revising the Multiple Use program in Bwindi, development of a fire management plan, and removal of exotic species in both Bwindi and Mgahinga. At a national level, we have also been assisting UWA in the development of water quality and resource harvest sustainability monitoring systems across protected areas in Uganda. Working with other partners in addition to UWA, ITFC has played a key role in the Heartland Conservation Planning process (see IR1) including the development of a shared monitoring framework and database. With the need to involve and coordinate with a number of different organizations, this process has taken longer than hoped, and we are still some way from having a final framework in place. However, this project has supported the initiation of a longer-term process which will continue this work in the future, with anticipated support from the MacArthur Foundation and other donors.

Through these integration mechanisms and close collaboration with Uganda Wildlife Authority, ITFC has been able to ensure that a large proportion of research and monitoring priorities have been carried out, and that results of this have been incorporated into a diverse array of management activities. The final Performance Management Plan found in Annex 2 lists identified priorities and the extent to which they have been implemented and utilized.

While the primary focus of this project has been on supporting UWA, we have also been working with the National Forest Authority in Echuya Forest Reserve, which was identified during the HCP planning process as an important component of the GVL. This has included work on the dynamics of bamboo with the aim of developing sustainable harvest regimes, as well as a review of available information and future research priorities, in collaboration with NatureUganda, a national NGO implementing community-based conservation programs in Echuya.

The project has also supported a range of capacity building activities for research and management in Southwestern Uganda, in order to ensure the sustainability of the impact of the project in strengthened management decisions. As a result, ITFC is now far better placed to continue to offer these types of support and services to UWA in the long term. In developing institutional capacity, infrastructure at ITFC has been upgraded, including work and residential accommodation, internet access, website and other facilities. ITFC has been working, in collaboration with the Conservation Development Center in Nairobi, to establish an appropriate institutional mechanism to ensure long-term international support for ITFC as well as to strengthen administrative arrangements for ITFC under Mbarara University. This institutional development work followed up on the outputs of the previous USAID funded institutional strengthening project for ITFC. As well as institutional development, the project has supported programmatic development at ITFC, with the initiation of a strategic planning process at the end of the project to identify priorities for the next five years, as well as the development of funding proposals for follow-up work.

With regards to capacity building at the individual level, training opportunities have been provided to both ITFC and UWA staff involved in the application of research and monitoring. Since the start of the project, these have included training in environmental leadership, geographic information systems, environmental impact assessments, taxonomy, participatory community negotiation and collaborative management, computer skills and financial management. ITFC has also assisted in ranger-based monitoring and fire management training workshops for UWA staff. Six research students have received field supervision over the course of this project, and ITFC and UWA have benefited from on-the-job training and mentorship.

5.2.5 Understanding of mountain gorilla ecology, conservation needs and management issues strengthened.

Research priorities identified under this result area included both immediate management challenges and long-term issues of viability of the gorilla populations. Considerable progress has been made in generating scientific data responding to these needs, as well as ensuring that this information is available to management.

At the longer-term level, regular censuses of the gorilla populations coupled with monitoring of selected groups provides information on demographic patterns and population dynamics. A census of the Virunga gorilla population was carried out, with project support for census fieldwork in the Uganda portion of the range (Mgahinga). The results of this census have shown that the population has now reached 380, an increase of 17% since the last complete census in 1989. Coupled with the 320 mountain gorillas found during a 2002 census in Bwindi, this brings the total world population to around 700. Analysis of the distribution and changes over time of the gorilla population in relation to patterns of human activities and habitat types, however, has shown that human disturbance does still have an impact on the population, and has provided key recommendations for park management authorities.

With support from this project, ITFC has been developing a new vegetation map for Bwindi (see Annex 7 for Vegetation Map summary report). In addition to providing a baseline for monitoring of long-term changes in forest cover, this will provide detailed information on the availability and distribution of habitats for the gorilla population, along with previous ITFC research on forest gap and disturbance dynamics and edge effects. A complete new set of aerial photographs was procured under this grant, but unfortunately delays in obtaining flight permissions and technical problems with the photography meant that the final orthorectified photographs were only made available in June 2005 (see also Annex 7), and the completion of the vegetation map will take additional time. Further funding is, however, available to complete this exercise from WCS, UNESCO and the British Ecological Society.



Figure 6. Census team members discuss findings

Research work at ITFC, through collaboration with the Max Planck Institute for Evolutionary Anthropology in Germany includes projects on the gorilla ecology, looking at their use of habitats and nutritional requirements across the range of vegetation types in Bwindi. Such information will be used as a basis for examining how many gorillas the park can support and which areas of the forest are most important for gorilla conservation. Patterns of gorilla diet, habitat use and ranging have been documented and have shown considerable differences in ecology between the gorillas in Bwindi and the more closely studied population in the Virungas. Bwindi gorillas consume significant quantities of fruit and use larger home ranges than those in the Virungas. There are also differences between the research group and those in the lower altitude areas to the west used by tourist groups, related to differences in habitats. Differences in ecology between Bwindi and Virunga gorillas show we must be careful in extrapolating information from other populations. The larger home range sizes suggest that Bwindi gorillas need a larger area to meet their nutritional requirements, so that we cannot expect them to reach as high densities as in parts of the Virungas. The potential for growth in the population may be more limited, but, more precise estimates of the carrying capacity will be possible when the habitat map has been completed.

Related projects carried out in MGNP, in collaboration with UWA staff, have been investigating the gorillas' use of previously encroached areas which are now in the process of regenerating, and are now assessing the progress of regeneration and the potential need for restoration interventions in these areas. This area, comprising approximately one third of the park, was cleared for agriculture in the 1950s, and reclaimed as part of the park approximately 12 years ago. Successful restoration of natural forest in this area would have an important impact on the long-term capacity of the park to support mountain gorillas. An additional survey of the status of bamboo in Mgahinga has been carried out as a baseline for long-term monitoring (see Annex 8, Bamboo monitoring report). The bamboo is an important gorilla food species, as well as a conservation target in its own right, but appears to be in the process of declining in the area. The issue of habitat quality for gorillas in Mgahinga has received much attention over the last few months since the tourist group crossed over to the Rwandan side of the mountains. We have been working closely with UWA, their counterparts in Rwanda and other partners in the area to increase understanding of the issues behind the tourist group in Mgahinga ranging across the border, and the management implications this brings.

Other research priorities relating to immediate management challenges included the need to understand, as well as design and test mitigation measures for, human-gorilla conflict. The research on these issues has focused on the new buffer zone established in the Nkuringo area, on the south side of Bwindi. ITFC has been working with UWA and local community groups to develop a plan for the management of this zone, based on our understanding of the factors driving gorilla ranging patterns, with the objective of keeping gorillas away from human inhabited areas and reducing human-gorilla conflict. A new systematic monitoring system for crop damage was established in this area last year, to compliment existing participatory community monitoring, and allow different buffer zone management strategies, including mitigation measures, chasing, and deterrents to be systematically tested. In the buffer zone area, management activities have been implemented under agreements between ITFC, UWA, IGCP and the Nkuringo Community Development Foundation including planting of live fencing along the edge of the buffer zone, removal of gorilla food plants from the buffer area, and establishment of pilot plots of a potential non-palatable buffer crop, *Artemisia*. Long-term monitoring of changes in crop-raiding levels will be needed to fully test the effectiveness of these measures, but initial indicators suggest they will work well.

The potential impact of tourism on gorilla behavior was also identified as a research priority, and a study carried out by ITFC focused on this issue. Initial findings from this study showed that gorilla behavior is affected by tourist visits in a potentially negative manner, with less time spent feeding and more movement when tourists are present, and frequent reactions to guides and tourists actions. These findings have been presented to UWA and partners, along with relevant recommendations for managing tourism programs to minimize the impacts on the gorillas. At the request of UWA, ITFC is now carrying out a second phase of this study, assessing the impacts of tourism as visits start to the new group habituated for tourism in the Nkuringo area. This monitoring will continue beyond the life of this project, with funding from WCS.

5.2.3 Understanding of dynamics of park community and wildlife interactions increased.

A major research initiative underway at ITFC has been assessing the effectiveness of ICD/community conservation strategies in achieving both conservation and development targets. The project is already having considerable impact, both in improving our understanding of the effectiveness of ICD, and in helping to inform and strengthen the design and implementation of ICD initiatives in the area (see Annex 9 for ICD report).

In terms of our understanding of ICD, the project has found that ICD initiatives in Bwindi and Mgahinga have played an important role in increasing support for conservation of the national parks, in terms of community attitudes and willingness to cooperate with park authorities. This support in itself will have had important conservation benefits, in making it easier for the park authority to carry out their programs and defend the existence of the parks against other pressures and demands for land. However, the ICD interventions do not, as yet, seem to have had much impact in reducing levels of illegal resource extraction from the parks. Indeed, community members and park staff alike agree that law enforcement is likely to be by far the most effective strategy for reducing illegal use of the parks, although ICD interventions will help to back up this process. ICD strategies have had differential impacts on different wealth groups, and this might in part explain the fact that while community attitudes have improved, illegal activities have not significantly reduced. The poorest groups are likely to be those most involved in illegal resource use, and these groups are often not the best placed to participate in and benefit from ICD interventions. Also, few initiatives have tried to explicitly link the benefits derived from ICD interventions with a direct responsibility for supporting park management and reducing illegal activities.

Considerable effort has been made to disseminate research results to implementing organizations in Uganda, and regionally, so that lessons learned are incorporated into ICD best practices. Internationally, findings of this study have been presented at both the World Parks Congress, and the Society for Conservation Biology Annual Conference. Results have also been discussed in different fora, especially the implications of our findings for ICD practice at different sites in the country. As part of this process, ITFC has been working with the Wildlife Conservation Society and Makerere University to assist the new USAID funded PRIME/West project to define and measure the conservation impact of economic development interventions in the area. These findings have also been applied in the development of new ICD interventions in the area, including the AWF/IGCP Heartland Conservation Planning process, CARE and WWF projects nationally and regionally, and the strategic planning of Mgahinga and Bwindi Impenetrable Forest Conservation Trust.

Following on from this work, ITFC has been working with CARE to develop a more precise assessment of the social and economic costs of conservation to local communities around Bwindi, as part of a larger regional project in East Africa. Previous research in Bwindi and elsewhere around the world has highlighted the need for local communities to benefit from

protected areas if they are to support conservation objectives and for conservation initiatives in their turn to improve local livelihoods, rather than exacerbate poverty. However, limited quantitative information has been available for most sites on the actual level of these costs and benefits. The initial pilot phase of this work in Bwindi has been completed, with the social costs assessment carried out by ITFC complementing the economic analysis supported by AWF/IGCP, and the study is now being extended to other sites in Uganda and East Africa.

Other priorities identified during this project that contribute to the achievement of this IR include the sustainability of natural resource use (e.g., medicinal plants, weaving materials, and the potential for Bwindi rivers to support fish harvest). Research and monitoring programs at ITFC have continued to monitor the sustainability of harvest of the most vulnerable plant species used for medicines and weaving materials, and have resulted in a series of recommendations to UWA on revision of harvest quotas. ITFC is now working with UWA and the local communities to revise and update the Multiple-Use agreements, based on these findings and other lessons learned from our research, and a series of community consultations. Research on sustainable resource harvest has also included the status of bamboo in Echuya Forest Reserve, with a baseline survey and recommendations for future monitoring and testing of different harvest levels. Surveys have also been carried out by ITFC of the fish populations in Bwindi's rivers, to which communities have also requested access for harvest. Student projects based at ITFC have also investigated the feasibility of harvest of *Dioscorea* roots and Stingless bee honey as wild food sources, which are of particular interest to the Batwa.

B. Problems encountered

The limited resources available to ITFC have been a major constraint on the institute's ability to carry out the wide range of research and monitoring activities needed to meet UWA's management needs. When the proposal was being submitted the budget was cut by approximately 50% without a corresponding reduction in the planned activities, which therefore remained over-ambitious compared to the resources available. For example, ITFC had planned to recruit another staff member to work primarily on this project, but was unable to do so. To some extent, we were able to compensate for this constraint by looking for other sources of funding and by collaborating with other researchers to undertake some of the research priorities. This project therefore had an important impact in allowing ITFC to leverage additional resources towards project objectives. These include:

- *British Ecological Society* – grant for vegetation mapping.
- *CARE* – funding and collaboration on ICD assessment projects.
- *Maria Gans Norbury Fund for animals* – grant for further infrastructure development.
- *Max Planck Institute of Evolutionary Anthropology* – researchers collaborating on projects on gorilla ecology, funds for gorilla monitoring.
- *National Forest Authority and Nature Uganda* – partial support for work in Echuya.
- *UNESCO Enhancing our Heritage Project* – funds provided through UWA for vegetation mapping, multiple use monitoring and problem animal control.
- *Wildlife Conservation Society* – ongoing support for ITFC focusing on gorilla monitoring and research and institutional development.
- *WWF* – funds for ICD assessment project and Nkuringo buffer zone activities.

Another constraint linked to resources is the time available to produce research and monitoring outputs. Often changes in particular parameters may only be evident after long-term monitoring,

and the process of collecting data, analyzing and writing-up research results can be a long and slow one. However, managers and partners often require information on which to base management decisions in a much more quickly, and are working to the constraints of typical project planning timeframe of between one and three years. Researchers may therefore find it difficult to meet the needs and expectations of managers in this regard.

Finally, while ITFC has had a good track record of ensuring research results are available to and used by protected area managers, we have had less success in demonstrating an impact at senior management and policy levels. A good example of this is the recently announced decision by UWA to increase the number of tourists visiting each group of gorillas in Bwindi per day from six to eight, counter to the research recommendations. This issue is discussed in some depth in the final project evaluation report. In summary, however, project partners need to become more effective at lobbying at these higher levels, and need to that there is a risk that other concerns of UWA, such as the need to generate more income and increase tourism numbers, may sometimes outweigh scientific evidence in decision-making.

C. Lessons learned

In order to allow for the constraints of limited resources, which will always be present to some extent, there is a need to better prioritize research activities, and in particular research that will inform key forthcoming management decisions that where possible, have been identified in advance. Forthcoming decisions should be ranked in terms of how critical or “strategic”, they are for conservation. The need to provide recommendations based on research results within a timeframe which is useful and relevant to park managers should be recognized, even where this might mean that such recommendations have to be made on the basis of incomplete data and preliminary conclusions.

At the same time, there is also a need to establish stronger mechanisms for long-term support of research and monitoring functions. This need is being addressed by the proposed establishment of an ITFC “Foundation”. Diverse sources for long-term funding also need to be identified and developed.

There is also a need to increase effectiveness at transmitting research results and lobbying at the senior management and policy levels in UWA and government. In any future programs, IGCP and other projects and conservation NGOs should lobby for a more active civil society role in informing key decisions made by UWA, in particular those relating to mountain gorilla conservation. Key recommendations emerging from research should be further simplified, and new channels used to present the message through compelling, face-to-face meetings with those actually making the final decision.

D. Sustainability

The need for sustainability in the impacts of this program in strengthening management decisions on the basis of research results was explicitly identified in the project design. Project activities were embedded in a permanent national institution, ITFC, rather than a short-term project infrastructure. A number of measures, described above, were included to strengthen the long-term capacity of this institution, as well as the relevant parts of UWA. The activities supported by this project were part of an ongoing series of ITFC programs, and a number of

other funding sources have been identified to continue these activities and the technical services provided to UWA and partners.

IR6: Expanded economic opportunities for rural communities in GVL

IR 6.1 Opportunities for CBVs identified and developed

A. Expected results and implementation

Conservation Business Ventures (CBVs) are business initiatives undertaken by the communities within the Heartland that are commercially viable; improves the income and livelihoods of local people and has a documented positive impact on wildlife conservation. AWF believes that wildlife is safest when human needs are addressed and when local people benefit economically from the presence of wildlife. Communities in the Virunga Heartland are faced with biting poverty coupled with scarcity of land. These factors pose risks to the protected areas. Based on this analysis, a number of CBVs were developed using a systematic business design approach; these include community lodges, beekeeping, mushrooms, **handcrafts and on-farm bamboo growing**. The business plans for these enterprises were developed. These CBVs showed potential to:

- Generate revenues that exceed the direct costs of operating the enterprise.
- Create and manage a stream of benefits that offset any opportunity costs of conserving the biodiversity values targeted by the enterprise.
- Create and manage a stream of benefits that offset any indirect costs of conserving the biodiversity values targeted by the enterprise.
- Create meaningful and practical incentives for the active conservation of the biodiversity values targeted by the enterprise
- Optimize the efficient use of best available environmentally sustainable technology and practice.

To a large extent these CBVs were able to:

- Produce products directly linked to the target biodiversity values.
- Directly integrate local people- whose livelihoods impact and/or are impacted by the target biodiversity values- into the management and ownership of the business.
- Involve partnerships between these local people and the technical, financial and market resources of the private sector.

Below are the details on the achievements of activities under this IR:

Nkuringo Eco-Lodge

A three-year negotiation process with the communities of Nteko and Rubuguri parishes in Kisoro District has been supported by the project. Progress thus far:

- Discussions with community to support formation of an appropriate community institution completed. Constitution drafted, registration process supported.
- Nkuringo Conservation & Development Foundation (NCDF) registered as a Private Company Limited by Guarantee in April 2004.
- Capacity building of the group and participatory selection process to identify areas in which NCDF wanted assistance– Community tourism and an ecolodge identified.

- AWF have supported Group habituation— ongoing since 1997. Mock tourism started in April 2004, and “live” gorilla tracking with tourists began in Oct 2004. This has generated a number of spin-offs.
- Negotiations with UWA to allocate 6 permits to NCDF. A MoU with UWA has been signed. Details of this mechanism are provided in Box 1 below.
- Nkuringo Tourism development plan has been prepared with AWF support.
- Consultant hired to design trails in the park. NCDF contracted through UWA with funds from AWF/IGCP to build trails.
- A suitable site has been identified (5.3 acres), purchased, surveyed and demarcated using money saved from trail construction.
- AWF facilitated District Land Committee meetings.
- Expressions of Interest were invited (Jan. 2005) from potential investors (4 responded).
- Detailed business plans were then invited from 2 interested private sector partners.
- Selection process has just recently (early July 2005) identified preferred candidate and the project commencement is awaiting approval of the PRIME/West grant that will contribute to the construction of the lodge.

NCDF are expecting employment, a share of profits, markets for their food produce, opportunities for other activities such as craft-making, community tourism and gorilla tracking—perhaps with community guides. Other key benefits of the process have included:

- Improved community participation in all conservation and development issues.
- Greatly improved relations with UWA, who use NCDF as point of reference for all matters relating to the park.
- Reduced occurrence of illegal activities in the Nkuringo sector.
- Increased vigilance on illegal activities, and immediate reporting to UWA, including the successful thwarting of an attempted theft of an infant gorilla.
- NCDF as an umbrella organization for the community has helped share ideas and coordinate other development activities, sensitize communities and now routinely handles conflicts relating to the park.

Box 1. The NCDF-UWA Gorilla Permit Deal

In an unprecedented deal, UWA committed to give the NCDF/private sector partnership exclusive rights to sell bed-space in a high quality eco-lodge for 6 Gorilla tracking permits. No other tour operator will have access to these permits. UWA will retain the revenues from the permit sales.

The private sector partner will have exclusive access to the gorilla permits of the Nkuringo group up to 6 months in advance to of the tracking date. A grant of up to \$250,000 is anticipated from PRIME/West, which will contribute to the costs of building the lodge, and through a negotiated concession agreement it is proposed that the Community will become the ultimate owners of the lodge, with a Private Sector partner contracted to manage the facility.

The NCDF/private sector partnership will negotiate a contract that includes a revenue sharing mechanism and other aspects of the package of benefits anticipated by NCDF. The objective is to avoid the overly competitive and inefficient situation seen at Buhoma, where 4 up-market hotels and a number of low-end hostels have built 120 bed spaces for only 18 gorilla permits.



Figure 7. UWA Executive Director and NCDF Chairman finalize the permit deal with a handshake

Nkuringo Buffer Zone management

A strip of land 12 kilometers long by 350 meters wide (approximately 420 hectares) was bought from local people with a grant through the IGCP coalition to provide a buffer between the gorillas and the local community. The rationale was that gorilla groups had been browsing on cropland outside the park on this stretch of land for a significant amount of time. Of this, a 200 metre wide strip has been added to the park and will be exclusively UWA property. Natural regeneration is being encouraged and exotic species are being removed under contract with the community. The remaining 150 meters strip will be jointly owned and managed by UWA and the NCDF. AWF/IGCP has been supporting the planting of a medicinal plant (*Artemisia*) in high demand for the production of anti-malarial drugs in this buffer zone. The AWF/IGCP is working with ITFC to establish whether this plant (and potentially others) can contribute to mitigating problem animal control as well as provide an income for the local communities.

Amajambere Iwachu Community Campground

The objective of working with Amajambere Iwachu Community Campground was two fold:

1. Improve management and therefore revenue from community campground by partnering with the private sector
2. Expand the membership of the campground to include all parishes that border Mgahinga Gorilla National Park so as to further spread benefits from conservation.

The project approached Amajambere Iwachu to expand its membership to include the neighboring parishes to Mgahinga Gorilla National Park. In order to incorporate these areas the project supported the established a new institution—Mgahinga Community Development Organization (MCDO) which had wider membership than Amajambere Iwachu Community, which only comprised of 33 families. The founding members of MCDO were the members of

Amajambere Iwachu and these individuals initially run the organization until formal elections could be held.

It was the understanding of the project that the asset of the campground would revert to MCDO and as a result of this, funds were raised from UNDP to support renovation work and a private sector partner (Red Chili) was brought on board to improve management and running of the facility.

Unfortunately, the 33 owners of Amajambere Iwachu reneged on the original agreement and refused to accept compensation for the property, officially valued by a government valuer citing the value was too low. As a result of this the project has focused on establishing MCDO to fairly represent the communities of the three parishes that border MGNP and continues to work with UNDP to utilize the funds donated towards supporting MCDO. Options suggested by MCDO members include various projects:

- Rainwater harvesting and tanks to overcome seasonal water shortages that require people to trek far into the park to collect water from a spring-line.
- Roads
- Beekeeping
- Office construction for MCDO
- Other developmental projects
- On-farm bamboo and tree planting

AWF/IGCP continues to work with MCDO and UNDP to establish how best to utilize the funds to achieve the original objectives of the project, especially in relation to spreading conservation benefit beyond a small cross section of the community.

Buhoma Community Rest Camp

The Buhoma Community Rest Camp Development Association has benefited from long-standing financial and technical support from a range of different conservation donors over the years, which helped establish it. In this project, AWF/IGCP supported them to prepare a 5-year business development plan, rather than funding any more infrastructure or other direct costs. The plan proposed an investment of an additional USD150,000 to upgrade it from “budget” low-cost bandas to mid-range accommodation, which has for long been under-catered for in Buhoma. Architectural plans were also prepared with project support.

The plan recommended that they should register as a Private Company (up until now they have been an NGO), link to donor agencies, and/or find a private sector partner to put in this money. Some members were taken on a study tour to Kenya to see how similar community/private partnerships had worked in the tourism business. However, the Buhoma Community seems to have decided they would prefer to operate alone. The AWF/IGCP continues to work with Buhoma Community Campground to raise funds to implement their business plan. The AWF/IGCP will work with the Campground to explore options of phasing the business plan so they can solicit smaller amounts of funds or reinvest their profits.

Handcraft Development

UCOTA had been sub-contracted under the project to provide support to handcraft product development, training and marketing. Twelve small groups (including one Batwa group) were reorganized into two larger groups and have been trained in various aspects of handcraft production and marketing through this project. More than 200 women are members, while the men mostly make tea baskets or do wood carving. Two Batwa men were supported for a 2-week training course in wood curving. Through training and product design improvements, the quality of products has improved significantly. There has been a 350% increase in number of professional weavers in each of the project parishes.

Despite the fact that over 50% of the handcraft sales are not captured in group records, a monthly increase in revenue from handcrafts to each of the groups of about 89% has been registered at the end of the project. The members of the handcraft groups have also been introduced to 'tie and dye' cloth making and tailoring the fabrics to satisfy the demand from the tourists in the region. With support from the project, UCOTA also produced a handcraft catalogue that will be put on their website and hard copies distributed to potential buyers both within the country and outside.

Mushroom Growing

Wild mushrooms are a resource which local communities used to traditionally access from MGNP. By targeting womens groups who are residents in parishes adjacent to MGNP, the project contributed to improving the socio-economic status of one of the target groups. In addition to this, mushrooms can be grown on a small amount of land and similar experience exists in the region as a result of the Mgahinga and Bwindi Impenetrable Forest Conservation Trust's (MBIFCT) mushroom growing projects on the northern side of Bwindi. Approximately 80 women were involved and at this stage, the project piloting the effectiveness of this strategy. Initial assessments of the local market indicate that demand is high for fresh and dry mushrooms. AWF/IGCP trained 40 women around MGNP in mushroom growing, processing and marketing in the previous period. Eight grow rooms were established for demonstration and two on-site trainings were conducted.

Mushroom growing is a straightforward intervention— women's groups have been taught how to grow mushrooms indoors, using millet chaffs as the substrate. Capital investment is minimal, yields are good; there is adequate demand on local markets, and the economics look positive. Women report that they now have mushrooms all year round, whereas they used to have to go to the forest and would only get them seasonally. Groups have some difficulty getting spores to initiate the process, but once trained, they are quite capable of passing on their skills to other groups. Some women take them to the markets in town. The ability of the local market to absorb growing quantities of more mushrooms is not known. However, sun drying and storage are options when surpluses are produced.



Figure 8. MBIFCT Women learn mushroom packaging techniques

Beekeeping

Beekeeping and honey harvesting are old traditions of the region. Honey harvesting from the wild uses smoke (and therefore fire) and was often the cause of accidental fires in the forest. Most of the honey produced was poorly processed, tainted with smoke and used for the local brewing industry. The project supported the development of Bwindi Beekeeping Development Association (BBDA), which registered in January 2004, and is now promoting both modern beekeeping, and processing for higher quality markets. It recently helped BBDA set up a honey refinery in March 2005. The flat rate prices proposed for honey from members may not persuade them to come to the refinery, since the brewers are often ready to pay more, when honey is scarce. It is anticipated that the opportunity to sell in larger quantities to the Refinery will be a valued attraction. Additionally, through this grant, IGCP has also brought in expertise on improving the quality of production and marketing to assist the BBDA.



Figure 9. BBDA beekeeper training

Human Gorilla Conflict Resolution (HuGo)

Some gorillas come out of the park to browse on crops in community farmland, especially the unhabituated groups. Historically this has been a major source of conflict between UWA and the community, who saw wild animals as their ‘enemies’. HuGo is an intervention initiated by AWF/IGCP since 1997-8 between the park and local communities in which community members have been trained in gorilla behavior and how to chase them back into the park—often not an easy task. Community members are not paid, but volunteers are supplied with gumboots, raincoats etc, and are provided with free “maize meal and beans” by UWA after engaging in a gorilla chasing exercise.

As a result of this intervention, community members now know to report gorillas moving out of the park to the HuGo group who are empowered to respond immediately without waiting a long time for UWA park staff to arrive. After some years, many HuGo members began complaining that they were not sufficiently rewarded for their efforts on behalf of both conservation and their community. In response, the project provided micro-grants exclusively to HuGo members (approx. USD400 equivalent each) to invest in micro-enterprises of their choice, typically livestock. This has been one of the most successful and replicable interventions of the project, with successes going well beyond its mandate.

Bamboo growing

The project undertook to support communities around MGNP to grow bamboo on their farms. This was justified given that with the gazettement of MGNP in 1991, communities were legally barred from accessing bamboo from the park. Care Uganda, under its Development Through Conservation (DTC) had done an on-farm bamboo-growing program in one parish (Gisozi) out of the three that border the MGNP.

Bamboo plays a major role in the lives of most people around the parks in Southwestern Uganda, with the main sources being Mgahinga Gorilla National Park and Ichuya Forest Reserve, both found in the GVL. This need has led to numerous illegal activities within the park related to bamboo harvesting (refer to MGNP and Ichuya law enforcement records). The project supported 500 community members in two other parishes surrounding MGNP to establish bamboo stands on their own plots of land cover. However, because of technical oversight, the plots did not establish very well.

Additionally, during the project it was learned that the issue of timing was important in bamboo growing as it requires a lot of rain at planting. The best season for planting bamboo is August–November. There is need for technical expertise when planting bamboo. Demonstration plots need to be established within communities for purposes of providing extension services.

Revenue Sharing from Gorilla Permits

The project has successfully advocated for UWA to share part of all gorilla permits with local communities-USD9 is currently deducted. UWA is still developing the mechanism for disbursement but initial discussions with UWA indicate that of the USD9, USD5 goes to the MBIFCT and the USD4 into UWA’s national revenue sharing basket. The significance is that IGCP has managed to convince UWA of the value of sharing a percentage of gorilla based tourism revenues locally. AWF/IGCP recognize that UWA is not in a position to accept a reduction of current revenues from gorilla permits, but have set their targets on increasing this share next time that UWA are reviewing their fee rates.

B. Problems encountered

The main problems encountered in the implementation of this result related mainly to the delays associated with working with community groups. The project made significant progress in the development of new institutions and initiate innovative enterprise models (e.g., Nkuringo), but only in a few of the enterprises were actual benefits accrued. Future work is expected to yield further benefits and AWF/IGCP is committed to supporting these enterprises until this is achieved.

C. Lessons learned

It is important that issues of ownership are clearly established at the onset of an enterprise activity. Although the project was confident that ownership of Amajambere Wachu would ultimately reside with MCDO, this should have been secured in writing and preferable in a legal agreement with the existing land owners.

D. Sustainability

The premise of enterprise development is to achieve financial sustainability. Although the enterprises developed under this IR must also contribute to conservation, it is likely that all the enterprises (except for Bamboo) supported under this result will achieve both financial sustainability and contribute to increased support for conservation amongst the local communities.

IR 6.2 GVL products and services effectively linked to regional and international markets

A. Expected results and implementation

The project did not achieve much under this IR in relation to effective linkages to regional and international markets. However, the following funds have been obtained from third party sources to support new CBVs that will build on the project's initiatives to support this sub-IR in the near future:

- USD50,000-UNDP-GEF Small Grants for Amajambere Community Campground.
- USD150,000-World Bank Development Marketplace for enterprise development in Nkuringo on the southern side of BINP.

B. Problems encountered

The lack of implementation of this result partly stems for the lack of expertise within the project to establish relevant linkage and partnerships to regional and international markets. Also the nascent stage in which most projects are currently made it premature to make these linkages.

C. Lessons learned

The main lesson has been to ensure that the relevant expertise is available to ensure that linkages to markets are made and this should be pursued with private sector partners who specialize in supplying the products developed within the GVL.

D. Sustainability

Once appropriate partnerships and linkages have been established, sustainability will be achieved.

IV. CONCLUSION

This project entitled, “Conservation of Afro-montane Forest and Mountain Gorillas in a Landscape Context”, sought to place the conservation of the critical habitats of the mountain gorillas in a wider landscape context. Two prevailing conditions demanded that this approach be established:

- The threats to the gorillas as a result of high populations and human activities continue to increase and change.
- Despite the high inherent value of this resource and the importance attached to it by the international community and the three national governments, the human communities living around the parks remain some of the poorest in Africa, and thus, the world.

Various intermediate results were designed to address these prevailing conditions as well as establish a framework for planning that incorporated the ‘landscape’.

Within the chosen intermediate results, strategies were implemented with varying degrees of success, as described in the previous sections. Overall, the project was successful in incorporating the landscape approach to the conservation of the mountain gorilla habitat (see IRs 1 & 2), strengthening management and governance capacity (IR 3-5) as well as expanding opportunities for mitigating the threat of the human populations that live in the vicinity of these critical ecosystems (IR 6). The additional results made significant contributions to strengthening permanent institutions (i.e., UWA and ITFC) ability to manage these forests as well as effectively monitor any changes.

One of the main contributions of the landscape planning process has been to initiate a process that brings on board a range of stakeholders in the landscape to work towards contributing to conservation. Although under this project many challenges were met and successes were witnessed, much work still needs to be done in relation to securing buy-in from a number of partners. In general though, the framework has been developed and a wide range of stakeholders have become engaged.

Many new Conservation Business Ventures were established and although few had begun to yield economic returns by the end of the project, the value of the investment in processes has resulted in the establishment of strong institutions with clear governance and objectives (e.g., NCDF, MCDO, BBDA). In addition to this, several key micro-enterprises (e.g., mushrooms and HuGo grants) have made direct contributions to conservation. Members of the mushroom groups no longer enter the forest to collect resources, and the HuGo groups have become strengthened as a result of the support and continue to provide invaluable support to the protected area managers. Discussions about whether the HuGo groups should expand their mandate are currently being held, also highlighting the success with which human gorilla conflicts have been mitigated in conjunction with community groups.

Finally, direct support to permanent institutions whose mandate is to conserve the habitat of the mountain gorillas was successfully implemented. Uganda Wildlife Authority received equipment,

training and technical advice throughout the project. The Institute of Tropical Forest Conservation, not only strengthened its ability to conduct research and monitoring, but linked this information to park management, thereby contributing to ensuring well-informed management.

Box 2. Summary of Project Review (From Evaluation Report, August 2005)

Success:

Indicators all positive, but recovery of wildlife populations and changing conservation behaviors are both slow processes.

The project has piloted cost-effective solutions to conservation in the form of community based institutions with conservation mandates (e.g., HuGo groups) which should be built on in the future.

Participation:

There has been strong IGCP liaison with project partners (esp. UWA) and now broadening conservation alliance to Local Govt. and CSOs.

Sustainability:

The new CBVs developed look promising, but need more support beyond the end of the project to bear fruits.

The pressure on UWA to increase gorilla revenues could emerge as a new and increasing threat to their long-term health and behavior. AWF/IGCP and other development partners should explore options to core-finance UWA and support it to develop business models that expand and diversify tourism away from gorillas.

Lessons learned:

Many valuable lessons have been learned which should be internalized by PRIME/West, UWA & AWF/IGCP partners.

Many lessons have been learned, as highlighted by the final evaluation. Perhaps the key lesson for the project partners for the future will be to focus on key threats to the landscape and work on not only using existing expertise but work on building partnerships with stakeholders who can also provide relevant technical support and linkages.

With support from USAID Uganda, this collaborative conservation-based development project made significant contributions towards biodiversity conservation in Uganda, and beyond. Although the indicators were positive (see Annex 2, final PMP), it is important to note that significant contributions to conservation are generally made over a timeframe beyond the life of this three-year project. Together with our partners in Uganda, AWF hopes to continue this partnership for enhanced conservation, protection and management of Uganda's rich biodiversity, while providing a catalyst for flourishing economic development opportunities.

V. ANNEXES

The following key project documents are attached separately due to large size:

- ANNEX 1: Final Financial Report
- ANNEX 2: Final Performance Management Plan (PMP)
- ANNEX 3: Final Evaluation
- ANNEX 4: Policy Review Report
- ANNEX 5: Economic Valuation Summary Report
- ANNEX 6: Nkuringo Eco-lodge Environmental Impact Assessment Report
- ANNEX 7: Vegetation Map Summary Report
- ANNEX 8: Bamboo monitoring Report
- ANNEX 9: ICD Summary Report



AFRICAN WILDLIFE FOUNDATION®

Final Financial Report

USAID Associate Award No. 617-A-00-02-00005

Conservation of Afromontane Forest and Mountain Gorillas in a Landscape Context

Category	Revised Budget	Total Expenses	Budget Balance
Project Implementation	1,033,269	1,066,094	(32,825)
Infrastructure Development	150,250	123,068	27,182
Specialized Activities	374,730	363,852	10,878
Procurement	82,802	88,281	(5,479)
Vehicles	84,932	84,688	244
Total Direct	1,725,983	1,725,983	(0)
Indirect Costs	323,622	323,622	-
TOTAL	2,049,605	2,049,605	(0)

Prepared by: Julie Garritson, Director of Grants Management

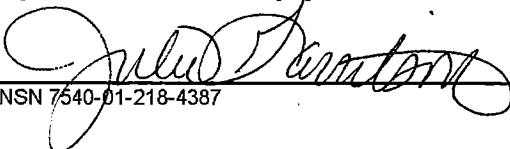
Signature: _____

Date: 21-Oct-05

FINANCIAL STATUS REPORT

(Short Form)

(Follow instructions on the back)

1. Federal Agency and Organizational Element to Which Report is Submitted USAID		2. Federal Grant or Other Identifying Number Assigned By Federal Agency Leader: LAG-A-00-99-00053 Associate: 617-A-00-02-00005		OMB Approval No. 0348-0038	Page of 1 1 pages
3. Recipient Organization (Name and complete address, including ZIP code) African Wildlife Foundation 1400 16th Street, NW, Suite 120 Washington, DC 20036					
4. Employer Identification Number 52-0781390		5. Recipient Account Number or Identifying Number Uganda Afro-Montane - 5010		6. Final Report <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
7. Basis <input type="checkbox"/> Cash <input checked="" type="checkbox"/> Accrual					
8. Funding/Grant Period (See instructions) From: (Month, Day, Year) 04/24/02		To: (Month, Day, Year) 07/24/05		9. Period Covered by this Report From: (Month, Day, Year) 07/01/05	
				To: (Month, Day, Year) 10/21/05	
10. Transactions:				I Previously Reported	II This Period
				III Cumulative	
a. Total outlays				1,933,524	116,081
b. Recipient share of outlays					
c. Federal share of outlays				1,933,524	116,081
d. Total unliquidated obligations					
e. Recipient share of unliquidated obligations					
f. Federal share of unliquidated obligations					
g. Total Federal share (Sum of lines c and f)					\$2,049,605.00
h. Total Federal funds authorized for this funding period					2,049,605.00
i. Unobligated balance of Federal funds (Line h minus line g)					
11. Indirect Expense					
a. Type of Rate (Place "X" in appropriate box) <input checked="" type="checkbox"/> Provisional <input type="checkbox"/> Predetermined <input type="checkbox"/> Final <input type="checkbox"/> Fixed					
b. Rate 18.75%		c. Base 89,488		d. Total Amount \$16,780 @ 18.75%	
				e. Federal Share \$9,813 See comment below	
12. Remarks: Attach any explanations deemed necessary or information required by Federal sponsoring agency in compliance with governing legislation. An additional \$9,813 has been billed for indirect costs based on a revised calculation using final approved NICRA rates for FY02 and FY03 not exceeding total indirect cost budget line.					
13. Certification: I certify to the best of my knowledge and belief that this report is correct and complete and that all outlays and unliquidated obligations are for the purposes set forth in the award documents.					
14. Typed or Printed Name and Title Julie Garritson Director of Grants Management				15. Telephone (Area code, number and extension) 202-939-3333 x 3351	
16. Signature of Authorized Certifying Official 				17. Date Report Submitted 10/21/05	



Associate Award Number 617-A-00-02-00005-00

**CONSERVATION OF AFRO-MONTANE FOREST AND MOUNTAIN GORILLAS
IN A LANDSCAPE CONTEXT**

PERFORMANCE MANAGEMENT PLAN—August 2005

Submitted to:

U.S. Agency for International Development, Uganda Mission

October 2005

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INTRODUCTION

The African Wildlife Foundation was awarded the above Associate Award on April 24th, 2002 in order to implement the project "Conservation of Afro-Montane Forest and Mountain Gorillas in a Landscape Context". The program activities are designed to place the conservation of mountain gorillas and their Afro-montane habitat in a broader "landscape context". This landscape context includes looking at the relevant parks in Uganda; the threats to these parks that originate in the surrounding areas of human settlement; the social and economic requirements of the interface between the parks and surrounding communities; and the international, trans-frontier nature of the resource.

In implementing the project, AWF works primarily through the International Gorilla Conservation Program (IGCP) and other collaborating institutions, notably the Uganda Wildlife Authority (UWA) and the Institute of Tropical Forest Conservation (ITFC).

The process for developing the Performance Management Plan (PMP) ensured input from project partners and began with a project planning meeting held in August 2002 which reviewed draft indicators from the project document. The Project Management Team then refined the indicators, in consultation with the USAID CTO and the USAID Performance Management Specialist.

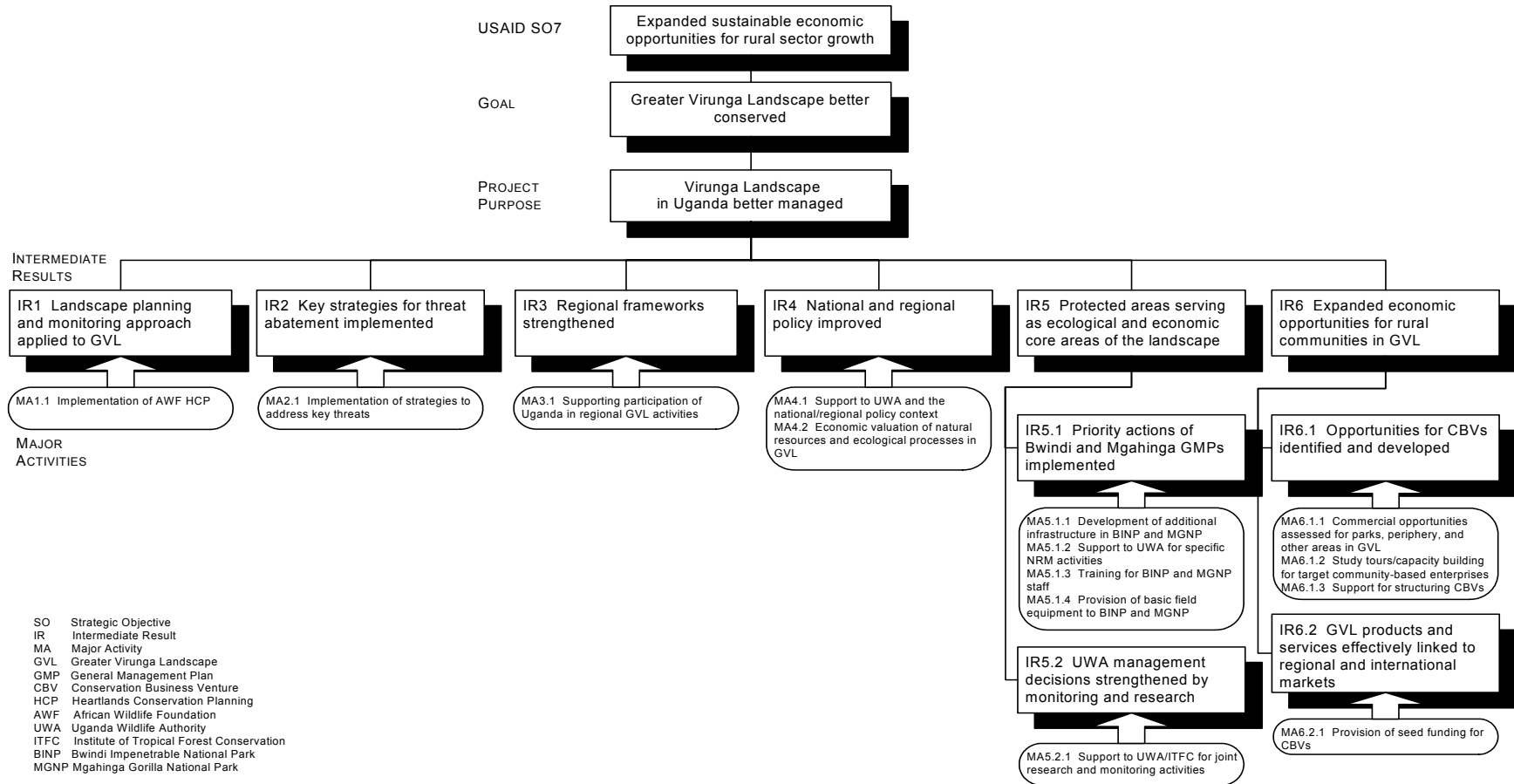
The PMP measures indicators against the project result framework (see page 2) and thus includes both biophysical as well as socio-economic indicators. However, it is acknowledged that the project will be held accountable at the project goal level i.e., Greater Virunga Landscape better conserved. It is also acknowledged that in order to be held accountable at this level, it is therefore necessary to set some indicators that may have to be tracked after completion of the project period. It is also acknowledged that a number of other players may also contribute to achievements at this level. However, during the project period, other indicators will be monitored according to project sites.

