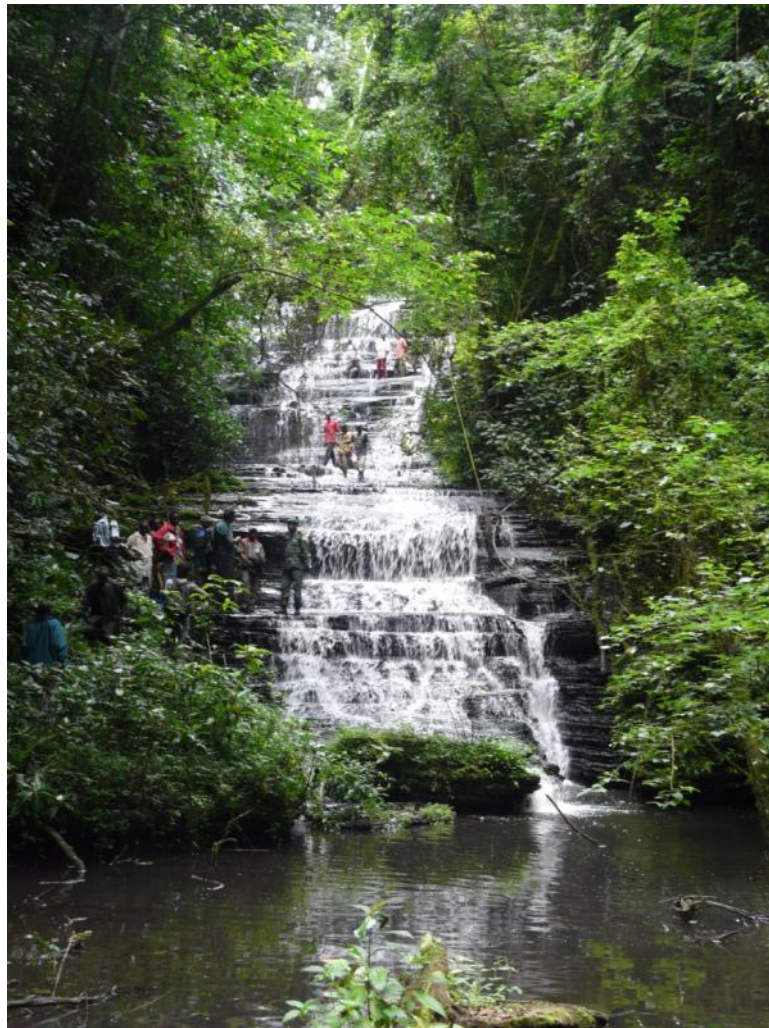


Establishing a conservation presence in the Mt Hoyo Reserve and development of a strategy for the conservation of a corridor



Final Report for USFWS Project 96200-9-G096

P. Shamavu, D.Kujirakwinja and A.Plumptre



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Introduction

The Mont Hoyo Reserve is located to the north of the Virunga National Park (NP) and was historically managed by the Northern sector of Virunga Park. Since 2009, the Institut Congolais pour la Conservation de la Nature has set up a separate management for Mont Hoyo that is headed by Chief Park Warden and rangers. Mont Hoyo Reserve was created by a ministerial decree in 1947 to protect its wildlife and its natural beauty. The site used to be regularly visited by tourists in the past because of its caves the cultural ceremonies of pygmies and an exceptional waterfall (escaliers de venus). The reserve is separated from Virunga park by a corridor of "intact" forest that can be seen from satellite images and could be established as a formally protected corridor between the two protected areas.

Mt Hoyo was abandoned by rangers in 1998 due to the presence of armed groups in the region and the unstable political situation in the region. This project aimed to re-establish rangers at the site to enable the protection of the biodiversity of the reserve and start to assess the options for carbon financing for local communities and ICCN. Through provision of equipment, support to staffing, rehabilitation of a ranger post, and consultation with various stakeholders, the re-establishment of an ICCN presence would support the conservation of wildlife at this site, particularly chimpanzees and okapis.

This report provides results of the USFWS funded activities that took place between July 2009-July 2010. Although the security situation has improved in the DRC, the northern sector of Virunga and the forest to the north is still insecure, including Mt Hoyo. The presence of Ngiti (local militia group) and NALU in the reserve has been a major challenge to implementing some of the activities that were funded.

Implemented activities

Objective 1. To re-establish a presence of ICCN rangers in Mt Hoyo

a) Rehabilitate existing building for rangers

The insecurity in the area has prevented the completion of the rehabilitation of the building to date. However, the rehabilitation process has begun and a contract with a private constructor has been signed. Materials have been purchased and funds advanced to ICCN for the work and we expect rehabilitation to be completed soon (end November).

b) Support patrols and monitoring activities

To enable the reestablishment of rangers in the reserve a series of meetings with various local authorities were held to make them aware of activities that will be implemented in the reserve and gain their support and commitment to conservation. The Regional Army commander of the Ituri area, the District Commissioner, the Administrator of the area and traditional local chiefs were among the authorities contacted by the WCS and ICCN staff. Due to the slow administrative processes in ICCN, the activities did not start as early as planned. The wardens in charge of the reserve were appointed in late 2008 while rangers were only transferred in late December 2009. During this period we supported wardens in terms of a motorbike, fuel and spares. We were also giving financial support to organize meetings and bonus for their survival. To strengthen the presence of ICCN and the capacity

to patrol the area, ICCN appointed 10 more rangers in June 2010, to help the 20 rangers stationed there since December 2009. Support to rangers included salary supplement to the low salary they are getting from the government (30\$ per month) which is low and can't allow them to overcome their families' needs.



Photo 1. Rangers at Mt Hoyo.

18 overnight patrols by rangers in the Reserve were funded under this project. These patrols aimed at surveying the area and to assess ongoing human activities as well as to start to make local communities aware that they should stop illegal activities in the reserve. During these patrols, it was observed that poaching for bush meat was going on, timber harvesting and wild fruits were being collected. With these threats observed, the management of the reserve decided to act on two fronts; sensitization and further patrols. Further contacts and sensitization meetings were held with local chiefs to encourage local communities to explain the need to conserve the reserve and why they should not be hunting or cutting timber in the reserve. This has led to a decrease in timber harvesting in the reserve and also a reduction in the number of people entering the reserve to hunt for bushmeat. However, because of this progress, some local chiefs have recently used the restriction of access to resources in the reserve to whip up conflict between ICCN and the local communities because they used to benefit from the timber sales. This has impacted the ability to patrol the whole reserve. The main threats encountered during these patrols were timber exploitation and poaching of monkeys and duikers.

c) Provision of field equipments for rangers

To enable rangers to patrol the areas, 20 gumboots, 10 GPS units (Garmin GPMAP 60CSx), 5 tents, and 20 rain coats have been provided. Given the need of uniforms by rangers, WCS has also ordered 33 uniforms using separate funds and these are in the process of being shipped to Goma.

Objective 2: To develop a strategy for the conservation of the corridor region

a) Interviews with villagers near the corridor

Teams of Congolese researchers have undertaken a socioeconomic survey in the villages surrounding the corridor region linking Mt Hoyo Reserve to Virunga Park. The teams were composed of one WCS staff member, one ICCN staff member and two interviewers recruited from the local community. These local community interviewers were chosen by local chiefs, based on their education level and their communication abilities. The WCS and ICCN staff were in charge of consultations with local leaders in each village and interviewed the village committee. The locally recruited people undertook interviews of households in the villages, following preliminary training by WCS. After having interviewed the village committee, one member of the committee had to accompany interviewers to identify households to be interviewed according to established criteria of having the same number of households falling in three categories: relatively rich, medium and poor. Data collected have been entered into the computer and analysed.