The Performance Management Plan is detailed on the table beginning on page 3 of this document. In some cases, supplemental information is availed to the reader as annexes to the respective IR indicator

Results Framework

PROJECT: Conservation of Afro-montane Forest and Mountain Gorillas in a Landscape Context

PROJECT DURATION: 39 months May 2002 - July 2005
PROJECT COST: US\$ 2,049,605



Conservation of Afro-montane Forest and Mountain Gorillas in a Landscape Context

PERFORMANCE MANAGEMENT PLAN

Goal		Greater Virunga Landscape better conserved				
Indicator Goal A		Natural forest cover				
<p>Indicator Definition and unit of measurement: Afro-montane forest is the primary habitat type of conservation significance in SW Uganda, and we propose to measure area of natural forest cover as an indicator of conservation impact for this project. This will include both the natural forest protected areas (Bwindi, Mgahinga, Echuya) and patches of forests in the surrounding community areas. However, there is already in fact very little natural forest left outside the protected area boundaries, so the main area of focus will be the protected areas themselves. Monitoring of forest cover will include both the overall area of natural forest cover on a broad scale, and the encroachment and/or regeneration of forest within Bwindi, from field-based monitoring. Field-based monitoring will focus on the forest edge, where human-induced loss and degradation of forest cover are most likely to occur, and in selected forest gaps, which have been caused by a long history of disturbance, and where forest regeneration can be regarded as an indicator of conservation success.</p>						
<p>Unit: hectares of natural forest cover, indices of encroachment at the forest edge and regeneration of forest gaps.</p>						
<p>Source of data: Vegetation maps and satellite photography, field assessment of park edge in Bwindi, and forest gap regeneration</p>						
<p>Frequency of data collection and reporting: At beginning and end of project</p>						
Baseline Year	Baseline		Year 3			
	Actual	Target	Target	Actual		
2000 – Satellite images 2002-2003 – Veg. map 2001 – forest gaps			Maintained or increased			
2000-2002 – edge data area encroached trees cut per km of edge		1.0 ha 1.58				

Comments:

This indicator could be monitored at two levels. Firstly, the general forest cover over the whole of SW Uganda can be used to assess general conservation impact in the Greater Virunga Landscape. Secondly, changes in forest cover could be monitored in more detail at specific sites where the project will focus interventions. These sites will be defined during the heartland conservation planning process in February 2003.

At the more general level, satellite image analysis has already been completed by WCS and the University of Maryland, showing forest cover in 2000 (along with loss of forest cover in the previous 15 years), which provides an overall baseline of forest cover. This analysis will be repeated at year 3, to look for further loss of forest cover. UNESCO / European Space Agency SOGHA project is also mapping gorilla habitat, and ICRAF are preparing a GIS database of forest cover and other variables for SW Uganda. Both of these initiatives also have the potential to feed into monitoring of this indicator. A more detailed baseline of forest cover within Bwindi will be set by the vegetation mapping exercise for Bwindi currently being carried out by ITFC which will be completed during the first year of this project. It should then be possible to monitor further changes in forest cover using satellite photographs against the detailed baseline of the vegetation map. The target for the end of the project will be no reduction in natural forest cover from the baseline year.

On the ground, change in forest cover will be monitored by repeating an assessment of the forest edge which has been carried out around all the parishes around Bwindi between 2000 and 2002. This baseline study collected data on the frequency and extent of encroachment, among other parameters, and will be repeated in selected parishes at the end of year 3. In addition, a baseline study of forest gaps was carried out in 2001, and selected gaps will be revisited in year 3 to assess regeneration.

A total of 1,050 acres of land bordering the southern side of BINP was purchased in August- September 2003 with support from IGCP, IUCN, FFI and WWF. This land was purchased to secure additional gorilla habitat and to support responsible tourism development. 57% (605 acres) of this land will be allowed to regenerate and the remainder will be managed as buffer zone in a unique partnership between UWA and the local communities.

Goal	Greater Virunga Landscape better conserved					
Indicator Goal B	Water quality					
Indicator Definition and unit of measurement:						
<p>Water quality is an indicator which reflects both one aspect of forest health, and one of the key environmental services, water catchment, provided by the forest and benefiting local communities. Baseline research at ITFC has shown that certain water quality parameters reflect disturbance to the forest ecosystem. These include Biological Monitoring Working Party (BMWP) score, water conductivity ($\mu\text{S cm}^{-1}$) and water transparency (cm). The BMWP score is widely used because the organisms are identified to family level for uniformity. Each family is allocated a score between one and ten. The most sensitive organisms to water quality score ten and the least sensitive ones score one. The sum of the scores at a given site is the BMWP score. The BMWP score was published as a standard method by an international panel (ISO-BMWP, 1979). This score was devised in the UK but is not specific to any single river catchment or geographical area. Water conductivity and water transparency are measures of the amount of sediment and nutrient runoff from the catchment. High conductivity values and low water transparency indicate stress within the watershed while reduced conductivity and increased water transparency would reflect improved water quality and forest health. Based on this research, ITFC has developed a system of water quality monitoring in selected rivers in Bwindi, which employs both physicochemical parameters and macro-invertebrate fauna as indicators of water quality. Selection of monitoring sites on rivers was based on past (such as logging and agricultural encroachment) and present human impacts (such as eco-tourism, multiple use, forest recovery). We are also currently investigating the possibilities of expanding the water quality monitoring to Mgahinga, although there are no permanently flowing rivers there, which complicates the analysis.</p>						
Unit: BMWP score, Conductivity ($\mu\text{S cm}^{-1}$ = micro siemens per cm), and Transparency (cm)						
Source of data: ITFC Ecological Monitoring Program						
Frequency of data collection and reporting: Annual						
Baseline Year 2000-2001	Year 2 – 2003		Year 3 - 2004			
	Target	Actual	Target	Actual		
BMWP score, mean = 102.9 \pm 7.1		91.2 \pm 7.8		89.2 \pm 5.3		
Conductivity, Mean = 56.1 \pm 10.5 (s.e.) $\mu\text{S cm}^{-1}$		57.6 \pm 3.4 $\mu\text{S cm}^{-1}$		58.2 \pm 2.9 $\mu\text{S cm}^{-1}$		
Transparency, mean = 88.3 \pm 15.6 (s.e.) cm		90.1 \pm 6.0 cm		86.6 \pm 5.0 cm		
Comments:						
<p>The water quality monitoring specialist at ITFC has defined parameters for monitoring water quality. The baseline values for each of the parameters are given above. BMWP score for the baseline ranged between 74 for a highly impacted site to 169 for the least impacted site. A BMWP score greater than 100 indicates good water quality. Conductivity ranged between 27.8 $\mu\text{S cm}^{-1}$ for a less impacted site to 155.3 $\mu\text{S cm}^{-1}$ for the highly impacted site. Transparency ranged from 20 cm at the highly impacted site to 160 cm at the least impacted sites.</p>						
<p>Overall, the value of these parameters has been remarkably consistent over the years, indicating that there has not been any major change in impacts on the forest.</p>						

Goal	Greater Virunga Landscape better conserved				
Indicator Goal C	Mountain gorilla populations in Bwindi and the Virungas				
Indicator Definition and unit of measurement:					
<p>The mountain gorillas are themselves an important conservation target, and the population size in Bwindi is therefore included as an indicator of performance at the Goal level. Gorilla censuses are in general only carried out every five years, because of the large amount of time and effort required, along with the fact that the population is unlikely to change very much in shorter periods. A census of the Bwindi population has already been carried out in 2002, which serves as a baseline for this project. The target will be set for 2007 based on the same rate of population growth as experienced between 1997 (the previous count) and 2002. Final analysis of the 2002 census results is currently being carried out.</p> <p>We are also including the Virungas population as well as Bwindi, a census was able to be completed in 2003. although we are not as certain that we will be able to obtain data depending on the security situation. The population in Mgahinga moves back and forth to the Rwandan and DRC parts of the Virungas, and continued instability prevents any systematic census of the whole Virunga area. We do have an analysis of the population in 2000 which indicated a minimum of 360 gorillas, and proposed a range of between 360 and 390, based on groups which are regularly monitored on other groups encountered during ranger-based monitoring. If security permits, a census of the Virunga population will be undertaken during the project. If not, we should at least be able to repeat the partial analysis of the population carried out in 2000.</p>					
Unit: Number of gorillas					
Source of data: Gorilla censuses conducted by ITFC, UWA and partners					
Frequency of data collection and reporting: Every five years					
Baseline Year Bwindi – 2002 Virungas – 2003	Year 5				
	Target	Actual			
Bwindi – 320 Virungas – 380					
Comments:					
<p>The next census will therefore take place in 2007, after the end of this project. However, we propose to retain this indicator for this three year project, since although it will be measured after the end of the project, changes in the number of gorillas will at least in part reflect the impact of this project. Because a much smaller number of groups in Bwindi are habituated and monitored every day, the type of partial analysis of the population which we have been able to carry out in the Virungas .</p> <p>At present we do not know how many gorillas could be supported by Bwindi. The targets will therefore be fairly conservative, and is based on the assumption that there is at least some room for expansion, given the existence of areas of apparent gorilla habitat which are currently unused.</p>					

Goal	Greater Virunga Landscape better conserved					
Indicator Goal D	Abundance of large mammals					
Indicator Definition and unit of measurement:						
Large mammals are the most vulnerable group of animals to poaching, one of the major threats to wildlife in the Greater Virunga Landscape. If this project succeeds in reducing poaching, an impact should be seen in the indices of abundance of large mammals in both Bwindi and Mgahinga. Data are collected by Uganda Wildlife Authority during regular patrols by rangers in both parks, recording observations and / or signs of each species. The species on which we will focus for the purposes of this indicator are as follows:						
Mgahinga: black fronted duiker, buffalo, golden monkey, elephant (signs only)						
Bwindi: black fronted duiker, yellow-backed duiker, bushpig, black and white colobus, l'hoesti monkey, blue monkey and red-tailed monkey, elephants (signs only)						
In addition in Bwindi, an ongoing ITFC monitoring program is recording observations of duikers and signs of elephants along the Ruhija-Ndego road, and will be used as a crude indicator of large mammal abundance on an annual basis.						
Unit: Encounter rates of large mammals and signs of large mammals during patrols, and recorded along Ruhija-Ndego Road						
Source of data: Ranger based monitoring data, ITFC monitoring program						
Frequency of data collection and reporting: Data collection is continuous, reported by month and year						
Baseline Year 2002	Year 1 (2003)		Year 2 (2004)		Year 3 (2005)	
	2002	Actual (2003)	Target	Actual	Target	Actual
RBM – Mgahinga:						
- Black fronted duiker	0.0309	0.0225	0.0309	0.0229	0.0309	0.0294
- Buffalo	0.2263	0.1179	0.2263	0.1157	0.2263	0.0771
- Golden monkey	0.3611	0.5085	0.3611	0.1491	0.3611	0.3538
- Elephant signs	0.0093	0.0159	0.0093	0.0173	0.0093	0.0035
RBM – Bwindi:						
- Black fronted duiker	0.0304	0.0334	0.0304	0.0468	0.0304	0.0474
- Yellow-backed duiker (rangers don't distinguish between duiker species)						
- Bushpig	0.0120	0.0128	0.0120	0.0110	0.0120	0.0091
- Black and white colobus	0.1453	0.1301	0.1453	0.2798	0.1453	0.3012
- L'hoesti monkey	0.1202	0.1090	0.1202	0.1900	0.1202	0.1250
- Blue monkey	0.0852	0.1466	0.0852	0.2941	0.0852	0.2032
- Red-tailed monkey	0.1818	0.1417	0.1818	0.2692	0.1818	0.2997
- Elephant signs	0.0139	0.0115	0.0139	0.0135	0.0139	0.0280
ITFC Road monitoring:						
- Elephant signs						
- Black fronted duikers						

Comments: While the actual numbers of mountain gorillas can be obtained from regular censuses, it is more difficult to get absolute numbers of other large mammals. However, indices of their abundance, such as number of observations of a particular species per patrol, or encounter rates of signs of another, can be used to indicate trends in the populations, and this data is regularly collected as part of ranger based monitoring systems set up by UWA and IGCP.

This indicator can be applied both to Bwindi and Mgahinga individually, but also to the Virungas as a whole. The goal of the project does have a regional element to it, even although the activities are concentrated in Uganda. Such a regional indicator is still appropriate, however, at the goal level.

In addition, in 2007, after the end of the project, there will be the opportunity to collect systematic data on large mammal signs right across Bwindi during the next gorilla census, in a comparable way to that collected in 2002.

BINP: Based on the available results for Bwindi, in Year 3 observations of elephant signs, duiker, red tail monkeys and black and white colobus have increased, while observations of bush pigs have decreased. Observations of blue monkeys and l'Hoest monkeys have decreased from Year 2 but the number is still greater than the target. With regard to illegal activities, the observations of snares, plant harvesting, grazing, beehives and fire decreased from Year 2; while observations of water collectors were equal to those in Year 2.

MGNP: Buffalo and elephant observations have decreased from Year 2 to Year 3; duiker, golden monkey have decreased below the target but increased above the number of observations in Year 2. Observations of snares and grazing have increased; plant harvesting and fire have increased above the target but decreased between Year 2 and Year 3; beehives and water collectors have decreased from Year 2 (reaching the target figure set).

It is likely that the reason why Golden Monkey observations may have increased is due to the initiation of a research project on golden monkeys and rangers accompanying the researcher are also collecting patrol data. A decrease in observations is probably linked to the fact that the researcher has completed the research and rangers are no longer specifically finding the golden monkeys. Additional information regarding the status of this research is still needed to confirm this. Observations of golden monkeys may then have increased (in Year 3) with the opening of a group of monkeys for tourism (the monkeys are visited every day for habituation purposes).

Elephant observations are influenced by migration patterns between Nyamulagira sector and Mikeno sector in DRC. When security is bad then the corridor between the two sectors is cleared and elephants no longer migrate between the sectors and are therefore more often moving through to MGNP and PNV (Rwanda). Elephant movement is also influenced by weather patterns, when it is extremely dry then elephants again tend to move into MGNP and PNV in search of water as there is less water available in the Mikeno sector (DRC).

Goal		Greater Virunga Landscape better conserved				
Indicator Goal E		Populations of Grauer's Rush Warbler				
Indicator Definition and unit of measurement:						
<p>Grauer's rush warbler is an endemic and endangered bird, with very specific and restricted habitat requirements. It is found only in swamps in SW Uganda and Rwanda. As such, it is a useful indicator of conservation impact in its own right, but also serves as an indicator of loss of swamps. Such swamps are an important habitat in the Greater Virunga Landscape, both because of their biodiversity value, being home to many species of rare or endemic plants and animals, and because they provide important environmental services for surrounding communities in terms of water catchment and local climate modification. As this species is only found at a few specific and restricted sites, we will be able to develop quick and easy methods to monitor these populations, based either on actual population numbers, or on indicators of abundance (such as frequency of calls at certain times of day/season) and based on their simple presence or absence at smaller swamps.</p>						
Unit: Indices of abundance – observations per plot						
Source of data: Bird counts						
Frequency of data collection and reporting: Annual						
Baseline Year December 2002	Year 1 (Dec 03)		Year 2 (Dec 04)		Year 3	
	Target	Actual	Target	Actual	Target	Actual
Bwindi – 1.63 ± 0.197 (mean ± standard error)	Pop. indices maintained	1.58 ± 0.165	Pop. indices maintained	2.23 ± 0.230	Pop. indices maintained	
Echuya – 1.37 ± 0.197	or increased	1.17 ± 0.167	or increased	1.21 ± 0.203	or increased	
Comments:						
<p>Baseline data for this species have been collected at swamps in and around Bwindi and Echuya during December 2002, and further counts were carried out in December 2003 and December 2004. Grauer's rush warblers are counted by extensive searches within 15x30 m plots in Mubwindi swamp in Bwindi Impenetrable National Park and Muchuya swamp in Echuya Forest Reserve. Frequency of the birds in Mubwindi swamp has been consistently higher than that in Muchuya. There is change in the counts in each swamp between years, with the exception that the December 2004 count in Mubwindi appears higher than in the two previous years. However, there is no statistical difference between years (Kruskal-Wallis test statistic = 1.448, probability, p = 0.485 for Muchuya, and 4.320, p = 0.115 for Mubwindi). Further years of monitoring will be needed to determine whether the apparent trend towards an increase in frequency in Mubwindi can be confirmed in the longer term. Annual counts will be continued each December, for at least 5 years after the end of the grant.</p> <p>However, we can at least conclude that there has been no significant drop in the population indices in the three years of this project. Given that Muchuya swamp has suffered from fires, grazing and disturbance in recent years, this is good news. Field teams did observe that in 2003 and 2004 Muchuya swamp appeared to be in better condition than in the baseline year, with less illegal harvest and burning and a higher water-table, although we cannot directly attribute these changes to the interventions of this project.</p>						

Goal	<i>Greater Virunga Landscape better conserved</i>					
Purpose	GVL better managed					
Indicator Purpose	Reduction in Key threats					
Indicator Definition and unit of measurement: Critical threats to the Greater Virunga Landscape were identified through the Heartland Conservation Planning process (see comments below). Project sites were also determined as per the comments below.						
Unit: nos. of critical threats, nos. of target areas						
Source of data: ecological and socio-economic data and monitoring						
Frequency of data collection and reporting: Quarterly/ Annually						
Baseline Year (2002)	Year 1		Year 2		Year 3	
	Target	Actual	Target	Actual	Target	Actual
Information to be determined thru the HCP - 15 critical threats identified					5/15 critical threats maintained or reduced	4/15 critical threats maintained or reduced

Comments: Critical threats identified through the HCP at the beginning of the project are as follows:

- Agricultural conversion
- Habitat loss through agricultural conversion
- Over-fishing using poor methods
- Nutrient overload (run-off)
- Population density
- Current economic systems & land tenure
- Refugees/conflict
- Lack of education
- Low income and lack of capital
- Timber harvesting
- Resettlement/displacement
- Hunting/poaching
- Charcoal production/collection of fuelwood
- Urbanization/growth in number and size of fishing villages
- Logging (Sarambwe, Tongo, Kichunga)

The following sites were confirmed in Uganda:

Bwindi INP, Mgahinga GP, Echuya Reserve as well as the surrounding areas (upto 2 parishes) around these protected areas.

Reduction in threats and number of critical threats was analyzed in a Heartland Conservation Planning meeting at the end of the project. In general, it was observed that the conservation targets and critical threats to the targets that were identified in the February 2003 HCP workshop were still valid, though the rankings have changed in some situations. For example the threat from agricultural conversion still remained very high. This was attributed to continued human population increase, reduced productivity of land and spatially limited implementation of strategies to alleviate the threat.

While 4 of the 5 critical threats chosen by the project reduced or were maintained, in total 11 of the 15 critical threats identified in 2003 reduced or where maintained in Uganda (see Annex 1).

Goal	Greater Virunga Landscape better conserved					
Purpose	GVL better managed					
Indicator Purpose	Reduction in illegal activities					
Indicator Definition and unit of measurement: Uncontrolled use of the resources from the core-protected areas in the GVL is considered to be a key threat to the conservation status of both BINP and the Virungas. Any reduction in illegal activities within the core-protected areas will enhance the conservation status of the national parks. The following illegal activities will be monitored utilizing the ranger based monitoring system developed by IGCP and the MIST system of UWA: poachers (direct/signs), wood cutters (direct/signs), water gatherers, smugglers, snares, gun shots, feral dogs, livestock (cattle, goat)						
Unit: nos. of illegal activities						
Source of data: Ranger based monitoring program and MIST						
Frequency of data collection and reporting: Quarterly/ Annually						
Baseline Year (2002)	Year 1		Year 2		Year 3	
	Target	Actual	Target	Actual	Target	Actual
	10% reduction		20% reduction		25% reduction	
Comments: This indicator will only monitor changes in illegal use in Bwindi Impenetrable National Park and Mgahinga Gorilla National Parks in Uganda. Calculation of reduction rate will take into consideration reported illegal activities in relation to distance patrolled and protected area covered. Note: The targets will be refined after the threat assessment						

Illegal activities MGNP

Illegal activity	Baseline (2002)	Year 1		Year 2		Year 3	
		Target 10% reduction	Actual	Target 20% reduction	Actual	Target 25% reduction	Actual
Snares	0.0135	0.01215	0.0279	0.0108	0.0033	0.0101	0.0287
Beehives	0.0006	0.00054	0.0025	0.0005	0.0024	0.0004	0.0004
Plant harvesting	0.0015	0.00135	0.0222	0.0012	0.0212	0.0011	0.0014
Grazing	0	0	0.0077	0	0.0083	0	0.0485
Fire	0	0	0.0011	0	0.0006	0	0.0004
Water collecting	0	0	0.0027	0	0.0029	0	0

Illegal activities BINP

Illegal activity	Baseline (2002)	Year 1		Year 2		Year 3	
		Target 10% reduction	Actual	Target 20% reduction	Actual	Target 25% reduction	Actual
Snares	0.0246	0.0221	0.0312	0.0197	0.1684	0.0184	0.0875
Beehives	0	0	0	0	0.0004	0	0
Plant harvesting	0.0078	0.0070	0.0091	0.0062	0.0248	0.0058	0.0160
Grazing	0.0032	0.0029	0.0037	0.0026	0.0080	0.0024	0.0029
Fire	0.0019	0.0017	0.0022	0.0015	0	0.0014	0.0047
Water collecting	0.0042	0.0038	0	0.0034	0	0.0031	0

Total distance patrolled (km)

Distance patrolled (km)	MGNP	BINP
Baseline (2002)	3331.27	4740.9
Year 1	3646.29	4073.25
Year 2	3353.4	2737.24
Year 3	2826.59	4070.40

Goal	Greater Virunga Landscape better conserved					
Purpose	GVL better managed					
Indicator Purpose	Positive threats reduction analysis/measure of success					
Indicator Definition and unit of measurement:						
Following the HCP, a threats analysis was undertaken for the Virunga Heartland. Results of the analysis are given below. The project plans to undertake a further threat analysis, specific to Uganda in order to ensure that the project monitors threat reduction at the project site level. Another threats analysis was planned to be undertaken at the end of the project at the Uganda country level to see if there has been a reduction in threats as per the knowledge and experience of the stakeholders. This analysis was subjectively done and is represented here below. Because of the method used, it was not possible to calculate the percentage threat reduction.						
Unit: index no.						
Source of data: threat analysis meeting reports						
Frequency of data collection and reporting: Twice/at the beginning and end of the project						
Baseline Year (2002)	Year 1		Year 2		Year 3	
	Target	Actual	Target	Actual	Target	Actual
See results of the HCP process below and comments above.					50% reduction in threat index	

Comments:

Results of the HCP threats analysis:

Critical and major threats	2003 Ranking	2005 ranking	
1. Agricultural conversion (and resulting habitat loss)	Very High	Very high	
2. Over fishing using poor methods	High	High	
3. Nutrient overload and erosion (agricultural practices)	High	Very high	
4. Cattle/livestock grazing	Medium	Low	
5. Charcoal production/ fuel wood collection	Medium	High	
6. Poaching for both food and trophies	Medium	Medium	
7. Harvesting of timber, bamboo and NTFP	Medium	Medium	
8. Insecurity/conflict	Medium	Low	
9. Pollution/waste management	Medium	Medium	
10. Clay & sand mining/brick production	Medium	Medium	
11. Resettlement & displacement of people/urbanization	Medium	Low	
12. Fire	Medium	Medium	
13. Disease	Low	Medium	
14. Need for water by population	Low	High	
15. Roads	Low	Low	

***** Please note: It was not possible to calculate the threat reduction index because the analysis done in the workshop did not capture all the required information.

Goal	Greater Virunga Landscape better managed		
IR 1	Landscape planning and monitoring applied to the Greater Virunga Landscape		
Indicator IR 1A	Heartland Conservation Action Plan		
Indicator Definition and unit of measurement:			
The process of heartland conservation planning will develop a Heartland Conservation Action Plan. The process of developing the Heartland conservation plan will be participatory with input from all relevant stakeholders at the Landscape level. This will include input from regional stakeholders and other organizations working in the Virunga Landscape.			
The final plan developed will be specific for the Uganda Component of the Virunga Heartland. This indicator will measure the quality of the plan by administering questionnaires to participants to ascertain stakeholder satisfaction.			
Unit: No. of questionnaires			
Source of data: Documentation of HCP process, heartland conservation action plan, questionnaires			
Frequency of data collection and reporting: quarterly, once			
Baseline Year	Year 3		

(2002)	Target	Actual				
0	75% of participants expressed +ive views on the plan	56%				
<p>Comments: The objective of the HCP and development of the Heartland Conservation Action Plan is to ensure by in to a common vision for the conservation of the Greater Virunga Landscape. The questionnaire was to ascertain how many the stakeholders' felt they were engaged in the HCP and how the plan has affected their activities. The results indicate that while the stakeholders are highly aware of the objectives of the HCP process and agree with the strategies identified as relevant, there are still challenges of implementation. The project used the composite proportion for all the parameters related to the HCP process to assess the stakeholder satisfaction (see Annex 2), which came to 56%. 57% of the stakeholders were able to modify their plans based on their participation in the HCP process.</p>						

Goal	Greater Virunga Landscape better managed																	
IR 1	Landscape planning and monitoring applied to the Greater Virunga Landscape																	
Indicator IR 1B	Activities identified in the HCP completed																	
Indicator Definition and unit of measurement:																		
The HCP identified strategies/activities to address conservation threats at the landscape level. Project staff then prioritized strategies/activities that will be undertaken under the project (see comments below).																		
This indicator will not only measure activities that have been completed but also activities underway.																		
Unit: no. activities successfully completed, no. of activities underway																		
Source of data: project reports, partner institutions reports																		
Frequency of data collection and reporting: Quarterly/quarterly																		
Baseline Year	Year 1		Year 2		Year 3													
	Target	Actual	Target	Actual	Target	Actual												
0	25%	40% disease poaching	50%	60% fire disease poaching	75%	80% - -fire -disease -poaching - agricultural conversion												
Comments: Monitoring progress of activities identified to address mitigation of key threats to the GVL will also give an indication of how good the plan developed is.																		
Strategies/activities that were prioritized for Uganda are given below:																		
<table border="1"> <thead> <tr> <th>Source of threat</th> <th>Strategy</th> </tr> </thead> <tbody> <tr> <td>Fire</td> <td>Prevention and control of fire outbreaks: Develop and implement a fire management plan</td> </tr> <tr> <td>Disease</td> <td>Develop integrated disease prevention control program</td> </tr> <tr> <td>Agricultural Conversion</td> <td>Work with partners to improve agricultural practices</td> </tr> <tr> <td>Poaching</td> <td>Improve and diversify income generating/livelihood options on particular target groups e.g., Batwa, Echuya communities</td> </tr> <tr> <td>Control/ownership</td> <td>Work with partners to review natural resource management practices</td> </tr> </tbody> </table>							Source of threat	Strategy	Fire	Prevention and control of fire outbreaks: Develop and implement a fire management plan	Disease	Develop integrated disease prevention control program	Agricultural Conversion	Work with partners to improve agricultural practices	Poaching	Improve and diversify income generating/livelihood options on particular target groups e.g., Batwa, Echuya communities	Control/ownership	Work with partners to review natural resource management practices
Source of threat	Strategy																	
Fire	Prevention and control of fire outbreaks: Develop and implement a fire management plan																	
Disease	Develop integrated disease prevention control program																	
Agricultural Conversion	Work with partners to improve agricultural practices																	
Poaching	Improve and diversify income generating/livelihood options on particular target groups e.g., Batwa, Echuya communities																	
Control/ownership	Work with partners to review natural resource management practices																	

Goal	Greater Virunga Landscape better managed					
IR 1	Landscape planning and monitoring applied to the Greater Virunga Landscape					
Indicator IR 1C	Monitoring of critical conservation targets					
Indicator Definition and unit of measurement: Once critical conservation targets have been identified, setting up a suitable monitoring system to ensure continuous assessments of these targets are in place is necessary. This indicator serves to ensure that at least 50% of the targets are being monitored in accordance with agreed ecological, bio-physical and socio-economic standards						
Unit: no. of critical threats monitored						
Source of data: project reports, partner institutions reports						
Frequency of data collection and reporting: Quarterly/quarterly						
Baseline Year	Year 1		Year 2		Year 3	
	Target	Actual	Target	Actual	Target	Actual
40%		40%	50%	50%	50%	50%
Comments: Note: The following targets were identified through the HCP process: <ol style="list-style-type: none"> 1. Low/High altitude forests 2. Bamboo 3. Corridors 4. Hydrological systems 5. Soils outside protected areas 6. Local customs and practices 7. Value of natural resources 8. Reptiles and amphibians 9. Large mammals and great apes 10. Birds and migratory routes Of the above 50% are currently being monitored (i.e. nos. 1, 2, 4, 9,10). Bamboo monitoring has been initiated in Echuya and the project will support the development of bamboo monitoring in Mgahinga. The bamboo monitoring in MGNP was initiated, with resources provided by IGCP and a preliminary report available.						

Goal	Greater Virunga Landscape better managed					
IR 2	Key strategies for threat abatement implemented					
Indicator IR 2 A	Number of key strategies implemented					
Indicator Definition and unit of measurement:						
Key strategies to address threats are developed under IR1 as part of the HCP. This indicator will monitor the level of implementation of ALL strategies and not just specific strategies that are being developed (e.g. enterprise development)						
Unit: No. of strategies towards which activities were implemented						
Source of data:						
Frequency of data collection and reporting:						
Baseline Year 2002	Year 1		Year 2		Year 3	
	Target	Actual	Target	Actual	Target	Actual
						7

Comments:

Note: The key strategies for Uganda were identified from the HCP process and the main activities implemented by the project to support those strategies are highlighted in the table below. The project contributed to a total of SEVEN strategies throughout the course of the project. These activities(see Annex 3) were implemented throughout the project, hence the difficulty in separating by year:

Goal	Greater Virunga Landscape better managed					
IR 3	Regional and other frameworks strengthened					
Indicator IR 3 A	Number and type of frameworks established/strengthened					
<p>Indicator Definition and unit of measurement: Due to the transboundary nature of the core-protected areas (Virunga and BINP) the need to strengthen regional frameworks that contribute to conservation has been identified as a strategy to contribute to natural resource management in the GVL. <i>Activities include: joint patrols, joint planning, regional meetings</i> Through IGCPs work over the last decade in the region, substantial progress has been made towards developing regional frameworks for field level collaboration. This project intends to strengthen existing frameworks as well as (if relevant) develop new ones. The indicator will measure the presence of plans to establish formalized regional frameworks Unit: no. of plans</p>						
Source of data: project reports, MOUs signed, protected area authority reports of joint activities						
Frequency of data collection and reporting: monthly/ quarterly						
Baseline Year 2002	Year 1		Year 2		Year 3	
	Target	Actual	Target	Actual	Target	Actual
		1		2	50%	3
<p>Comments: It is expected that regional frameworks will seek to address: Field level collaboration/co-ordination, Harmonizing of policies, Regional tourism & Formalization of a Transboundary protected area. These regional issues are expected to contribute to treat abatement. Note: an initial identification of regional frameworks meeting with stakeholders must be undertaken to establish baseline and gaps. IGCP is working to provide baseline information, pending verification meeting with stakeholders.</p> <p>Year 1: A strategy to strengthen regional frameworks has been developed with input from protected area authorities of Uganda, Rwanda and DRC. Specific working groups will focus on:</p> <ul style="list-style-type: none"> • Enterprise • Tourism • Monitoring and research <p>At the time of updating the PMP – working groups for enterprise had been identified</p> <p>Year 2: Memorandum of agreement between the protected area authorities of Uganda, Rwanda and DRC was signed which underscored the desire of the three PAAs to extend, maintain and protect the unique ecosystem of the Central Albertine Rift Transfrontier protected Area Network through collaborative management of the eight Pas shared between them. The new agreement established a Transfrontier Core Secretariat.</p> <p>Year 3.</p> <ul style="list-style-type: none"> • Regional Tourism Action plan in place. • Virunga Tourism master plan finalized. • The process of regional strategic plan initiated/undertaken by the 3 PAAs 						

Goal		Greater Virunga Landscape better managed				
IR 3		Regional and other frameworks strengthened				
Indicator IR 3 B		Number of key actions addressing critical threats				
Indicator Definition and unit of measurement:						
Key actions will be defined as part of the development of threat abatement strategies. By end of project , three key actions will be implemented to address critical threats in the GVL as a result of regional frameworks e.g., nos of joint patrols, co-ordination meetings						
Unit:						
Source of data: project reports						
Frequency of data collection and reporting: Monthly/quarterly						
Baseline Year 2002	Year 1		Year 2		Year 3	
	Target	Actual	Target	Actual	Target	Actual
0	1	7	2	7	3	8
Comments: This is a measure of the number of actions that have actually been undertaken.						
Year 1:						
The following key actions were completed:						
<ul style="list-style-type: none"> • Three regional meetings • Three warden co-ordination meetings • One Site Conservation Planning meeting 						
Year 2:						
The following key actions were completed:						
<ul style="list-style-type: none"> • Three regional meetings • One warden's co-ordination meeting • Two meetings to develop a regional tourism action plan • Meetings to finalize MoJ between UWA, ORTPN and ICCN (3 PAA of Uganda, Rwanda and DRC) 						
Year 3:						
<ul style="list-style-type: none"> • Three regional meetings • Two CORE secretariat meetings by April 05, three by July 05 • Three Chief wardens meetings by April 05, four by July 05 						

Goal		Greater Virunga Landscape better conserved				
IR 4		National and regional policy improved				
Indicator IR 4		Policies supportive of conservation				
Indicator Definition and unit of measurement: This activity will be achieved through supporting Uganda Wildlife Authority to contribute to both national and internal policies.						
Unit: nos. of policies under development or completed						
Source of data: minutes of meetings, development of policy documents						
Frequency of data collection and reporting: Quarterly/ Annually						
Baseline Year (2002)	Year 1		Year 2		Year 3	
	Target	Actual	Target	Actual	Target	Actual
0	1	1 (under development)	2	1 Tourism bill	2	1 -Community levy implemented
Comments: An initial action of the project will be to identify gaps, likely policies to be developed will include transboundary collaboration and great ape conservation.						
In year 2 the project had input into the development of the Tourism Bill for Uganda as well as lobbying UWA for the inclusion of a community levy on any price increase in gorilla permits. As of 1 st August 2004 - USD 9 of each permit sold will be disbursed to local communities living next to protected areas.						

Goal	Greater Virunga Landscape better conserved					
IR 5	Protected areas serving as ecological and economic core areas					
Indicator IR 5.A	Revenue to UWA and community campground					
Indicator Definition and unit of measurement:						
In addition to the numbers of tourists visiting the national parks and the community campgrounds, we will also use the amount of revenue to UWA and community camp-grounds as a performance indicator for IR 5, since the revenue is in fact a more direct measure of the degree to which protected areas are serving as economic cores. Need to define "core area".						
Unit: Uganda shillings						
Source of data: Park records, campground records, economic evaluations						
Frequency of data collection and reporting: Data collected monthly, reported annually (multiplier effects measured again at end of project)						
Baseline Year	Year 1		Year 2		Year 3	
2002	Target	Actual	Target	Actual	Target	Actual
Revenue to UWA from BINP/MGNP (FY2001/2002 July-June) 1,936,442,658 UgShs	10% increase	2,595,666,609 UgShs (34%)	10% increase	3,031,258,837 UgShs (16%)	10% increase	3,621,107,941 UgShs (19.5%)
Revenue to camps SEE BELOW						
Multiplier effects PENDING FINAL ECONOMIC VALUATION REPORT						
Comments:						
Economic evaluation of tourism was carried out in 2000 (Moyini et., al), and a regional economic valuation of the parks is being carried out during 2002 (commissioned by IGCP). Specific variables are to be identified from these sources, and the same data collection repeated at end of project. The regional economic valuation report was not yet completed at the end of the project. The project was therefore unable to monitor the multiplier effects. Revenue for community campgrounds is as follows.						
Enterprises			Income during project (Sh.000)			Total
			2002/3	2003/4	2004/5	
1. Buhoma Community Rest Camp			64,450	94,076	120,068	278,594
2. Amagyembere Iwacu Community Camp			523	143	3,000	
						3666

IR 5	Protected areas serving as ecological and economic core areas					
IR 5.1	Priority actions of Bwindi and Mgahinga GMP implemented					
Indicator IR 5.1.A	Number of actions identified in GMP implemented with at least partial support from this project					
<p>Indicator Definition and unit of measurement:</p> <p>The Result here is to ensure implementation of the General Management Plan for Bwindi and Mgahinga Conservation Area, which was developed during 2001. The GMP contains lists of specific planned actions under each management function. At the simplest level, we can therefore use the number of actions identified in GMPs implemented with at least partial support from this project.</p> <p>Unit: Number of actions</p>						
Source of data: UWA and project annual workplans and progress reports						
Frequency of data collection and reporting: Annually						
Baseline Year	Year 1		Year 2		Year 3	
2002	Target	Actual	Target	Actual	Target	Actual
0%		32%		35%		35%

Comments:

GMP was scrutinized to see how many actions have already been implemented, and how many remain. The baseline is zero since, obviously, before the start of the project no actions had been supported. The target should be expressed in terms of the percentage of actions identified in the GMP. The GMP was produced in Jan 2003 but the project failed to define targets. The information that follows (Annex 4) indicates which actions were supported as identified within the GMP.