Results show the following:

We interviewed 471 households sampled in 52 villages on the western side and along a road passing through the potential corridor and linking the west to the east of it. Household age and sex composition is typical of many households in this region with 53.5% of household members under the age of 20 (figure 1).

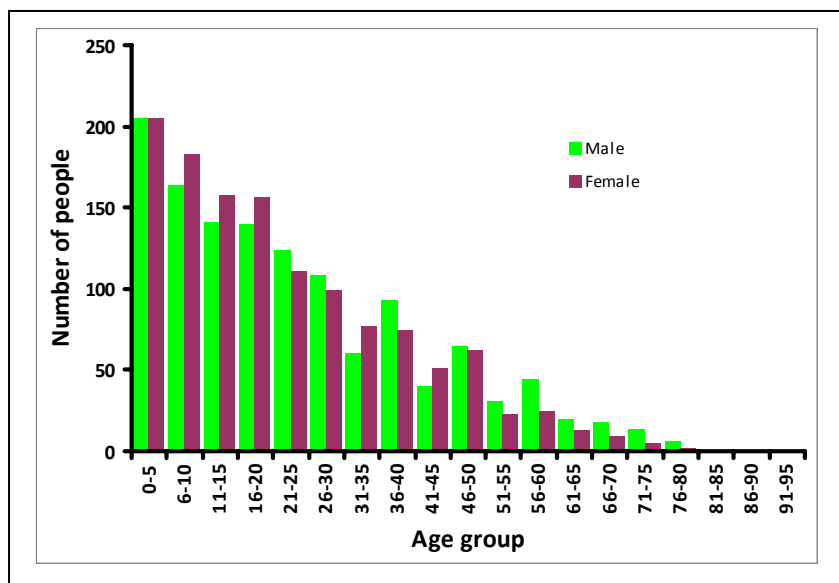


Figure 1. Age structure of the population living around the potential Mt Hoyo corridor for male and female household occupants.

35.3% of household inhabitants had no education, 49% had primary level education, 14.8% had some secondary education and only 0.9% had University level education.

We asked each household about their sources of income and where it comes from. On average households earn \$2,558 per year in this region of which 69% is consumed in the home and 31% sold to bring in cash to the household. However this varies quite a bit in the three different ‘Groupements’ around the corridor (figure 2).

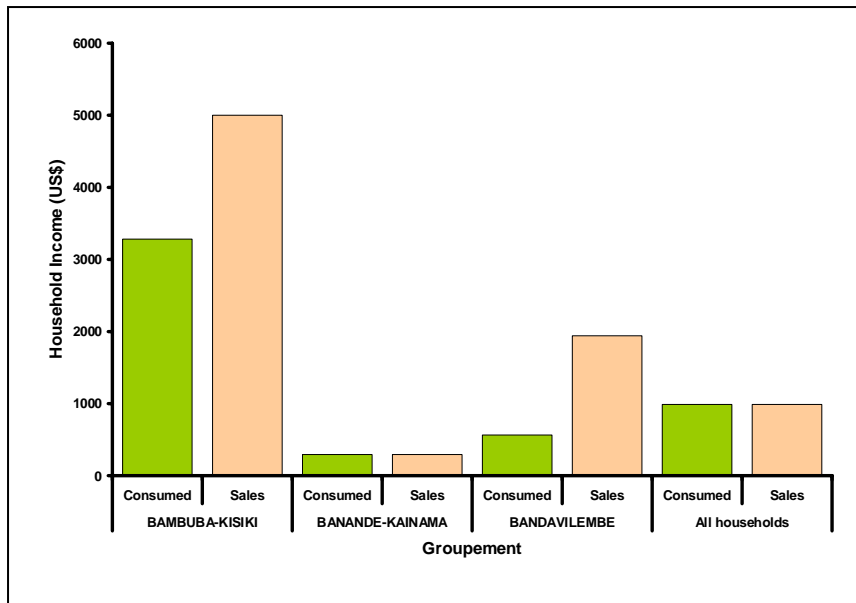


Figure 2. Household income in the three groupements around the corridor as well as for all households broken down into the amount consumed in the home and the amount sold to bring in cash (includes income from small businesses).