IR 5	Protected areas serving as ecological and economic core areas					
IR 5.1	Priority actions of Bwindi and Mgahinga GMPs implemented					
Indicator IR 5.1.B	New infrastructure					
<p>Indicator Definition and unit of measurement: By end of project – planned new infrastructure (<i>selected in accordance with priorities and budgetary constraints</i>) is established in compliance with specifications and quality standards. It is assumed that the planned infrastructure that will be established will be as per the details in the project document and budget. This infrastructure includes a visitor/community center at Mgahinga, administration blocks and gates at Bwindi and Mgahinga National Parks and signage at Bwindi. AWF/IGCP will work closely with UWA to review any changes in prioritization and budgetary issues that may affect the development of the planned infrastructure.</p> <p>Unit: The successful completion of the following: Administration block (A); Administration block (B); Visitor/community center (C); Gates (D); Signage (E)</p> <p>Source of data: Building plans and specifications;</p> <p>Frequency of data collection and reporting: Annual</p>						
Baseline Year	Year 1		Year 2		Year 3	
	Target	Actual	Target	Actual	Target	Actual
0			C, D, E	E		E, C, D
<p>Comments: The Visitor's Center in MGNP is currently under construction. The cost of this project fell way beyond available funds from the project. The extra funds were raised from other sources in IGCP. The Gateway for Mgahinga Gorilla National Park HQ will be completed as part of the construction for the VC, however the rest of the gate plan will not be implemented due to lack of sufficient funding and the delay in obtaining approval from UWA.</p> <p>Note: UWA has decided to construct the Administration blocks (A&B) using funds from other sources (World Bank PAMSU).</p>						

IR 5	Protected areas serving as ecological and economic core areas					
IR 5.1	Priority actions of Bwindi and Mgahinga GMPs implemented					
Indicator IR 5.1.C	Number of courses successfully implemented					
<p>Indicator Definition and unit of measurement:</p> <p>This indicator will document the number of courses that have been successfully implemented by the project in accordance with priorities and schedules established by a training needs assessment. Courses will be considered successful if training design addresses skill gaps identified by the needs assessment and if skills transfer to the trainee is demonstrated. In cases where the timing of the courses in relation to the project duration makes it feasible, skills transfer to the workplace will also be documented.</p> <p>Unit: Number of staff - courses</p> <p>Source of data: Training needs assessment; training reports, staff performance reports.</p> <p>Frequency of data collection and reporting: After each course; annual performance reports.</p>						
Baseline Year	Year 1		Year 2		Year 3	
	Target	Actual	Target	Actual	Target	Actual
0	4	4	7	7	8	8
<p>Comments:</p> <p>The target number of courses was determined by a needs assessment, which was undertaken as part of the project activities. The following training for park staff was therefore completed was support from the project:-</p> <ul style="list-style-type: none"> • Customer care • Guiding • Birding • Ranger Based Monitoring • Computer Training • Culture • Natural History • Conflict resolution 						

IR 5		Protected areas serving as ecological and economic core areas																					
IR 5.1		Priority actions of Bwindi and Mgahinga GMPs implemented																					
Indicator IR 5.1.D		incidences of human/livestock-originated gorilla disease																					
<p>Indicator Definition and unit of measurement:</p> <p>By end of project the no. of gorillas that have veterinary calls and/or are treated as a factor of the no. of gorillas that are observed will have reduced by X%.</p> <p>Unit: Ratio of the number of cases of sick gorillas/number of gorillas seen</p>																							
Source of data:																							
Frequency of data collection and reporting:																							
Baseline Year		Year 1		Year 2		Year 3																	
		Target	Actual	Target	Actual	Target	Actual																
<p>Comments:</p> <p>Information has been received from MGVP regarding the number of veterinary interventions from the beginning of 2002-2004 as a ratio of the number of gorillas seen. This indicator was developed with input from the Mountain Gorilla Veterinary Project (MGVP) and the information was provided from RBM. The project, however, did not set targets. Additional work on better monitoring gorilla health is being developed with support from MGVP.</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Vet reported cases</th> <th>Nr of Gorillas seen</th> <th>Cases reported/Nr of gorillas seen</th> </tr> </thead> <tbody> <tr> <td>2002</td> <td>18</td> <td>2591</td> <td>0.007</td> </tr> <tr> <td>2003</td> <td>3</td> <td>2233</td> <td>0.001</td> </tr> <tr> <td>2004</td> <td>14</td> <td>3045</td> <td>0.005</td> </tr> </tbody> </table> <p>Source: BMCA RBM patrol data for 2002-04</p>								Year	Vet reported cases	Nr of Gorillas seen	Cases reported/Nr of gorillas seen	2002	18	2591	0.007	2003	3	2233	0.001	2004	14	3045	0.005
Year	Vet reported cases	Nr of Gorillas seen	Cases reported/Nr of gorillas seen																				
2002	18	2591	0.007																				
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2004	14	3045	0.005																				

IR 5	Protected areas serving as ecological and economic core areas						
IR 5.1	Priority actions of Bwindi and Mgahinga GMPs implemented						
Indicator IR 5.1.E	Extent of fire damage						
<p>Indicator Definition and unit of measurement: The project will support development and implementation of a fire management plan. The impact of this activity in reducing fire damage will be difficult to measure objectively, as the number of fire outbreaks in a given year is strongly related to climatic damage. However, the actual area of forest damaged each time a fire starts somewhere in the park should be a good indicator of the effectiveness of fire control measures, and could therefore be used for IR 5.1. The causes of fire, and the responses of the local community to the fires, could also be used to indicate the effectiveness of fire management.</p> <p>Unit: fires per year, hectares burned per fire outbreak, frequency of fires causes and proportion of fires where communities participate in fire-fighting</p> <p>Source of data: ITFC Ecological monitoring program</p> <p>Frequency of data collection and reporting: Annual</p>							
Parameter	Bwindi Impenetrable National Park Annual Fire Report						
	1999	2000	2001	2002	2003	2004	
Number of fires	37	7	0	0	2	3	
Total area damaged (ha)	264	17	0	0	9.4	4.1	
Area damaged per fire (ha)	7.14	2.43			4.7	1.37	
Causes of fire	Number of fires caused by:						
• From fields (outside)	22	0	0	0	1	2	
• Wild honey collection	9	4	0	0	0	1	
• Beekeeping in MUZ's	4	1	0	0	1	0	
• Unknown	2	2	0	0	0	0	
% community contribution to extinguishing off fires	68%	100%	-	-	50%	100%	
<p>Comments: It should be possible to refine this indicator when the fire management plan is completed, especially given the availability of relevant expertise from the U.S. Department of the Interior / National Park Service. If possible, rainfall should also be factored in.</p>							

IR 5	Protected areas serving as ecological and economic core areas					
IR 5.2:	UWA management decisions strengthened by monitoring and research					
Indicator IR 5.2.A	Number of monitoring and research activities underway or completed					
Indicator Definition and unit of measurement:						
<p>The GMP completed for Bwindi and Mgahinga includes a list of research and monitoring priorities for management of the two protected areas. This was refined and more detail added during the project initiation workshop for IR5.2, and the revised list is used here.</p> <p>At the start of the project, we originally specified that, by the end of the project, at least 75% of monitoring and research activities identified in the BINP/MGNP GMP would underway or completed. However, we found that the figure for the baseline year was already 70%, so revised the target for year 3 to be 90 %.</p> <p>Unit: number of activities, as percentage of all those identified in the GMP</p> <p>Source of data: ITFC project reports and annual reports, annual review of research priorities</p>						
Frequency of data collection and reporting: Annually						
Baseline Year	Year 1 (2003)		Year 2 (2004)		Year 3	
2002	Target	Actual	Target	Actual	Target	Actual
70 %		80 %		84 %	90 %	88%
Comments:						
<p>See table below (Annex 5) of identified research and monitoring priorities. By the end of the project, 88 % of the forty-three research and monitoring parameters identified in the project initiation workshop were underway or completed. Those which have not yet been initiated (n = 5) were all ranked as low priority.</p> <p>This indicator is in effect a subset of indicator IR 5.1.A, although it goes into more detail.</p>						

IR 5	Protected areas serving as ecological and economic core areas					
IR 5.2:	UWA management decisions strengthened by monitoring and research					
Indicator IR 5.2.B	Number of UWA management actions based on research and monitoring results					
Indicator Definition and unit of measurement:						
<p>Because of the close working relationship between ITFC and UWA, it should be possible for ITFC to compile each year a list of UWA's management actions or decisions which we can demonstrate have actually been influenced in some way by the results of management oriented research and monitoring. This should in fact be the best indicator of whether such research and monitoring really does have an impact on protected area management.</p> <p>Unit: Number of actions / management decisions</p>						
Source of data: Annual operation plans, workplans, minutes of UWA management meetings, annual review of research priorities						
Frequency of data collection and reporting: Annually						
Baseline Year Average 2000-2002	Year 1 - 2003		Year 2 - 2004		Year 3 - 2005	
	Target	Actual	Target	Actual	Target	Actual
1.7		11		12		8 (up to August 05)
Comments:						
<p>The Baseline was set using the average of the three preceding years (2000-2002) so as to iron out chance differences from one year to another, and we will aim at a 100% increase by Year 3. Data have been analyzed on a calendar year basis, and figures included for the first 8 months of 2005.</p>						

IR 6		Expanded economic opportunities for rural communities in GVL			
Indicator 6.A		Household income based on household assets			
<p>Indicator Definition and unit of measurement:</p> <p>Household income means monetary and non-monetary benefits (<i>expressed in monetary terms</i>) which a family in the project area will have realized as a result of this project intervention. Household income is often difficult to measure. Therefore, a proxy indicator based on specific assets at household level will be used. These assets will include mattress, livestock, lamps, type of roof on the house. The persons undertaking the baseline survey may also look at other assets that will be used to measure household income. A household in this case means a group of people who reside and eat together. It is also important to note that there are other players in the project area who may also contribute to this indicator hence this factor will be taken into account and recognized.</p> <p>Unit: US dollars</p> <p>Source of data: baseline reports from IGCP and other organizations e.g., Africare, interviews, project reports</p> <p>Frequency of data collection and reporting: Beginning and end of the project</p>					
Baseline Year (2002)	Year 2002/3		End of project 2005		
	Target	Actual (From survey)	Target	Actual	
	N/a	44% have mattresses			
	N/a	11.7 % have bicycles			
	N/a	27% have radios			
	N/a	65.4 % have iron roofs			
<p>Comments:</p> <ul style="list-style-type: none"> • Four indicators were selected i.e. mattress, bicycles, radio and iron sheet roofs, and information was derived from the Income and Enterprise survey, which will be repeated at the end of the project. • The end of project survey was not completed due to lack of funds and the relative short time between surveys. AWF/IGCP however, intend to conduct a follow –up survey once resources have been secured and sufficient time has passed in order to be able to assess impact. 					

IR 6	Expanded economic opportunities for rural communities in GVL				
Indicator 6.B	Household income based on cash inflows				
Indicator Definition and unit of measurement:					
Apart from measuring household income using household assets as a proxy indicator, the project will attempt to measure direct cash inflows that comes from CBVs related activities. These will include dividends, rent, wages, and any other cash inflows.					
Unit: US dollars					
Source of data: baseline reports, interviews, project reports					
Frequency of data collection and reporting: Beginning and end of the project					
Baseline Year (2002)	Year 2002/3		2005		
	Target	Actual	Target	Actual	
	N/A	Sh. 457,068			
Comments:					
<ul style="list-style-type: none"> Income information was derived from the Income and Enterprise survey, which will be repeated at the end of the project. The survey was not repeated at the end of the project due to lack of funds and insufficient timing between the proposed survey times. 					

IR 6	Expanded economic opportunities for rural communities in GVL					
IR 6.1	Opportunities for CBVs identified and developed					
Indicator 6.1A	Number of on-going CBVs operating on sound business principles					
Indicator Definition and unit of measurement:						
<p>Ongoing Conservation Business Ventures (CBVs) are those business enterprises initiated and owned (partially or wholly) by communities or individuals living in the project area and have been in operation for at least one year. The indicator focuses on all those CBVs that IGCP has been supporting and all those that will be developed during the project period. This indicator makes a clear distinction between on-going (<1 year of operation) and new (> 1 year of operation) CBVs. This project will build the capacity of communities to manage their CBVs on sound business principles. Sound business principles mean:</p> <ul style="list-style-type: none"> • A rate of return on equity, which is above inflation. Inflation rate is the government quoted rate based on Consumer Price Index (CPI). • Clearly laid out roles for ownership, governance and management • Periodic meetings as stipulated in the CBV constitution • Periodic reports at various levels (income statement, cash flow statement and balance sheet) • Periodic audits <p>It is important to note that this indicator mainly focuses at the qualitative aspects of CBVs.</p>						
Unit: Number						
Source of data: CBV financial reports, audit reports, and project reports						
Frequency of data collection and reporting: Quarterly						
Baseline Year (2002)	Year 2002/3		2003/4		2004/5	
	Target	Actual	Target	Actual	Target	Actual
Ongoing (2)	2	2	4	2	6	2
Comments:						
<p>This is an important indicator for it goes beyond the process of establishing enterprises hence measures their ability to generate returns for the owners/community.</p> <p><i>* The 2 enterprises are: Buhoma Community Camp and Amagyembere Iwacu Campground</i></p>						

IR 6	Expanded economic opportunities for rural communities in GVL					
IR 6.1	Opportunities for CBVs identified and developed					
Indicator 6.1B	Number of new enterprises established					
Indicator Definition and unit of measurement:						
<p>New enterprises are those business ventures that will be initiated as a result of IGCP/AWF's intervention under this project and will have existed for less than one year. An enterprise that will be in operation for more than one year will be "graduated" to ongoing enterprises' category and its performance will be measured by <i>indicator 1</i> above. These will include, but not limited to, tourism-based enterprises such as campsites, lodges, harvesting, processing and marketing of natural resource products, bird watching, village walks. For a new CBV to be considered operational, it must have:</p> <ul style="list-style-type: none"> • developed a commercial activity, based on a conservation objective • a constitution or Articles and Memorandum of Association, with a management team and advisory committee/board in place. <p>An enterprise, whether ongoing or new, will have an asset base of at least US\$ 500.</p>						
Unit: Number						
Source of data: CBV reports, audit reports, and project reports						
Frequency of data collection and reporting: Quarterly						
Baseline Year (2002)	Year 2002/3		2003/4		2004/5	
	Target	Actual	Target	Actual	Target	Actual
0	2	0	2	1	2	*2
Comments:						
<p>This indicator will track additional enterprises which will come into existence as a result of the project intervention but does not necessarily look at the qualitative elements in depth.</p> <p><i>Note: There are smaller individual-based enterprises that have been initiated which do not quality to be included in this category. These include mushroom growing, handicrafts groups and support to HuGo groups.</i></p> <p><i>* The 2 enterprises are: Nkuringo Conservation and Development Foundation (proposed eco-lodge) and Bwindi Beekeepers Development Association (BBDA)</i></p>						

IR 6	Expanded economic opportunities for rural communities in GVL						
IR 6.1	Opportunities for CBVs identified and developed						
Indicator 6.1C	Number of people employed by CBVs (by sex and position)						
Indicator Definition and unit of measurement:							
<p>This indicator will measure the trickle down of CBV benefits to communities. Employment is a key economic benefit for local communities that may be involved in CBVs development. This indicator will also measure not just how this benefit is accruing to the communities but also how it is being distributed between men and women. It will also show which areas are benefiting as well as in which positions the people are employed in. The project will be interested in knowing the number of community members employed in senior positions. These senior positions are the overall manager and departmental/functional heads. This will give an idea of how the CBVs and the project are contributing to wider development goals within the project area. This indicator will however concentrate on those employed directly by the CBVs as this is easier to measure than other indirect employment which is harder to estimate and measure. Although indirect employment measurement is beyond the scope of this project, attempts will be made in the subsequent project to estimate the spill over employment effects of the CBVs through a case study.</p>							
Unit: Number							
Source of data: CBV reports, interviews, project reports							
Frequency of data collection and reporting: Annually							
Baseline Year (2002)	Year 2002/3		2003/4		2004/5		
	Target	Actual	Target	Actual	Target	Actual	
Total	16	25	16	50	194	70	932
Male:	15	20	15	44	-	428	
Female:	1	5	1	150	-	504	
Senior positions:	2	3	2	3 (for community camps)	-	4	

Comments: The table below gives the details of beneficiaries.

Enterprises	No of beneficiaries (current-2004/05)				
	Direct/employed		Indirect	Total	
	M	F			
1. Buhoma Community Rest Camp	1	11	48		60
2. Amagyembere Iwacu Community Camp	4	0	16		20
3. Nkuringo Ecolodge	-	-	-	-	
4. Mushroom growing	22	198	880		1100
5. Beekeeping	350	50	800		1200
6. HuGo Micro-Enterprises	44	0	176		220
7. Handcrafts	7	245	1,260		1512
Total	428	504	3180		4112

IR 6	Expanded economic opportunities for rural communities in GVL					
IR 6.1	Opportunities for CBVs identified and developed					
Indicator 6.1D	Value of support to social and economic activities					
Indicator Definition and unit of measurement:						
<p>The essence of initiating CBVs is to get a return that can improve the social and economic welfare of the people who hitherto depended on the resources from the parks. Therefore, this indicator attempts to measure how much has the bigger community benefited from CBVs. In a typical business sense, when one invests, he/she expects a return from the business in which resources were invested. This return comes in form of a dividend. However, in some cases, CBVs prefer to donate their “dividends” by supporting other economic and social infrastructure in the same community. The social infrastructure includes schools, dispensaries, while economic activities include bee-keeping, crafts, among others. This indicator will track the monetary value donated to community for social and economic development. It is assumed that if an infrastructure like a school or a dispensary has been constructed, it benefits the entire community. In this regards the community can clearly make a link between conservation and development.</p>						
Unit: US\$						
Source of data: CBV reports, interviews, project reports						
Frequency of data collection and reporting: Annually						
Baseline Year (2002)	Year 2002/3		2003/4		2004/5	
	Target	Actual	Target	Actual	Target	Actual
US\$ 1,974	3,000	3,877	4,000	4,284	6,000	5,500
Comments:						
CBVs normally compile their financial information at the end of the calendar year.						

IR 6	Expanded economic opportunities for rural communities in GVL					
IR 6.1	Opportunities for CBVs identified and developed					
Indicator 6.1E	Annual percentage increase in returns					
Indicator Definition and unit of measurement:						
<p>This indicator measures the effect of AWF capacity building program. AWF has plans to improve the capacity of CBVs to increase returns on their investment. Return on investment is a ratio of net profit to equity contribution. The capacity building activities include training CBVs in business management like bookkeeping, marketing, governance and financial analysis. The project will also provide specific on -site technical support to CBVs as and when requested. Another type of capacity building activity to be provided is organizing exposure visits to other successful CBVs within and outside Uganda.</p>						
Unit: Percent						
Source of data: CBV financial reports, audit reports, and project reports						
Frequency of data collection and reporting: Quarterly						
Baseline Year (2002)	Year 2002/3		2003/4		2004/5	
	Target	Actual	Target	Actual	Target	Actual
7%	10%	19%	12%	17%	15%	18%
Comments:						
<i>The actual rate of return for Buhoma Community Camp= (Gross receipts-expenses)/total assets</i>						

IR 6	Expanded economic opportunities for rural communities in GVL					
IR 6.2	GVL products and services effectively linked to international markets					
Indicator 6.2A	Volume of sales of GVL products and services					
Indicator Definition and unit of measurement:						
<p>This indicator looks at the amount of revenue generated from selling products to international markets. International markets are those market outlets/clients that are based outside Uganda. The sales are restricted to those CBVs that have direct support from AWF/IGCP either financially or/and in terms of capacity building like providing technical assistance. Some of the products that have the potential to be marketed in the international market outlets include crafts, honey, campsites, lodges, herbal medicine materials, and other natural resource based products. For purposes of clarity, all non-Ugandan clients who visit and pay for services within the country e.g., campsites, village walk, guiding, drama and singing will be considered international market. It is also important to note that AWF/IGCP will be working closely with UCOTA in linking CBVs to the international markets.</p>						
Unit: US dollars						
Source of data: CBVs reports, interviews, project reports						
Frequency of data collection and reporting: quarterly						
Baseline Year (2002)	Year 2002/3		2003/4		2004/5	
	Target	Actual	Target	Actual	Target	Actual
\$30,000	\$50,000	\$38,219	\$80,000	\$57,029	\$100,000	77,864
Comments:						
<ul style="list-style-type: none"> • This is an impact indicator which aims at capturing CBV revenue that come from markets outside Uganda. • The exchange rate used is UgShs1,700 <p>Please see Annex 6 for details on how the revenue figures have been derived.</p>						
Comments:						
<p>This is an important indicator for it focuses at the capacity of the community in allying with the private or /and public sector to generate returns. The world is becoming a global village, hence strategic alliances and partnerships in business management are increasingly becoming crucial.</p> <ul style="list-style-type: none"> • <i>The strategic agreements signed include: UWA-NCDF agreement on gorilla permits where NCDF will generate an estimated \$50,000 per year as income and the second one is RCHL-MCDO where MCDO will initially receive about \$3,000 per year.</i> • <i>Discussions are underway between NCDF and the private sector operator regarding Nkuringo Eco-lodge. If these negotiations become successful, the private will invest about USD300,000 in eco-lodge.</i> 						

IR 6	Expanded economic opportunities for rural communities in GVL					
IR 6.3	Funding sources for CBVs identified					
Indicator 6.3A	Value of resources raised					
Indicator Definition and unit of measurement:						
<p>This project does not have enough resources to “kick start” new CBVs as well as to assist the existing ones to consolidate their activities. Therefore, there is a need for AWF/IGCP to help new and ongoing CBVs to raise resources in order to operate smoothly. A funding source can be in a form of a donor, bank, investor (equity participation). For purposes of clarity, a funding source will only be considered identified only when the CBV has received the funds. A mere intent by a donor or bank to support a CBV will not tantamount to the identification of a funding source. Further, this definition only applies to those resources for which AWF/IGCP participates in securing. If a CBV raised its resources independent of AWF support, such a source will not be considered.</p>						
Unit: US dollars						
Source of data: CBVs reports, interviews, project reports						
Frequency of data collection and reporting: quarterly						
Baseline Year (2002)	Year 2002/3		2003/4		2004/5	
	Target	Actual	Target	Actual	Target	Actual
0	\$50,000	0	100,000	*50,000	150,000	**150,000
Comments:						
<p>This is an important indicator for it assesses the ability of CBVs to raise resources for their future operations</p> <ul style="list-style-type: none"> • <i>USD\$50,000 has been raised from UNDP-GEF Small Grants Program to renovate Amagyembere Iwacu Community Camp</i> • <i>USD\$150,000 was recently raised from the World Bank under the Development Marketplace competition</i> 						

Annex 1: The Ranking of the Critical Threats for Uganda in 2005 Compared to 2003

Critical and major threats	Ranking Uganda 2003	Ranking for Uganda 2005
1. Agricultural conversion (and resulting habitat loss)	Very High	Very high
2. Over fishing using poor methods	High	High
3. Nutrient overload and erosion (agricultural practices)	High	Very high
4. Cattle/livestock grazing	Medium	Low
5. Charcoal production/ fuelwood collection	Medium	High
6. Poaching for both food and trophies	Medium	Medium
7. Harvesting of timber, bamboo and NTFP	Medium	Medium
8. Insecurity/conflict	Medium	Low
9. Pollution/waste management	Medium	Medium
10. Clay & sand mining/brick production	Medium	Medium
11. Resettlement & displacement of people/urbanisation	Medium	Low
12. Fire	Medium	Medium
13. Disease	Low	Medium
14. Need for water by population	Low	High
15. Roads	Low	Low

- The scale of implementation of some strategies was spatially so narrow in some cases that they ranked low when applied across the Uganda portion of the landscape.

Annex 2: Review of HCP process at the end of project - Summary of Questionnaire Results

Review of HCP impacts			
Questions			
1.	The objectives of the site conservation planning were made clear	86%	
2.	Has your organization participated in the HCP process before?	83%	Said yes
3.	Have you as an individual participated in the HCP process before	54%	Said yes
4.	Key threats to the identified conservation targets have been effectively and accurately identified.	76%	
5.	Effective strategies have been identified to address the key threats.	77%	
6.	Do you think partners not present in the HCP process has been informed of the HCP plan and understand it?	80%	Said yes
7.	All partners identified as being able to contribute to implementation of the HCP have been given a copy of the February 2003 HCP workshop report.	45%	
8.	Non-conservation organizations operating in the Heartland (e.g. agricultural / community development projects, CBOs, Private sector etc) have been involved in planning and / or lobbied to consciously contribute to implementing heartland conservation strategies and actions.	53%	
9.	Other staff of the key partner institutions <i>which were NOT present</i> at the HCP planning meeting have been informed of the HCP process by colleagues <i>who WERE present</i> .	35%	
10.	The role of leadership and coordination for the HCP planning and implementation process in your region / country has been clearly defined, and adopted. (If defined, please state who is leading/coordinating)	60%	
11.	The Range of National Partners has adopted the HCP Plan as their own.	39%	
12.	Did you modify any of your plans/activities based on your participation in the process? If yes, please provide details below:	57%	Said yes
13.	HCP has assisted partner organizations to fund-raise for those activities identified as their respective responsibilities.	32%	
14.	Funding sources have been found to implement threat abatement strategies	41%	
15.	Partners not present in the HCP process have contributed to the implementation of the plan	43%	
16.	Heartland Monitoring plan has been developed	35%	
17.	Heartland Monitoring Plan has been implemented and data collected and compiled into a Monitoring System (PIMA or other).	31%	
18.	Conservation Targets have been monitored and shown to be improving since 2003	47%	
19.	Key threats have been reduced since the HCP Plan (2003)	44%	
20.	Did you learn anything new during the process?	100%	Said yes

Annex 3: Key Threat Reduction Strategies and Activities

Critical source of threat	Strategy	Activities implemented by project
Charcoal/fuelwood	Develop alternative sources of fuelwood.	
	Improve Law Enforcement	-Provision of equipment -Training in RBM
Timber	Law Enforcement	-Provision of equipment -Training in RBM
	Reforestation	
Fire	Prevention and control of fire outbreaks	-Development of fire management plan -Provision of basic equipment -Follow up training
Cattle grazing	Reduce need to take livestock into Pas	
	Prevent cattle entering PA	
	Disease control	
Disease	Integrated disease prevention and control program	-Integrated Health Action Plan developed -Sensitization activities completed through clean up operations, drama shows -Support to provision of clean water through development of water gravity scheme in Buhoma
	Law Enforcement	-Provision of equipment -Training in RBM
	Contingency plan designed, finalized and implemented	-Draft contingency plan developed -Training of park staff in observing gorilla health and rules

Critical source of threat	Strategy	Activities implemented by project
Agricultural Conversion	Agroforestry	
	Intensify and diversify agricultural practices	
	Develop alternative IGAs	Support to enterprise activities (See IR6)
	Enforce/enhance/develop laws/by laws prohibiting cultivation of steep slopes	Support to developing buffer crops Habitat restoration consultancy commissioned
	Restoration of natural forest e.g., MGNP, Nyundo	
	Land acquisition in critical ecosystems	Land purchased in Nkuringo
	Land concession	
	Advocacy for correction of irregularities in law enforcement	
Poaching	Diversify agricultural strategies beyond agriculture	
	Strengthen efficiency of law enforcement patrols	-Provision of equipment -Training in RBM
	Increase awareness on values (economic and non-economic)	-Economic valuation of gorilla parks conducted -Socio-economic survey completed
	Diversify IGAs (refer to agric. Conversion)	Support to enterprise activities (See IR6)
	Involvement of LCs in PA management	
	Demonstrate economic value of viable NRs	
Control/ ownership	Reduce crop loss to wild animals	-Support to buffer zone purchase -Planting of buffer zone crops -Continued support to HuGo
	Promote co-management	Co-ownership of buffer zone
	Review, improve, implement NR management policies	Review of NR policies conducted
	Assess potential of environmental tax	
	Incentive/ disincentive mechanisms	

Annex 4: Management Activities

No of activities in which project was involved in implementation=90
 Total activities in BMCA GMP= 217

BWINDI-MGAHIINGA CONSERVATION AREA (BMCA) MANAGEMENT PROGRAMS AND ACTIONS SUPPORTED BY THE PROJECT.

The activities supported by the project were spread over the three-year period. Some of the activities ranged for all the three years and some were done for part of the period.

LEGEND showing the period during the project when the training was provided:

	Yr 1 activity
	Yr 2 Activity
	Yr 3
	Yrs 1 & 2
	Yrs 2 & 3
	Yrs 1,2 &3

1. Resource Conservation and Management

Primary Objective: The structure and extent of the forest and other physical features and the populations of flora and fauna of the two parks maintained and / or enhanced.

Protection and Management of Flora and Fauna

Objective: Effective and efficient protection and management of the flora and fauna and their habitats within the CA ensured

Management programs and actions

Action	Responsibility	Others Involved	Timing	Priority
Carry out surveillance and law enforcement activities	WLE	CW	On going	High
Identify appropriate boundary markers (preferably live markers)	WMR	WCC, MRC	Year 1	Medium
Reorganise ranger deployments	WLE, CW	DDFC	Year 2	Medium
Carry out regular patrols including boundary surveillance	WLE	WCC	On going	High
Carry out EIAs for all proposed developments (infrastructure)	PEIAC	WMR, POs, Developers	As need arises	Medium 4/5

Action	Responsibility	Others Involved	Timing	Priority
Identify, evaluate and document degraded areas	WMR	ITFC	Year 1-3	Medium
Prepare restoration plans for the degraded areas	WMR	ITFC	Year 3-4	Medium

Restoration of Physical and Ecological Value

Objective: The restoration of physical and ecological values of degraded areas within the parks enhanced

Management programs and actions

Fire

Objective: Occurrence of fire and its related impacts minimized

Management programs and actions

Action	Responsibility	Others Involved	Timing	Priority
Complete the fire management plan for BINP	WMR	ITFC	Year 1	High
Purchase fire fighting equipment	CW	PO, ITFC	Year 2	High
Mobilise and sensitise communities on the dangers of wild fires	WCC	WMR, Local govt., DTC	On going	High
Train staff in fire fighting and management techniques	WMR	Consultant	Periodic	High
Work with local government to review and enforce by-laws on fire	CW	Local govt., DTC	Year 1	High
Implement other provisions of the fire management plan	WMR	CW, Local govt.	Year 3 -10	Medium/8

Tourism development

Primary Objective: To diversify and sustainably manage tourism in the BMCA in partnership with local communities and other stakeholders.

Tourism Information and Marketing

Objective: Marketing and dissemination of high quality tourism information improved

Management programs and actions

Action	Responsibility	Others Involved	Timing	Priority
Harmonize tariffs and the booking system	DTDM	TDM, WT	Year 1	High
Collaborate with MTI & UTB to ensure relevant, accurate and consistent tourist information	DTDM	MM, WT	Year 2, on going	High
Provide training to all information clerks and tour guides regarding all attractions in all UWA PAs	DTDM	TM, TDM	Year 2, ongoing	High/3/9

Visitor Orientation and Interpretation

Objective: Visitor orientation and interpretation services and facilities improved
Management programs and actions

Action	Responsibility	Others Involved	Timing	Priority
Regularly update and maintain visitor orientation and interpretation materials	WT	TDM	On going	High
Periodically provide refresher training for all staff involved in visitor handling	TM	TDM, WT, UTB	Year 2, 4, 6, 8, 10	High
Develop an interpretive plan for MGNP	WT	TDM, IGCP	Year 1	Medium
Plan, fundraise, construct and equip visitor center for MGNP and construct and equip visitor center for BINP.	DFC	CW, TDM, WT, IGCP, UTB	Year 1-5	High
Prepare and implement signage plan in line with UWA approved standards for signage	TDM	WT, IGCP	Year 1	High5/6

Nkuringo Tourism Development (BINP)

Objective: Appropriate tourism in Nkuringo established
Management programs and actions

Action	Responsibility	Others Involved	Timing	Priority
Complete the Nkuringo tourism development plan	TDM	WT, IGCP	Year 1	High
Implement the tourism development plan	WT	IGCP	Year 1 - 3	Medium
Work with communities to provide quality tourism facilities and services in line with the tourism development plan	WCC	WT, DDCC, IGCP, MBIFCT, TDM	Year 1	High
Reach agreement with the communities on handling community land within the gorilla home range	DDCC	IGCP	Year 1	High
Implement the recommendation of the MU Program review with regard to Nteko within Nkuringo Tourism Zone	WCC	IGCP, CARE - DTC	Year 1	High5/5

Quality of Products and Services

Objective: Tourism activities, products and facilities compatible with the environment diversified and expanded
Management programs and actions

Action	Responsibility	Others Involved	Timing	Priority
Identify viable tourism activities in and outside the CA	WT	TDM, UTB	Year 2-3	High
Review and revise existing tourism development plan for the CA	TDM	WT, IGCP, UTB	Year 2	High
Plan for and regularly maintain all tourism infrastructure and facilities to improve and maintain standards	WT	TDM	Year 1 on going	High

Community Participation in Tourism Development

Objective: Community participation in tourism development and management increased
Management programs and actions

Action	Responsibility	Others Involved	Timing	Priority
Train communities to supplement park staff in tourism and visitor handling	WT	IGCP	Year 3, 6, 9	Medium
Develop and establish linkages with communities, private sector, NGOs and local government for tourism products and service provision	WT	WCC, IGCP, TMM, UTB	Year 3-4	Medium
Gather and avail information to communities on potential tourism products and services	WT	WCC, IGCP	Year 4-5	Medium3/3

Tourism Rules and Regulations

Objective: Tourism rules and regulations established and implemented
Management programs and actions

Action	Responsibility	Others Involved	Timing	Priority
Review/update rules, regulations and guidelines for all tourism activities	TDM, WT	IGCP	Year 2	High
Train staff on implementation and enforcement of rules, regulations and guidelines	WT	IGCP	Year 3, 6, 9	High
Implement and enforce rules, regulations and guidelines	WT	IGCP	On going	High3/3

1.1 Community Conservation

Primary Objective: Community support for conservation increased

1.1.1 Community Institutions

Objective: Operation of the community institutions involved in conservation strengthened
Management programs and actions

Action	Responsibility	Others Involved	Timing	Priority
Disseminate information and feedback reports and integrated work plans to partners	CW	SWIC, MGNP, Partners	Year 1 ongoing	High
Formulate and adopt a common community conservation strategy with all partners that is in line with UWA policy	CW	DDCC, SWIC, MGNP, IGCP, MBIFCT, DTC, TFC, districts	Year 1 ongoing	Medium
Carry out regular reviews of MoJ to address changes in policy and management strategies	DDCC	CW, SWIC, MGNP, WCC, Legal Manager	Year 1, 3, 5, 7, 9	High

1.1.2 Revenue Sharing

Objective: Implementation of UWA revenue sharing policy ensured
Management programs and actions

Action	RESPONSIBILITY	Others Involved	Timing	Priority
Guide local communities and local government at sub-county levels on generation of viable proposals for revenue sharing funds	WCC	DDCC, CW, DTC, IGCP	Year 1, 4, 7, 10	High 1/2

1.1.3 Community Education and Development

Objective: Understanding / awareness about wildlife conservation increased
Management programs and actions

Action	Responsibility	Others Involved	Timing	Priority
Use public media to disseminate park conservation messages	WCC	MBIFCT, DTC, IGCP, district Education Depts.	Year 1 onwards	Medium
Conduct conservation education meetings and drama shows at village, sub county and district levels	WCC	MBIFCT, DTC, IGCP, districts, Community Drama groups	Year 1 onwards	High
Liaise with local government to provide extension services to promote public health and sanitation and improved agricultural practices among the communities	CW	WCC, MBIFCT, DTC, IGCP, districts	Year 1 onwards	High
Lobby local governments and partners to promote better management and use of resources among communities adjacent to the CA	WCC	CW, MBIFCT, DTC, IGCP, districts	Year 1 onwards	Medium
Lobby local governments to formulate and enforce by-laws on natural resource management outside the parks	CW	DDCC, WCC, MBIFCT, DTC, IGCP, districts	Year 2 onwards	Medium 5/9

1.1.4 Land Acquisition by UWA

Objective: Land acquisition mechanisms developed and implemented
Management Actions

Action	Responsibility	Others Involved	Timing	Priority
Develop land acquisition guidelines to minimize conflict	DDCC	DFO, DPMR	Year 2	Medium
Implement land acquisition guidelines developed above	DDCC	DFO	As need arises	Medium
Work more with the local government / authorities on park / community related issues (e.g., land purchase)	CW	DDCC, WCC	Year 1	High1/4

1.1.5 Problem Animals Control

Objective: Long-term strategies for minimizing the impacts of problem animals and vermin devised and implemented
Management actions

Action	Responsibility	Others Involved	Timing	Priority
Carry out a study to determine the best methods to control gorilla damage	DPMR	CW, WRM, WCC, ITFC, Communities, IGCP	Year 1	High1/6
Work with local communities to identify and implement methods for controlling problem animal damage to crops and property	WCC	CW, WLE, DTC, ITFC, districts	Year 1, ongoing	High



Action	Responsibility	Others Involved	Timing	Priority
Lobby for donor support to assist communities adjacent the parks to adopt cultivation of income generating crops that are not palatable to problem animals	DDCC	CW, WCC, DTC, districts, IGCP, MBIFCT	Year 3, 4, 5	Medium
Regularly monitor the effectiveness of PAC methods	WCC	WLE, DTC, districts, ITFC, MBIFCT, IGCP	Year 2 ongoing	High

1.1.6 Resource Access and Utilization

Objective: Sustainable utilization of park resources by local communities ensured

Management Actions

Action	Responsibility	Others Involved	Timing	Priority
Carry out a review of the integrated resource use program ¹	DDCC	WCC, ITFC, IGCP, Communities, DTC, MBIFCT	Year 1	High
Determine from the above review whether Batwa needs for wild yams and honey and fish can be considered for sustainable harvesting	DDCC	WCC, ITFC, Communities, DTC, IGCP, MBIFCT	Year 1	High

1.1.7 Impact of integrated conservation and development programs

Objective: Impact of community Conservation programs evaluated

Management actions

Action	Responsibility	Other Involved	Timing	Priority
Carry out regular and periodic research and evaluation to establish the impact of community conservation programs	ITFC	DTC, CW, WCC, DDCC, MBIFCT, Communities, MRC	Year 1, 5 and 9	High
Use results of evaluation to review community conservation programs	DDCC	CW, MBIFCT, DTC, Communities, WCC	Year 2 ongoing	High2/2

1.2 Park Operations and Maintenance

Primary Objective: Park operations and support services strengthened

1.2.1 Coordination with Partners

Objective: Co-ordination of PA activities with Local Government, NGOs and other partners improved

Management actions

Action	Responsibility	Others Involved	Timing	Priority
Implement UWA guidelines on working with partners	CW	DTC, MBIFCT, IGCP, ITFC, local govt.	On going	High
Hold bi-annual co-ordination and planning meetings	CW	DTC, MBIFCT, ITFC, local govt., IGCP, etc.	On going	Medium
Develop integrated work plans	CW	DTC, MBIFCT, ITFC, local govt., IGCP, etc.	On going	High3/4

¹ Most of the actions in this section will depend on the outcome of this review.

1.2.2 Protection of Life and Property

Objective: Protection of life and properties (of tourists, communities, the parks and staff) enhanced
Management actions

Action	Responsibility	Others Involved	Timing	Priority
Develop and establish an intelligence system in collaboration with communities and security organs	WLE	CW, security organizations	On going	Medium1/3
Identify and procure relevant equipment and kits for rescue operations and first aid	CW	PO, DDFO	Year 1	High

Staff training

UWA staff members are recruited on merit based on academic qualification, experience and performance during an interview. However, new methodologies and technologies are being adopted in all areas of work. There is therefore a need to carry out refresher training of all staff. Some of the areas of training identified have been included in the relevant sections. A summary of all courses identified and supported by the project is shown in table 5.3. below:

Table 5.3 Courses for BMCA staff

Subject	Target Groups	To be organized by ² :
Guiding and public relations	<ul style="list-style-type: none"> ▪ Some LE rangers ▪ Gate clerks ▪ All guides ▪ Some CC rangers 	<ul style="list-style-type: none"> ▪ BINP/MGNP Tourism
Basic ecological monitoring as input to MIST (with component of animal health monitoring)	<ul style="list-style-type: none"> ▪ All LE rangers ▪ All CC rangers ▪ Guides ▪ Trackers 	<ul style="list-style-type: none"> ▪ UWA Planning, Monitoring & Research ▪ BINP/MGNP Monitoring & Research
Problem animal control	<ul style="list-style-type: none"> ▪ WLE, WCC, WT ▪ Some LE rangers ▪ Some CC rangers ▪ Guides 	<ul style="list-style-type: none"> ▪ UWA Field Operations (with help of external consultant) ▪ BINP/MGNP Law-Enforcement
Basic computer operation	<ul style="list-style-type: none"> ▪ Accounts Dept ▪ All Wardens 	<ul style="list-style-type: none"> ▪ BINP/MGNP Administration ▪ BINP/MGNP Accounts
Radio Communication and Maintenance	<ul style="list-style-type: none"> ▪ All wardens ▪ All rangers / guides ▪ All accounts clerks ▪ Gate clerks ▪ Information clerks 	<ul style="list-style-type: none"> ▪ BINP/MGNP Law-Enforcement
Intelligence and undercover operations	<ul style="list-style-type: none"> ▪ WLE, WCC, ▪ Some LE rangers ▪ CC rangers 	<ul style="list-style-type: none"> ▪ BINP/MGNP Law-Enforcement ▪ UWA Field Operations

² All courses will be coordinated by the UWA Training Manager.



Subject	Target Groups	To be organized by ² :
Negotiation and conflict resolution	<ul style="list-style-type: none"> ▪ All wardens ▪ CC rangers ▪ LE rangers 	<ul style="list-style-type: none"> ▪ UWA HRA and Community conservation unit
Customer care	<ul style="list-style-type: none"> ▪ All wardens ▪ All tourism staff ▪ Gate clerks ▪ LE rangers ▪ UPDF 	<ul style="list-style-type: none"> ▪ UWA TDM

Infrastructure

Objective: Infrastructure development and maintenance plan developed and implemented
Management actions

Action	Responsibility	Others Involved	Timing	Priority
Carry out EIA for all proposed infrastructure according to the UWA specific EIA guidelines	PEIAC	CW, WMR Partners	Year 1	Medium
Solicit for funding for approved infrastructure developments and renovation work	ED, CW	DFS, DDFO	Year 1-3	High
Identify appropriate contractors according to UWA's infrastructure development standards.	DDFO	CW, DPMR	Year 3	High
Closely supervise contractors to ensure quality work and conformity with agreed standards.	CW	DPMR, DDFO	Year 3-8	High
Monitor road improvements & lobby stoppage of potentially harmful road development plans	WMR	CW, PEIAC	On going	High
Improve road signage on major access roads	WT	CW, Partners	Year 1	High
Construct Ndego, Buhoma, and Ntebeko gates in accordance with UWA approved standards	CW	DFO, DFS	Year 3	Medium
Provide appropriate equipment for park operations	CW	DDFO, DFS	On going	High

1.2.3 Equipment

Objective: Relevant equipment available and better maintained
Management actions

Action	Responsibility	Others Involved	Timing	Priority
Train staff in the handling, use, maintenance and storage of equipment	PO	CW, Accountant, Donors	On going	High

Monitoring and Research

Primary Objective: Accurate, relevant and timely information for resource management provided

1.2.4 Research

Objective: Effective management oriented research carried out
Management actions

Action	Responsibility	Others Involved	Timing	Priority
Determine key (indicator) species	WMR	ITFC	On going	Medium
Periodically carry out gorilla census	MRC	WRM, ITFC, IGCP	Year 1 & every 5 yrs	Medium



Action	Responsibility	Others Involved	Timing	Priority
Ensure management oriented research is carried out and properly supervised	MRC	WMR, ITFC	On going	High
Liaise with research institutions to ensure that prioritised research could be given priority in their research work	MRC	CW, WMR, RO, ITFC	On going	High

1.2.5 Monitoring and Evaluation

Objective: Effectiveness of management interventions evaluated

Management actions

Action	Responsibility	Others Involved	Timing	Priority
Regularly monitor key species	WMR,	ITFC	On going	High
Continue RBDC	WLE	MRC, WMR, ITFC	Ongoing	High
Evaluate the effects of different management programs	WMR	MRC, ITFC	On going	High
Implement recommendations of the evaluations carried out above	CW, All staff	All Hqs, Departments	On going	High

1.2.6 Management Information System (MIST)

Management Programs and Actions

Action	Responsibility	Others Involved	Timing	Priority
Continue RBDC	WLE	MRC	On going	High
Continue tourism gorilla groups data collection	WT	WMR	On going	High
Carry out refresher training for staff to ensure proper understanding on how to fill the data sheets.	MRC	WLE, WMR, WT	Year 1, 3, 5, 7, 9	High 2/3

1.2.7 Human / Livestock and Gorilla Health

Objective: Health of the mountain gorillas ensured and relationship between human, livestock and gorilla health investigated

Management actions

Action	Responsibility	Others Involved	Timing	Priority
Complete drafting of the Contingency Plan on animal health and implement it in case of disease outbreak	VC	MRC, WRM, IGCP, ITFC	Year 1 and onwards as need arises	High
Investigate linkage between humans, livestock and gorilla diseases	VC	WMR, IGCP, ITFC	Year 1, 2	Medium
Sensitise communities regarding health and protection of self and gorillas	WCC	WMR, Local govt.	Year 1-3	High
Identify and implement preventive measures against cross infection between communities and gorillas	VC, DDCC	WMR, Local govt., IGCP	Year 1-2	High4/4
Strengthen HUGO activities	WCC	IGCP	Year 1-2	High
Review and implement recommendations of the Homsy report	VC	WMR, WT, IGCP, ITFC	Year 1	High

1.3 Regional Co-operation

Primary Objective: Collaboration with partner gorilla parks in DRC and Rwanda enhanced

1.3.1 *Resource Conservation and Management*

Objective: Collaboration with the neighboring PAs for resource conservation and management enhanced.