It is clear from figure 2 that the households in Bambuba-Kisiki are much wealthier than those from the other two groupements.



Photo 2. Forest products harvested included forest fruits, wild coffee and planks of timber.

We also calculated annual contributions from the collection of products from the forest to household income. These included NTFPs, bushmeat, and minerals. On average forest products contributed to about 9% of household income but this also varied greatly between groupements with Bambuba-Kisiki having the lowest contribution (both total value and percentage wise) from forest products (figure 3). The very high income from sales in Bandavilembe is due to businesses harvesting poles for house construction and also making charcoal from the forest.

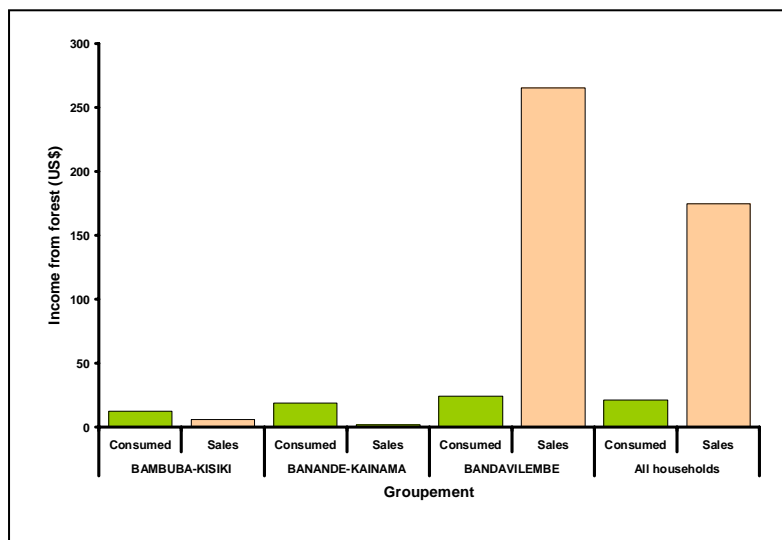


Figure 3. Household income from collection of products from the forest separated into those that are consumed in the home and those that are sold to raise cash.

On average a household earns about \$200 per year from access to products from the forest and \$1,980 from their crops, livestock and small businesses. Any carbon project might have to offset the loss of access to these forest products by this amount. In 2008, WCS estimated that there were 9,457 houses within 3 km of the potential corridor region. We would estimate therefore that any REDD project would need to provide \$1,891,400 per year to compensate these households if all are accessing the forest. However if only those households within 1km of the forest need to be compensated then we would only need to raise \$572,800 per year. With an area of nearly 1000 km² we believe the corridor has the potential to generate this level of revenue from carbon sequestration.

We also asked households whether they would be interested in conserving the corridor if it could generate some income for them. Results show that 41.8 % of respondents are supportive of the creation of the corridor and the protection of the reserve, 41 % were against the idea, 12.5 % did not express any preference either way and 4.7 % left the decision to villages' chiefs. If the corridor is created respondents wished to have continued access to cultural sites, extraction of some resources and a zoning plan that defines land use options and regulations related to activities such as agriculture, settlements and conservation. Respondents who did not want the corridor to be protected are worried about some of their lands which might be taken in the process but also were worried about future land scarcity for their children, the negative impact on their incomes (such as timber exploitation), restrictions on hunting and a fear of protection approaches that would evict people from the forest. Any REDD project would have to address these concerns by working with the villages to make sure everyone knows what is being planned and that they are all happy with the plans.