Management actions

Action	Responsibility	Others Involved	Timing	Priority
Establish protocols for regional co-operation	ED	DFO, CW	Year 3	Low
Carry out joint patrols	CW	WLE, DDFO	Yr 1, ongoing	High
Carry out joint monitoring programs	WMR	WLE, MRC, IGCP	Yr 2, ongoing	Medium
Harmonize the various data bases in the sister nations	MRC	WMR, DPMR, IMU, IGCP	Year 3	Medium
Plan and attend regular regional / border meetings	CW	All wardens, IGCP	Year 1	High4/8

1.3.2 *Regional Tourism Circuit*

Objective: Regional tourism circuit established

Management actions

Action	Responsibility	Others involved	Timing	Priority
Work with ICCN, ORTPN to identify and develop regional tourism circuits and packages	CW	TMM, TDM, WT, DDFO	Year 3, 4, 5	Low
Jointly train guides and arrange cross visits to improve performance	TM	TDM, WT	Year 6	Medium
Develop mutually beneficial activities and products	TDM	WT	Year 4, 5	Medium3/5

Annex 5: Identified Research and Monitoring Priorities

<i>R & M Priority</i>	<i>Priority³</i>	<i>R / M⁴</i>	<i>Status 2002</i>	<i>Status 2003</i>	<i>Status 2004</i>	<i>Status 2005</i>	<i>ITFC program</i>	<i>Others doing</i>	<i>Corresponds to USAID IR⁵</i>
<i>1. FOREST DYNAMICS</i>									
1.1 Vegetation mapping (Bwindi – Mgahinga was done recently)	**	R	Ongoing	Ongoing	Ongoing	Ongoing	EMP		5.2.2
1.2 Large-scale vegetation changes (including outside parks)	*	M	Ongoing	Ongoing	Ongoing	Ongoing	EMP		5.2.2, PMP
1.3 Island habitat viability, including edge effects, shape & connectivity, animal populations)	**	RM	Ongoing	Ongoing	Ongoing	Ongoing	Forest islands		5.2.2
1.4 Role of large mammals in the structure & composition of the forest		R	Planned	Ongoing (limited)	Ongoing	Ongoing	Research project		
1.5 Forest gap dynamics and regeneration	*	RM	Ongoing	Ongoing	Ongoing	Ongoing	EMP		5.2.2
1.6 Animals' use of forest gaps		R	Planned	Ongoing	Completed	Completed	Research project		
1.7 Phenology: fruiting patterns of dominant species		M	Ongoing (limited)	Ongoing (limited)	Ongoing	Ongoing	Independent research		
1.8 Water quantity & quality (as an indicator of forest health)	*	M	Ongoing	Ongoing	Ongoing	Ongoing	EMP		PMP

³ Those items identified as the top 15 priorities overall are marked with two stars, while those identified within the top 15 priorities by at least one interest group (from researchers, managers and NGO staff) are marked with one star. Those marked BINP or MGNP are taken from the UWA monitoring plans for the two parks, while those marked HCP are taken from the Virunga-Bwindi Heartland Conservation Plan monitoring framework.

⁴ Discrete Research (R) and / or long-term monitoring (M).

⁵ 5.2.2 – gorilla conservation issues, 5.2.3 – park-community interactions, PMP–Performance Management Plan.

<i>R & M Priority</i>	<i>Priority³</i>	<i>R / M⁴</i>	<i>Status 2002</i>	<i>Status 2003</i>	<i>Status 2004</i>	<i>Status 2005</i>	<i>ITFC program</i>	<i>Others doing</i>	<i>Corresponds to USAID IR⁵</i>
1.9 Climate		M	Ongoing	Ongoing	Ongoing	Ongoing	EMP		
<i>2. SPECIES</i>									
2.1 Surveys of unknown taxa: inventories & distribution	**	R			Planned	Ongoing (selected taxa)	Independent research		
2.3 Monitoring of key species (populations & health if appropriate): Large mammals (i.e. those with low reproductive rates, targets of poaching, crop-raiders)		M	Ongoing	Ongoing	Ongoing	Ongoing	Gorilla censuses	UWA - RBM	PMP
2.4 Monitoring of key species (populations & health if appropriate): Indicators of forest health (e.g. species restricted to primary forest, amphibians)		M	Ongoing (one species)	Ongoing (one species)	Ongoing for one species, developing for others	Ongoing for one species, developing for others	Grauer's Rush Warbler	WCS	PMP
2.5 Monitoring of key species (populations & health if appropriate): Rare, endangered & endemic species	**	M	Ongoing	Ongoing	Ongoing. Expanding bird species	Ongoing.	Grauer's Rush Warbler surveys, endemic bird surveys, gorilla censuses		PMP
2.6 Monitoring of key species (populations & health if appropriate): Important trees		M							
2.7 Gorilla population dynamics (including infant mortality)	**	RM	Ongoing	Ongoing	Ongoing	Ongoing	Gorilla censuses, monitoring	UWA-RBM	5.2.2, PMP

<i>R & M Priority</i>	<i>Priority³</i>	<i>R / M⁴</i>	<i>Status 2002</i>	<i>Status 2003</i>	<i>Status 2004</i>	<i>Status 2005</i>	<i>ITFC program</i>	<i>Others doing</i>	<i>Corresponds to USAID IR⁵</i>
2.8 Gorilla ranging, habitat use, quality & requirements, carrying capacity	**	R	Planned	Ongoing	Ongoing	Ongoing	EMP, gorilla monitoring, independent research		5.2.2
<i>3. ECOLOGICAL IMPACTS & RECOVERY</i>									
3.1 Regeneration & restoration of disturbed & encroached areas	**	RM	Ongoing Planned	Ongoing	Ongoing	Ongoing	Research Project	IGCP	IGCP component
3.2 Extent, causes & impacts of fire	**	RM	Ongoing Planned	Ongoing Ongoing	Ongoing Completed	Ongoing Completed	EMP, Research Project		5.2.3, PMP
3.3 Animals' use of previously encroached areas		R	Planned	Ongoing (gorillas in MGNP)	Completed (gorillas in MGNP)	Completed (gorillas in MGNP)	Mgahinga gorilla project		
3.4 Occurrence, distribution, impacts and control of invasive / exotic species		R	Ongoing	Ongoing	Ongoing	Ongoing	Forest islands, Lantana		
3.5 Frequency, distribution, intensity & impacts of landslides & erosion		RM							
3.6 Impacts of roads & paths on forest		RM							
3.7 Seismology: potential impacts of volcanic eruptions on forests and wildlife		R							
3.8 Impacts of grazing on wildlife and ecosystem	MGNP, BINP	R			New priority	Ongoing	MGNP restoration		
3.9 Effects of pit-sawing on species regeneration, diversity and richness	BINP	R			New priority	Ongoing	EMP-Vegetation mapping		5.2.2

<i>R & M Priority</i>	<i>Priority³</i>	<i>R / M⁴</i>	<i>Status 2002</i>	<i>Status 2003</i>	<i>Status 2004</i>	<i>Status 2005</i>	<i>ITFC program</i>	<i>Others doing</i>	<i>Corresponds to USAID IR⁵</i>
<i>4. MANAGEMENT INTERVENTIONS</i>									
4.1 Effectiveness of conservation strategies: Multiple Use	*	RM	Ongoing	Completed	Completed	Completed	ICD assessment		5.2.3
4.2 Effectiveness of conservation strategies: Integrated Conservation and Development Programs	**	RM	Ongoing	Completed	Completed	Completed	ICD assessment		5.2.3
4.3 Effectiveness of conservation strategies: Substitution		RM	Ongoing	Completed	Completed	Completed	ICD assessment		5.2.3
4.4 Effectiveness of conservation strategies: Law enforcement	*	RM	Ongoing	Ongoing	Completed	Completed	Julia Baker PhD study	UWA-RBM	
4.5 Effectiveness of conservation strategies: Agricultural improvement		RM	Ongoing	Completed	Completed	Completed	ICD assessment		5.2.3
4.6 Effectiveness of conservation strategies: Institutional development		RM				Ongoing	Independent research (Laudati)		
4.7 Sustainability of Natural Resource use (MU resources, etc., including distribution, abundance and ecology of target resources)	**	RM	Ongoing	Ongoing	Ongoing	Ongoing	EMP		5.2.3
4.8 Impacts of tourism and research on parks (-ve and +ve)		R							
4.9 Impacts of tourism and research on gorillas (-ve and +ve) including enforcement of rules		R	Ongoing	Ongoing	Ongoing	Ongoing	Behavioural impact study		5.2.2
4.10 Crop-raiding patterns	**	RM	Ongoing	Ongoing	Ongoing	Ongoing	Research project	CARE	5.2.3

<i>R & M Priority</i>	<i>Priority³</i>	<i>R / M⁴</i>	<i>Status 2002</i>	<i>Status 2003</i>	<i>Status 2004</i>	<i>Status 2005</i>	<i>ITFC program</i>	<i>Others doing</i>	<i>Corresponds to USAID IR⁵</i>
4.11 Effectiveness of problem animal control strategies (including education-attitude change)	**	RM	Ongoing	Ongoing	Ongoing	Ongoing	Research project	CARE	5.2.3
4.12 Relationship between wildlife/human/livestock health (including plants where appropriate)	*	R	Ongoing	Ongoing	Ongoing	Ongoing		MGVP	IGCP component
4.13 Monitoring the extent and impact of illegal activities (including insecurity)	**	M	Ongoing	Ongoing	Ongoing	Ongoing		UWA-RBM	
4.14 Impact of water schemes on swamps and ecosystem	MGNP	RM			New priority	Ongoing	EMP		
4.15 Comparative analysis of incentives and disincentives to control poaching	BINP	R			New priority				
4.16 Analysis of strategies to tackle fires in forest ecosystems	BINP	R			New priority	Ongoing	Fire management plan	UWA	
4.17 Identification of alternative resources/sources of NTFPs outside PAs and potential for on-farm substitution	BINP	R			New priority	Ongoing	Bamboo (MGNP, Echuya)	IGCP, NFA	
4.18 Area of natural forest and critical ecosystems under protection and management	HCP	M			New priority	Ongoing	EMP	WCS	
4.19 Amount of international / national / local gov funding to this sector	HCP	M			New priority	Ongoing?		USAID	
5. SOCIO-ECONOMIC ASPECTS									
5.1 Human population dynamics and socio-economic status	*	M	Ongoing (limited)	Ongoing (limited)	Ongoing (limited)	Ongoing (limited)		GoU census	

<i>R & M Priority</i>	<i>Priority³</i>	<i>R / M⁴</i>	<i>Status 2002</i>	<i>Status 2003</i>	<i>Status 2004</i>	<i>Status 2005</i>	<i>ITFC program</i>	<i>Others doing</i>	<i>Corresponds to USAID IR⁵</i>
5.2 Changes in community attitudes towards conservation & underlying causes	**	M	Ongoing	Ongoing	Ongoing	Ongoing	ICD assessment	CARE, WCS	5.2.3
5.3 Economic valuation of ecosystems (& how to use these in fund-raising)	**	R	Ongoing Planned	Completed Ongoing	Completed Ongoing	Completed		IGCP WCS	IGCP component
5.4 Socio-economic analysis of reasons for illegal activities including origin of poachers	**	R	Ongoing (limited)	Completed (limited)	Completed (limited)	Completed (limited)	ICD assessment		5.2.3
5.5 Assessment of changes in demands for NTFPs		RM		Planned	Ongoing	Completed	EMP		
5.6 Changes in land use patterns outside the park (in relation to fires and other factors)	*	M	Ongoing (limited)	Ongoing (limited)	Ongoing (limited)	Ongoing (limited)		ICRAF, PRIME	
5.7 Impact of government policies on conservation (e.g. decentralization, liberalization, regional collaboration)	*	R			Ongoing	Completed		IGCP (policy review)	
5.8 Analysis of markets and the trade in bushmeat	BINP	R			New priority	Planned		PRIME	
5.9 Economics of the local timber trade and analysis of alternatives	BINP	R			New priority	?			
5.10 Households obtaining fuel wood from forest, wood lots and agroforestry trees.	HCP	M			New priority	?			
5.11 Households (and institutions) using alternative technologies for energy and energy saving techniques	HCP	M			New priority	?			

<i>R & M Priority</i>	<i>Priority³</i>	<i>R / M⁴</i>	<i>Status 2002</i>	<i>Status 2003</i>	<i>Status 2004</i>	<i>Status 2005</i>	<i>ITFC program</i>	<i>Others doing</i>	<i>Corresponds to USAID IR⁵</i>
5.12 Changes in community knowledge about conservation and natural resources, including fire damage	HCP	M			New priority	Ongoing (limited)	Fire monitoring (cooperation in fire-fighting)		PMP
5.13 Local community income from agriculture, natural resources and alternatives (Bee-keeping, etc)	HCP	M			New priority	?			
5.14 Community cooperation with park authorities in reporting illegal activities, assisting with fires, etc.	HCP	M			New priority	Ongoing	Fire monitoring	UWA	PMP

Annex 6: Enterprise Revenues

Enterprises	Income during project (Sh.000)			Total
	2002/3	2003/4	2004/5	
1. Buhoma Community Rest Camp	64,450	94,076	120,068	278,594
2. Amagyembere Iwacu Community Camp	523	143	3,000	3666
3. Nkuringo Ecolodge	-	-	-	
4. Mushroom growing	-		3,662	3,662
5. Beekeeping	-	-	200	200
6. HuGo Micro Enterprises	-	-	1500	1500
7. Handcrafts	-	2,731	3,939	
Total	64,973	96,950	132,369	294,292

New	50,000	0	100,000	*53,000	200,000	**0
Existing (0)		0	0	0	0	0

Conservation of Afro-montane Forest & Mountain Gorillas in a Landscape Context

“Life of Project” Performance Evaluation.



July 15th to August 11th 2005

Prepared by:

James Acworth (Team Leader) and
Anthony Ratter (Technical Reviewer)
With support of AWF/IGCP Partners.

Inside Front cover

Some quotes from the original BINP Tourism Development Plan (IGCP, 1992):

Guiding Principle No.1:

"Tourism activity must support conservation, not be an end in itself, and be sustainable in the sense that it does not act to disturb, or destroy the very attractions it is based upon."

Tourism Objective:

"To allow and manage sustainable tourism in the National Park(s) which is of low environmental impact, of benefit to the communities and economically viable in a national context and which shall thereby ultimately serve to support biodiversity conservation."

Some quotes from the project Application:

Overall Hypothesis: *"When managed and conserved as an ecologically and economically vibrant conservation landscape, the GVL can contribute substantially to the alleviation of poverty and the provision of sustainable livelihoods for rural people in SW Uganda."*

"Increasing threats to forest and gorillas are originating in the surrounding landscape"

"Landscape level conservation programs are designed to intervene at the most effective possible level: large enough to address some of the root causes but local enough to be within the manageable interests of stakeholders in the region"

"The vision of financially independent and self-sustaining African Wildlife Authorities is critical to the future survival and well-being of Africa's wildlife populations."

"As long as community involvement and benefit flows remain at current levels, the mountain gorillas and their habitat will continue to be viewed as belonging to someone else - those who more successfully capture the value associated with mountain gorilla tourism."

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Acronyms & Abbreviations:

AWF	African Wildlife Foundation
AUTO	Association of Uganda Tour Operators;
CARE DTC	CARE Development through Conservation Project
CARPE	Central African Regional Program for the Environment -USAID
BINP	Bwindi Impenetrable National Park
CBV	Conservation Business Venture
CC	Community Conservation
DRC	Democratic Republic of Congo
FFI	Fauna and Flora International
GEF	Global Environment Fund
GRASP	The Great Ape Survival Project (GrASP) of UNEP in partnership with UNESCO
GVL	Greater Virunga Landscape
HCP	Heartland Conservation Planning
HuGo	Human Gorilla Conflict resolution project
ICCN	Institute Congolais pour la Conservation de la Nature
IGCP	International Gorilla Conservation Program
ITFC	Institute of Tropical Forest Conservation
LG	Local Government
MoU	Memorandum of Understanding.
NEMS	National Evaluation & Monitoring System
MBIFCT	Mgahinga & Bwindi Impenetrable Forest Conservation Trust.
MGNP	Mgahinga Gorilla National Park
NCDF	Nkuringo Conservation and Development Foundation
ORTNP	Office Rwandaise de la Tourisme et Parcs Nationaux
PA	Protected Area
PAA	Protected Area Authority
PAMSU	Protected Area Management Support Unit
PNV	Parc National des Volcans
PNVi	Parc National des Virunga
UCOTA	Uganda Community Tourism Association
UNDP	United Nations Development Program
UNEP	United Nations Environment Programme
UNESCO	The United Nations Educational, Scientific and Cultural Organisation.
USAID	United States Agency for International Development
UWA	Uganda Wildlife Authority
WCS	Wildlife Conservation Society
WWF	World Wildlife Fund for Nature.

1 Project/Activity Summary

Final evaluation of the USAID funded 'Conservation of Afro-montane Forest and Mountain Gorillas in a Landscape Context' project

Associate Award under Leader Award

LAG-A-00-99-00053-00 of the Global Conservation Program

USAID/Uganda

Contributing to USAID Uganda Mission's Strategic Objective 7: "Expanded sustainable economic opportunities for rural sector growth" (see Results Framework in Annex 5).

Evaluation Type: Final evaluation to assess the "Life of Project" performance.

Project Name: Conservation of Afro-montane Forest and Mountain Gorillas in a Landscape Context

Project Duration: A project agreement was signed with USAID on 24 April 2002. The project was initially for three years and slotted for completion on April 25th 2005. The African Wildlife Foundation requested a no-cost extension for an additional three months and the project completion date is now July 25th 2005.

Project Implementing Organization: African Wildlife Foundation (AWF)

This project was implemented by AWF working with and through the International Gorilla Conservation Program (IGCP).

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Principal Partners:

1. Fauna and Flora International (FFI) and World Wide Fund for Nature (WWF), through coalition with AWF in the International Gorilla Conservation Program (IGCP), the main project implementing mechanism.
2. The Uganda Wildlife Authority (UWA)
3. The Institute of Tropical Forest Conservation (ITFC)
4. The Uganda Community Tourism Association (UCOTA)

Project Objectives

Project Goal: Greater Virunga Landscape better conserved

Project Purpose: Virunga Landscape in Uganda better managed

Intermediate Results:

1. Landscape planning & Monitoring approach applied to GVL;
2. Key strategies for threat abatement implemented.
3. Regional frameworks strengthened
4. National and Regional Policy improved.
5. Protected areas serving as ecological and economic core areas of the landscape
6. Expanded economic opportunities for rural communities in GVL.

Relationship between the key institutions

The International Gorilla Conservation Program (IGCP), a collaborative program of African Wildlife Foundation (AWF), Fauna & Flora International (FFI) and the World Wide Fund for Nature (WWF) has become the principal effort to support the conservation of the mountain gorillas throughout their habitat spanning three countries, as well as a model for cooperation.

In addressing issues at the broader "landscape context", AWF supports IGCP activities in Rwanda and the Democratic Republic of Congo (DRC) through other U.S. Government funding. This includes USAID funding through the Gorilla Directive, USAID Africa Bureau funding through CARPE and U.S. Fish and Wildlife Service through the Great Apes Conservation Fund. Further funding for regional activities has also been made available from the MacArthur Foundation.

Total Project Cost Requested from USAID Uganda: US\$ 1,999,959

Total Funds Allocated by USAID Uganda to Date (07-24-05): US\$2,049,605

Project Location: The Mgahinga Gorilla National Park; the Bwindi Impenetrable National Park; portions of the surrounding districts of Rukungiri, Kabale and Kisoro.

2 Recommendations

The following list summarises all the recommendations for action, based on the evaluation, made throughout the report with reference to the page number on which they occur. Details and rationale for the recommendations can be found in the corresponding sections on the Intermediate Results in Section 6 along the lines of the Intermediate Result areas.

Key recommendations:

- R. 1 Refine future Performance Monitoring Plans to provide for more qualitative evaluation of the impacts of achieving defined results in any future programme.....16
- R. 2 Ensure that now functioning monitoring and reporting systems support an adaptive management approach of all project partners.....16
- R. 3 IGCP/AWF should expand their close liaison beyond UWA to new institutions, particularly through strengthening links with Local Government and agricultural development organisations.....17
- R. 4 IGCP/AWF and UWA should consider contracting out more of their workload (e.g. to business development experts) and instead focus on their core mandates.17
- R. Continue to use NGOs for catalyzing partnerships, group formation & capacity building and more actively enroll private sector partners to develop products and markets;.....18
- R. 7 In future, acknowledge the long time that it takes to get communities on board in new and complex projects, where possible simplifying both the objectives, and the process in the design phase;19
- R. 8 Ensure continued support for processes to achieve early CBV successes, even if this means accepting less-ambitious outcomes than planned.19
- R. 9. Future phases should be less ambitious and balance embarking on complex processes with achieving early demonstrable results.....19
- R. 10 Increase UWA's ability to prioritise, and capacity to implement key activities on schedule, through targeted planning and management skills training.....19
- R. 11 Conduct more bottom-up planning with partners in the field, replicating the participatory Annual Operational Planning that is done at national level for each Conservation Area.19
- R. 12. Standardise Landscape planning processes at national level for all PAs.21
- R. 13 Review the range of planning processes that are being promoted in the region and identify commonalities and ways to harmonise processes and reduce the demand on scarce staff time of all partners (Local Govt, NGOs, UWA, Private Sector, Etc).23
- R. 14 Review relevance and impacts of Heartland Conservation Planning to actual decision making processes (UWA, District Local Government, etc) on the ground.23
- R. 15 Set up National & regional Heartland Coordination Forum that can meet periodically to review progress against the plan and ensure exchange of information, ideas, plans & progress reports...23
- R. 16 The Chairmanship of the proposed Forum should be a position that is either rotated between partner institutions, or embedded permanently in a neutral national institution.....23
- R. 17 Produce the HCP "Plan" in Tabular / Wall-Poster format and distribute to all partners.....23
- R. 18 HCP partners should collectively recruit and support the new position of a national "Heartlands *Pacemaker*" to coordinate implementation of the plan.....24

R. 19 Agree on coordination modalities between all key partners.	24
R. 20 Expand the HCP process to more effectively cover Echuya Forest Reserve and involve the National Forestry Authority in its implementation.	24
R. 22 Invest more effort in building a broader "conservation alliance"	24
R. 23 Convene future HCP meetings around "key issues"	24
R. 25 Threats analysis should go beyond simply identifying 'threats' to quantifying their significance, and more clearly understand who are the "threateners", and what drives them;	31
R. 26 Consider hiring a social scientist to explore the root causes of the key threats in more detail under the ITFC research programme;	31
R. 28 Criteria for inclusion of individuals in CBVs such as HuGo should ensure that hunters and other "threateners" who wish to "reform" are not excluded.	31
R. 29 Include monitoring of soil fertility in the zone surrounding the National Parks;	31
R. 30 Engage other project partners to specifically target agricultural development and resource conservation in the Zone immediately surrounding the NPs;	31
R. 31 Appoint one organisation to spearhead the continuation of regional cooperation activities.	32
R. 32 Develop mechanisms for reinforcing legal validity and implementation of decisions taken at regional forums in the respective countries.	32
R. 33 Ensure IGCP/AWF have active role in the ongoing Wildlife policy review process.	32
R. 34 Summarise and disseminate the findings of the economic study to key decision makers with clear policy recommendations as to how to increase local and national level revenues.	34
R. 35 A follow up study on economic valuation should determine more realistically how the relative costs and benefits of conservation are distributed, locally, nationally and internationally.	34
R. 39 IGCP/AWF should review the draft Tourism Regulations, once available, and carefully and strategically influence their final form and content.	35
R. 41 Develop Policy Working Group of key representatives from stakeholder institutions around specific policies, to maximise opportunities for exchange of experiences and ideas, and coordinate lobbying efforts.	36
R. 42 Actively engage with the Private Sector & Civil Society throughout the Policy review process through face-to-face meetings, newsletters, media events, etc.	36
R. 43 UWA should consider either leaving present signage around Bwindi & Mgahinga to save funds for other more important activities or phasing the new signage to change BI NP/MGNP signs at end of the process.	37
R. 46 Spread the training over a longer period in future to allow staff to assimilate;	40
R. 47 Build capacity of senior staff to take on mentoring / in-house training role;	40
R. 48 Consider contracting evaluation of the impacts of training to professional organisations rather than conducting "in-house".	40
R. 49 Consider contributing to core funding of ITFC to ensure long term support for monitoring and research on priority issues.	41
R. 50 Speed up and consolidate research on the impacts of Gorilla-Tracking on Gorilla Health and conservation and present a stronger case for its recommendations;	42

R. 53 Lobby for 1) a technical committee to be established specifically to advise the UWA Board on key issues relating to Gorilla / Great Ape Conservation and related tourism and 2) to try to obtain seats on it.....	42
R. 54 Prioritise research that will inform key forthcoming UWA management decisions.....	42
R. 56 Analyse UWA's decision-making process which resulted in an increase number of Gorilla Permits	42
R. 57 Further simplify key recommendations emerging from research and seek new channels to present the message to those actually making the final decision.	43
R. 58 Inform other stakeholders (such as tourism associations and the relevant media) of the position of IGCP to raise public awareness of critical conservation issues and win more popular support for IGCP's recommendations.....	43
R. 59. Lobby USAID and other donors to core-finance UWA, and support business models that expand and diversify tourism away from Gorillas and that take a more holistic approach to supporting UWA's institutional and financial sustainability.....	43
R. 60 Research the effectiveness of UWA Policy towards problem animal control (a key source of conflict between PAAs and local communities).....	43
R. 61 Research the socio-economic impacts of tourism development in Buhoma, e.g. HIV, prostitution resulting largely from increased security presence in the area, and specific impacts on the Batwa, who are being regularly called away from their fields to "perform" for tourist groups on the cultural walks.....	43
R. 62 Continue research into impacts of tourism on gorillas. In particular research should investigate options that reduce impacts on gorillas but maintain valuable revenue.....	43
R. 64 Research potential of linking the range of benefits provided by conservation bodies to location-specific indicators of conservation performance by particular communities.....	43
R. 65 Deepen Project/Community analysis and understanding of the experiences of other community-private sector ecotourism partnerships.....	46
R. 66 Support NCDF to hire competent lawyers to help them draft and negotiate the contract.....	46
R. 67 Continue to seek other development partners that can support activities in Nkuringo to avoid over-dependence on AWF/IGCP support.....	46
R. 68 Accelerate process of establishing alternative cash crops (e.g. Tea, Artemisia) that can be grown on the shared area, and keep community expectations of potential benefits realistic.....	47
R. 69 Encourage "Amajambere I wachu" to go ahead with Red Chilli on a revised business model.....	49
R. 70 Assess the potential of using the UNDP Grant to kick-start a business oriented rainwater-harvesting scheme, and/or tree nurseries, managed by MCDO;	49
R. 71 Facilitate the issuing of a leasehold title by MUST to Buhoma Community Rest Camp Development Association.....	50
R. 72 Invest more efforts to explain the Private sector / Community partnership concept to the Buhoma Community Association membership.....	50
R. 73 Revise format of Rest Camp accounts to show profits before grants are given to community projects and use to leverage bank credits, or donor co-financing.....	50
R. 74 Support Association to break down their upgrading plan into simple phases and perhaps make the overall investment plan less ambitious.....	50

R. 75 Assess the potential for giving Buhoma main street a much-needed face-lift.....	51
R. 76 Provide more rewards to HuGo Groups that effectively report illegal activities and where indicators from RBM data show reducing levels of threat within the park.....	53
R. 78 Conduct more participatory research and development work into finding ways in which the HuGo groups can expand their mandates to include a wider range of conservation interventions (such as reporting illegal activities, and other problem animals such as elephant, buffalo and “vermin”) in return for support to group members to improve local livelihoods.....	53
R. 79 Develop mechanisms to ensure the sustainability of finance for the HuGo groups.....	53
R. 80 Summarise the process of achieving the issuance of permits to community groups in a case study / briefing note to disseminate lessons learned to other IGCP partners.....	54
R. 81 Lobby UWA to package any future increase in prices of Gorilla tracking permits with an improved revenue sharing arrangement with frontline community institutions such as HuGo groups, which clearly contribute to conservation.....	54
R. 83 Support/contribute to a review of the UWA Revenue-Sharing policy that shifts funding priorities towards those that have a direct and positive conservation linkage (such as supporting HuGo / Problem Animal Control initiatives).....	55
R. 84 Make more use of existing grant-making mechanisms such as MBI FCT to channel support to initiatives in local communities.	55
R. 85 Strengthen efforts to identify CBVs that have clear impacts on reducing key threats, and are directly accessible to the key threateners.....	56
R. 87 Focus NGO efforts more on group formation, skills training, linking CBVs to Private Sector Partners, capacity building in governance, managerial, accountability and negotiation skills	56
R. 88 Strengthen sustainable business partnerships between CBV Associations (e.g. NCDF, Bwindi Beekeeping Development Association, Craft Groups, etc) and Private Sector to focus on product development, advertising, increasing access to markets, and boosting sales.....	56
R. 91 Identify and promote opportunities to transfer CBV Technology Packages such as bamboo planting and mushroom growing to other programs (e.g. Africa2000Net, NAADs, Africare etc) and local extension services.....	56
R. 92 Invest more efforts in identifying and promoting a more diverse range of tourism products.....	59
R. 93 Make linkages with Private Sector to assess and test the potential for boosting sales of craft materials, within the region or internationally.	59
R. 94 ITFC/IGCP Monitoring Officer should work closely with UWA to assess the consistency of RBM data collection methods and the accuracy of the results obtained. Data should be disaggregated to reflect trends in different sectors of the forest.....	62
R. 95 Project interventions should make all efforts to identify the actual “threateners”, and not just the generic “threats”, and develop strategies for addressing this particular socio-economic group.	62
R. 96 Repeat survey of tree & pole cutting as soon as possible to provide a repeat measurement against which to monitor performance of this project at purpose level, and to serve as baseline for future activities if funded under PRIME/West.....	63
R. 98 Request WCS to repeat Satellite image analysis at the earliest opportunity to provide a baseline for PRIME/West and an end-of-project assessment for the USAID funded IGCP/AWF project under review, and link to BEGO/IGCP support.	63

- R. 99 Assess the potential for monitoring remnant natural forest patches and woodlots outside the park using LandSat7 TM, IKONOS or fixed-point photography..... 64
- R. 100 Extend monitoring of water quality to sample points downstream from the Park perimeter to determine trends in impacts of land use changes outside the park. 64
- R. 101 Verify the accuracy of RBM estimates of large mammal populations and either work to improve methods to increase statistical validity or explore more objective monitoring methods. 65
- R. 102 Monitor populations and spatial distribution of “vermin” species – bushpig and baboon; 65
- R. 103 Develop appropriate mechanisms to regulate their populations on the forest edge to manageable levels for local farmers. 65
- R. 104 Develop new strategies that address the complex of poaching and “vermin control” and identify longer-term solutions to crop-raiding such as Mauritius thorn hedges, or other suitable barriers. 65
- R. 105 Monitoring of Grauer’s Rush Warbler should be extended to some swamps outside the PAs (such as Nyamuriro Swamp on the edge of Bwindi) to determine whether there are indeed corresponding drops in warbler populations there..... 66

3 Introduction

The broad objective of this evaluation is to assess the performance of the USAID-funded 'Conservation of Afro-montane Forest and Mountain Gorillas in a Landscape Context' project during the entire activity period; April 2002 – July 2005.

The **development problems** being addressed were summarised in the Project Application as:

- (a) Increasing threats to forest and gorillas are originating in the surrounding landscape.
- (b) Insufficient capacity in the parks prevents them from serving as core areas of the landscape in a sustainable fashion.
- (c) Opportunities for rural communities to engage in enterprises that capture value from the resources of their region are insufficiently developed.

The **assistance provided** under this project aimed to achieve the following objectives:

- (a) Greater Virunga Landscape (GVL) managed to ensure the conservation of mountain gorillas and other priority conservation targets;
- (b) Increased capacity of protected areas to serve as ecological and economic core areas of the landscape;
- (c) Expanded economic opportunities for rural communities in the GVL.

These were later reformulated into 6 Intermediate Results (see Annex 5). Assistance was in the form of technical and financial assistance to the Uganda Wildlife Authority for the in-park components, and to development of "Conservation-Business Ventures" through forging partnerships between communities and private sector surrounding the Bwindi and Mgahinga National Parks. Support was also provided to regional planning & coordination processes.

The **target audiences** for this report are:

- o USAID – Funding Donor;
- o UWA – as the Management Authority for the National Parks.
- o IGCP Partners – for future activities (e.g. possible grant under PRIME/West)
- o PRIME/West – for its own landscape approaches to conservation in the same region, and in the case that it will supervise some future grant-funded work of IGCP;

The detailed scope of work is provided in Annex 1, and is summarised in 4 simple questions:

1. Did we/they succeed? (SoW 1)

- o Were activities implemented as planned, or with good reasons for deviations?
- o Were Intermediate Results achieved, and contribute to Purpose & Goal level success?

2. How were partners involved? (SoW 2)

- o Were partners, stakeholders, and beneficiaries of the project adequately involved in planning, implementation and monitoring activities?

3. Will it last? (SoW 3)

- Can initiatives supported under this project now continue without external support, and if not, what will be required to ensure that they are sustained.

4. Any lessons for a next time? (SoW 4)

- What can be learned from this project, and how can they be incorporated into any future activities to be funded by USAID, or its partners.

The team focussed in particular on this last question relating to the future. In a nutshell, the overall conclusions of the review are shown in the box below. Details are provided in the Conclusions in Section 10.

Box 1. Summary of Project Review.

Success

Performance indicators all positive, but recovery of wildlife populations and changing conservation behaviours are both slow processes.

The project has piloted cost-effective solutions to conservation in the form of strengthened UWA capacity to implement adaptive management of the Protected Areas, and community-based institutions with conservation mandates (e.g. HuGo groups) both of which should be built on in the future.

Participation

There has been strong IGCP liaison with project partners (esp. UWA) and they are now broadening the conservation alliance to Local Govt, and CSOs.

Sustainability

The new Conservation Business Ventures developed look promising, but need more support beyond the end of the project to bear fruits.

The pressure on UWA to increase Gorilla revenues could emerge as a new and increasing threat to their long-term health and behaviour. IGCP and other development partners should explore options to core-finance UWA and support it to develop business models that expand and diversify tourism away from Gorillas.

Lessons learned.

Many valuable lessons have been learned which should be internalised by PRIME / West, UWA & IGCP partners through a targeted communication strategy;

4 Evaluation Approach and Methods

4.1 The Team

Name	Role	Institution	LoE
James Acworth	Team Leader - review of documentation. Field consultations and verification.	Independent Consultant	18 Days
Anthony Ratter	Technical Review of findings and draft report, and facilitating stakeholder meetings	Independent Consultant	6 Days
Steven Asuma	Member - Project Partner	Programme Officer, IGCP	As required
James Byamukama	Member - Project Partner	Field Officer, IGCP	As required
Innocent Garakumbe	Member - Project Partner	Senior Enterprise Officer, AWF	As required
Alastair McNeilage	Member - Project Partner	Director, ITFC	As required
Helga Rainer	Member - Project Partner	Senior Program Officer, AWF	As required

4.2 Method

The evaluation addressed the specific objectives defined in the Scope of Work through a mixed methods approach.

1. Evaluation work plan development workshop

During the first three days of the evaluation process an initial workshop with project partners. The scope of work for the consultancy was presented to partners, and the method for evaluation, as outlined in this section. While fulfilling the need to evaluate past performance, the team requested Project Partners to put emphasis on learning lessons for the future.

A detailed evaluation work plan was agreed for field visits and a final workshop to present the findings of the evaluation (see Annex 2).

The evaluation team presented the original logical framework and indicators, and then provided an opportunity for the Project implementing partners to self evaluate the project performance by Intermediate Results, highlighting positive achievements, areas where setbacks, weakness or problems had been experienced, and to identify key lessons learned, and issues for the review team to focus on. Results of this exercise are not included in this report, but were availed to project partners.

2. Review of background documentation

Over the period of the consultancy the team leader reviewed a wide range of Project documents to assess whether targets were achieved against those identified in the defined **Results and Indicators** from the Planning Document and the Performance Management Plan.

Annex 3 summarizes existing information sources relevant to this study.

3. Participatory process

The evaluation team carried out interviews, group discussions, site visits and mini-workshops with all partners, beneficiaries and interested parties both in Kampala and in the field, as the major component of the evaluation process.

- A number of field visits were made to the project's ultimate beneficiaries (Community Groups) to see their infrastructures and to discuss practical aspects of their work.
- A one-day meeting with project beneficiaries at community level was held in Kisoro on the 29th July.

Annex 4 provides a full list of field visits and consultations made.

Given the short time available for the review generally we have attempted to:

- Focus on the essential;
- Encourage Project Partners and beneficiaries to self-evaluate performance;
- Rapidly cross-check the Performance Management Plan (PMP);
- Focus on helping partners learn some key lessons from the review process.

4. Final Stakeholder workshop

- At the final meeting held in Kampala on the 11th August, the team leader presented the evaluation findings to the project partners i.e. USAID, AWF/IGCP, UWA, UCOTA and ITFC.
- Inputs from workshop participants were integrated into the analysis and the overall findings presented to USAID on the 16th August, and then integrated into the final report.
- Overall it is anticipated that the findings of the review will form the basis of any follow on projects developed to support the conservation of the mountain gorillas and afro-montane forests.

5 Project Design & Implementation

The project was designed in a participatory manner, with an initial concept developed by IGCP and ITFC, that was adopted by AWF and UWA with opportunities for substantial modification to meet the objectives of the different partners. Over the years IGCP has provided a model for partner support, that UWA wish other partners to emulate.

The project design (see Annex 5) is based on the Landscape approach to identified "Heartlands" that AWF have adopted (see section 6.1 for more details and analysis).

USAID SO7: Expanded sustainable **economic** opportunities for rural sector growth;

Project Goal: GVL better conserved

Project Purpose: VL in Uganda better managed

Intermediate Results:

1. Landscape planning & monitoring approach applied to GVL.
2. Key strategies for threat abatement implemented.
3. Regional frameworks strengthened
4. National and Regional Policy improved.
5. Protected areas serving as ecological and economic core areas of the landscape
6. Expanded economic opportunities for rural communities in GVL.

5.1 Validity of intervention logic

The original project design was intended to contribute to USAID (Uganda) Mission's Strategic Objective SO2 on conservation (see below), but at the time that the project was being formulated, USAID was also revising its Strategic Plans and SO2 was later subsumed into SO7.

Former USAID Strategic Objective 2: *"Critical Ecosystems conserved to sustain biological diversity and to enhance benefits to society"*

Indicators:

- Ecosystem Health and biodiversity maintained - Population of mountain gorillas maintained
- Critical Ecosystems generate benefits and revenues - Annual revenue generated from ecotourism by UWA
- Critical Ecosystems managed rationally - number of critical areas operating under integrated management plans or community resource agreements;

Until very recently there were no indicators under SO7 that related to environment. The Project's goal level indicators of success are entirely conservation oriented and not development indicators.

The initial project proposal had three Intermediate Results, and these were reoriented to become six IRs as shown in Annex 5. As reformulated, the Project's IR6 (expanded economic opportunities) is synonymous with SO7. The project in general was anticipated to contribute to SO7 through improved management of the parks supporting increasing tourism potential.

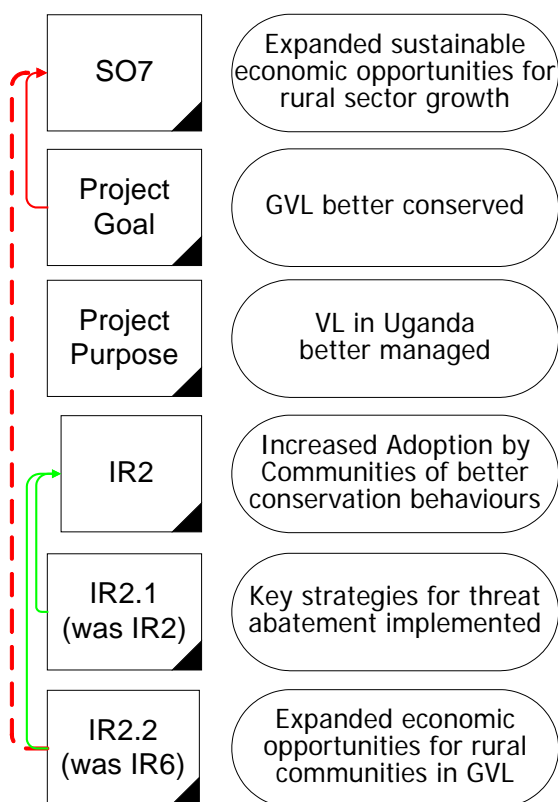
IR6 was also presented as a strategy not just for rural development, but for threat abatement (IR2), and thus as a means to the project purpose, i.e. **Conservation through Development...** via an un-stated but implicit result:

- o "Increased adoption by communities of better conservation behaviours."

This is illustrated in a revised, more logical framework in Figure 1 below.

The Team has therefore assessed project initiatives for both their development merits (and contribution to SO7), and their contribution to conservation as outlined in the original SO2. The need to achieve a higher conservation objective has been made clearer under PRIME/West (*Biodiversity Earmark*).

Figure 1. A more logical framework



Greater conservation impacts could probably have been achieved, through further integration of the activities into packages, whereby "increased adoption by communities of better conservation behaviours" are more clearly linked to "benefits", even if the benefits or new enterprises that are supported are not directly conservation related.

In future the evaluation team recommends that as justification for any interventions, a strong and demonstrable link should be made between:

A. Better conservation as measured by “performance indicators” derived from timely & targeted monitoring of trends in:

- community compliance with agreed rules (reducing signs of illegal activity)
- community support for law enforcement (frequency and effectiveness of reporting illegal activities to the Responsible Body – UWA/NFA).
- conservation targets (wildlife populations, etc)

and

B. Distribution of conservation-related benefits to local communities:

- Revenue sharing mechanisms of UWA;
- Support to enterprise development in park adjacent communities;
- Grants from development partners and MBI FCT for a range of development and infrastructural projects;
- Employment opportunities, etc.

Lack of linkage in the minds of local communities reduces the cost-effectiveness of limited conservation-oriented funds. ‘Tweaking’ the incentives for conservation and disincentives against illegal / unsustainable activities is key to cost-effective conservation.

The IGCP partnership and other conservation projects have the opportunity to learn from the review of impacts of fifteen years of ICD activities in and around the Bwindi & Mgahinga National Parks. Lessons are both varied and not always supportive of the logic / hypotheses that were originally put forward for some activities in the project design.

A pragmatic lessons learning / adaptive management approach has been adopted by the Project team although there are still some lessons that will need to be addressed in future project phases. These are discussed in more detail later in the report, especially under IR6.1 under which many of the key ICD interventions with local communities were implemented.