52 village committees (local chiefs) were also consulted separately to the households, of which 36 were positive and four neutral about the creation of the corridor and protection of the reserve because the process can be perceived as an opportunity for employment and local development through tourism and conservation jobs. 12 village committees expressed a negative reaction to the idea. A major worry of the community was the in-migration of outsiders into the area and the possible increase in conflicts over land and the restriction

over resources access. However, 45 of the 52 committees recognised the importance of protecting the forest.



Photo 3. Meeting with village committee over the idea of creating the corridor

It has been difficult to survey the eastern side of the reserve as the Ngitu militias are present in that area. The Chief Park warden of Mt Hoyo has started some informal contacts with their leaders to assess their willingness to enable rangers and partners to implement various activities that would protect natural resources. He hasn't succeeded yet but we look forward to the success of the contacts.

Over the coming three years WCS will be taking these results and working with other partners to develop a REDD project for the corridor under a CBFF grant which is due to be financed in the near future.

b) Development of conservation strategy

A strategy to conserving the Mont Hoyo reserve was developed for both the short term and long term. Over the short term conservation partners interested in MT Hoyo and the corridor to Virunga Park met to plan for activities to be implemented in the reserve for the year 2010. This meeting was attended by ICCN, WCS, ZSL and Hope in Action. A workplan was produced to enable coordinated activities in the reserve and the involvement of local communities in conserving the site.

Activities that were agreed for the workplan include:

- Refresher training to rangers in anti poaching techniques: Given the fact that Mont Hoyo has had no ranger presence for more than 10 years and that it is located in a conflict prone area, there is a need to train rangers and wardens in anti poaching techniques. This has already taken place in a training center established by ICCN in Virunga National Park.
- Training rangers in Monitoring : WCS set up a law enforcement monitoring process in Virunga NP which consists of rangers collecting data while on patrol and has

provided information on species and illegal activities sightings. Also ZSL has been conducting Okapi monitoring using camera traps in Virunga. These two processes are important for the management of the reserve and training will be conducted as a whole in the last quarter of 2010.

- Construction of a ranger post (accommodation): This ranger post will accommodate 8 rangers and one warden. See objective 1 above.
- Provision of field equipment : ICCN receives very little in Mt Hoyo and there is a need to provide field equipment, uniforms and boots to enable the rangers to be well equipped.
- Provision of patrol rations and salary supplement: Patrol rations are vital to law enforcement activities as rangers have to conduct over night patrols in some areas. Low government pay isn't sufficient for rangers and their families to live on and there is a need for salary supplements from NGOs or donors in order to motivate the personnel to protect the reserve.
- Socio economic study: The aim of conducting a socio economic study is part of a long term strategy for the conservation of the reserve as the idea behind it is to understand how local communities use and depend on the forest. This will help us in looking at opportunities of creating a corridor linking Mont Hoyo reserve to Virunga National Park. Some of the results of this are summarized above and a more complete report will be completed in due course.
- Monitoring of the site: After training rangers in monitoring techniques, it will be important to collect, compute and analyze data. This will be helpful in getting encounter rates for key species and for illegal activities which is useful for adaptive management.

The longer term strategy was based on the assessment of the needs of this region at this meeting as well as the options for REDD financing. Zoological Society of London (ZSL), Wildlife Conservation Society (WCS), World Wide Fund for Nature (WWF) and the Conservation Company (ESCO-CONSCO) submitted a joint proposal to Congo Basin Forest Fund (CBFF) to raise funds for activities to be implemented over the next three years. Based on meetings and discussions with ICCN Mt Hoyo staff the proposal identified key elements of support for both Mt Hoyo Reserve and the corridor. This project will not only strengthen the management of Mt Hoyo but also establish a REDD project for the financing of the corridor to Virunga Park. The aim of the project is to reduce deforestation and forest degradation in the project zone whilst simultaneously alleviating poverty by creating economic incentives for the local communities through carbon income and cocoa growing in a buffer zone around the corridor. ESCO Kivu is a company that exports cocoa and they are looking for projects that help local communities increase their earnings as well as benefiting conservation. They aim to grow shade cocoa at the edge of the corridor and pay a higher price for the cocoa to reward farmers for conserving the corridor.