5.2 Critical assumptions and Risks

A number of critical assumptions and risks were inherent in the project design and are reviewed here:

- *A conducive regional environment for the growth of ecotourism:* This assumption has held true to date. No further security incidents have occurred during the project lifespan, and generally the levels of tourists visiting Uganda is increasing, and facilities are improving.
- *Ability to impact livelihoods of a significant proportion of local people:* Impacts on livelihoods as a result of project initiatives have been limited to date in terms of economic benefit (direct and spin off). The evident enthusiasm among local communities for conservation has more to do with *anticipated* benefits than *demonstrated* results; sustaining this enthusiasm relies on achieving results in the near future.
- *Ability to mitigate threats:* while threats have been identified in generic terms, the details, in terms of “*who are the threateners?*” and “*what drives them?*” have not been

sufficiently answered. Strategies to abate or mitigate those threats have therefore been vaguely targeted and have not been as effective as they could have been. However the assumption holds true – i.e. that it remains *possible* to identify and address threats directly or indirectly within the manageable interests of the stakeholders involved.

An un-stated but important assumption in the original project design was that

- *Distribution of conservation-related benefits* to local communities will lead to better conservation behaviour as measured by conservation performance indicators;* such as:*
 - Revenue sharing;
 - CBV enterprise development;
 - Grants for development / infrastructure;

This assumption remains unproven:

Insufficient conceptual linkages have been made between benefits given by project and expected improvements in conservation behaviour to fully test this assumption;

The review of Integrated Conservation & Development (ICD) Strategies (ITFC et al, 2005), and summarised in Box 6 on page 57 did not specifically test how Conservation Business Ventures change conservation behaviour. Instead, it was designed to test strategies that had been implemented for a longer period, that were more likely to show change.

5.3 Appropriateness of Monitoring Plan

Generally indicators and targets identified in the PMP were poor. Too much simplistic quantification was expected, i.e.:

- [number of] policies under development or completed (IR4);
- number of key actions addressing critical threats
- number of decisions influenced;
- number of enterprises initiated, etc
- number of monitoring and research activities underway or completed

... without defining the quality of impacts required:

- extent to which policies have been influenced by project actions;
- effectiveness of actions to actually reduce critical threats;
- gravity of decisions informed and how much influence was achieved;
- value and viability of enterprises initiated, etc;

This makes assessment of real impacts of the project difficult, as it is possible for the project to report how very simplistic quantitative targets were met, even though their contribution to the broader project objectives may be small.

It also tempts the project implementation partners to become engaged in **many** activities (to achieve the numbers targets!) rather than **prioritise** and focus on activities that achieve high **quality** results that really contribute to project purpose and goal.

Lack of systematic monitoring of the key indicators (e.g. occurrences of illegal activities, large mammal populations), and statistically questionable means of verification (i.e. Ranger-based monitoring) has provided an arbitrary picture of goal and purpose level trends over time that generates more subjective debate than objective insight into the success or otherwise of the project to achieve its objectives.

Irregular reporting against PMP and weak implementation of other monitoring frameworks (e.g. the HCP) undermine their potential value to support adaptive management. Many of the trends have only become apparent right at the end of the 3-year project and there was no scope to use the information to guide partners towards more effective project implementation during this project phase.

On the positive side, a key result of this phase of the project is the range of innovative, planning, monitoring and research programmes. Now that these systems are functioning smoothly (in most cases), timely monitoring and reporting of performance to project partners should provide valuable insight to the effectiveness of a range of interventions, and greatly improve adaptive management approaches in the future.

Finally, we support the project partners' reminder that some of the longer term conservation targets cannot statistically be shown to have been met in a short 3 year period (i.e. gorilla population changes) or necessarily assign success to just one 3 year project among many broader interventions over a much longer period of time, but that nonetheless monitoring of these ultimate conservation targets/goals should be included in the long-term.

Recommendations

- R. 1 Refine future Performance Monitoring Plans to provide for more qualitative evaluation of the impacts of achieving defined results in any future programme.
- R. 2 Ensure that now functioning monitoring and reporting systems support an adaptive management approach of all project partners.

5.4 Project Implementation

Stakeholder participation

Generally, UWA (key partner) are very supportive of the level of their participation in the IGCP/AWF project planning process and project implementation.

- o IGCP/AWF and other partners are invited to participate in the overall Annual Operational Planning exercises at HQ level. Partner funding is thus reflected in UWA budgets, and responsibility is clearly apportioned to specific partners.
- o Reporting is done through UWA's financial and activity reporting systems.
- o UWA are largely responsible for the implementation of the activities within the Protected Areas, while IGCP/AWF staff provide only technical backstopping where required. This has resulted in substantial capacity building of UWA Staff.

- o With project support, UWA Community Conservation Staff are also working directly with frontline communities¹, mobilising groups and providing training, materials and follow up. As a result, communities now see UWA delivering benefits rather than the partner organisation. This has greatly enhanced UWA's public relations with the communities and has changed the perception that they are the "bad-guys" (Park Police) while project partners deliver the benefits, thus "out-shining" UWA.
- o UWA are promoting this model to other development partners to adopt, and have incorporated the concept into their Partnership Policy.

Clearly, the IGCP/AWF approach to partnership with UWA (the primary partner in the programme) is both participatory and successful. However, there is a much wider range of partnerships identified as being necessary to implement the broad diversity of activities to mitigate threats across the landscape,

Some institutions reported feeling that they would like to have been involved more closely in the activities of the project, particularly Local Governments, and the MBI FCT, both of whom feel they have a more active role to play in development initiatives and could have facilitated some of IGCP/AWF project implementation.

Activities such as development and support for CBVs and development of the Heartland Conservation Plan have been driven more by IGCP/AWF than the other project partners. While UWA and other stakeholders have participated to a degree, they did not develop much sense of ownership. Some further effort to transfer ownership of these activities to durable institutions within the region is required.

R. 3 IGCP/AWF should expand their close liaison beyond UWA to new institutions, particularly through strengthening links with Local Government and agricultural development organisations.

Appropriateness of allocated roles

The team also questioned the necessity of UWA or IGCP staff actually implementing Community support programmes with their own staff rather than simply facilitating linkages with professional service providers, where they exist.

UWA Community Conservation staff, and IGCP staff risk becoming 'jacks of all trades'. This may be distracting them from addressing more critical challenges (such as dealing with crop raiding by wildlife) that fall more clearly within their mandate, (see issues raised in Section 6.6).

R. 4 IGCP/AWF and UWA should consider contracting out more of their workload (e.g. to business development experts) and instead focus on their core mandates.

Public relations (e.g. from support given to community enterprise development) can still be maintained by clearly introducing such support as UWA initiatives;

In some cases, NGOs have also been engaged to develop Conservation Business Ventures. While they have an important role in mobilization and building institutional capacity at

¹ 'Frontline' communities are those that actually border the National Parks.

community level, it is critical to link community groups to sustainable markets as soon as possible. This is much more effectively achieved by private sector than NGO partners.

R. 5 Continue to use NGOs for catalyzing partnerships, group formation & capacity building and more actively enroll private sector partners to develop products and markets;

Process versus results

There are perennial debates as to the relative importance of project "process" and "results". Clearly this review team is evaluating results, which are more and more being demanded by the donors (especially USAID) over and above engagement in "processes". But the "process" has sometimes had positive impacts that are important to acknowledge.

Often the complex process of getting all stakeholders on board (e.g. in new approaches to community based conservation and tourism) takes much longer than envisaged and concrete results are difficult to achieve in the relatively short time frame of a grant (in this case 3 years). This is one reason why the IGCP partners decided to take a longer-term view and set up the IGCP "project" that outlives the typical duration of any single grant.

In the context of this project, key processes that are considered to have strengthened capacities of previously marginalised stakeholders (especially frontline communities) include:

- o Negotiation of Community-based Eco-lodge in Nkuringo. Communities have been substantially empowered by their involvement in the negotiation process in terms of increased leverage over the way that tourism investments are planned, and how benefits are shared (even though the eco-lodge has yet to be built).
- o Establishment of HuGo groups – they are already effective (i.e. results have been achieved), but a great deal of additional impact of the HuGo groups (controlling illegal activities and promoting conservation ethics within their communities - see section 6.6) has derived from the *approach to*, and *process of* establishing the groups and not the intended result (which was more simply to reduce Gorilla crop raiding).

The process of building UWA willingness and capacity to adopt new approaches to tourism and conservation that involve communities also has important ramifications for the future. Likewise the support provided to developing UWA's planning, implementation and monitoring procedures using a more holistic landscape approach would generate benefits beyond their limited impacts observed during this project phase.

Another phase can build on the firm foundation of functioning HuGo groups, institutionalising some of the added conservation-supportive roles that they have begun to adopt.

However in other endeavours, the expected results (functional eco-lodge) still lay some way ahead. This is in large part due to the very complexity of the anticipated agreement that was proposed. These processes have already demanded huge commitments of time and effort from community groups and support should be continued to a successful conclusion.

Recommendations:

- R. 8 In future, acknowledge the long time that it takes to get communities on board in new and complex projects, where possible simplifying both the objectives, and the process in the design phase;
- R. 9 Ensure continued support for processes to achieve early CBV successes, even if this means accepting less-ambitious outcomes than planned.

Timeliness

A recurring theme in evaluation reports of previous phases of the IGCP project, and again observed in this review, has been the apparent slow implementation of some activities, meaning that many are incomplete by the end of the project. This seems to be the result of a number of factors:

- o Elongated community planning processes to agree on modalities of community based project interventions;
 - o Unanticipated derailments of planned processes;
 - o Ambitious targets by the Project partners;
 - o Insufficient prioritisation to identify some critical activities and focus on them, and to drop others that distract from key areas of success; (e.g. Senior UWA staff acknowledge that the “unforeseen AOBs” that are regularly added to their programme often get in the way of scheduled activities);
 - o Slow response / decision making from UWA management to some proposals made by the project, and delayed reporting of activities due to overstretched human resources, and perhaps insufficient delegation;
 - o Staff shortages in the field have been in part responsible for deficiencies in timely implementation of activities and effective reporting.
- R. 10. Future phases should be less ambitious and balance embarking on complex processes with achieving early demonstrable results.
- R. 11 Increase UWA's ability to prioritise, and capacity to implement key activities on schedule, through targeted planning and management skills training.
- R. 12 Conduct more bottom-up planning with partners in the field, replicating the participatory Annual Operational Planning that is done at national level for each Conservation Area.

Note that Bwindi & Mgahinga are one Conservation Area (CA).

Integrating results of this bottom-up plan into UWA's overall AOP rather than the other way round may result in more realistic plans that are within the capacity of the CA staff on the ground to implement.

6 Achievement of Intermediate Results

The effective implementation of "Main Activities" and "Activities" is assessed in this section, and key issues identified.

6.1 The Heartland Conservation Planning Process (IR1).

Assessment of HCP Method:

The Heartland Conservation Planning (HCP) process follows a logical and sensible approach to landscape planning. It is overtly a tool to improve AWF's own ability to plan, monitor and learn across landscapes (often crossing national boundaries), but strives also to provide a framework also for partners to collaborate and support landscape-scale conservation. It has probably achieved more success in the former objective than the latter, although notably UWA have adopted HCP as the umbrella planning process to coordinate the activities of a range of partners working around the Mgahinga and Bwindi landscape.

Box 2. What is the Heartland Concept?

"Heartlands are large African landscapes of exceptional wildlife and nature where AWF works with a variety of partners, including local communities, governments and other resource users to conserve wild species, communities, and natural processes.

Because Africa's wildlife cannot be conserved everywhere, the great majority of AWF's resources and efforts are invested in these Heartlands. The Heartland Conceptual Model is the process by which AWF prioritizes and selects Heartlands, then plans and implements activities in these priority landscapes."

The Virunga Heartland therefore covers Uganda, Rwanda and Democratic Republic of Congo.

HCP Process aims to "integrate partners and their resources in a strategic and complimentary fashion" (project application p.11).

Extract from the Heartland Conservation Plan (Virungas & Bwindi). Feb 2003 Workshop Report.

Participation and adoption by stakeholders:

Representatives of a wide array of Government Wildlife Management Authorities and Conservation NGOs and Projects have been involved during the planning process over the past 2 years, and the design of a monitoring plan.

Although the HCP method explicitly proposes to involve all key partners, from the attendance list, notable absentees have been:

- o Local Government: only one District Environment Officer (DEO) from Kanungu was present at the initial planning process (3-4th Feb 2003), two DEOs (Kabale and Kisoro) during development of the monitoring programme (12th November 2004) and 1 District Community Development Officer and a Secretary for Environment in the Review meeting 2nd-4th August 2005).
- o The Forest Department / National Forestry Authority (NFA) who are the lead agency responsible for management of Echuya Central Forest Reserve (defined as part of Heartland); and
- o Private Sector who appear not to have attended any of the meetings.

However, we concede that it is possible that some were invited and chose not to attend.

It was therefore no great surprise to discover that the Local Government, who are deemed to be key partners, at the senior level remain largely unaware of, and do not understand the HCP process, or how they contribute to its implementation.

Regular staff transfers within UWA have also resulted in rather limited understanding of the HCP process at the National Park senior management level in both Bwindi and Mgahinga. This points for the need for a standardised process at national level so that if people move from one landscape to another, they are familiar with the planning process, and format.

R. 13. Standardise Landscape planning processes at national level for all PAs.

Indicator A: Heartland Conservation Plan

An HCP plan has been prepared, but has not been sufficiently circulated or internalised by all partners, other than some UWA staff, to be effective. A monitoring programme to track performance against the HCP has been in a state of permanent preparation (rather than implementation) over the project lifespan. This still needs a lot of refinement and development of indicators, as well as establishing on-the-ground monitoring systems. This will require a large investment of people and time – and therefore funds. ITFC is currently looking for funds for this (e.g., from MacArthur Foundation).

The first review of progress against the plan was held during the Evaluation Mission in August 2005. While the review largely confirmed the validity of the planned activities, it identified many areas where no progress has been made in terms of implementation.

The evaluation team perceive that more effort is being put into the development of a fully comprehensive plan than into its coordinated implementation. HCP should aim to become more strategic in nature, providing overview and direction rather than blueprints for action.

Only the priority strategies need detailed planning by those who have accepted responsibility to implement actions on the ground. In depth planning of all components of a holistic development plan in the absence of those who have resources to implement is futile.

Indicator B: Activities in HCP complete

Targets were set to have successfully *completed* 75% of [all?] the planned activities. In the PMP this is diluted to measure the percentage of strategies and activities that are "*under way*" for 5 key threats. The indicator is thus at odds with the ambiguous target and is anyway unrealistic in the context of a long-term strategy to reduce threats, in which activities are probably never "complete".

In practise, it is hard to conclude that many of the planned activities in the HCP have been "completed". Many are not yet under way. However, planned activities have been initiated for each of the 5 key threats. Their effectiveness is reviewed under IR2.

Indicator C: Monitoring of Critical Conservation Threats

Most potential threats appear to have been identified, although only a minority have been adequately addressed in project strategies of either IGCP/AWF or partners to date. The

key threats selected for targeting by the project in the Uganda Sector of the Virunga / Bwindi Heartland were:

1. Fire
2. Disease
3. Agricultural Conversion
4. Poaching
5. [lack of] Control/ownership

Monitoring has not been a continuous process for many of the threats. The PMP has been irregularly updated and remained partially complete at the time of review. The design of an HCP Monitoring Framework has only just been completed, and assessment of changes over time of many critical threats is based largely on subjective opinion, rather than on evidence.

That said, some of the identified HCP indicators are being monitored already as part of ongoing partner Research & Monitoring activities (especially I TFC Ecological Monitoring Programme and UWA's Ranger Based Monitoring).

Process

The HCP process has been implemented at various levels:

- o Regional plan - developed 3rd -4th February 2003.
- o Uganda-specific plan - developed on 5th February 2003. Note that this was already 9 months into the 3-year programme.
- o Development of detailed monitoring plan for the HCP - 4 to 5 meetings held so far.
 - o First major meeting to prepare a monitoring plan was held in November 2003.
 - o Second major meeting to finalise the plan was held in November 2004.
 - o Various other meetings have been held to develop the monitoring plan.

Meeting to review the HCP was held on August 2nd 2005 (Evaluation Team Leader attended some of this).

Impact

National level - UWA and other partners have adopted the HCP process as their partner coordinating mechanism for the Gorilla Parks (Bwindi / Mgahinga).

HCP has been used to inform the Annual Operational Plan for Bwindi and Mgahinga.

Many field staffs of UWA and partners are not very clear on the HCP process in terms of its purpose or content.

AWF had tentatively committed themselves to take a lead in implementing the HCP process, but insufficient resources (staff time) were allocated to ensure coordination.

Issues

During the evaluation, a workshop was held in Kabale (2nd – 4th August) to review the HCP process. Up to the Review meeting many stakeholders remained unaware of the HCP or uncertain as to how it was to be implemented, particularly in terms of involving local level partners. A questionnaire was designed to assess the impacts of the HCP. Key findings of the workshop and the assessment by HCP partners are shown in Annex 6.

Plans need *champions* to convert into action, and HCP Plan has so far lacked clear leadership. It has so far been promoted by AWF on a sporadic basis and a sense of having a “stake” in the plan or being a partner has not been clearly instilled in all those institutions that were envisaged to take on responsibilities to implement the HCP.

By being all-inclusive, the HCP almost reads as a plan for the sustainable development of the entire region. As such it looks both daunting and to some extent fails to recognise the limitations of its protagonists to implement the wide array of envisaged activities. As a result some partners risk taking on responsibilities that lie beyond their core competencies. For the conservation partners, the “think globally, act locally” mantra is equally relevant at the Landscape scale.

The HCP process has been one of many trying to achieve a broader landscape approach:

- o The Albertine Rift strategic planning process (covering the entire Rift);
- o The Heartland Conservation Plan (taking a broader landscape approach to the Virunga/Bwindi section of the Rift)
- o The Transfrontier Management Plan (focussing on the Protected Areas); and
- o District Environment Action Plans (focussing on the Districts within Uganda).

While there is a logical hierarchy of plans, this has probably resulted in planning fatigue and a diluted value of any one such plan.

HCP Recommendations:

- R. 14 Review the range of planning processes that are being promoted in the region and identify commonalities and ways to harmonise processes and reduce the demand on scarce staff time of all partners (Local Govt, NGOs, UWA, Private Sector, Etc).
- R. 15 Review relevance and impacts of Heartland Conservation Planning to actual decision making processes (UWA, District Local Government, etc) on the ground.
- R. 16 Set up National & regional Heartland Coordination Forum that can meet periodically to review progress against the plan and ensure exchange of information, ideas, plans & progress reports.
- R. 17 The Chairmanship of the proposed Forum should be a position that is either rotated between partner institutions, or embedded permanently in a neutral national institution.
- R. 18 Produce the HCP “Plan” in Tabular / Wall-Poster format and distribute to all partners.

The chart should allow partners to add or update the plan activities over time - pencilling in new activities and adding new partners where they have taken up responsibility to implement parts of the HCP.

R. 19 HCP partners should collectively recruit and support the new position of a national "Heartlands *Pacemaker*" to coordinate implementation of the plan.

Some key aspects of a new "Pacemaker's" Scope of Work are given in Box 3 below.

R. 20 Agree on coordination modalities between all key partners.

A proposed organigramme is shown below in Figure 2.

R. 21 Expand the HCP process to more effectively cover Echuya Forest Reserve and involve the National Forestry Authority in its implementation.

IGCP focus is currently mainly on National Parks, not surprisingly given that the Gorillas are only in the parks, but Echuya is identified as part of the heartland. NFA have

The "landscape" approach is important to keep an eye on the bigger picture, but partners should avoid taking on too many commitments that are beyond their specific core competences and/or that cannot be fulfilled.

R. 23 Invest more effort in building a broader "conservation alliance"

This alliance should aim to increase "buy-in" to the HCP from Local Govts, Private Sector and other Development Agencies (NGO and Government projects) around shared goals of regional conservation and development. This could be a key job of the "Pacemaker".

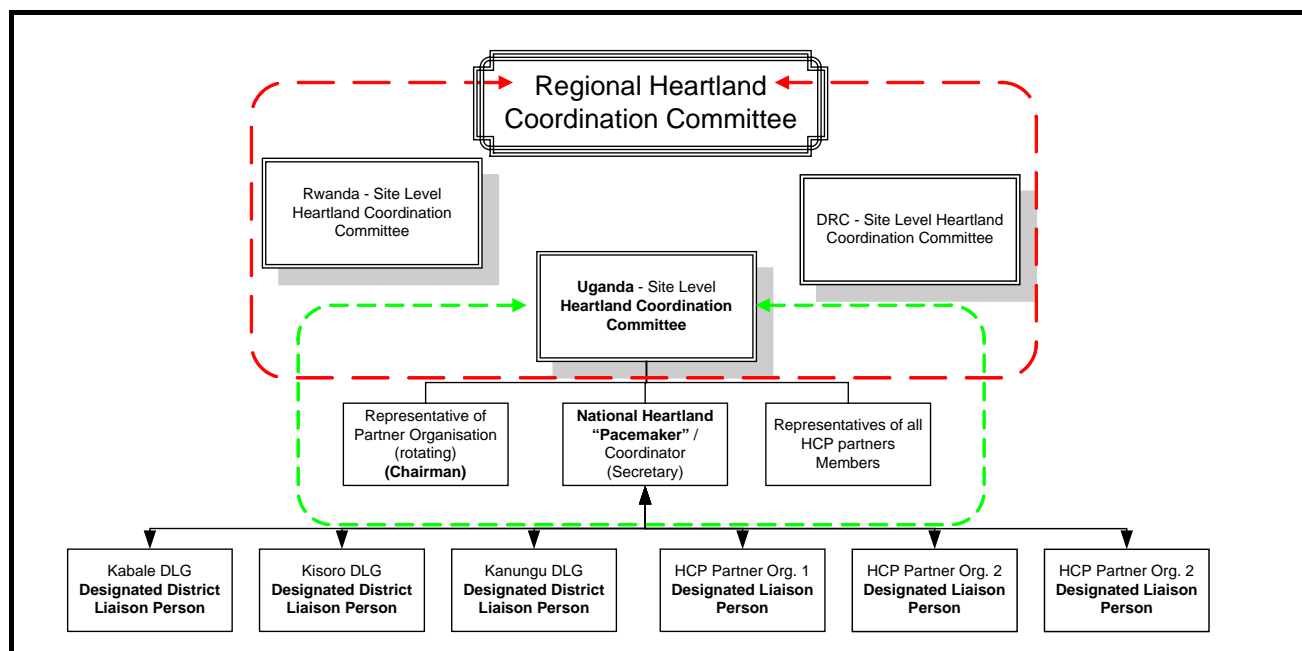
R. 24 Convene future HCP meetings around "key issues".

By following a "Key Issues" approach to future meetings specific experts can be invited thereby making more intensive use of their already over-stretched time. This modular approach to planning should result in much quicker results (i.e. an agreed issue-specific plan emerging from 1 meeting) rather than waiting three years for a perfect, and all-inclusive plan.

Suggested topics for "key issue" planning modules include:

- o regional tourism development plan (plan already prepared),
- o gorilla-human health issues" (already done);
- o problem animal management and vermin control strategies;
- o promoting sustainable agricultural practises;
- o Ranger Based Monitoring;
- o Developing / Expanding role of Frontline Community Institutions (e.g. HuGo).

Figure 2. Suggested Organigramme for Heartland Coordination



Box 3. Suggested key elements of Scope of work for a National Heartland "Pacemaker"

1. Compile all information on each partners' planned and completed activities;
2. Inform all partners of each other's respective activities;
3. Promote coordination of planning and implementation of activities;
4. Liaise with all stakeholders to win their support for the plan;
5. Lobby 3rd party organisations (Local Governments, NAADS, other Donor projects, Development NGOs such as Africare, etc) to take up more activities that support the conservation of the landscape as a whole, as identified in the HCP.
6. Monitor performance against the national "heartland monitoring plan".
7. Act as secretary to the "Heartland Coordination Committee"
8. Report to the incumbent Committee Chairperson.

N.B. the pacemaker and associated secretariat could be housed by the respective partner institution that currently holds the Chair and could rotate over time.

6.2 Key Strategies for Threat Abatement Implemented (IR2)

The indicator for this IR was weak, reading “Number of key strategies implemented”. Clearly this does not reflect their effectiveness.

Threats were first identified and ranked in terms of their severity.

Table 1. Ranking of the 15 critical threats to the Landscape

Critical and major threats	Ranking for GVL (2003)	Ranking for Uganda 2005
1. Agricultural conversion (& resulting habitat loss)	Very High	Very high
2. Over fishing using poor methods	High	High
3. Nutrient overload & erosion (agricultural practices)	High	Very high
4. Cattle/livestock grazing	Medium	Low
5. Charcoal production/ fuelwood collection	Medium	High
6. Poaching for both food and trophies	Medium	Medium
7. Harvesting of timber, bamboo and NTFP	Medium	Medium
8. Insecurity/conflict	Medium	Low
9. Pollution/waste management	Medium	Medium
10. Clay & sand mining/brick production	Medium	Medium
11. Resettlement & displacement of people/urbanisation	Medium	Low
12. Fire	Medium	Medium
13. Disease	Low	Medium
14. Need for water by population	Low	High
15. Roads	Low	Low

The project selected to work on those in bold and red. It also identified [lack of] “control and ownership” over natural resources, though it was not very clearly explained how this is seen as a threat.

The team found it difficult to directly link the PMP indicators and the threat reduction activities identified in the Annual work plans.

The HCP Review Meeting (Aug 2005) has provided some measure of the degree to which different threat abatement strategies identified have been implemented, (see Table 2). The analysis of progress was conducted by the IGCP Team. We present it as the basis for the discussion that follows.

The effectiveness of threat reduction strategies is dealt with better at the Purpose level for which the indicators include “Reduction in key threats” and were evaluated at the End of Project HCP review meeting (attended by the Evaluation Team Leader).

There is also an explicit objective in the project design that all activities implemented under IR6 are seen to be key strategies for threat abatement. Achievements in reducing threats through actions implemented undertaken under IR2 are therefore difficult to evaluate in isolation.

Table 2. Progress report on Threat Reduction Strategies (HCP, August 2005)

Source of threat	Strategy	Progress report
Fire	Prevention and control of fire outbreaks: Develop and implement a fire management plan	Developed a fire management plan for BMCA
		Trained park and community representatives in fire management techniques (2 trainings);
		Supported UWA to review fire management plan after one year.
		Procured some basic fire fighting equipment.
Disease	Develop integrated disease prevention control programme	Working with District local govts of Kanungu, Kisoro and Kabale UWA, MGVP and CTPH, developed a multi-sectoral Public Health and Conservation framework.
		Implemented some of the components of the framework, e.g. Health education, clean up exercises, drama shows through CTPH, the relevant district departments and UWA.
		Supported Health radio talk shows esp. by Kanungu district
		IGCP/AWF didn't do much.... It is the responsibility of MGVP!
Agricultural Conversion	Work with partners to improve farming practices	Not much work done.
	Alternative livelihood options to reduce agricultural pressure on the land. Land protection, which includes easements, leases and purchases.	See Income Generating Activities listed under "Poaching"; Buffer zone management support in Nkuringo;
Poaching	Improve and diversify income generating/livelihood options on particular target groups e.g. Batwa, Echuya communities	Conducted income and enterprise survey around BMCA as a baseline
		Supported Mushrooms growing for 80 women groups
		Supported Handicrafts training and marketing for 30 groups around BMCA
		Supported formation of one Beekeepers group. Supported training for 263 association members in 6 parishes. Procured processing plant for honey
		Planted bamboo in MGNP, involving about 500 households.
		Supported formation and institutional development of MCDO. Raised funds for improving enterprise facilities for MCDO
		Supported formation and training for NCDF, Negotiated MOU with UWA that granted exclusive rights of six gorilla permits. Assisted to identify funding for Nkuringo ecolodge. Working with NCDF and UWA to identify private sector partner for the ecolodge
		BCDRA. Developed Business plan Sourced Expertise for infrastructure improving plan
		Organized Study tour for 12 community reps to Kenya for Community/ Private Sector partnerships
	Strengthen efficiency of law enforcement and improve law re-enforcement capacity.	Strengthened RBM that tracked patrol coverage etc. Information fed into PA management decision-making process. Supported training in RBM, computer use for park staff, intelligence gathering. Provided various equipment for patrols
	Reduce market value and demand of animal parts (CITES regulations-enforcement)	Supported sensitization workshop for stakeholders e.g. customs, judiciary, local leadership on illegal trade in WL
Control/ Ownership	Work with partners to review natural resource management practices	Buffer zone management activities in Nkuringo

Threat of Disease

A framework was developed to integrate human, wildlife and livestock health. Its development involved the inputs from all three health sectors. The objective has been to mitigate the risk of transmission of diseases between any three of these sectors. Of all areas of the Project this is perhaps where Local Govt have reported being most involved. Other NGOs were also involved (the Mountain Gorilla Veterinary Project). Implementation of the framework has included:

- Health education is being conducted through Conservation through Public Health (part funded by IGCP/AWF but not from the USAID grant).
- Clean-up exercise within the 6 adjacent parishes where Gorillas exit the park.
- Health monitoring of human, wildlife, and livestock health.
- Ranger-based monitoring. Rangers identify any unusual signs and report to vets who then make professional assessment.
- Fund raising to continue supporting the framework.

To date the new framework and response mechanism has not been tested. In the time available, the evaluation team was not able to assess whether such a mechanism is effective.

Threat of Fire

Fire fighting training has been completed with support from the Dept of Interior, US Government, and guidelines for fire control developed. Management recommendations have been developed for both Bwindi and Mgahinga NPs.

Indicators of success are best provided under IR5.1 E.

Fires are weather dependent. 1999 was a particularly dry year that experienced a large number of fires. After a severe fire season in 1999 (a very dry year), there have been many fewer fires (none in Bwindi in 2001 or 2002, and only 2 in 2003, and 3 in 2004). Notably the area damaged per fire has reduced in recent years, and there are less fires caused by wild honey collection. Community response to fires is much better. People are much more willing to go and help fight fires than before.

Improving agricultural Practises

The HCP process, in its latest review of Threats (August 2005) again ranked as "very high" the combined threats of:

1. Nutrient overload and erosion (agricultural practices), and
2. Agricultural conversion (and resulting habitat loss)

Strategies were then developed (Feb 2003) for addressing the threat, largely through linking up with other agencies - see Table 3 below.

Some activities have been reported by AWF/IGCP as addressing this issue, but in practise they are actually referring to reclamation of agricultural land to extend the park, which does not really address the threat of poverty induced by depleted soils in the surrounding landscape.

The HCP review process itself concluded that: *“not much was done with agricultural conversion (Working with partners to improve agricultural practices)” due to*

- o *Lack of expertise*
- o *Districts had no resources*
- o *Programmes like NAADS were not operating in parishes next to the Pas”*

We have to conclude that effective strategies to address this threat remains “not implemented”, but also acknowledge that the solution lies beyond the resources available to the project itself.

Table 3. Strategies identified to deal with the threat of agricultural conversion.

Critical source of threat	Strategy	Actions (rank with explanation)	Responsibility
Agricultural Conversion	Agroforestry	Agroforestry – provide inputs and skills (e.g. Seed multiplication centres)	ICRAF, NARO, FD
	Intensify and diversify agricultural practices	Partner with key projects/institutions	L.Govts: Govt programmes e.g. NAADS
	Develop alternative IGAs	(e.g. IDEA)	L.Govts, NGOS, Private sector
	Enforce/enhance/develop laws/by laws prohibiting cultivation of steep slopes	Assess viability and promote IGAs	Environmental lawyers/LGs
	Restoration of natural forest e.g. MGNP, Nyundo	Advocate for development of relevant legislation	UWA, NGOs, Wetlands programme
	Land acquisition in critical ecosystems	I identify critical ecosystems and raise funds	Environmental lawyers, NGOs
	Land concession	Partnership and networking with relevant players	LGs, NGOs, Private Sector
	Advocacy for correction of irregularities in law enforcement	Assess viability and promote feasible options	
	Diversify agricultural strategies beyond agriculture		

Table 3 shows that the intention in the HCP was indeed to engage other agricultural development organisations to take on this huge challenge, and this was repeated in Annual Work-plans.

Meetings with potential partners have been held but there is scanty evidence that these partners are now implementing activities that help reduce the threats as an outcome of the negotiations.

An exception is PRIME/West that has taken up responsibility to implement some of the activities (promotion of new buffer crops, and reverse-slope terraces), though these are more pilots than reality just yet.

There are no monitoring results that provide a measure of changes in soil loss or soil fertility, so even if there had been some activities, it would have been difficult to monitor “impacts”.

Improving Natural Resources Management.

This approach to threat abatement is mainly tackled under 6.1. More analysis is provided in that section.

Criteria for selecting Conservation-Business Ventures included the need for a conservation “logic” to the new enterprises, i.e. to ensure that they in some way address threats, by:

substituting for natural resources/products from PAs by increasing on-farm supplies; e.g.

- o bee-keeping, mushrooms, bamboo cultivation;

reducing costs of conservation (crop raiding / exclusion from PA); e.g.

- o Human Gorilla Conflict Resolution – **HuGo**; High value crops (which are unpalatable to wildlife) in Buffer zones;
- o Community campgrounds / tourism;

Key natural resources that were ranked as being subject to high threats (see Table 1) but have not been addressed by the project are firewood and the need for water from the park.

[Access to Water in the PA is seen as a threat largely due to the tendency for people who go to the park for water to also engage in other (illegal) activities and risking disease transmission between Human and Gorilla populations.]

Poaching

The opinion of the Evaluation Team is that “law enforcement” of in-park rules is the only strategy that clearly addresses poaching. This is a necessary but insufficient approach to addressing one of the key threats to biodiversity in the Park.

Other strategies that are reported in Table 2 as addressing the **source** of the threats are much more limited and doubtful as to their impacts in terms of threat reduction, and in terms of reaching the actual socio-economic groups that are responsible for poaching.

The underlying causes have not been addressed in the project design – i.e.

- o ‘poachers’ as a group have not been identified and approached as one of the key “threateners” and their reasons for hunting not analysed.
- o Specific threat reduction strategies to reduce poaching and to address the underlying incentives and disincentives to poachers.
- o Poachers are in some cases (perhaps many more than realised) excluded from potential benefits of the project. For example, according to explanations given by community members, the HuGo Groups explicitly use an individual’s history of hunting as a criteria for exclusion from the Group. Many of the CBVs claimed to be addressing ‘poaching’ are aimed at women’s groups. However, women typically do not poach.
- o On the other hand, women are probably the main firewood collectors but there are no activities targeted at increasing on-farm supplies, although bamboo is used for firewood to a limited extent.

Control/Ownership.

The threat identified was "*insufficient control / ownership*" of natural resources, in the form of "*denial of ownership rights, undermining of local knowledge and unfair negotiation*", presumably of the terms of agreements made relating to access to park resources and benefits. The main strategies have been to engage the communities surrounding the Nkuringo Sector of Bwindi in the management of the buffer zone and in the negotiation of the terms of a forthcoming Eco-lodge with UWA and potential private sector partners.

Recommendations

R. 26 Threats analysis should go beyond simply identifying 'threats' to quantifying their significance, and more clearly understand who are the "threateners", and what drives them;

R. 27 Consider hiring a social scientist to explore the root causes of the key threats in more detail under the ITFC research programme;

R. 29 Criteria for inclusion of individuals in CBVs such as HuGo should ensure that hunters and other "threateners" who wish to "reform" are not excluded.

However, continued membership should indeed be conditional on giving up illegal activities and "staying clean".

R. 30 Include monitoring of soil fertility in the zone surrounding the National Parks;

R. 31 Engage other project partners to specifically target agricultural development and resource conservation in the Zone immediately surrounding the NPs;

6.3 Regional Frameworks Strengthened (IR3)

The first indicator for success is the "number and type of frameworks strengthened".

The AWF/IGCP regional partners have worked hard to develop and implement regional frameworks and this is an area where the project has made some good progress.

- o Regional policy frameworks were evaluated although it is still necessary for each of the governments concerned to take up the recommendations and implement.
- o The Heartland Conservation Planning process has brought together partners from all three neighbouring countries (Rwanda, DRC and Uganda).
- o The project has supported a "Transfrontier Secretariat" which builds on an MoU that between the three country PAAs (ICCN, ORTNP, UWA), and has been developing a "Transfrontier Management Plan" (TMP). At a meeting held in late July 2005, it was agreed to merge the TMP process with the Albertine Rift Planning process.
- o Quarterly regional meetings have been held between staff at the executive level in each country, supported financially and technically by IGCP.
- o A tourism master plan for the Virunga Volcano region has been developed.
- o A Regional Tourism Action plan has been developed which identified actions to operationalise tourism across Rwanda, Uganda and DRC.

- o Discussions relating to harmonisation of fees and gorilla permit numbers have been held (although the consensus was to “agree to disagree”).

The second indicator is “Number of key actions addressing critical threats”. This seems to reflect more on IR2 than this IR. The PMP lists under “Actual” [performance] the type and number of regional meetings held as “key actions”. While the PMP shows targets for this indicator to have been greatly exceeded, the indicator could be further improved by measuring the extent to which actions identified in regional meetings have been implemented.

Impacts:

The increasing sense of common purpose and “partnership” between the PA authorities and project partners between the three countries is one of the key achievements of the Project, although the IGCP/AWF contribution is one of many that are aiming to build such alliances.

In spite of some setbacks and strains on relations (such as the disappearance of the Nyakagezi Group from Mgahinga NP to the Rwandan sector of the Virungas), there is a perceived commitment to develop mitigating measures to address them. Discussions go as far as sharing revenues between countries, although these would be tough to implement.

Recommendations:

- R. 32 Appoint one organisation to spearhead the continuation of regional cooperation activities.
- R. 33 Develop mechanisms for reinforcing legal validity and implementation of decisions taken at regional forums in the respective countries.

6.4 National and Regional Policy improved (IR4).

Various activities have been implemented under this IR. The indicator is “Policies supportive of conservation (number of policies under development or completed)”. The target of “two policies” does not reflect the quality or significance of the policies to be developed (and - one would hope - improved), nor is the level of impact that the project itself has had on them.

For the purposes of the review we have chosen to assess the level of impact on the policy development process.

Policy Review

The National Policy Review report was completed in April last year (Wabenoha, 2004). Findings have been presented to the National GRASP committee (most of the members being within UWA) but as yet the report has not gone any further than this. Reasons given are that UWA are waiting for top management to review and adopt findings before releasing the report to a wider audience.

No impacts have yet been achieved in terms of “improving” the national or regional policies reviewed in this report. UWA senior management report that the policy review is only now taking place (September 2005) and that this report will feed into this process. The impact of the AWF/IGCP review can only be assessed after this is completed.

- R. 34 Ensure IGCP/AWF have active role in the ongoing Wildlife policy review process.

Economic Valuation

An economic valuation has been conducted with three stated intentions:

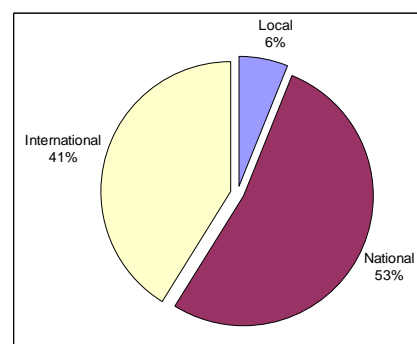
- Provide a baseline from which to further refine and/or expand on the current study
- Draw policy conclusions
- Explore the economic impact of possible interventions

After a first phase of field data collection (2003-04) and publication of a draft report in 2004, AWF headquarters requested for further data collection and analysis relating to local benefits and a new survey was recently completed (early 2005). The final report is still awaited from the researchers. The evaluation team had access only to a draft academic paper written on the basis of the study. The key findings are summarised in the Abstract.

Overall, gorilla tourism generates USD21.2 million per year (2000-01) in benefits, of which US\$1.1 million was gorilla-related tourism income (Park Revenues for BINP/MGNP) in 2001-02. This has since risen to USD 2.13 million in 2004-05.

Distribution of gross net economic benefits is as follows:

- 53% accrues to the national level
- 41% accrues to the international level
- 6% accrues to the local level



Official Tourism statistics showed that for the year 2000-2001, gorilla viewing operated at 41% of full capacity, suggesting potential for increasing revenues, with a maximum attainable value of US\$51.7 Million a year².

Box 4. Abstract – Hatfield Economics Paper

The Virunga and Bwindi afro-montane forests of eastern/central Africa are best known as home to the mountain gorilla *Gorilla beringei beringei*. A study was undertaken to estimate the economic value of the protected forests; and the distribution of benefits and costs between local, national and international stakeholders. *Results suggested that the forests are generating positive benefits - both tangible and intangible - relative to costs; but that benefits are overwhelmingly accruing to the international community, with little-to-no benefit accruing to those countries containing the protected areas.* The implications are that *the international community should be paying a greater share for the benefits it enjoys; and that the real engine of development - and sustainable forest conservation - is likely to involve investment into local smallholder agricultural livelihoods.*

N.B. Highlighting is that of Evaluation team.

The results of the report have been presented at an IGCP Regional meeting, and a meeting of the International Association of Travel Agencies (IATA) held in Munyonyo, Kampala in 2004. UWA were represented at both meetings, and the Ministry of Tourism Trade & Industry at

² n.b. IR6.2 has the objective of improving the linking of GVL products to regional and international markets. Activities under 6.2 have not obviously focussed on reducing the shortfall in the potential sales of Gorilla tracking permits. This is in part due to IGCP's position on numbers of permits and the health and behaviour impacts of too many visitors tracking Gorillas on daily basis.

the latter, but neither meeting were intended to be a forum for policy review at the Uganda level.

Until the final report is available, it will not be possible for IGCP/AWF to use the findings to lobby for Policy improvements.

All the planned activities have been completed but impacts of the recommendations made have yet to be felt since the Wildlife Statute is still in the early stages of a process of review and the Tourism Bill is with cabinet.

Recommendation:

R. 35 Summarise and disseminate the findings of the economic study to key decision makers with clear policy recommendations as to how to increase local and national level revenues.

Equitable Distribution of Costs and benefits of Conservation

The Economic consultancy has tried to show how the distribution of benefits enjoyed by international, national and local communities is somehow disproportionate compared to the share of the costs borne by each. It argues that one of the costs of the Parks is the forfeit of potential agricultural land by the local communities. While the evaluation team agrees that the overall economic value of the National Parks should consider the opportunity costs to the "nation" of not converting them to agriculture, we disagree that this cost is actually borne by the "local" community.

The net effect of the consultant's assertion is to show a disproportionate amount of costs being borne by the forest adjacent communities. Analysis should have been focussed on the real costs of living next to a park – the costs of crop raiding resulting from problem animals³ (such as Elephant, Gorilla, Buffalo) and vermin⁴ and compared these with the advantages (opportunities to benefit from tourism, access to multiple use zones, clean water, and so on). However, the report states that data gathered on crop losses were exaggerated and inconsistent, and therefore not used for the analysis.

While national & international bodies contribute significantly to the costs of conservation in Uganda, the WB financed PAMSU Project that provides the bulk of financial support to UWA is actually a loan, and not a grant, and thus will ultimately have to be repaid by the people of Uganda. Comparing how the relative costs and benefits of conservation are distributed internationally is thus by no means straightforward.

R. 36 A follow up study on economic valuation should determine more realistically how the relative costs and benefits of conservation are distributed, locally, nationally and internationally.

Impacts

³ "Problem animal" includes any animal which poses a danger to human life or property (Wildlife Statute, 1996);

⁴ Vermin are legally defined as "bushpigs, Baboons and Vervet Monkeys" by declaration of the UWA Board.

The Economic Valuation report remains a draft. IGCP/AWF await the final report to distribute and present specifically to policy makers and senior managers in the Uganda Wildlife Authority. The main value of the report to date has been to provide additional support for IGCP/AWF's arguments to increase the share of revenues from gorilla-based tourism allocated to local communities.

Key interventions in this regard include successfully lobbying UWA to:

- o Allocate a proportion (\$9) of Gorilla revenues to Local Communities (and not lumped into the national revenue sharing pot).
- o Allocate the six new gorilla permits for Nkuringo to the local Community. The Community do not get the revenue from these permits, but are free to negotiate terms of a joint venture with Private Sector investor who will build a lodge in the Nkuringo Sector of Bwindi (see Section 6.6 on IR6.1 for more details).

Tourism Bill

IGCP/AWF had input into the draft Tourism Bill, but it is not yet clear to what extent the proposals have been incorporated. This Bill is now with cabinet and has not been promulgated in Parliament yet. While the evaluation team has not reviewed the Bill or the level of influence achieved by IGCP/AWF, as with many Bills, it is understood to be a broad framework that will be implemented through regulations.

The Draft Tourism Regulations have not yet been made available to stakeholders and it is not clear what stage the draft Regulations have reached. However, as always, the devil is in the detail and the key implementing mechanisms will be within the regulations.

Recommendation:

R. 40 IGCP/AWF should review the draft Tourism Regulations, once available, and carefully and strategically influence their final form and content.

In particular focus should be on ensuring that tight mechanisms ensure that:

- a. the impacts of tourism on the gorillas are minimised;
- b. the positive impacts on local socio-economic development are optimised, and negative impacts mitigated as far as possible;
- c. appropriate and fair revenue sharing mechanisms are established;
- d. infrastructural planning is done in ways such that the aesthetic and environmental impacts are minimised.
- e. Regional tourism across national borders is facilitated;

Other Policy Issues

There are a number of key policy issues that have not specifically been targeted by IGCP/AWF in terms of their listed Main Activities. This does not mean to say that the

project has not contributed to the ongoing debate or undertaken background research to support policy recommendations, but that it has not set performance indicators against which to assess impact.

The following policies are considered to be of critical importance for the future:

- o Revenue Sharing Policy
- o Problem Animal Management and Vermin Control.
- o Gorilla Tracking Permit Numbers and better means of enforcing associated "Gorilla Rules"
- o Tourism Bill and associated Regulations (in draft)
- o Wildlife Statute and associated Regulations / Schedules.

General Recommendations on Policy issues:

- R. 42 Develop Policy Working Group of key representatives from stakeholder institutions around specific policies, to maximise opportunities for exchange of experiences and ideas, and coordinate lobbying efforts.
- R. 43 Actively engage with the Private Sector & Civil Society throughout the Policy review process through face-to-face meetings, newsletters, media events, etc.

6.5 PAs serving as ecological & economic core areas of the Landscape (IR5)

The second initial problem statement in the grant application read: "Insufficient capacity in the parks prevents them from serving as core areas of the landscape in a sustainable fashion." This IR was designed to increase capacity and sustainability of the parks.

Overall the indicator of success for IR5 is the "Revenue to UWA and the community campground" and the target was to increase revenues by 10% per annum.

UWA revenues from the gorilla parks have increased from US\$1.9billion to US\$3.0billion in the first two years (see table below). Buhoma Community Campground revenues have increased from 94million in 2003-04 to 120million in 2004-05.

Table 4. Revenues to UWA from Bwindi and Mgahinga National Parks

Year	Revenues (UgShs)	Revenues (USD)	Percent Increase on previous year
2001-02	1.936 Billion UgShs	\$1,139,084	-
2002-03	2.596 Billion UgShs	\$1,782,941	34%
2003-04	3.031 Billion UgShs	\$1,526,862	16%
2004-05	3.621 Billion UgShs	\$2,130,000	19.5

This represents "target met and exceeded", but it is difficult to attribute this solely to project activities, but it still played an important part. However the IGCP has been involved in the development of gorilla tourism since its inception in the early 90s. IGCP has supported

habituating of gorillas, development of booking rules and regulations, harmonising of tariffs etc. It is understood that revenues increased as a result of:

- An increase in the tariffs that came out of a review of tariffs conducted with the support of IGCP/AWF.
- One of the Buhoma groups split in to, so UWA gained a habituated group there.
- A general increase in visitor numbers.

Except for the training of Guides, many of the other activities that were targeted at improving the visitor facilities in the park have not yet been completed so it is anticipated that visitor satisfaction and revenues will increase further when Visitor Centres are complete.

This IR was divided into two sub-IRs:

- Priority Actions of Bwindi and Mgahinga GMPs implemented (IR5.1)
- UWA Management decisions strengthened by monitoring and research (IR5.2).

6.5.1 Priority Actions of Bwindi and Mgahinga GMPs implemented (IR5.1)

IGCP / AWF staff are routinely invited to attend the Annual Operational Planning meeting held by UWA, in which UWA and partners agree on their respective inputs. This is the mechanism by which IGCP/AWF identify which actions to implement.

Equipment

Substantial amounts of field equipment (sleeping bags and mats, tents, rain gear, binoculars, and GPSs) were provided under this USAID grant to UWA (verified by copy of letter from UWA, 30th January 2004) confirming receipt of equipment – seen by Consultant). Field staff expressed their appreciation and assurance that these facilitate their field activities such as gorilla tracking, law enforcement and ranger based monitoring.

Signage

Signage for the Bwindi & Mgahinga parks has been provided, as witnessed by a widespread array of clear signboards around the network of roads. Delays were experienced due to the long time taken by UWA to approve the signage plan and design. Minor issues were reported relating to a few signs missing and/or put in the wrong place. These are being rectified.

Since the signs have been put up, UWA have decided to standardise signs throughout the country and are proposing to replace all the signs recently installed around Bwindi / Mgahinga. This is no fault of IGCP/AWF, but represents a waste of resources within an already tight UWA budget.

Recommendations:

- R. 44 UWA should consider either leaving present signage around Bwindi & Mgahinga to save funds for other more important activities or phasing the new signage to change BINP/MGNP signs at end of the process.

Visitor Centres / Infrastructure

The Visitor centres and interpretation plans for Bwindi & Mgahinga NPs has been “pending” since 1992 when the Tourism Development Plan was written.

Construction of the Visitor Centre at Mgahinga has just begun – foundations and slab were being laid during our field visit. Delays are due to various design changes recommended by AWF and final approval from USAID.

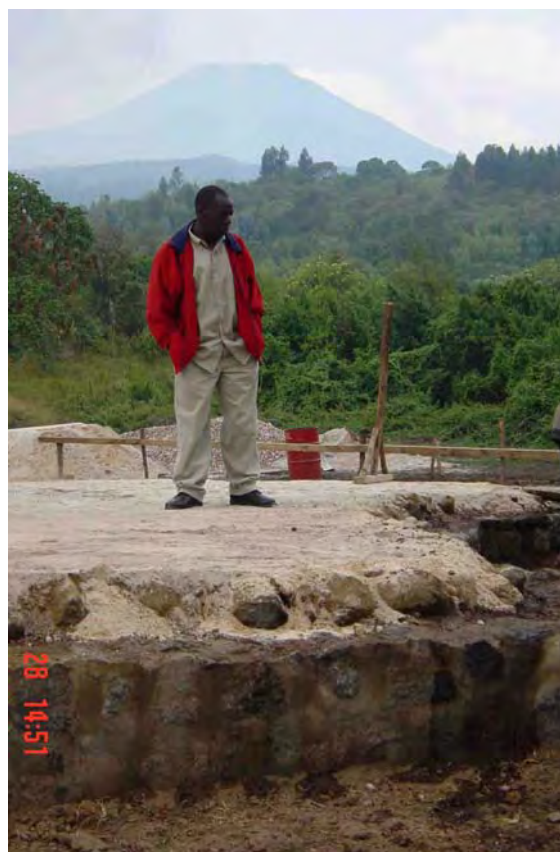
A design was also submitted to UWA upgrade the Bwindi Buhoma Gate and Visitor facilities and Mgahinga gate plan, but UWA approval delayed for so long that the project rightly decided to allocate the funds to other priorities. Other sources of funding for Buhoma are being explored.

The team did not evaluate the plans for either the visitor centre or the Gate Plan as this was not their area of competence! The contractors are confident that they will complete the construction by September 2005.

Figure 3. Architectural Drawing of Visitor Centre, Mgahinga



Figure 4. Mgahinga Visitor Centre: Progress so far



Interpretation has been designed and some artwork has been already initiated.

Nkuringo Trails Development

A new trail network has been developed at Nkuringo under this phase of the Project as one component of implementation of the Tourism Development Plan for that area.

Weather and time did not permit the team to visit the trails established but they are clearly a key component of being able to initiate the Gorilla Tracking in Nkuringo even before the Eco-Lodge is built. There is a basic campground there and some tourists are already coming, thus providing a source of revenue from spin-off activities for the local community.

Training

The Project has supported various training programmes for Park staff, and Park adjacent communities:

- Fire management and control;
- Guide training in Customer Care, Natural History, and Birding - among others.

Generally the training has been well received. Senior staff has been trained to also provide mentoring to junior staff, so that a more “on-the-job” training culture is now developing.

Much of the above training was given in back-to-back sessions in one intensive block. Senior staff felt that it was difficult for more junior staff to absorb all training in one go, without chance to practise newly acquired skills.

Various observations and suggestions were gathered from Park management and IGCP staff on training, which we have incorporated into our recommendations below.

An in-house review of training impacts has been conducted. Some concerns were raised as to the effectiveness and objectivity of such self-evaluation.

Recommendations:

- R. 47 Spread the training over a longer period in future to allow staff to assimilate;
- R. 48 Build capacity of senior staff to take on mentoring / in-house training role;
- R. 49 Consider contracting evaluation of the impacts of training to professional organisations rather than conducting "in-house".

6.5.2 UWA management decisions strengthened by monitoring and research (IR5.2).

The Institute for Tropical Forest Conservation (ITFC) has provided an impressive range of advice to UWA management over the past three years, based on solid research findings (see Annex 7, extracted from the PMP).

There exists a strong and positive relationship between ITFC and UWA / NFA. Regular presentations of findings are made to UWA Park management at local level and many findings and recommendations have been incorporated into PA management

The Research Plan is based largely on research needs defined in the General Management Plans for the National Parks, at an initial workshop carried out under this project and in the HCP monitoring plan.

Various levels of decision have been supported, for example:

- o **Key strategic decisions**, such as the number of gorilla permits that are compatible with conservation objectives;
- o **Resource allocation decisions** such as how to deal with exotic species within the Park;
- o **Day to day decisions** such as targeting of patrol efforts;

Again the indicator is somewhat simplistic: "number of decisions influenced". More important is the 'gravity' of each decision taken and the extent to which it has actually been influenced by findings of ITFC Research / UWA monitoring and the lobbying efforts of IGCP as a whole.

A revised format for assessing the impacts of research on decision-making was proposed by the team.

ITFC is clearly under-resourced to implement effectively the entire research agenda it had identified. This is in part due to the reduction in budget allocated in the USAID grant to IGCP for this project overall without a corresponding reduction in research targets.

It is also necessary for ITFC to priority KEY decisions that need to be targeted with adequate research findings to inform the more critical decisions that influence conservation.

R. 50 Consider contributing to core funding of ITFC to ensure long term support for monitoring and research on priority issues.

UWA Board Decision to increase the number of Gorilla Tracking Permits

A decision to increase permit numbers per habituated group from 6 to 8 tourists each was taken by the UWA board in July and announced during this evaluation (August 2005).

This decision goes against the advice of IGCP and what they believed to be a consensus of wider stakeholders, including UWA senior management. Given the central conservation target of the IGCP - the Mountain Gorilla - this is a substantial disappointment to the IGCP partners.

Two contrasting "position papers" were prepared:

- o A Briefing Note issued by IGCP⁵
- o A Briefing Note issued by UWA⁶.

Both briefing notes quote the same sources of information and research findings to argue in quite opposite directions regarding the future allocation of Gorilla Permits.

The IGCP Brief points to emerging evidence of negative impacts on gorilla health and behaviour, and recommends UWA should wait until research results have been analysed more conclusively before increasing gorilla permit numbers.

The scope of this evaluation does not allow a full analysis of the decision making process, or the virtues of the final decision made by UWA, but it is clear that in this case,

Either:

- o IGCP did not make their research findings recommendations available to the right target audiences in a convincing and timely manner.

Or:

- o UWA senior management have wrongly interpreted the ITFC research findings and corresponding IGCP recommendations
- o or have been persuaded in favour of the financial and political arguments for increasing the permits at the expense of the No.1 "ecotourism principle" outlined in the original Tourism Plan for BINP (see inside front cover of this report);

Concerted lobbying efforts were indeed made by IGCP partners to advise UWA senior management. But IGCP's influence over key decisions seems to have been pushed aside in favour of other interests.

IGCP and partners have invested an enormous amount of resources in setting up the Gorilla tracking over the years. They also have repeatedly expressed apparently valid concerns

⁵ "Gorilla Permit Numbers in Bwindi Impenetrable NP" - IGCP recommendations, April 2005.

⁶ "UWA increases gorilla tracking tourists from six to eight persons"- UWA Board decision, 22nd July 2005

about its *potential* to substantially increase the risk to Gorilla health and conservation. They have been undertaking long-term research to quantify the impacts of tourism on gorillas, but conclusive evidence of negative impacts has been slow to emerge or be published in compelling form for decision makers. This is an area where more IGCP investment can be made to speed up research procedures, and results dissemination.

It is critical to target the final decision makers (i.e. the UWA Board, rather than just the UWA senior management) in effective lobbying campaigns so that it is impossible for them to escape up to date scientific research findings.

Lobbying is a different skill from research, and to a large extent is not ITFC's mandate. We recommend a review of the way in which IGCP lobbies decision makers in Uganda (and perhaps the other countries in the Virunga Heartland) on key issues, with an objective of professionalizing its lobbying role.

Article 8(3) of the Wildlife statute states "*The board may appoint a technical committee to advise it on subjects relating to wildlife management*".

The GRASP Committee (chaired by UWA) was set up to design a National GRASP Action Plan for Uganda (as for each of the 13 range states). It does not specifically have a mandate to advise the board, nor did it provide advice to the Board about the impacts of increased tourism on Gorillas. One option to consider is to modify the mandate of the GRASP committee to take on a technical advisory role.

Recommended Lobbying targets:

In any future phase of funding, IGCP and other projects and conservation NGOs should:

R. 51 Speed up and consolidate research on the impacts of Gorilla-Tracking on Gorilla Health and conservation and present a stronger case for its recommendations;

R. 54 Lobby for 1) a technical committee to be established specifically to advise the UWA Board on key issues relating to Gorilla / Great Ape Conservation and related tourism and 2) to try to obtain seats on it.

R. 55 Prioritise research that will inform key forthcoming UWA management decisions.

Forthcoming decisions should be identified in advance and ranked in terms of how critical or "strategic", they are for conservation.

R. 57 Analyse UWA's decision-making process which resulted in an increase number of Gorilla Permits

in terms of:

- o the research findings that backed up the IGCP recommendations;
- o the lobbying approach that was used by IGCP and ITFC - who was actually targeted? - and were they the final decision makers?;
- o how AUTO (association of Ugandan Tour Operators) and/or others persuaded the board to increase permit numbers rather than take the strong IGCP recommendation to the contrary, at least while awaiting the results of more detailed research;
- o The reasons why the board reached the decision finally taken;

It is anticipated that a number of lessons can be learned from such a review.

R. 58 Further simplify key recommendations emerging from research and seek new channels to present the message to those actually making the final decision.

R. 59 Inform other stakeholders (such as tourism associations and the relevant media) of the position of IGCP to raise public awareness of critical conservation issues and win more popular support for IGCP's recommendations.

ITFC have reasonably argued that they made substantial efforts to provide the facts to UWA but that the recommendations made little difference given that UWA are under considerable pressures to increase Gorilla Permits:

- o >50% of UWA revenues come from the Gorilla Parks, most of it from permits;
- o Tour Operators have openly lobbied hard for more permits to increase own earnings.

Instead, ITFC argue that without additional core funding to UWA from the donors, with conditions attached that restrict the increase in gorilla permits, it will be very difficult for IGCP to persuade UWA of the merits of their recommendations.

R. 60. Lobby USAID and other donors to core-finance UWA, and support business models that expand and diversify tourism away from Gorillas and that take a more holistic approach to supporting UWA's institutional and financial sustainability.

Recommended future research priorities

R. 61 Research the effectiveness of UWA Policy towards problem animal control (a key source of conflict between PAAs and local communities)

R. 62 Research the socio-economic impacts of tourism development in Buhoma, e.g. HIV, prostitution resulting largely from increased security presence in the area, and specific impacts on the Batwa, who are being regularly called away from their fields to "perform" for tourist groups on the cultural walks.

R. 63 Continue research into impacts of tourism on gorillas. In particular research should investigate options that reduce impacts on gorillas but maintain valuable revenue.

R. 65 Research potential of linking the range of benefits provided by conservation bodies to location-specific indicators of conservation performance by particular communities.

6.6 Expanded economic opportunities for rural communities in the GVL (IR6)

An array of Conservation Business Ventures (CBVs) have been initiated and supported in this phase of the project. Time was limited to evaluate properly these initiatives in the field, either in terms of their viability as "businesses" or, more importantly, in terms of their actual impacts on conservation against the unstated assumption in the project design that CBVs can effectively improve conservation behaviours and reduce threats (see Section 5.1).

A comprehensive analysis of the impacts of 15 years of Integrated Conservation and Development Programmes has recently been completed (ITFC et al. 2005), in which a number

of highly qualified researchers invested substantial research effort to learn whether ICD interventions have or have not achieved their stated objectives. Their findings are summarised at the end of this section and represent a much more comprehensive analysis of the conservation impacts of different interventions.

Our analysis in this report is therefore far from exhaustive and provides an overview of progress against stated project implementation targets as the basis for some further discussion and recommendations.

Two indicators were provided for IR6 overall (which emulates SO7):

- Household income based on household assets
- Household income based on cash inflows

From the PMP there is some evidence of *increasing incomes* derived from support to existing / new CBVs. There are no indicators to assess the potential impacts that the CBVs have had on *conservation behaviours*.

Baseline data collected on household assets, but apparently NEMS agreed (verbally) that project leave this to national scale monitoring system (UBOS).

Baseline was also collected on household incomes (cash flow) and the project proposed conducting a repeat survey at end of project. This has not yet happened due to lack of funds and the short time frame in between surveys.

6.6.1 Opportunities for CBVs identified and developed (IR6.1)

Indicators for this IR include:

- Number of on-going CBVs operating on sound business principles
- Number of new enterprises established [and operational];
- Number of people employed by CBVs
- Value of support to social and economic activities
- Annual percentage increase in returns

While it is possible to count the *numbers* of on-going CBVs, it is more difficult for the team to assess the '*soundness*' of their business principles, in part because many are still in their infancy, and because they are currently still benefiting from substantial subsidies from the project. Only when they are actually forced to stand on their own two feet, without support, will their soundness become evident. Criteria for assessing *soundness* provided in the PMP (Rates of return on equity, periodic reports and audits, etc) were not reported on.

Data reported in the PMP on number of people 'employed' includes beekeepers, and handcrafts makers that have signed up membership to the project supported association. To a large extent these figures do not represent jobs newly created but are more a measure of the attractiveness of the new institutions for doing CBVs 'collectively'.

The only real "new" form of benefit seems to be from the mushroom growing, and perhaps the HuGo groups (who have benefited from micro-credit), although the majority of the latter groups were formed before the project began.

Nkuringo Eco-Lodge.

A three-year negotiation process with the communities of Nteko and Rubuguri parishes in Kisoro District has been supported by AWF. Progress so far: -

- Discussions with community to support formation of an appropriate community institution. Constitution drafted, registration process supported.
- Nkuringo Conservation & Development Foundation (NCDF) registered as a Private Company Limited by Guarantee in April 2004.
- Capacity building of the group and participatory selection process to identify areas in which NCDF wanted assistance - Community tourism and an "Ecolodge" identified;
- AWF have supported Group habituation - ongoing since 1997. Mock tourism started in April 2004, and "live" gorilla tracking with tourists began in Oct 2004.
- Negotiations with UWA to allocate 6 permits to NCDF and an MoU with UWA has been signed. Details of this mechanism are provided in Box 5.
- Nkuringo Tourism development plan has been prepared with AWF support.
- A consultant was hired to design trails in the park. NCDF contracted through UWA with funds from IGCP/AWF to build trails.
- A suitable site has been identified (5.3 acres), purchased, surveyed and demarcated using money saved from trail construction.
- AWF facilitated District Land Committee to sit.
- Expressions of Interest were invited (Jan '05) from potential investors (4 responded);
- Detailed business plans were then invited from 2 interested private sector partners;
- Selection process has just recently (early July '05) identified preferred candidate;

NCDF are expecting employment, a share of profits, markets for their food produce, opportunities for other activities such as craft making, community tourism and gorilla tracking - perhaps with community guides.

The negotiation of a final contract with a private sector partner that incorporates these community aspirations still lies ahead. Clearly this is a very critical and major step to ensure that they get a good deal.

Box 5. The NCDF-UWA Gorilla Permit Deal

UWA are committed to give the NCDF / Private Sector partnership exclusive rights to sell bed-space in a high quality eco-lodge for 6 Gorilla tracking permits. No other tour operator will have access to these permits. UWA will retain the revenues from the permit sales.

The Private sector partner will have exclusive access to the gorilla permits of the Nkuringo group up to 6 months in advance of the tracking date. A grant of up to \$250,000 is anticipated from PRIME/West through IGCP/AWF will contribute to the costs of building the lodge, and through a negotiated concession agreement, it is proposed that the Community will become the ultimate owners of the lodge, with a Private Sector partner contracted to manage the facility.

The NCDF/ Private Sector Partnership will negotiate a contract that includes a revenue sharing mechanism and other aspects of the package of benefits anticipated by NCDF.

The objective is to avoid the overly competitive and inefficient situation seen at Buhoma, where 4 up-market hotels and a number of low-end hostels have built 120 bed spaces for only 6 gorilla permits.

Next steps include:

- o Work out the details of the contract between NCDF and the preferred private sector partner for the construction, ownership, management and revenue sharing from the Eco-lodge.
- o Eco-lodge construction is to be completed within 1 year of signing a contract between NCDF and the private sector partner. Meanwhile the private sector partner will put up a temporary tented camp.

While a very interesting process of negotiation has been successfully concluded to date, and AWF support much appreciated by NCDF, the final 'deal' is far from clinched – IGCP / AWF will have to work hard to secure the level of benefits anticipated by the community.

Exclusive access to 6 gorilla permits is a very enticing carrot for a private sector partner but ultimately this partner will be watching his own bottom line (profitability). NCDF will have to be realistic in their expectations and avoid falling into the trap of over-optimistic community expectations that has ensnared Amajembere Iwachu (see below).

Other key benefits of the process have been:

- o Improved community participation in all conservation and development issues;
- o Greatly improved relations with UWA, who use NCDF as point of reference for all matters relating to the park.
- o Reduced occurrence of illegal activities in the Nkuringo sector.
- o Increased vigilance on illegal activities, and immediate reporting to UWA, including the successful thwarting of an attempted theft of an infant Gorilla.

NCDF as an umbrella organisation for the community has helped share ideas and coordinate other development activities, sensitise communities and now routinely handles conflicts relating to the park.

Recommendations:

R. 66 Deepen Project/Community analysis and understanding of the experiences of other community-private sector ecotourism partnerships.

R. 67 Support NCDF to hire competent lawyers to help them draft and negotiate the contract.

R. 68 Continue to seek other development partners that can support activities in Nkuringo to avoid over-dependence on AWF/IGCP support.

Nkuringo Buffer Zone management

A strip of land 12 kilometres long by 350 metres wide (approximately 420 hectares) was bought from local people with a grant through IGCP partnership to provide a buffer between the gorillas and the local community. The rationale was that the Nkuringo Group had been browsing regularly on cropland outside the park on this stretch of land.

Of this, a 200 metre wide strip has been added to the park and will be exclusively UWA property. Natural regeneration is being encouraged and the community, under contract with UWA, are removing exotic species.

The remaining 150 metres strip will be jointly owned and managed by UWA and the NCDF. IGCP/AWF have been conducting trials of planting *Artemisia* as a buffer crop – a medicinal plant in high demand for the production of anti-malarial drugs. There are high expectations within the community that *Artemisia* will prove to be a high value cash crop. East African Botanicals have recently bought the former pyrethrum processing factory nearby and plan to convert it to extraction of *Artemisia*, with support from a number of Donors.

According to a report by TechnoServe⁷ (October 2004) suggest that the returns from *Artemisia* growing can compete favourably with those from such traditional crops as bananas, maize and potatoes in some environments. This is a rather more modest claim than those heard circulating in the communities, and among project staff, which seem to portray *Artemisia* as a silver bullet or “wonder crop”. Its main advantage over other conventional crops is that it appears less prone to problem animal damage. Since it is still a trial, raising expectations with high estimated revenues is premature, as there are still many unknowns on yields, quality, processing and marketability of the raw leaf.

There are also discussions about supporting the establishment of a tea-processing factory to the south of the park, because the existing tea factory on the northern side is very far by road around the eastern end of the park.

According to Local Govt, the buffer zone as such is not yet benefiting local communities. A large part of the value of the project as perceived by local communities in Nkuringo has been the funds generated by selling their land, which has helped people start their own projects, such as house building with tin roofs

Recommendations on Buffer Zone

R. 69 Accelerate process of establishing alternative cash crops (e.g. Tea, *Artemisia*) that can be grown on the shared area, and keep community expectations of potential benefits realistic.

Amajambere Iwachu Community Campground

IGCP / AWF initially offered to raise funds to improve the existing campground at the Gateway to Mgahinga National Park and run it as a community based ecotourism venture.

This campground had been built over years with assistance from various quarters (including Peace Corps) on a piece of land belonging to 33 individuals who had bought it collectively some time ago and named their joint holding “Amajambere Iwachu”. The campground was of low standard, somewhat run down, and required substantial investment to attract new customers.

With the objective of assisting more than a handful of individuals, AWF/IGCP stimulated the establishment of the Mgahinga Community and Development Organisation (MCDO) as a

⁷ TechnoServe (2004) Production of *Artemisia annua* in Tanzania and Kenya and extraction of Artemisinin in Tanzania and/or Kenya. Report to USAID

Company limited by Guarantee, with a membership of about 2,400 individuals from the three parishes neighbouring Mgahinga NP, namely Gisozi, Gitendere and Rukongo parishes.

IGCP/AWF then helped MCDO to secure a grant of \$50,000 for supporting a community campground initiative of MCDO involving renovation, improved marketing and so on. The UNDP Grant proposal also involved bringing in a private sector partner to manage the campground with the carrot of the community offering the land plus the UNDP Grant to invest jointly in the project so as to secure its own "share" of revenues. It was expected to generate US\$20million per annum that would be split between the three parishes to support community projects.

Expressions of interest from private sector partners were invited, and bids prepared by short-listed candidates. "Red Chilli", a Kampala based low-budget tourism operation won the bid and prepared a co-management agreement for the development of the campground to sign with MCDO.

AWF/IGCP then suggested that "Amajambere Iwachu" donate the land to MCDO as a condition to receiving the grant. Initially this was agreed. At the last minute "Amajambere Iwachu" decided that they instead wanted to be compensated for the land.

After some negotiations, a government valuer was brought in and valued it at 30 million Ugandan Shillings which was considered by almost all concerned as a fair price, allowing for the fact that its strategic location increased its value over average agricultural land prices.

MCDO raised 2.4 million from membership contributions of US\$ 1,000 from each of 2,400 members across the three parishes, and AWF/IGCP offered to pay the balance to purchase the land and secure a land title for MCDO.

However, "Amajambere Iwachu" demanded US\$67 million, and AWF refused, and instead recommended that the UNDP grant be used for other purposes.

By this time Red Chilli had already started investing modest sums of its own in the campsite and had committed itself to advertising tours and developing new packages. They found themselves without any agreement with MCDO (as they did not actually own the land), or any grant to co-finance the investment.

Some senior elected members of MCDO and indeed UWA Park staff are also members of "Amajambere Iwachu" creating a complex web of interests.

To date little of the UNDP grant has been spent – on surveying the plot of land and obtaining a government valuer to calculate a value of the land, and drafting some renovation plans.

IGCP/AWF has continued to provide other forms of support to MCDO, such as training in beekeeping and bamboo cultivation.

Red Chilli have decided to go ahead and sign an agreement with "Amajambere Iwachu" alone, based on a rent of 3million UgShs per year, and will see how business develops. Meanwhile "Amajambere Iwachu" acknowledge that they do not have the capacity to manage the campground alone and that it will collapse without a private sector partner.

There will be fewer beneficiaries to divide more modest profits. A 3million return (the rent paid by Red Chilli) from a 30million estimated value of the property represents a 10% return on capital value, which is probably realistic.

The team concluded that this is a waiting game, and that finally “Amajambere Iwachu” will either accept a sensible offer from MCDO for their land, or go ahead with Red Chill on a much revised business model, or seeking alternative sources of funds.

Meanwhile a resolution has to be reached as to how to use the remaining funds from the UNDP Grant. Options suggested by MCDO members include various projects:

- Rainwater harvesting and tanks to overcome seasonal water shortages that require people to trek far into the Park to collect water from a Spring-line.
- Roads
- Beekeeping
- Office construction for MCDO
- Other developmental projects
- On-farm bamboo and tree planting.

Recommendations:

R. 70 Encourage “Amajambere Iwachu” to go ahead with Red Chilli on a revised business model.

If 33 households benefit, this is still a viable CBV that supports local livelihoods, albeit perhaps less deserving of a large external grant from UNDP. However, that should not put them off from trying to raise funds from other sources.

R. 71 Assess the potential of using the UNDP Grant to kick-start a business oriented rainwater-harvesting scheme, and/or tree nurseries, managed by MCDO;

Both of the above options have the potential to become self-financing, and have a clear conservation element - in reducing threats to the National Parks (see Table 1 - key threats).

MCDO could be contracted (on a ‘profit-making business’ principle) to build storage tanks from locally made bricks for individuals (who will have to pay for them) and who can then charge others in the community from water that they collect in their tanks. This could be linked into encouraging micro-finance institutions to offer their services to such projects.

Recommendations relating to Beekeeping, bamboo and tree planting options are made under specific sections relating to these CBVs.

Buhoma Community Rest Camp

The Buhoma Community Rest Camp Development Association (BCRCDA) has benefited from long-standing financial and technical support from a range of different conservation donors over the years, which helped establish it. In this phase, IGCP/AWF supported them to prepare a 5-year Business Development plan, rather than funding any more infrastructure or other direct costs. The plan proposed an investment of an additional \$150,000 to upgrade it from “budget” low-cost bandas to mid-range accommodation, which has for long been under-catered in Buhoma. Architectural plans were also prepared with project support.

The plan recommended that they should register as a private company (up until now they have been an NGO), link to donor agencies, and/or find a private sector partner to put in this

money. Some members were taken on a study tour to Kenya to see how similar community / private partnerships had worked in the tourism business. However, the Buhoma Community seem to have decided they would prefer to operate alone.

Having approached one or two Donors, they have retreated - they say because there are too many strings attached (e.g. having to provide 25% co-financing, and reformatting proposals).

They have not yet started to reinvest their own funds significantly, even though they are generating quite a healthy profit (20% over operating costs) and could well afford to plough it back into the upgrading of the existing bandas one by one. They could equally afford to take a loan from a bank, upgrade more facilities in one go, and pay back over time.

However the strong impression of the Evaluation team was that they are hoping that the donors will once again come and "give" them money for future developments without having to make any matching commitments.

Another concern is that one of the formerly "high-end" lodges has been bought out and the new owners have wisely decided to drop prices to mid-range, moving it away from competition from the two high end lodges, and thus now representing real competition for the Rest Camp.

A minor issue raised was that the Community would like to have a proper Leasehold document from the Mbarara University of Science & Technology (MUST) which own the land on which it is sited.

Recommendations

- R. 72 Facilitate the issuing of a leasehold title by MUST to Buhoma Community Rest Camp Development Association.
- R. 73 Invest more efforts to explain the Private sector / Community partnership concept to the Buhoma Community Association membership.
- R. 74 Revise format of Rest Camp accounts to show profits before grants are given to community projects and use to leverage bank credits, or donor co-financing.
- R. 75 Support Association to break down their upgrading plan into simple phases and perhaps make the overall investment plan less ambitious.

Buhoma Town

While not specifically an objective under this Grant, there is widespread consensus that Buhoma town is becoming an eyesore – unplanned shacks are springing up left and right to offer the same over-supply of mediocre quality craft merchandise which is inconsistent with the high quality tourism experience UWA are trying to sell in the Park. The contrast with the backdrop of natural forest – which is the ultimate reason why tourists visit Buhoma – is startling (see Figure 5).

Figure 5. Buhoma main street – unsightly infrastructure in a high-profile tourism destination.

There are a range of options – one of which is to prepare a development plan for the town, including some green landscaping, a well-designed craft market and refreshment hall with small stalls that accommodate a carefully selected range of products, ideally under some form of community ownership and management.

Detailed recommendations are provided in the District Tourism Plan (which was not reviewed as part of this evaluation due to lack of time).



R. 76 Assess the potential for giving Buhoma main street a much-needed face-lift.

Handcraft Development

UCOTA has been contracted under the project to provide support to handcraft product development, training and marketing.

12 small groups (including 1 Batwa group who are not traditionally handcraft makers) were grouped into two larger groups and have been trained. More than 200 women are members, while the men mostly make tea baskets or do wood carving.

Through training and product design improvements, the quality of products has improved.

It is not clear to many observers how well Uganda can compete economically on the international market for craft manufacturing – which is dominated by more industrial style production rather than cottage industry craft production.

Mushroom Growing

Mushroom growing is a straightforward intervention – women's groups have been taught how to grow mushrooms indoors, using Millet chaffs as the substrate. Capital investment is minimal, and yields are good; there is adequate demand on local markets, and the economics

look positive. Women report that they now have mushrooms all year round, whereas they used to have to go to the forest and would only get them seasonally. Groups have some difficulty getting spores to initiate the crop, but once trained, they are quite capable of passing on their skills to other groups. Some women take them to the markets in town. The ability of the local market to absorb more and more mushrooms is not known. Sun drying and storage is an option when surpluses are produced.

It is not clear how much impact mushroom growing has on the forest, but one would assume it would be minimal. However it was not explicitly included in the Resource Access agreements between Communities and Park Authorities, so harvesting remains technically illegal and could have been a source of conflict, if not threat to the forest.

Beekeeping

Beekeeping and honey harvesting are old traditions of the region. Honey harvesting from the wild uses smoke (and therefore fire) and was often the cause of accidental fires in the forest. Most of the honey produced was poorly processed, tainted with smoke and used for the local brewing industry.

The project has encouraged the formation of Bwindi Beekeeping Development Association (BBDA), which registered in January 2004, and is now promoting both modern beekeeping, and processing for higher quality markets. It recently helped BBDA set up a honey refinery in March 2005, too late to benefit from the February harvest season, so it remains untested to determine how it will help the BBDA members.

The flat rate prices proposed for buying in honey from members may not persuade them to come to the refinery, since the brewers are often ready to pay more, when honey is scarce. It is anticipated that the opportunity to sell in larger quantities to the Refinery will be a valued attraction.

IGCP brought in expertise on improving the quality of production and marketing during the evaluation (early August 2005) and discussions with the consultant highlighted the need to get private sector partners to assist with marketing to make the business truly viable. This seems to be on track and it remains to be seen how BBDA evolves.

Human Gorilla Conflict Resolution (HuGo)

Some gorillas come out of the park to browse on crops in community farmland, especially the unhabituated groups. Historically this has been a major source of conflict between UWA and the community, who saw wild animals as their 'enemies'.

HuGo is an intervention initiated by IGCP/AWF since 1997-8 between the park and local communities in which community members have been trained in gorilla behaviour and how to chase them back into the park - often not an easy task. Community members are not paid in cash, but volunteers are kitted up with gumboots, raincoats etc, and are provided with free "posho and beans" by UWA after engaging in a gorilla chasing exercise.

As a result of this intervention, community members now know to report Gorillas moving out of the park to the HuGo group who are empowered to respond immediately without waiting a long time for UWA park staff to arrive.

The assumption has often been made by many conservation organisations that communities have a vested interest in protecting their crops from wild animals and would therefore provide free labour to do so, without expecting any compensation from the Protected Area Authorities (PAAs). However, to a large extent communities instead perceive this "empowerment" as PAAs simply transferring some of the cost of conservation to them (see also Namara and Nsabagasani, 2003).

After some years, many HuGo members began complaining that they were not sufficiently rewarded for their efforts on behalf of both conservation and their community. In response, AWF/IGCP has recently begun providing micro-grants exclusively to HuGo members (approx. \$230 equivalent each) to invest in micro-enterprises of their choice, typically livestock.

Some UWA staffs expressed the need to provide more rewards – and to expand the mandate beyond the responsibility to control gorilla excursions out of the forest to other problem animals such as elephant, buffalo and "vermin"⁸. The review team wholeheartedly supports this suggestion and understand that it has already been written into the new funding proposal submitted by AWF/IGCP to USAID (via PRIME/West).

NCDF want to address the issue of vermin and problem animals with more permanent solutions. In April 2005 they began trialling Mauritius Thorn (*Caesalpinia decapetala*) as a vegetative barrier, which once established is impenetrable to all but the largest (elephant) and smallest mammals (e.g. porcupine and other rodents) on a 1.2km stretch of park boundary. It is still early to determine whether it is effective, but according to research done by ITFC it is a manageable solution to vermin and problem animals.

The HuGo groups have been one of the most successful and replicable interventions of the Project, with successes going well beyond its mandate. That said, it appears to rely largely on external support (the micro-grants from AWF/IGCP) to sustain community interest and support. Given their conservation impacts, securing sustainable sources of financing for HuGo groups should be a high priority for a more targeted approach to UWA revenue sharing.

Vermin guards have been identified from the community – and are pending training. They seem to be a different set of people from the HuGo groups, in different villages, and based on a different institutional set-up. The evaluation team see this to be replication of effort.

Recommendations

- R. 77 Provide more rewards to HuGo Groups that effectively report illegal activities and where indicators from RBM data show reducing levels of threat within the park.
- R. 79 Conduct more participatory research and development work into finding ways in which the HuGo groups can expand their mandates to include a wider range of conservation interventions (such as reporting illegal activities, and other problem animals such as elephant, buffalo and "vermin") in return for support to group members to improve local livelihoods.
- R. 80 Develop mechanisms to ensure the sustainability of finance for the HuGo groups.

⁸ Vermin are defined by UWA Board as Baboons, Bushpigs and Vervet Monkeys.

Revenue Sharing from Gorilla Permits.

IGCP / AWF have successfully lobbied UWA to share part of all Gorilla Permits with local communities - \$9 per permit is deducted. UWA is still developing the mechanism for disbursement but initial discussions with UWA indicate that \$5 goes to the MBI FCT and the remaining \$4 into UWA's national Revenue Sharing Basket. IGCP are looking for an opportunity to increase the share of Gorilla revenues that goes to local communities.

IGCP/AWF recognise that UWA are not in a position to accept a reduction from current revenues from Gorilla Permits, but have set their targets on increasing this share next time that UWA are reviewing their fee rates (see Section 6.5.2 for more recommendations on 'influencing UWA Decision making processes').

A more comprehensive revenue sharing agreement is being worked out in Nkuringo (see Section 6.6 for more details).

Recommendation:

- R. 81 Summarise the process of achieving the issuance of permits to community groups in a case study / briefing note to disseminate lessons learned to other IGCP partners.
- R. 82 Lobby UWA to package any future increase in prices of Gorilla tracking permits with an improved revenue sharing arrangement with frontline community institutions such as HuGo groups, which clearly contribute to conservation.

Broader Revenue Sharing Policy

The UWA Revenue Sharing policy has been identified as a target for lobbying for changes throughout the IGCP lifetime, and indeed by many other old and new projects (CARE – DTC, and now CARE – REPA Projects and the USAID PRIME/West Programme). But progress on achieving meaningful and lasting impacts have been disappointingly slow. The Evaluation report (Feb 1999) of the last phase of USAID grant to IGCP likewise was disappointed with progress on efforts to achieve revenue sharing with frontline communities that both improves their wellbeing and is more clearly supportive of conservation, rather than just "improved attitudes towards conservation".

This evaluation team argue that it is reasonable and necessary to minimise and mitigate the costs of conservation as imposed by "Problem Animals" and "Vermin" on the Frontline Communities.

However, while it is written into the Wildlife Statute that 20% of gate fees be shared with local governments, there is no obvious justification why park revenues should *automatically* be shared with local communities (further back from the frontline) that are not sharing the costs of conservation.

The original logic may have been to give the general community a sense of "equity" in the national parks, or as a means to entice communities to reduce their threats to the Parks. Whatever the reasons, the ongoing review of the wildlife policy and legal framework provides an opportunity to revisit the rationale for the Revenue Sharing Policy and to improve its efficiency and effectiveness.

Using conservation-generated funds for more general development objectives may simply be digging a hole in UWA revenues that must still be filled by donor funds, or repayment of development loans (such as PAMSU) by the people of Uganda.

The illogical nature of the current Revenue Sharing Policy is illustrated as follows:

- o Funds from UWA Revenue Sharing Scheme support a secondary school at a sub-county headquarters to which few frontline community members send their children;
- o The IGCP/AWF project provides small grants to the HuGo groups that are clearly addressing a key conservation issue; N.B. UWA do also provide some support but insufficient to make the groups sustainable.