The proposal has been accepted and we are awaiting the final contract signing.

Objective 3: To support transboundary collaboration between DRC and Uganda in the Rwenzori-Semuliki region

Transboundary Collaboration is a process of cooperation across boundaries that facilitates and improves the management of natural resources to benefit of the two countries concerned DRC

and Uganda. Virunga National Park forms the backbone of the landscape and is contiguous with Volcanoes National Park (Rwanda), Mgahinga Gorilla, Queen Elizabeth, Rwenzori Mountains, and Semuliki National Parks (Uganda). All these National parks face similar threats, many of which straddle the international borders between the DRC and Uganda.

To overcome these threats regional wardens meetings were organized to bring together wardens of Virunga (Northern sector) and their Uganda counterparts (Rwenzori and Semliki wardens), informal meetings where wardens meet to share information and strategize to overcome identified threats and lastly coordinated patrols along borders. During this grant period, wardens of North Virunga, Semuliki, and Rwenzori Mountains National Parks met as part of the transboundary collaboration and three wardens meetings have been held. In these meetings, issues related to armed poaching from DRC, timber harvesting, timber trafficking, and illegal fishing were discussed. To try stop these illegal activities, wardens agreed on conducting coordinated patrols, and agreed to strengthen information sharing, and sensitization towards officials who could support them. For example, to try to stop illegal timber trafficking (timber coming from DRC and suspected to be coming from Virunga NP which is ferried into Uganda), the Uganda counterpart has contacted the District Forest Officer to seek his help in making sure that all timber coming into Uganda is legal. On the DRC side, contacts have been made with Army commanders to sensitize soldiers not to poach but help in conserving wildlife as it has been reported by Ugandan counterparts that DRC soldiers are involved in cross-border poaching.

Information sharing was mainly focused on the situation in the Watalinga region where Virunga Park is linked to Semliki Park as to date the security situation has prevented any joint patrols taking place here. However, four coordinated patrols were conducted by ICCN (DRC side) and UWA (Ugandan side) in Virunga, Semuliki and Rwenzori Mountains National Park under this project. All these patrols were supported by WCS and resulted in the confiscation of 32 wire snares, destruction of 11 poachers shelters and some illegal fishing equipment.

Challenges

Insecurity due to the presence of armed militias in the Mt Hoyo Reserve has been a major challenge and strategies are being developed by the ICCN management to enable conservation activities to be more operational in the area.

Conclusion

The implementation of this grant has been a motivation for other organizations to move to Mt Hoyo to support rangers and save the reserve. Hope in Action a Swedish NGO has started rehabilitating the road linking the main road (Beni - Bunia) to the ranger post near an old building of a hotel that will be also fully renovated by the same NGO for tourism activities. The socioeconomic study has been conducted as part of the process leading to the creation of the corridor and has helped in the raising of additional funding for the region through CBFF.

Mont Hoyo is still a key site for local communities and ICCN, given its potential for tourism and protection of some key endangered species. The creation of the corridor is still a challenge given that the area is known for previous land conflict and armed group activism (Vlassenroot & Huggins 2005), but it is critical for chimpanzee, elephant and okapi populations in Virunga Park who'se numbers in the park are too low to be viable. Thus,

conservation work in the area needs not only to focus on the protection of resources, but also on the involvement of all the key stakeholders, using a conflict resolution process such as the one WCS and IISD have applied in Virunga and Kahuzi-Biega (see www.csconservation.org). We believe that the communities will appreciate the corridor once we can show the level of funding that could be generated by conserving the forest and will be moving ahead with the CBFF project in the near future. We are grateful to USFWS Great Ape Fund for supporting Mt Hoyo through this grant and providing the catalyst for this additional funding for the site.

Reference cited

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