Sustainability of the HuGo groups would most logically lie in obtaining full support from UWA's Revenue Sharing mechanism, rather than from external, temporal and therefore non-guaranteed partner funding.

The Mgahinga Bwindi Impenetrable Forest Conservation Trust (MBI FCT) is the existing long-term institution that is mandated to fund conservation initiatives in frontline communities around Bwindi & Mgahinga NPs. It is currently using funds from its own endowment but it could equally act as a channel for managing and distributing UWA Revenue Sharing funds and/or more Donor funds. MBI FCT expressed a desire to see more clarity and specialisation in the roles of different conservation agencies on the ground. They would like donor-funded projects to further strengthen the role of MBI FCT as 'the' community grant management mechanism in the region, while focussing their own project activities at areas where they have special competence such as IGCP managing human-wildlife relationships.

However, MBI FCT also needs to find better ways of targeting grants to real cost-bearers (and threateners). A recent review¹⁰ of the MBI FCT grant making priorities reached the conclusion that it should stop funding infrastructural developments that should be the responsibility of other government agencies (such as roads and schools).

It is timely for all project partners to work closely with UWA to review thoroughly the premise for, and impacts of the revenue sharing policy both on UWA and on the local communities, and to help UWA design and implement more efficient mechanisms for achieving both the PR and the community conservation objectives.

Recommendation

R. 84 Support/contribute to a review of the UWA Revenue-Sharing policy that shifts funding priorities towards those that have a direct and positive conservation linkage (such as supporting HuGo / Problem Animal Control initiatives).

R. 85 Make more use of existing grant-making mechanisms such as MBIFCT to channel support to initiatives in local communities.

¹⁰ Kamugisha and Kazoora, 2003.

ICD Review

A key undertaking under this Project phase was the review of the Integrated Conservation and Development programming. It aimed to answer the question “has 15 years of ICD programming succeeded in increasing support for conservation among local communities”. It was jointly financed and implemented by a range of donors and projects including IGCP.

It provides a valuable insight into how to target support in the future to maximise conservation impact with limited funds. Findings from a comprehensive research programme are summarised in the box below and since they are key to other recommendations made in this report, are quoted verbatim in Box 6.

General Recommendations relating to CBVs

R. 86 Strengthen efforts to identify CBVs that have clear impacts on reducing key threats, and are directly accessible to the key threateners.

This will not be easy but is critical if the poorest are not going to become marginalised by conservation efforts.

R. 88 Focus NGO efforts more on group formation, skills training, linking CBVs to Private Sector Partners, capacity building in governance, managerial, accountability and negotiation skills

... so that they are more capable of running their organisation and their CBV equitably and sustainably (i.e. profitably!). NGOs have proven to be unable to make much impact on market share for products such as honey, crafts, and novel crops. Private sector have more vested interest to make CBVs work.

R. 89 Strengthen sustainable business partnerships between CBV Associations (e.g. NCDF, Bwindi Beekeeping Development Association, Craft Groups, etc) and Private Sector to focus on product development, advertising, increasing access to markets, and boosting sales.

R. 92 Identify and promote opportunities to transfer CBV Technology Packages such as bamboo planting and mushroom growing to other programs (e.g. Africa2000Net, NAADs, Africare etc) and local extension services.

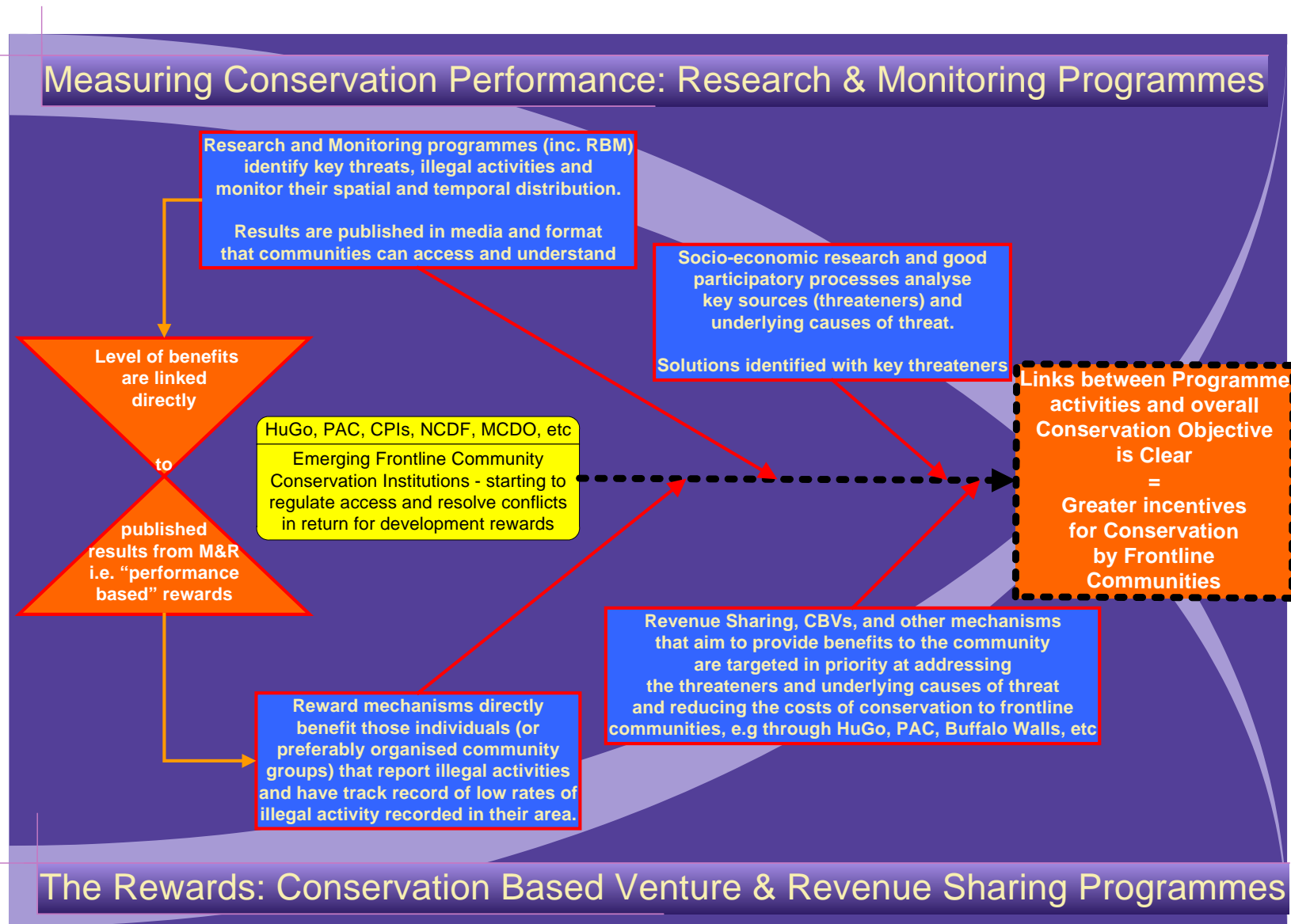
Box 6. Extract from ICD Review

- Community attitudes to the parks have improved greatly since gazettement ten years ago, and ICD strategies have played an important role in this.
- The poorest people generally have less positive attitudes, but when they receive park-related benefits, it leads to a higher level of attitude change than for richer people.
- **Problem animal damage to crops has a negative impact on attitudes**, and while this damage seems to affect different wealth categories equally, the **negative impact on attitudes of the poor is much greater**.
- **Community cooperation with park authorities has also improved**, particularly **willingness to assist in fighting fires and to a lesser extent reporting of illegal activities**, and ICD strategies have again played an important role in this improvement.
- While both community members and park staff state that illegal resource extraction has decreased, there is **little evidence to support this from data on illegal activities within the parks in recent years**, nor is there evidence that areas which have received particularly intensive investment in ICD (such as multiple use zones) experience lower levels of illegal activities.
- **Law enforcement is by far the most frequently cited reason as to why illegal activities would be reduced**, although ICD strategies are sometimes also cited. It is the poorest people who are thought to be most involved in illegal activities, generally for subsistence purposes.
- The exact nature of the impact on attitudes and cooperation with park authorities (in how they reach different wealth categories, the scale and magnitude of the effect, and how they affect different aspects of attitudes and cooperation) depends on the individual strategy. For example multiple use has been particularly effective in increasing cooperation in fire control, while **agricultural interventions** and conservation trust fund have had **most significant impact on attitudes** overall.
- We conclude that ICD strategies have, **through their impact on community support for conservation, reduced some of the threats to biodiversity** in Mgahinga and Bwindi, in particular **fires and politically driven threats** (e.g. degazettement, roads).
- There is also evidence that ICD strategies have made the protected area authority's work easier, through improved community cooperation, and have at least the potential to reduce the cost of law enforcement. PA linked benefits have been particularly important in achieving this. The long-term sustainability of these links is likely to be important in sustaining the positive conservation impact of ICD.
- However, ICD strategies do not seem to have had a major impact in reducing illegal forest resource exploitation. This could be due to a number of factors. Firstly, **illegal activities are mainly conducted by poorer people, but many of the strategies have not reached the lowest wealth categories very effectively**. ICD has **not been effective in ensuring explicit links between rights/benefits and responsibilities at community level, particularly with regards to preventing illegal activities**.
- **Crop damage by problem animals remains a serious challenge, with a strong negative impact on attitudes**, which may have diluted the potential impact of ICD.
- Considerable time and resources have been invested in ICD in SW Uganda, which should have been enough to achieve significant changes in people's attitudes to the park. However, the type and magnitude of development changes which would significantly reduce local people's direct need for forest resources might take much longer.
- Lastly, effective law enforcement is needed to back up ICD strategies in reducing illegal activities, and despite recent changes in attitudes and practices remains an important part of the ICD equation.

Extract from Executive Summary of ICD report (Namara et al, 2005, draft).

The findings of the ICD Review point very strongly at the need to develop much more integrated mechanisms for monitoring threats and illegal activities and targeting benefits and development opportunities directly at those who either prove that they are helping to reduce these threats, or at activities that help the threateners to take up other forms of economic activities. This is illustrated in the diagram below.

Figure 6. Illustration of stronger links between development rewards and conservation incentives



6.6.2 GVL products and services effectively linked to regional and international markets

Indicators for this IR were:

- o Volume of sales of GVL products and services;
- o Value of strategic agreements;
- o Value of resources raised;

Volume of sales of GVL products and services

Main source of revenue increase reported against indicators is from Buhoma Community Rest Camp, due to an increase in Charges that were prompted by IGCP/AWF recommendations in the business plan, and from the nature walk, that was also supported through the Project.

Very limited evidence of project yet enhancing linkages of tourism products to international markets. Most obviously this would be through promotion of non-gorilla tourism opportunities in Bwindi and Mgahinga given the existing saturation and over-dependence on gorilla-based tourism. Examples highlighted during the evaluation were the cultural walks, bird watching, hiking in Mgahinga and Golden Monkey viewing.

Marketing of craft materials overseas by UCOTA has resulted in some increase in sales, on an ad-hoc basis, but from a very small baseline. To break into any meaningful market, a much larger volume of standardised products would probably be required to satisfy regular orders.

Again, linkages with private sector craft traders may be the most effective means of achieving any substantial increase in volume of sales.

Value of Resources Raised

Funds have been raised from 3rd party sources to support new CBVs:

- \$50,000 - UNDP-GEF Small Grants for Amajembere Community Campground.
- \$150,000 - WB under Development Marketplace for enterprise development in Nkuringo on the Southern Side of BINP.

Value of Strategic Arrangements

The strategic agreements signed include: UWA-NCDF agreement on gorilla permits where NCDF will generate an estimated \$50,000 per year as income and the second one is Red Chillies Hideaway Ltd -MCDO where MCDO will initially receive about \$3,000 per year. Discussions are underway between NCDF and a private sector operator regarding Nkuringo Ecolodge. If negotiations are successful, the private will invest about S300,000 in the lodge.

Recommendations

- R. 93 Invest more efforts in identifying and promoting a more diverse range of tourism products.
- R. 94 Make linkages with Private Sector to assess and test the potential for boosting sales of craft materials, within the region or internationally.

7 Impact – Purpose and Goal Level

Intermediate results have been implemented and most indicators are positive – at or above target levels. Details of the effectiveness of specific intermediate results (IRs) are given in the main text of Section 6.

This section now looks at the measurable achievements of goal and purpose level objectives against the indicators.

7.1 Review of Purpose level indicators.

Indicators at purpose level were as follows:

- a. Reduction on key threats;
- b. Reduction in illegal activities;
- c. Positive threats reduction analysis.

N.B. There is considerable overlap between these indicators – for example illegal activities such as “hunting/poaching” and “timber harvesting” are identified as some of the key threats. The effectiveness of achieving these targets is assessed below.

7.1.1 Reduction on key threats - Indicator (a)

The proposed method for evaluation was to analyse the threats identified in the HCP at the Review meeting (held on 2nd August 2005 in Kabale, and attended by the Evaluation Team Leader). This is essentially a subjective assessment by project partners.

Based on the updated analysis of key threats coming out of the HCP review (August 2005), there is limited success at addressing, or reducing key threats.

We have also prepared an analysis based on the Team Leaders review of key threats and the effectiveness at reducing them as observed during the fieldwork.

7.1.2 Reduction in illegal activities - Indicator (b)

Illegal activities in each of the National Parks are monitored through the Ranger Based Monitoring system developed over the years by UWA with support from GTZ and in BMCA, IGCP. This system has taken a long while to become effective for the following reasons:

- o Frequent transfer of staff trained in Ranger Based Monitoring and data entry and analysis
- o Insufficient staffing of Mgahinga, with Monitoring & Research supervised by M&R Warden from Bwindi.
- o Problems with the data analysis component of 'MI ST' (Management Information System) into which RBM data is entered.

However, in spite of these difficulties, UWA staff have been collecting and entering data both into MI ST and directly into Excel and ArcView GIS to calculate results and visualise.

Under IR5.2, the project has a stated objective to provide support to UWA/ITFC for joint monitoring activities, and IGCP staff have indeed been trying to assist Park Staff analyse and interpret the RBM data.

Park Management typically looks at the "snapshot" of results for one time period and has been looking to see where there are hotspots of illegal activities and/or gaps in the ranger patrol coverage in the Park.

However it does not seem that the trends in key indicators have been monitored carefully and / or on a regular basis. This may be because time series have only recently become available. A sample prepared by the consultants is provided in Figure 8 on the following pages.

For each illegal activity, the target were:

- o 10% reduction in Yr 1 (2003), }
- o 20% in Yr2 (2004), } over baseline (2002) figures.
- o 25% reduction in Yr3 (2005) }

From this time series, targets for reductions in illegal activities have not obviously been met. The most alarming data is that relating to encounter rates of snares, which has doubled for Mgahinga, and increased fourfold in Bwindi, over and above the 2002 baseline.

Extensive discussions with a range of project partners raised various issues about the RBM data in general and snares in particular, and various suggestions were put forward for the lack of "reduction" particularly in the number of snares:

- o "Increased effort to patrol areas not previously patrolled in early years (i.e. away from main pathways and into the centre of the park) has inevitably uncovered new signs of illegal activity. This should not be interpreted as an increase in illegal activity, but an increase in patrol effort and success."
- o "Double counting might be occurring where two patrol teams do joint patrols and both record data."
- o "Rangers may not be consistently noticing signs of illegal activity on the ground, or recording the data. More training and experience is picking up more illegal activity."
- o "The occurrence of illegal activities may be highly seasonal and variable depending on other pressures outside the park. It may also not be uniform but concentrated in some areas"

For each of the suggestions put forward, there were those who argued both for, and against their credibility. Those actually responsible for Ranger-based monitoring seemed to accept that the number of snares has indeed increased, based on visual observation, particularly in those areas that are not frequented by tourists or in the multiple resource use zones.

Rather than taking these observations purely as criticism, it should be noted that the RBM and other monitoring and research activities in Bwindi and Mgahinga are far more advanced than for a great many other protected areas, but the system is still in a phase of refinement.

The Evaluation Team's main purpose of raising the following issues should therefore be seen more as an opportunity to learn from experiences and improve adaptive management systems:

- o Management had in some cases not previously noticed the trends (though BI NP Senior staff say they have noticed them and have been debating the possible causes).
- o Charts such as those shown in Figure 8 are not apparently available to Park Management, even though they are quick and easy to prepare.
- o If not accurately reflecting actual threats and/or illegal activities, then these indicators are a dangerous barometer of project success, creating a rod for UWA's own back.
- o The reasons why these indicators are increasing needs to be researched urgently, to determine whether it is a result of poor RBM method, or actually reflecting real trends.

Recommendations:

R. 95 ITFC/IGCP Monitoring Officer should work closely with UWA to assess the consistency of RBM data collection methods and the accuracy of the results obtained. Data should be disaggregated to reflect trends in different sectors of the forest

(n.b. this has already been discussed with ITFC and UWA Park management, and agreed in principle);

It is likely that poachers are some of the poorest and most marginalised members of the community and require specific approaches to divert their attentions to new CBVs.

R. 96 Project interventions should make all efforts to identify the actual "threateners", and not just the generic "threats", and develop strategies for addressing this particular socio-economic group.

7.1.3 Positive threats reduction analysis - Indicator (c)

The method proposed for monitoring this indicator is essentially the same as for Purpose Indicator (a) - therefore refer to section 7.1.1 for discussion.

7.2 Review of Goal level indicators.

The rationale for selecting the Goal level indicators, as agreed with USAID at the time, was not to try to look for specific indicators related to project activities, but rather wider indicators of the conservation status of forests in the project area. It was understood that these would be unlikely to change much in three years, and that if they showed no obvious decline that would be good enough for the purposes of monitoring the success of this project. These indicators would represent part of a longer-term process of monitoring.

7.2.1 Natural Forest Cover - Goal Indicator (A)

The project made an early decision to focus on in-park forest cover rather than over the whole landscape.

Specific discussions about the method for monitoring forest cover were held with the Desk Officer at the USAID mission at the time, who favoured aerial photography over satellite image analysis. An additional special grant of \$50,000 was allocated to AWF to pay for aerial surveys and photo ortho-rectification and interpretation. PhotoMap (Kenya) were selected (by USAID) and given the contract. Implementation of the aerial survey was much delayed for a number of reasons including cloud cover and obtaining the necessary flight permissions.

Only in the past few weeks have the final copies of the photographs been received by ITFC, who are not entirely satisfied with the quality of the resulting photography, making the ortho-rectification process slow and difficult. As a result no possibility of a repeat survey using similar methods is possible during this project phase.

Signs of woodcutting for poles, timber and firewood are rarely found far into the park. ITFC had initiated a "field assessment of park edge", running transects into the Park from the external boundary at regular intervals to count trees cut per km of edge, along with collection of data on edge effects. A baseline was set in 2002, using an extensive study funded by WCS, but has not been repeated due to funding cuts early in the programme (see IR5.2 for more details). This survey should be repeated at the earliest opportunity to provide data on trends. Estimated costs are only \$5,000.

Another source of data to assess Project impact is Satellite Imagery (LandSat 7TM). WCS and the University of Maryland have run a comparative analysis of forest loss over the 15 years up to 2000 using unsupervised classification into simple "forest / non-forest" classes, and could repeat this analysis now for approximately \$5,000. This analysis has been budgeted for in the WCS proposal for monitoring the PRIME/West Project area and will pick up changes in forest cover both within and outside the Protected Areas.

Ideally the impact of any future project interventions to protect the small patches of remaining natural forest and stimulate more woodlots on private farmland would also be monitored periodically, but given the very small size of most forest remnants, and woodlots, it may be impossible to pick them up with low resolution satellite imagery.

Some imagery has been processed by BEGO (Building Environment for Gorillas) – who will continue to partner with IGCP. There may be opportunities to use this data for a further time-series analysis of trends.

PRIME/West is also investing in high-resolution imagery (IKONOS) which may become a valuable monitoring tool for micro-level land use changes.

Another cheaper option may be comparison of repeated fixed-point digital photography across the valleys at a number of clearly defined permanent sample points and standard methods. Given the extremely steep nature of the terrain, a photograph taken across a valley from the ground may be no less distorted than a satellite image or aerial photograph!

Recommendations

- R. 97 Repeat survey of tree & pole cutting as soon as possible to provide a repeat measurement against which to monitor performance of this project at purpose level, and to serve as baseline for future activities if funded under PRIME/West.
- R. 99 Request WCS to repeat Satellite image analysis at the earliest opportunity to provide a baseline for PRIME/West and an end-of-project assessment for the USAID funded IGCP/AWF project under review, and link to BEGO/IGCP support.

R. 100 Assess the potential for monitoring remnant natural forest patches and woodlots outside the park using LandSat7 TM, IKONOS or fixed-point photography.

7.2.2 Water Quality - Goal Indicator (B)

This indicator has been monitored on a quarterly basis in selected watercourses within the park and shows no significant change over the project period, indicating that there has not been any major change in impacts on the forest.

It is difficult to assess the effectiveness of proposed buffer zone management interventions on the surrounding landscape at goal level since water quality measurements are currently not taken outside the park. Extending the water monitoring downstream from the parks, and into the agricultural landscape would help in monitoring impacts of buffer zone management particularly against targets and goals set in the Heartland Conservation Plan, particularly:

- o Maintenance of "Hydrological Functions – springs and watersheds".
- o Reduction of "Nutrient overload (run-off)".

Recommendations

R. 101 Extend monitoring of water quality to sample points downstream from the Park perimeter to determine trends in impacts of land use changes outside the park.

7.2.3 Mountain Gorilla populations in Bwindi and the Virungas - Goal Indicator (C)

Gorilla Surveys carried out in 1997 and then repeated in 2002 show a growth of 7% over the 5-year period. These surveys also provide a baseline measure of signs of illegal activities.

The project have convincingly argued that it is generally not appropriate to resurvey after only 3 years to satisfy monitoring requirements of a short term (3 year) project such as this, but that they may consider re-surveying Bwindi in 2006 for logistical reasons (available resources) and to provide a better baseline for PRIME/West monitoring. This would provide an opportunity to re-measure illegal activities and perhaps large mammal populations more rigorously than is possible by ranger based monitoring.

No reported unnatural mortalities of Gorillas have occurred during the period of the project so it is reasonable to project previous trends and assume that the population has continued to grow.

The repeat survey will provide evidence of Gorilla population trends. However, it will be difficult to attribute a positive trend to the effectiveness of this project. IGCP/AWF is just one of a wide range of institutions and projects implementing a broad suite of conservation measures. Of course with Mountain Gorillas we cannot afford to have a control group with no conservation interventions against which to compare project impacts.

7.2.4 Abundance of Large Mammals – Goal Indicator (D)

This indicator is measured by encounter rates of Mammals during Ranger Based Monitoring, and as recorded along the Ruhija-Ndego Road. Bulldozing and grading of this road during the project interrupted monitoring along it. Data is only available from the RBM and trends over the project period are shown in Figure 7.

Targets were set at maintaining a stable population. Generally RBM appears to indicate increasing populations, and therefore beyond targets, with a few exceptions:

- o Buffalo and Elephant numbers have reduced in Mgahinga. This may be explained in part by their mobility back and forth to Rwanda, but it should also be noted that there are reports of buffalo being killed when they venture outside the park. The buffalo wall is known to be inadequate (broken and/or not high enough) in some places.
- o Bushpig populations in Bwindi have fallen slightly, though the change may not be significant. Bushpigs are gazetted as vermin, and may be killed in fields outside PAs.
- o Golden monkey population trends are erratic, and have been explained to be the result of a new research initiative: rangers accompanied the researchers on a regular basis during 2003, and then a recent attempt to habituate one group in 2005.

Overall, the trends are erratic and various critics (including the evaluation team) doubt the statistical accuracy of RBM results.

Taken at face-value the positive increase in encounters of large mammal populations suggests that the apparent increase in snare encounter rates identified at the Purpose level indicators, either does not reflect an actual increase in snares (as argued by some UWA staff), or that they have not yet had a noticeable impact on the Goal level indicators (wildlife populations).

More research to understand the spatial distribution of large mammals and snares, and the underlying objectives of poachers needs to be conducted as a matter of priority.

Bushpig, Baboons and Vervet Monkeys have been classified as "vermin" by UWA Board, which in theory means that farmers are entitled to kill them outside the National Park. However discussions with HuGo Groups and UWA management clearly indicate that snares even on farm are not tolerated, and are considered illegal. This has been a source of controversy between communities and the Park Authorities and needs clarification.

Generally the issue of "vermin" and the conflicts that crop-raiding causes between PAAs and local communities has not been clearly addressed by the Project, or the monitoring system.

Recommendations:

- R. 102 Verify the accuracy of RBM estimates of large mammal populations and either work to improve methods to increase statistical validity or explore more objective monitoring methods.
- R. 103 Monitor populations and spatial distribution of "vermin" species – bushpig and baboon;
- R. 104 Develop appropriate mechanisms to regulate their populations on the forest edge to manageable levels for local farmers.
- R. 105 Develop new strategies that address the complex of poaching and "vermin control" and identify longer-term solutions to crop-raiding such as Mauritius thorn hedges, or other suitable barriers.

7.2.5 Populations of Grauer's Rush Warbler – Goal Indicator (E)

This indicator is measured by annual counts in December of each year. The target set was to maintain or increase populations. Three counts have been completed during the project

lifespan (Dec '02, Dec '03 and Dec '04) and the populations have increased in both Bwindi, and Echuya over this period. There is some speculation that this may reflect their movement between swamps and that the increase may instead reflect the degradation of swamps outside the Protected Areas that is pushing the Warbler populations to shift to PAs.

The next counts in Bwindi / Echuya are scheduled for December '05 and will not be completed before the end of this phase of the project. For reasons of avoiding seasonal effects, it is not appropriate to do the survey earlier just to meet end-of-project monitoring needs.

Recommendation:

R. 106 Monitoring of Grauer's Rush Warbler should be extended to some swamps outside the PAs (such as Nyamuro Swamp on the edge of Bwindi) to determine whether there are indeed corresponding drops in warbler populations there.

7.2.6 Contribution to USAID Strategic Objective 7

The overall USAID SO7 objective of "expanded sustainable opportunities for rural sector Growth" towards which this project contributes is not obvious in the Goal and Purpose level indicators - this is largely due to the fact that the project was designed to contribute to SO2 - an environmental objective which was later scrapped by USAID (see Section 5.1 on Project Design for detailed explanation).

However, it was still implicit in the project design that it intends to achieve the higher USAID SO7 objective, largely through improving ecotourism and spin-off industries (crafts etc.) via a range of activities to better manage the park and its sustainable tourism potential.

There are no Purpose or Goal level indicators for this objective - instead expansion of economic opportunities is envisaged in IR6 and to some extent IR5. The indicators of contribution to SO7 are therefore best read from the Indicators of IR6 success.

Figure 7. Trends in abundance of large mammals (2002-2005)

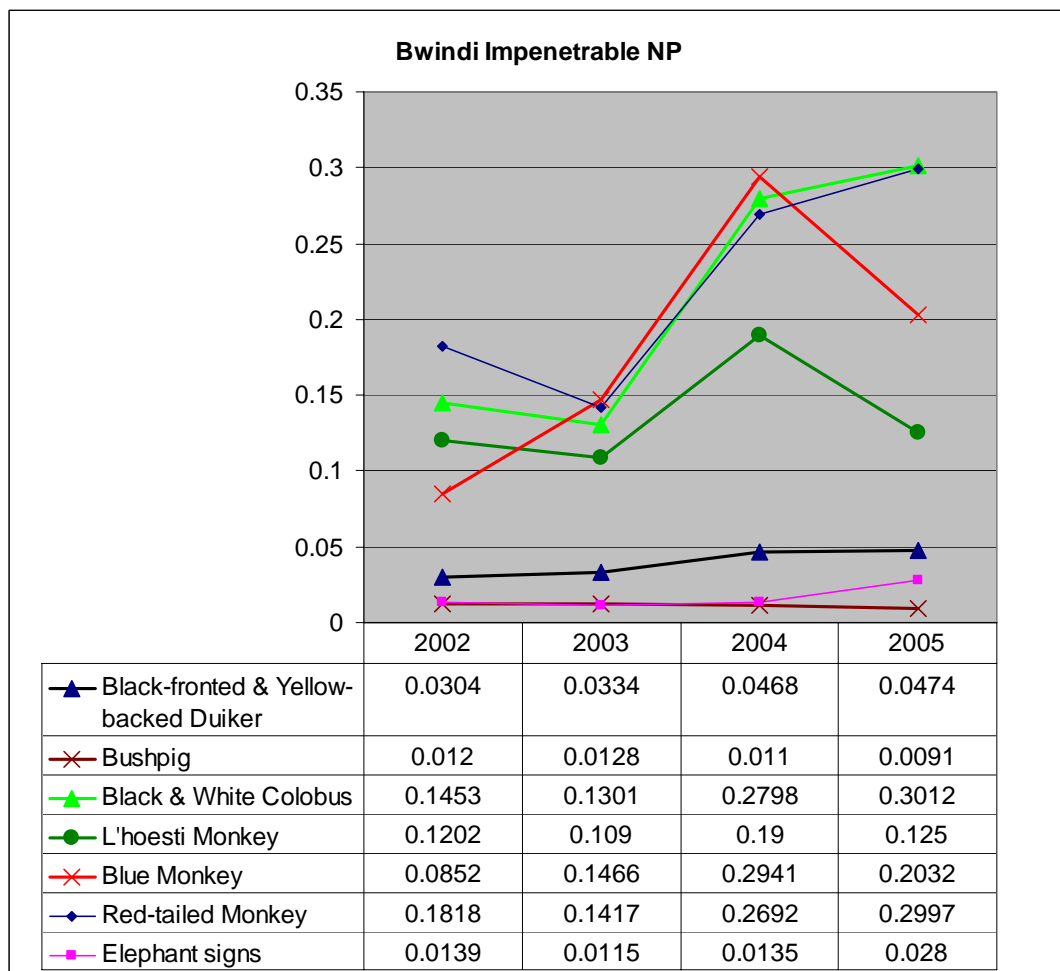
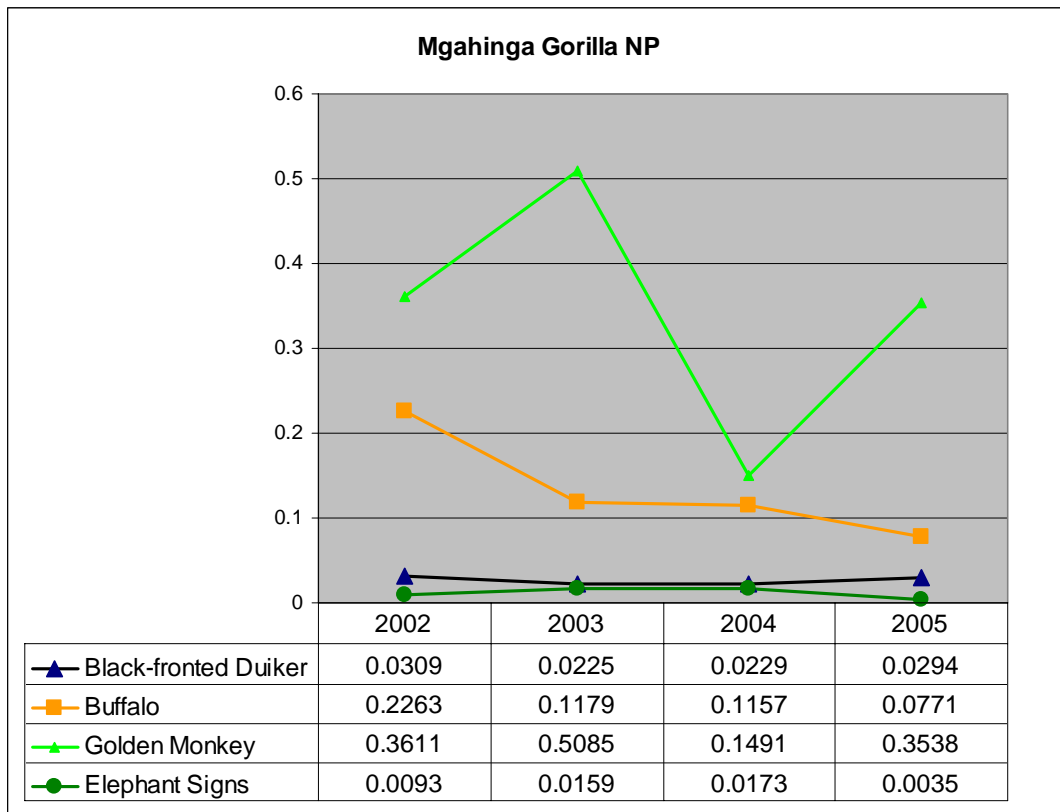
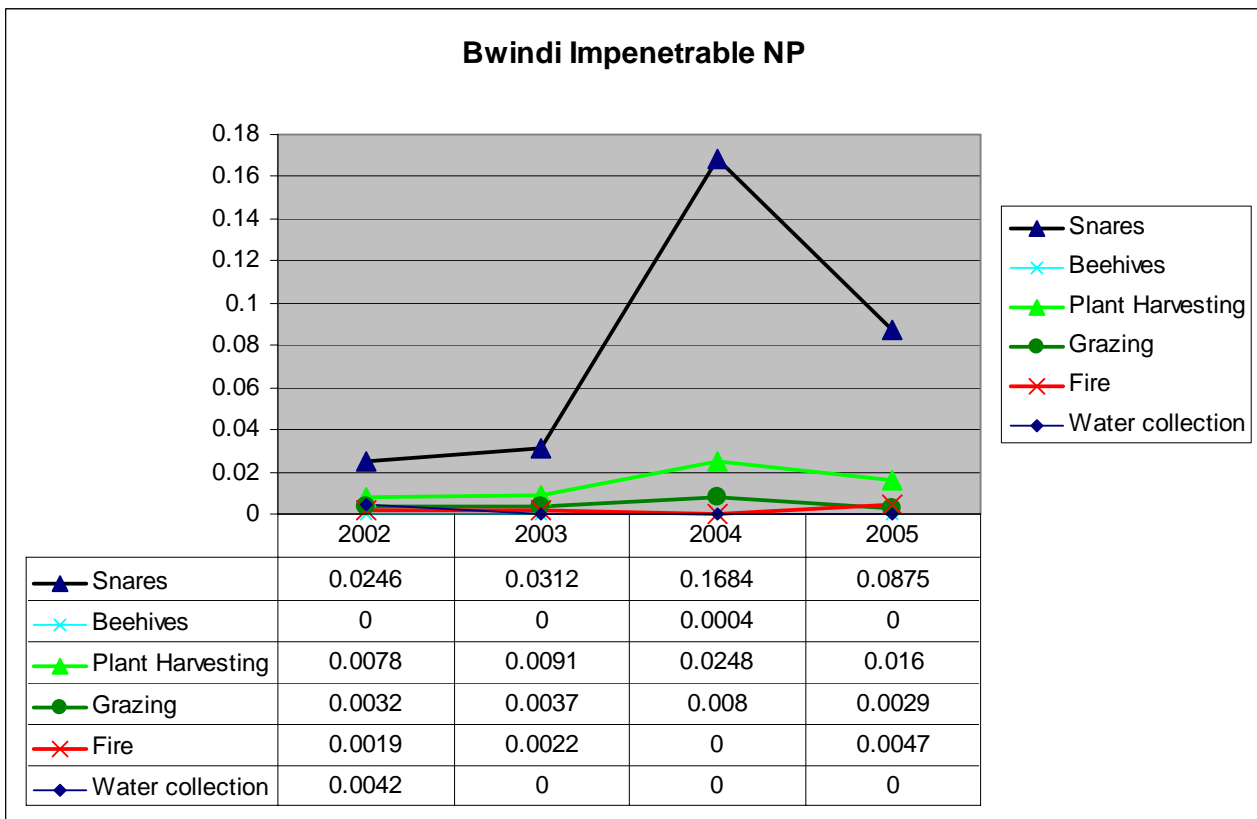
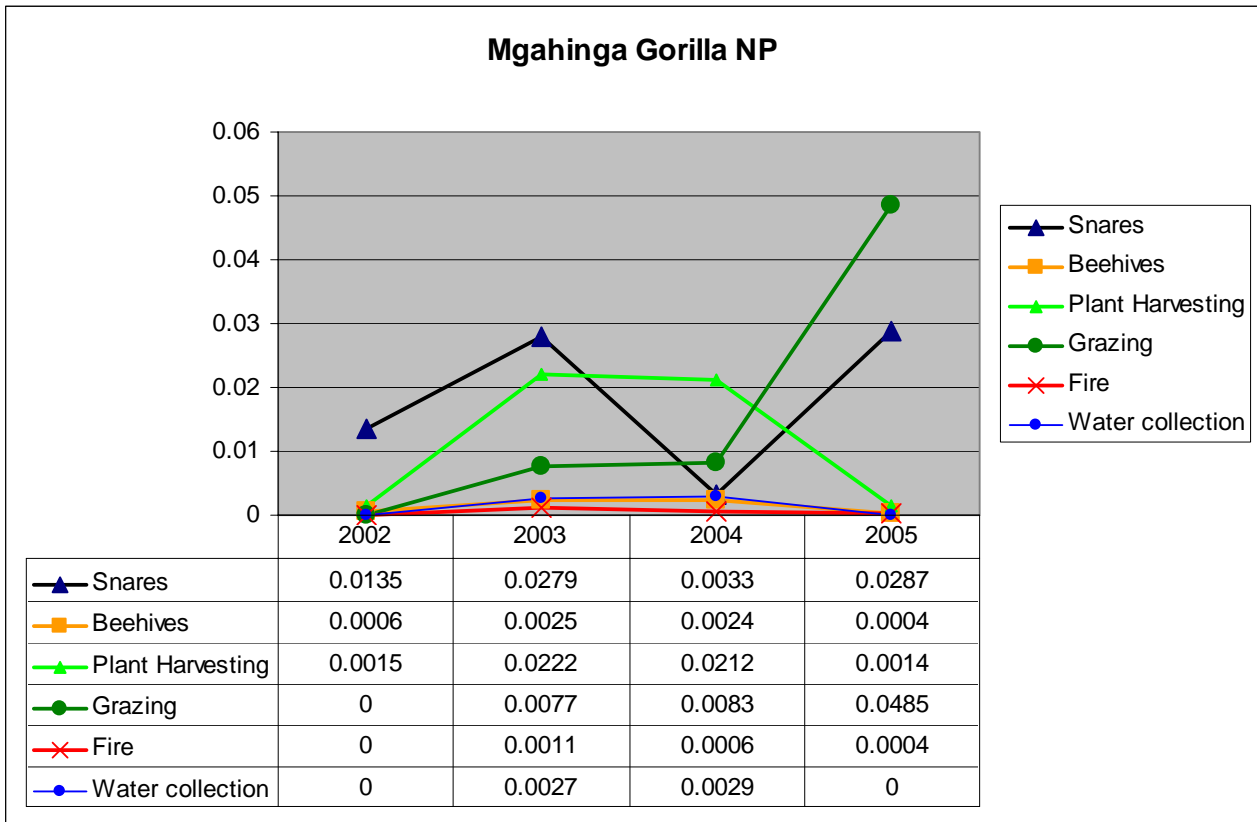


Figure 8. Trends in Ranger Based Monitoring Results 2002-2005



N.B. for each illegal activity, the target was a 10% reduction in Yr 1, 20% in Yr2, and 25% reduction in Yr3 over baseline (2002) figures.

8 Sustainability of Project Activities & Results

This section summarises the key issues that we deemed important to sustain the successes of the programme over time. The issues are restricted to one per Intermediate Result.

The HCP process requires additional commitment of stakeholders and funding of a full time coordinator, which should be budgeted for. Leadership of the process needs to be clarified.

Threats reduction – beyond the need to sustain law enforcement, community based threat reduction initiatives must be linked to CBVs or other sources of incentive if threat reduction is to be sustained.

Effecting decisions made at regional framework meetings is not straightforward. High-level buy-in is needed to turn good will into concrete action. The political complexity of the Virunga region makes the virtuous efforts to coordinate difficult to achieve in practise.

Support to policy review processes will no doubt continue without project support. Coordinated and targeted efforts by the plethora of conservation organisations working in the region would result in more impact in terms of influence on policy formulation.

Sustainability of PA protection and management efforts relies on continued external support – an argument supported by the Economic Study. Efforts to make national scale conservation self-financing could be counter-productive, as it would most likely result in increased number of gorilla permits. Diversification of the tourism attractions within all PAs is thus critical.

ITFC have been working on proposals to secure longer-term financing to sustain their conservation research and monitoring efforts through establishment of a foundation. Associated feasibility studies and institutional reforms were supported under IR5.2.

The real economic viability of most of the new CBVs initiated under this grant project is doubtful without subsidy and external technical support for the next few years. Older established CBVs such as the Buhoma Community Rest Camp are ready to stand on their own two feet.

Stronger partnerships between community enterprises and private sector is critical for development of quality products and durable markets, rather than relying on NGOs that are often somewhat naive about markets and are themselves dependent on external support.

Long term funding of community-based institutions (such as HuGo) relies in large part on linking them into the UWA Revenue Sharing or MBI FCT mechanisms. Both UWA and MBI FCT would gain credit for expanding their support to this model, which appears to have more tangible local impact on conservation than the Community Protected Area Institutions (CPIs).

A sustained expansion of the tourism-based business in the Virunga Landscape requires new investment to diversify away from gorilla-based tourism to broaden its range of products and services, supported by regional and international marketing it as a “package” of tourism opportunities in the Virungas and not just a single-stop destination in a national tour.

During the next phase of funding by IGCP, there should be a conscious effort made to design and implement a gradual exit strategy whereby more and more of the programme’s activities are transferred to mandated national and local institutions such as UWA, MBI FCT, Local Government, government programmes such as NAADS, local NGOs and the private sector.

9 Key issues.

The following is a summary of the key issues emerging from the review – in a nutshell. Recommendations should guide future project planning, review and monitoring.

Landscape planning:

- While the HCP approach may finally prove itself a useful tool for strategic planning and partnership building, but at present the HCP plan risks becoming over-complex and the process burdensome.
- The HCP process should be used to “think landscape, but act local”, i.e. to tailor and coordinate simple strategies to achieve priority objectives within context of the bigger picture and a wide range of intervening partners.
- Landscape planning needs strong coordination (as do regional frameworks), which will not happen without investment in a full time coordinator and agreed process.

Threat Reduction:

- In future project activity planning and implementation, I GCP and its conservation partners need to deepen their analysis of threateners (who, why?), and strategies to address root causes (e.g. poverty) as well as simply tackling symptoms (e.g. poaching);
- I GCP and partners should fully recognise and enhance the potential for frontline community institutions to simultaneously reduce community wildlife conflicts and illegal activities as well as becoming conduits for targeted development support to park adjacent communities;
- Developing clear linkages in peoples' minds that conservation funds are accessible only to those who can demonstrate that they are contributing positively to conservation will make increasingly scarce conservation funds go much further.

Regional Frameworks:

- I GCP should continue to support cross-border processes, but with more investment in coordination mechanisms, and integration of proposals into national frameworks;

Policy influence:

- Efforts to review and influence policy have been superficial to date. I GCP needs to deepen its analysis of impact of policy/law on key issues such as problem animal management, vermin control, gorilla-based tourism, and revenue sharing and pilot more novel approaches to each of them to guide future policy development.
- I GCP and partners should focus future advocacy work on the ongoing UWA-led review of Wildlife policy frameworks. They also need to professionalize their lobbying skills.

Strengthening PA management:

- Continued support to UWA should focus on improving adaptive management skills, where managers are more aware of conservation performance indicators and given greater freedom to test, and learn from new approaches to working (particularly with communities) and in diversifying business models for tourism away from Mountain Gorillas;

Expanding Economic Opportunities:

- Generally the objective of increasing the benefits derived from conservation and Protected Areas is consistent with national development policies, and any success in reducing rural poverty will help to increase the relevance and marketability of 'conservation initiatives' to the general public and national decision makers.
- In future the Programme is encouraged to tighten link between provision of support to CBVs & other conservation-derived benefits targeted at communities with demonstrated improvements in conservation behaviours.
- New strategic thinking is needed within UWA about how to sustain its financial viability without continuously increasing the amount of gorilla permits.

Gorilla-Based Tourism - a double-edged sword?

- There is a real risk that gorilla based tourism that IGCP has invested huge resources over the years to promote actually becomes the key direct threat to Gorillas (through increased risk of disease transmission and impacts on behavioural patterns). Ongoing research and proper enforcement of the "Gorilla Rules" are critical to understanding, monitoring and mitigating these risks.
- IGCP should test the assumption that it may be possible to increase revenues while reducing impacts by making gorilla-tracking a much more "exclusive" experience (i.e. not something that the average back-packer can afford) and selling higher-priced permits on the basis that tourists will not be jostling for space in the undergrowth with 7 other people when experiencing a once in a lifetime peep at wild gorillas.
- Very preliminary discussions held with fellow IGCP team members raised the idea of independent monitoring of Gorilla tourism - by staff trained to simultaneously provide better information to tourists of the issues relating to gorilla conservation, to research impacts of tourism, and to monitor the consistent enforcement of the "Gorilla Rules"¹¹ especially now that groups of up to 8 tourists will be visiting together.
- Overly concentrated tourism developments without careful planning and monitoring also risk becoming a double-edged sword for rural development. While tourism clearly brings economic benefits it also brings social problems (such as prostitution linked largely to the influx of tourism-industry workers and security personnel to tourism hubs, dependence of the Batwa on "performances" for tourists, and poorly planned and aesthetically disappointing urban developments (such as the eyesores in Buhoma main street).
- The regional tourism development plan has addressed some of these issues but IGCP should invest resources into its implementation, particularly in Nkuringo, which could serve as an alternative model for tourism initiatives.

¹¹ The Gorilla Rules were developed with support from IGCP and are one of the key mitigating measures to reduce risk of disease transmission and disturbance. They are reportedly not consistently enforced - tourists are getting closer, and staying longer than the defined time limits with Gorilla groups.

10 Conclusions.

We summarise below our findings against the 4 key questions (as paraphrased by the team) outlined in the Scope of Work for the evaluation (see Annex 1 for details).

1. Did the project succeed?

Indicators of Gorilla populations and most of the other environmental targets within the Parks are all positive, but recovery of wildlife populations and changing conservation behaviours are both slow processes. Monitoring over the longer term should be sustained to determine how "real" are the positive but often small changes picked up in the Performance Monitoring Plan in terms of longer term trends.

The project has piloted some very cost-effective solutions to in-park conservation both through increasing UWA capacity and partnership building with communities. Particular mention is due for the HuGo groups which appear highly efficient at mitigating some of the human-wildlife conflicts, both in terms of reducing crop losses to raiding wildlife and reducing threats of illegal activities in Protected Areas.

Environmental conditions in the wider landscape outside the park are not being monitored sufficiently to draw any conclusions about project impacts, and nor were the activities implemented under this grant likely to have any significant influence on them, other than the Nkuringo buffer zone. To most observers, the quality of the environment outside the PAs is still deteriorating - with increasing losses of soil fertility and clearance of the very few remaining parts of natural vegetation on the steepest of slopes.

Gorilla-based tourism revenues are increasing rapidly, due to a number of factors, a good number of which can be attributed to this and previous grants to IGCP/AWF. As highlighted in the Economic Valuation report commissioned by this project, it is not so clear how equitably the benefits of the Protected Areas and tourism are distributed between local, national and international stakeholders.

The impact of the project at increasing the incomes of rural communities is less evident, and again is not sufficiently monitored to draw any firm conclusions. Successes achieved in establishing new Conservation-Based Businesses have mostly been modest and relatively isolated in geographical scope (mushroom growing, bamboo planting, craft-making and honey production). The most promising new developments, such as the Nkuringo Ecolodge and associated developments are still in the design and negotiation phase, and buffer crops such as Artemisia are still trials in the early phase.

2. Were partners effectively involved?

There has been strong and effective IGCP liaison with some project partners (esp. UWA) and IGCP are now broadening this conservation alliance to Local Govt, Civil Society Organisations (NGOs and private sector). They are encouraged to hand over more and more of the responsibilities for implementation of project initiatives to the appropriate local, national and regional partners. The HCP process was seen as the key mechanism for achieving stakeholder buy-in. It has not achieved this objective adequately and a full time coordinator is required to ensure better liaison and coordination between the many agencies involved in conservation.

3. Will it last?

This question is addressed in detail in Section 8. In summary UWA at a national scale remain dependent on external financial support to sustain activities. The Economic Evaluation makes a strong argument for continued, or even increased global funding for conservation of the Bwindi and Mgahinga NPs (in grant form rather than as a loan) to pay an equitable share of the costs of conservation, whose benefits are largely enjoyed internationally.

Within its own generated revenues, UWA is overly dependent on Gorilla based tourism and while this will probably always remain the mainstay of its enterprises, it will only achieve sustainable increases in revenue through diversifying its products.

Reduction of threats to the Gorillas and their Afro-Montane Forest habitat still rely largely on heavy investment in patrolling by UWA. More cost effective solutions probably can be found through enhancing the mandates of community based institutions and providing very clear the incentives for better conservation behaviour, through performance based rewards. This approach has widespread application across Uganda and could result in significant cost savings for UWA by targeting patrol efforts where effective community institutions are reporting problems.

New CBVs are promising, but need sustained support to bear fruits for at least another 2-3 years before they become self-sustaining. The Nkuringo model stands out as the most innovative and ambitious CBV, but for these very reasons needs a lot more nurturing if it is to be a success. The project has made substantial progress in achieving improved attitudes within UWA and private sector towards working with community institutions. These attitude changes must be sustained through adequate support in the next few years to ensure that this approach becomes a model for Uganda! If it fails, there are many sceptics out there who would make it difficult to attempt such novel approaches to conservation and tourism again.

4. Any lessons for the future?

Many valuable lessons have been learned from this evaluation, as illustrated by the long list of recommendations made throughout the text and compiled again in Section 2. The ICD Report (I TFC et al, 2005) provides much more detail than this evaluation. These will not be summarised again here. Instead, UWA & IGCP partners are encouraged to read the relevant sections of these reports before preparing new grant proposals and take on board the experiences of the past 3 years of this project and the lessons learned from this evaluation.

In particular PRIME/West (the major USAID funded project in SW Uganda), which is likely to fund another phase of IGCP/AWF activities in the region, should internalise these recommendations and ensure that new activities by IGCP, other grantees, and indeed their own implementation team are informed by the long history of ICD interventions in the region.

The single key lesson to take home is for conservation organisations to try to understand the real underlying causes of threat to the overall landscape, and carefully tailor any incentives to communities so that they encourage better conservation behaviour. Monitoring should be geographically accurate enough to identify which communities are supporting conservation so that benefits offered are clearly linked to demonstrated improvements in performance.

Annex 1. Scope of work for evaluation

Final evaluation of the USAID funded 'Conservation of Afro-montane Forest and Mountain Gorillas in a Landscape Context' project

Background

The African Wildlife Foundation (AWF) was awarded an Associate Award on April 24th 2002 in order to implement the USAID-funded project "Conservation of Afro-Montane Forest and Mountain Gorillas in a Landscape Context". The international community recognizes the Afro-montane forests of southwest Uganda and neighbouring countries as some of the most ecologically rich habitat on the planet. In addition to serving as home to the critically endangered mountain gorilla, these forests harbour many other important species and provide crucial environmental services to surrounding human communities.

The program activities were designed to place the conservation of mountain gorillas and their Afro-montane habitat in a broader "landscape context". This landscape context includes looking at the relevant parks in Uganda; the threats to these parks that originate in the surrounding areas of human settlement; the social and economic requirements of the interface between the parks and surrounding communities; and the international, trans-frontier nature of the resource.

The goal of the 'Conservation of Afro-montane Forest and Mountain Gorillas in a Landscape Context' project was therefore developed to be 'Greater Virunga Landscape better conserved' with the project purpose articulated as 'Virunga Landscape in Uganda better managed'. As a result of a planning meeting at the onset of the project, the following intermediate results were developed to meet this purpose:

- Landscape planning and monitoring approach applied to GVL
- Key strategies for threat abatement implemented
- Regional Frameworks strengthened
- National and regional policy improved
- Protected areas serving as ecological and economic core areas in the landscape
- Expanded economic opportunities for rural communities in the GVL

In implementing the project, AWF works primarily through the International Gorilla Conservation Programme (IGCP) and other collaborating institutions, notably the Uganda Wildlife Authority (UWA), the Institute of Tropical Forest Conservation (ITFC) and the Uganda Community Tourism Association (UCOTA).

The project was initially for three years and slotted for completion on April 25th 2005. The African Wildlife Foundation requested a no-cost extension for an additional three months and the project completion date is now July 25th 2005.

Objective of the evaluation

The broad objective of the final evaluation is to assess the performance of the USAID-funded 'Conservation of Afro-montane Forest and Mountain Gorillas in a Landscape Context' project during the entire activity period; April 2002 – July 2005. The specific objectives of the evaluation are:-

- To provide project management and partners with an assessment of the project's activities and their effectiveness in achieving the stated life of project targets and results.
- To review extent to which stakeholders and collaborating partners were involved in the design and implementation of the project.
- To examine the sustainability of the activities and their results as stated in the Annual Work plans and progress reports.
- To distil lessons learned that may be used to guide the development of any further proposals focused on the conservation of the mountain gorillas and afro-montane forests in a landscape context.

Existing Performance Information Sources

The list below summarizes existing information sources relevant to this study:

- Project proposal/Document
- Annual work plans
- Activity Performance Monitoring Plan
- Co-ordination meeting notes
- Consultancy reports commissioned by the project
 - Socio-economic survey
 - Economic Valuation
 - Review of Policies and Legislation
 - Training reports
 - Habitat restoration report
 - Gorilla Census report
- Contracts for infrastructure
- Correspondence between AWF/I GCP, partners, beneficiaries and other parties
- Activity Progress Reports

Methodology:

The evaluation is expected to address the above issues through a mixed methods approach. The evaluation will be initiated with a workshop to clarify SOW issues and to present a detailed evaluation work plan. The evaluation process will include the following steps:

1. Evaluation work plan development workshop

During the first three days of the evaluation process the team leader will facilitate a workshop of partners, beneficiaries and other interested parties to present a detailed evaluation work plan.

2. Participatory process

The evaluation team will carry out interviews, group discussions, site visits and mini-workshops with all partners, beneficiaries and interested parties as the major component of the evaluation process.

3. Stakeholder workshop

The team leader will present the evaluation findings to the project partners i.e. USAID, AWF/IGCP, UWA, UCOTA and ITFC. Input from workshop participants will be integrated into the final report and will thus form the basis of any follow on projects developed to support the conservation of the mountain gorillas and afro-montane forests.

Deliverables

The consultant shall produce a discussion draft report (no more than 5 pages of text in the body of the report, plus an Executive Summary and annexes) for presentation at the stakeholder workshop in addition to a detailed evaluation draft report that responds to the SOW, documents findings and suggests recommendations based on the empirical findings.

An analysis of the lessons learnt from the perspective of the various partners, beneficiaries and interested parties will be a central component of the final report. A suggested format for the final report is provided as Attachment A.

The consultant shall submit to USAID/Uganda one hard copy and one electronic copy (in Microsoft Word 97 or higher, Times New Roman 12 point font) of the final report within one week after the presentation workshop.

Team Composition and Participation

The evaluation team will comprise of an external consultant, AWF staff member who has been technically involved throughout the activity's life, and one representative from the collaborating institutions.

It is anticipated that the external consultant who is to provide key input into the study should have the following skills:

- Monitoring and Evaluation experience with donor funded Projects and NGOs.
- Technical competence in the field of natural resources, economic growth, and relevant analytical tools.
- Experience with data collection procedures, evaluation designs, report writing and presentation.
- Good communication, rapporteur skills, and ability to interact with Ugandans and expatriates.

Schedule and Logistics

The team will begin the evaluation on or around July 05, 2005 with a Team Planning Meeting facilitated by the activity at its offices, and will work for a period of 20 days (8 hours a day). The evaluation team will have the flexibility to design the timing of the evaluation activities described in the evaluation scope, provided the report is submitted in time.

The Key consultant is to develop and complete the evaluation work plan within the first three days of the evaluation time frame including a schedule for the submission of final report.

The technical reviewer will provide additional support in relation to facilitating the final workshop and commenting on aspects of the process and logic of the project.

Budget in (Person days) for Local Consultant

No.	Activity	Local Consultant	Technical Reviewer
1.	SOW and document review	2.5	1
2.	TPM, Initial Meeting with USAID, Presentation of Evaluation Work plan/ methodology	1	1
3.	Relevant work on issues raised in the SOW	5	
4.	Prepare and present comprehensive evaluation draft report based on empirical findings for oral briefing for USAID and other stakeholders.	6	3 (2 days report input and 1 day presentation meeting)
5.	Present finding to USAID	0.5	
6.	Preparation of final report based on written comments from stakeholders	3	1
	Total	18	6

Annex 2: Schedule for Review.

Field work for Final Evaluation of USAID funded ‘Conservation of Afro-montane forests and Mountain Gorillas in a Landscape Context’ project

Date	Activity	Meetings	Responsibility to arrange meetings
26 th July (Tuesday)	Team travels to Kabale	6-7 PM Meet with Jackson Mutebi - CARE/RPI ME, Mr Dutji - MBI FCT (over dinner?)	Helga Rainer
27 th July (Wednesday)	Team travel to Nkuringo (overnight Kisoro)	8-12 AM Visit gorillas 2-4 PM Meeting with NCDF 2-4 PM Meeting with warden	Innocent/James
28 th July (Thursday) Note: referendum day	Team in Kisoro	9-11 AM- Travel to MGNP <ul style="list-style-type: none"> • Meet with park staff • Visit Amajambere Iwachu • Meet with MCDO • Visit VC MGNP site 	Innocent/James
29 th July (Friday)	Team in Kisoro	9-10.00 AM - Meet with district officials (LCV) 10.30 – 3 PM - Organize meeting with representatives from the following projects (mini-workshop): <ul style="list-style-type: none"> • Beekeeping • Mushroom • Bamboo • Batwa Group • Craft workers, Etc. 3-5 PM - Travel to Ruhija, ITFC	
30 th July (Saturday)	Team with ITFC	9-4 PM Meet with ITFC and visit ITFC programs 4-5 PM - Travel to Buhoma	Alastair McNeilage
31 st July (Sunday)	Team in Buhoma	9-12 AM Meet with park staff 1-3 PM Meet with Buhoma Community Campground 3-6 PM Travel to Kabale	Innocent/James
1 st - 5 th August (Monday)	Team leader in Kabale	Attend HCP meeting and draft report	
5 th August	Return Kampala		

Annex 3. Documents Reviewed:

Namara, A & Nsabagasani, X (2003). Environmental Governance in Africa. Decentralization & Wildlife Management: Devolving Rights or Shedding Responsibility? Bwindi Impenetrable National Park, Uganda. World Resources Institute.

Namara, A., McNeilage, A., Franks, P., Blomley, T., Infield, M., Malpas, R., Donaldson, A., Olupot, W. (April 2005) Bwindi and Mgahinga National Parks in Uganda: has 15 years of ICD programming succeeded in increasing support for conservation among local communities? Bwindi and Mgahinga Integrated Conservation and Development Strategies Assessment Project. DRAFT REPORT.

Hatfield, R. (2004). The Economic Value of the Mountain Gorilla Forests: Benefits, Costs and their distribution amongst stakeholders. A paper given to the International School of Tropical Forestry, Yale University Spring 2004 Conference, People in Parks: Beyond the Debate (Achieving Conservation in Human-Inhabited Protected Areas). March 2004.

Wabunoha, R. (April, 2004). Review Of Laws And Policies Relating To The Conservation Of Great Apes In Uganda And Regionally. A Consultancy Report For The International Gorilla Conservation Programme.

Other Documents:

- Project Document (the Project Application for Associate Award);
- Annual work plans
- Activity Performance Monitoring Plan
- Heartland Monitoring Plan (Uganda sector) and Annex (the plan) (2003).
- Heartland Conservation Planning & Monitoring Meeting Reports.
- Minutes of UWA Donor Coordination meeting (April 2005).
- Regional Co-ordination meeting notes*;
- Consultancy reports commissioned by the project.
- Socio-economic survey
- Review of Policies and Legislation
- Review of Multiple Resource Use Agreements*
- Training reports
- Habitat restoration report
- Gorilla Census report
- Contracts for infrastructure*
- Correspondence between AWF/IGCP, partners, beneficiaries and other parties*
- Activity Progress Reports (Quarterly Reports)

* = Documents not seen either because not considered a priority or due to lack of time.

Annex 4. Key persons met

Date	People Met	Position / Institution	Issues covered
Friday 14 th July	Helga Rainer Project Manager.	African Wildlife Foundation / IGCP.	Project Design Purpose of Review Methods / Schedule.
	Anthony Ratter	Consultant-Technical Review	
Monday 18 th July	Eunice Mahoro: Deputy Director, Planning, Monitoring & Research	Uganda Wildlife Authority (Formerly in charge of Community Conservation)	Overall project implementation; focus on activities done in collaboration with UWA
	John Makumba: Deputy Director, Field Operations.	Uganda Wildlife Authority. (formerly Chief Park Warden, Bwindi and Mgahinga NPs).	
Tuesday 19 th July	Jody Stallings	Environment Desk Officer, USAID	Overall Project and key issues for evaluation
	Helen Lubowa: Director,	Uganda Community Tourism Association (UCOTA)	Handcraft development training and marketing.
	Steve Willis: Managing Director	Red Chilli Hideaway	Amajembere Campground project
Wednesday 20 th July	Project Partners	EVALUATION KICK-OFF WORKSHOP, ARA Makindye	
Tuesday 26 th July	Jim Seyler Chief of Party,	DAI, PRIME/West.	Key issues for future AWF activities / grant.
Wednesday 27 th July	Sabiti Elija. Manager	Refinery, Bwindi Beekeeping Development Association	Honey processing and marketing as a CBV.
	8 Women members	Rubanda Solidarity Development Association	Mushroom growing as a CBV
	Chairman + ~20 women members	Nteka Handcrafts Group	Craft making as a CBV
	6 / 7 members of Executive Committee	Nkuringo Conservation & Development Foundation	Ecotourism as a CBV. Nkuringo Eco-Lodge. HuGo Programme. Land Purchase by UWA.
Thursday, 28 th July	Ghad Mugiri, Senior Warden	Mgahinga Gorilla National Park, Uganda Wildlife Authority.	Park infrastructure, equipment and capacity building component.
	Robinah Gangitibi, Warden Tourism		
	Milton Shwekyerera, Head Ranger		
	Charles..... ? (Chairman).	Mgahinga Community Development Organisation.	Amajembere I wachu - way forward.
Friday 29 th July	Dr. Philemon Mateke Chairman,	Kisoro District Local Government	Review of Local Govt involvement in project activities.
	Mrs Juliana Munderi Vice Chairperson	(also Secretary for Production & Environment) Kisoro DLG.	
	Abdallah Musobya Kiganda	Chief Administrative Officer, Kisoro DLG	
	3 members of each of 3 CBV groups.	Bwindi Beekeepers Development Association, Bamboo Growers, Mushroom growers	Review of impacts of CBV support efforts
Saturday 30 th July	Alastair McNeilage, Director,	Institute for Tropical Forest Conservation, Ruhija, Bwindi Impenetrable National Park.	Review of research and ecological monitoring programme of ITFC and partners
	Dennis Babaasa, water quality monitoring.		
	Robert Bitariho, Ecological Monitoring.		

AWF Conservation of Afro-montane Forest and Mountain Gorillas in a Landscape Context
End of Project Review Mission - July-August 2005

Date	People Met	Position / Institution	Issues covered
Sunday 31 st July	John Bosco Nuwe , Chief Warden,	Bwindi Impenetrable National Park, Uganda Wildlife Authority BI NP.	
	John Emitchell Okot , Warden Tourism,		
	Benon Mugyerua , Ass't Warden, Community Conservation,		
	Edwin Kagoda : Warden Monitoring & Research		
	Sunday Ndayakunze, Village HuGo Chairman	Buhoma "HuGo" Group	
	John Bihweire		
	Barnabas Tieto		
	Basril Nkunda		
	Anatoli Batanyenda		
	Alice Kapere		
Mrs. Leya	Buhoma Bwindi Progressive Women's Group	Training support given through UCOTA to develop craft-making skills of Batwa.	
Elifaz Kabugana	Trainee wood-carvers, Batwa Community.		
Ghad Mugiri	Trainer, Woodcarving, Buhoma.		
Augustin Muhanji			
	James Tweheyo, Chairman	Buhoma Community Rest Camp Association.	Review development of business plan for Camp Ground & other support
	Paul Muhwezi, Manager		
Monday 1 st August	Mr Geo Dutki	MBI FCT	
	Jackson Mutebi Community Conservation Officer	RPI ME/West Formerly with CARE DTC	
Tuesday 2 nd to Thursday 4 th August	All participants in the HCP planning and monitoring process.	Stakeholder Institutions from DRC, Rwanda & Uganda.	Review threats and strategies identified in HCP Process. Assess impact of HCP overall.
	Dr. Phillip Muthuli	Senior Scientific Officer, AWF Regional HQ, Nairobi.	Discussions on HCP process.

Annex 5. Logical Framework

Project: Conservation of Afro-montane Forest and Mountain Gorillas in a Landscape Context
Duration: 36 months May 2002 – April 2005 (extended to July 2005)
Budget Ceiling: US\$ 2,049,959

SUMMARY OF OBJECTIVES AND ACTIVITIES	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS: EXTERNAL FACTORS
<i>Goal</i> Greater Virunga Landscape better conserved	<i>... that measure achievement of Goal</i> G.a Natural forest cover G.b Water quality G.c MG populations G.d Abundance of large mammals G.e Populations of Grauer's Rush Warbler	a. vegetation maps and satellite photography b. field assessment of park edge in BINP and regeneration of forest gaps c. ITFC Ecological Monitoring Programme d. gorilla censuses e. encounter rates during patrols, and recorded on Ruhija-Ndego road f. bird counts	<i>... to ensure sustainability of Goal</i>
<i>Project Purpose</i> Virunga Landscape in Uganda better managed	<i>... that measure achievement of Project Purpose</i> P.a Reduction on key threats P.b Reduction in illegal activities P.c Positive threats reduction analysis	a. ecological and socio-economic data and monitoring b. ranger-based monitoring programme and MIST c. threat analysis meeting reports	<i>... to achieve Goal</i>
Intermediate Results 1 Landscape planning and monitoring approach applied to GVL MA1.1 Implementation of AWF HCP <i>Activities:</i> 1.1 Threats reduction analysis 1.2 Monitoring for continuous assessment of conservation targets 1.3 Heartland conservation planning (HCP) 2 Key strategies for threat abatement implemented MA2.1 Implementation of strategies to address key threats <i>Activities</i> 2.1 Protecting human health 2.2 Improving agricultural practices 2.3 Improving NR management 3 Regional frameworks strengthened MA3.1 Supporting participation of Uganda in regional GVL activities <i>Activities</i> 3.1 Regional meetings 3.2 Regional tourism 3.3 MoUs between PAAs 3.4 Uganda's participation in regional frameworks	<i>... that measure achievement of Intermediate Results</i> 1.a Heartland Conservation Action Plan 1.b Activities identified in HCP complete 1.c Monitoring of critical conservation targets 2.a Number of key strategies implemented 3.a Number and type of frameworks established/strengthened 3.b Number of key actions addressing critical threats	a. documentation of HCP process: heartland conservation action plan; questionnaires b. project reports c. partner institutions reports • ??? a. project reports b. MoUs signed c. PAA reports of joint activities	<i>... to achieve Project Purpose</i>

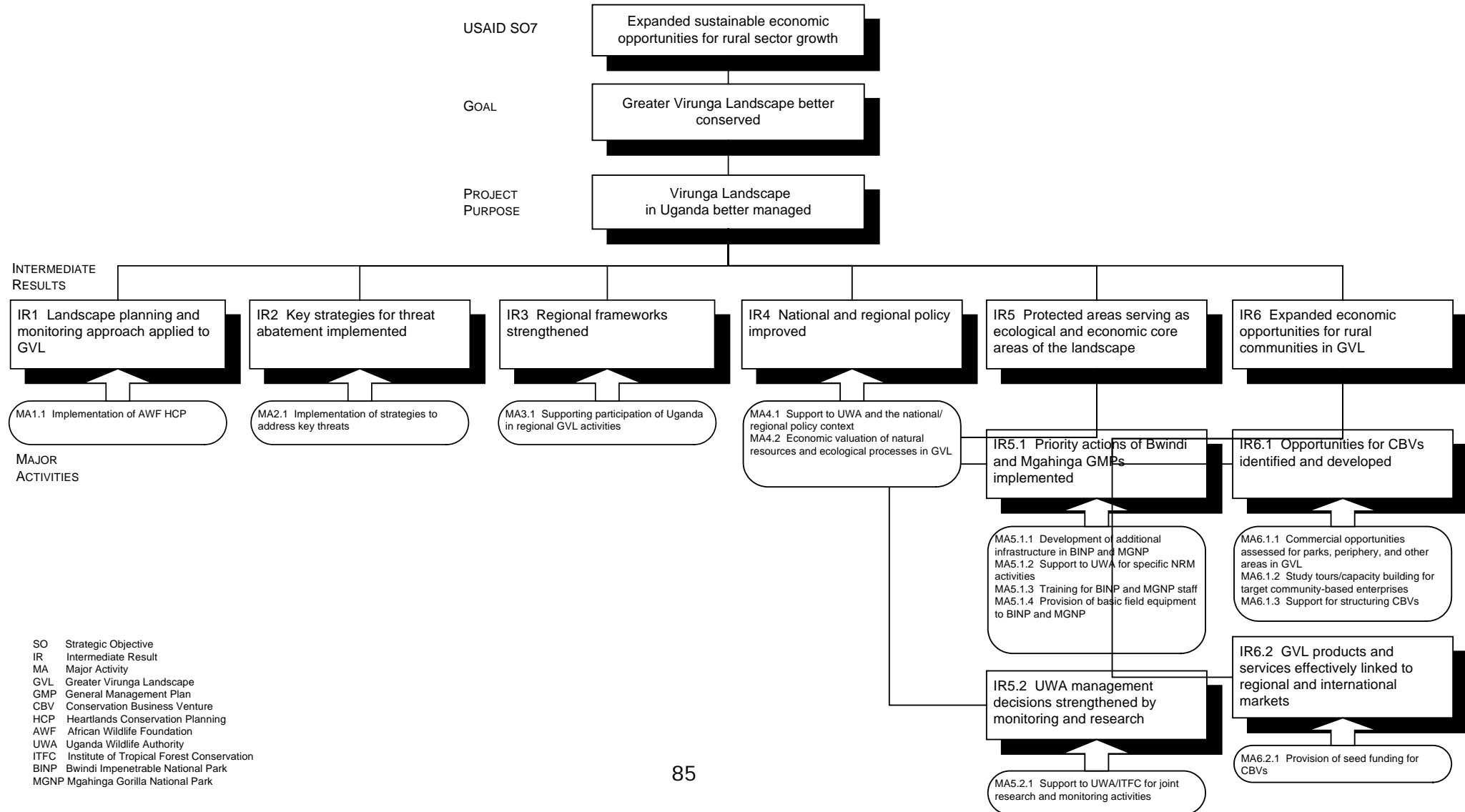
SUMMARY OF OBJECTIVES AND ACTIVITIES	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS: EXTERNAL FACTORS
<p>4 National and regional policy improved MA4.1 Support to UWA and the national/regional policy context MA4.2 Economic valuation of natural resources and ecological processes in GVL <i>Activities</i> 4.1 Policy review and analysis 4.2 Economic valuation of Virunga/BINP 4.3 Socio-economic survey 4.4 Tourism bill</p> <p>5 Protected areas serving as ecological and economic core areas of the landscape</p> <p style="text-align: center;">5.1 Priority actions of BINP and MGNP GMPs implemented</p> <p>MA5.1.1 Development of additional infrastructure in BINP and MGNP MA5.1.2 Support to UWA for specific NRM activities MA5.1.3 Training for BINP and MGNP staff MA5.1.4 Provision of basic field equipment to BINP and MGNP <i>Activities</i> 5.1.1 Signage 5.1.2 Visitor Centre 5.1.3 Field equipment 5.1.4 Fire management 5.1.5 Habitat restoration 5.1.6 Training</p> <p style="text-align: center;">5.2 UWA management decisions strengthened by monitoring and research</p> <p>MA5.2.1 Support to UWA/ITFC for joint research and monitoring activities <i>Activities</i> 5.2.1 Integration of management and research between ITFC and UWA 5.2.2 Research on gorilla conservation and management 5.2.3 Research on effectiveness of ICDPs</p> <p>6 Expanded economic opportunities for rural communities in GVL</p>	<p>4.a Policies supportive of conservation (number of policies under development or completed)</p> <p>5.a Revenue to UWA and community camp-ground</p> <p>5.1.a Number of actions identified in GMP implemented with at least partial support from the project 5.1.b New infrastructure 5.1.c Number of staff training courses successfully implemented 5.1.d Incidence of human/livestock-originated gorilla disease 5.1.e Extent of fire damage</p> <p>5.2.a Number of M&R activities under way or completed 5.2.b Number of UWA management actions based on M&R results</p> <p>6.a Household income based on household assets 6.b Household income based on cash inflows</p>	<p>a. minutes of meetings b. development of policy documents</p> <ul style="list-style-type: none"> • park records • camp-ground records • economic valuations <p>a. UWA and project annual workplans and progress reports; b. building plans, specifications; c. training needs assessment / training reports: staff performance reports d. ITFC Ecological Monitoring Programme e. Ranger Based Monitoring / ITFC EMP.</p> <ul style="list-style-type: none"> • ITFC project reports and annual reports • annual review of research priorities • annual operation plans • workplans • minutes of UWA management meetings • annual review of research priorities <ul style="list-style-type: none"> • baseline reports from IGCP and other organizations – e.g. Africare • interviews • project reports • baseline reports • interviews • project reports 	

SUMMARY OF OBJECTIVES AND ACTIVITIES	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS: EXTERNAL FACTORS
<p>6.1 Opportunities for CBVs identified and developed</p> <p>MA6.1.1 Commercial opportunities assessed for parks, periphery, and other areas in GVL</p> <p>MA6.1.2 Study tours/capacity building for target community-based enterprises</p> <p>MA6.1.3 Support for structuring CBVs</p> <p><i>Activities</i></p> <p>6.1.1 Eco-tourism lodges</p> <p>6.1.2 Bee-keeping</p> <p>6.1.3 Mushrooms</p> <p>6.1.4 Bamboo</p> <p>6.1.5 HUGO</p> <p>6.1.6 Batwa NGO</p> <p>6.1.7 Revenue sharing</p> <p>6.1.8 UCOTA (handicrafts development)</p> <p>6.2 GVL products and services effectively linked to regional and international markets</p> <p>MA6.2.1 Provision of seed funding for CBVs</p> <p><i>Activities</i></p> <p>6.2.1 ???</p>	<p>6.1.a Number of on-going CBVs operating on sound business principles</p> <p>6.1.b Number of new enterprises established</p> <p>6.1.c Number of people employed by CBVs</p> <p>6.1.d Value of support to social and economic activities</p> <p>6.1.e Annual percentage increase in returns</p> <p>6.2.a Volume of sales of GVL products and services</p> <p>6.2.b Value of strategic agreements</p> <p>6.2.c Value of resources raised</p>	<ul style="list-style-type: none"> • CBV financial reports • audit reports • project reports • CBV reports • audit reports • project reports • CBV reports • interviews • project reports • CBV reports • interviews • project reports • CBV financial reports • audit reports • project reports • CBV reports • interviews • project reports • CBV reports • interviews • project reports • CBV reports • interviews • project reports 	

Results Framework

PROJECT: Conservation of Afro-montane Forest and Mountain Gorillas in a Landscape Context

PROJECT DURATION: 36 months May 2002 - April 2005
 PROJECT COST: US\$ 1,999,959



Annex 6. Review of HCP process - Summary of Questionnaire results

Review of HCP impacts	Average scores by 24 respondents	
Questions		
1. The objectives of the site conservation planning were made clear	8.6	out of 10
2. Has your organization participated in the HCP process before?	83%	said yes
3. Have you as an individual participated in the HCP process before	54%	said yes
4. Key threats to the identified conservation targets have been effectively and accurately identified.	7.6	out of 10
5. Effective strategies have been identified to address the key threats.	7.7	out of 10
6. Do you think partners not present in the HCP process has been informed of the HCP plan and understand it.	9%	said yes
7. All partners identified as being able to contribute to implementation of the HCP have been given a copy of the February 2003 HCP workshop report.	4.5	out of 10
8. Non-conservation organisations operating in the Heartland (e.g. agricultural / community development projects, CBOs, Private sector etc) have been involved in planning and / or lobbied to consciously contribute to implementing heartland conservation strategies and actions.	5.3	out of 10
9. Other staff of the key partner institutions <i>who were NOT present</i> at the HCP planning meeting have been informed of the HCP process by colleagues <i>who WERE present</i> .	3.5	out of 10
10. The role of leadership and coordination for the HCP planning and implementation process in your region / country has been clearly defined, and adopted. (If defined, please state who is leading/coordinating)	6.0	out of 10
11. The Range of National Partners has adopted the HCP Plan as their own.	3.9	out of 10
12. Did you modify any of your plans/activities based on your participation in the process? If yes, please provide details below:	57%	said yes
13. HCP has assisted partner organisations to fund-raise for those activities identified as their respective responsibilities.	3.2	out of 10
14. Funding sources have been found to implement threat abatement strategies	4.1	out of 10
15. Partners not present in the HCP process have contributed to the implementation of the plan	4.3	out of 10
16. Heartland Monitoring plan has been developed	3.5	out of 10
17. Heartland Monitoring Plan has been implemented and data collected and compiled into a Monitoring System (PIMA or other).	3.1	out of 10
18. Conservation Targets have been monitored and shown to be improving since 2003	4.7	out of 10
19. Key threats have been reduced since the HCP Plan (2003)	4.4	out of 10
20. Did you learn anything new during the process?	100%	said yes

Annex 7. Decisions influenced by ITFC

Project	USAID funds	Information provided	Means by which information provided	Management response - decision or action taken or pending, etc.	Year
EMP – Multiple use	-	Availability of requested species	Report, meetings	Harvest quotas set	1997-98
				Planning for potential commercialisation of forest resources.	2002
	Yes	Assessment of sustainability of off-take	Report, presentations, personal contacts	Undertaking review process, incorporating new information, including new specific groups (e.g. Batwa) and new resource demands.	2004
	Yes	Changing demands and context for MU resources	Report, presentations, participation in review process		2004-5
Yes	Methods for resource harvest monitoring	Report, workshop	UWA developing national standards for resource harvest monitoring	2004	
EMP – GIS mapping	-	Distribution of key harvest areas, areas of multiple use zones.	Maps, meetings	Revision of delineation of MU zones, and creation of new zones	1999-2000
EMP – Bamboo rhizome harvest	-	Rhizome harvest guidelines, impact of harvest on bamboo regeneration	Guidelines document, report	Used in management of rhizome harvest programme	1999
EMP – Bamboo assessments	Yes – IGCP	Baseline assessment of status of bamboo in Mgahinga and Echuya, recommendations for experimental harvest	Reports, personal contacts.	Establishment of long-term monitoring programmes for bamboo. Development of offtake quotas (Echuya). Experimental harvest plots (pending)	2004-2005
EMP – Fire monitoring	Yes – PMP	Causes and extent of fire damage Background information and discussion of fire management options	Reports, Discussion document, training workshops	Development of fire management plan. Equipment acquired, community sensitisation, park staff training. Boundary maintenance at critical dry periods	2003-2005
EMP – Kabiranyuma swamp monitoring	Yes	Impact of water harvest on swamp ecosystem	Report, presentations	Used in planning for rehabilitation of scheme. Also used in hydrological assessment.	2003-2005
EMP – Climate monitoring	-	Annual and seasonal weather patterns	Report, data summaries	Incorporated in fire management plans. Information for tour operators. Used by various research projects.	2000-2005

Project	USAID funds	Information provided	Means by which information provided	Management response - decision or action taken or pending, etc.	Year
EMP – Water quality	Yes - PMP	Impact of past and present human activities on forest 'health' – vegetation structure, regeneration	Report, presentations, personal contacts, participation in EIA.	Ranger based water quality monitoring programme proposed for other protected areas. Planning of Buhoma gravity water scheme. Management of tourism, garbage disposal in Buhoma area.	2000-2005
Fish populations	Yes	Fish species present in rivers, illegal harvest of fish.	Personal contacts	Incorporated in MU review process (pending). Law enforcement focusing on fish harvest.	2004-5
Vegetation mapping using aerial photos	Yes - PMP	Inaccuracies in boundary mapping	Personal contacts	Rectification of the boundary in GIS database (pending)	2005
Gap dynamics	-	Gap sizes, regeneration, causes and impacts of logging	Report, publication, presentations	Information to justify not harvesting timber from Bwindi	2002
Edge effects	-	Distribution of exotic plant species	Report, discussion document	Intention to remove exotics from Bwindi. Initiating removal of Eucalyptus in Ruhija	2003
	-	Distribution of illegal activities	Report, personal contacts	Focused patrols on specific areas	2002-3
	-	Poor boundary marking and encroachment in certain areas	Report, personal contacts	Improved boundary maintenance	2003-4
	-	General pattern of edge effects and boundary issues	Presentation to UWA headquarters	Better awareness of boundary management issues	2004
Impacts of tourism on gorilla behaviour	Yes	Impact of tourist visits on gorilla behaviour	Presentations, summary reports	Increase distance rule to 7 m (also based on IGCP health recommendations) Better understanding of impacts and ways to minimise. Guide training.	2003
Gorilla censuses in Bwindi and Virungas	Yes	Information on gorilla population trends and distribution, signs of other large mammals	Summary reports, presentations	Possibly used in management plan zoning?	2003-5
	Yes	Increase in levels of illegal activities	Maps, presentations, personal contacts	Improved patrol strategies, particular in park interior	2003

Project	USAID funds	Information provided	Means by which information provided	Management response - decision or action taken or pending, etc.	Year
Gorilla ecology and behaviour	-	Information on gorilla behaviour, diet, habitat utilisation, ranging patterns	Summary reports, publications, presentations	Information for interpretation for tourists. Used in developing buffer zone management strategies for Nkuringo	
Gorillas use of regenerating zone in Mgahinga	-	Diet, ranging patterns, use of regenerating zone	Presentation, personal contacts	Project carried out by UWA staff	2003-5
Nkuringo buffer zone management	Yes	Recommendations for mitigating human-gorilla conflict	Discussion document, participation in planning meetings	Land purchased at Nkuringo, set-up buffer zone, testing barriers and buffer crops	2002-5
Reducing costs of conservation	-	Pattern of problem animal conflicts around Bwindi, Echuya and Queen Elizabeth and potential solutions.	Report, CARE workshop	Development of new PAC initiatives (CARE)	2003
Mauritius thorn as a "Living Fence"	-	Information on potential invasiveness, growth patterns and guidelines for management	Reports, presentations	Use of Mauritius thorn for problem animal control in Northern sector of Bwindi	2004
Porcupine crop-raiding in MGNP	-	Crop-raiding patterns, effectiveness of stone wall and other prevention measures	Report, presentation	Need to repair and extend stone wall	2002
ICD strategies assessment project	Yes	Effectiveness of ICD strategies	Presentations, report (summary/draft, final pending).	Incorporated in project planning (PRIME, CARE, PEMA, AWF-IGCP HCP process, MBIFCT)	2003-4
Evaluating conservation policy – ICD in Bwindi	-	Impact of law enforcement and multiple use on poaching levels	PhD thesis, presentations		2005
Echuya knowledge base review	-	Summaries of available information on Echuya	Report, workshop	Establishing future research and monitoring priorities (pending), used in development of Echuya management plan.	2005
Large mammal use of gaps	-	Data on large mammal use of gaps	Presentation (Report pending)		2004-5
Impacts of fire on forest regeneration	-	Data on regeneration in burnt areas and neighbouring natural forest	Presentation (MSc pending)		2004-5

Project	USAID funds	Information provided	Means by which information provided	Management response - decision or action taken or pending, etc.	Year
Impact of exotic trees in MGNP	-	Distribution of exotic trees and impacts on regeneration	MSc thesis	Removal of exotics in regenerating zone of MGNP (based on previous work)	1999
Regeneration and Restoration MGNP	Yes	Protocol to assess factors constraining regeneration	Discussion document, personal contacts	Assessment project underway, lead by UWA	2005
Stingless bees ecology in BINP	-	Ecology, distribution of nests, illegal harvesting.	Presentation (PhD thesis pending)	Understanding of use of Stingless bee nests/honey by local communities. Incorporated in Multiple Use review	2004
Dioscorea ecology and utilisation in Bwindi	-	Potential as a multiple use "wild food" resource. Harvesting techniques	Presentation	Understanding of use of Dioscorea root use by local communities. Incorporated in Multiple Use review	2004
Regeneration in the Mbwa River Tract	-	Levels of regeneration, and presence of exotic species	Report, presentation	Need of long term monitoring of regeneration	2002