

Rwanda – a review of the role of Mountain Gorilla Tourism in National Rehabilitation

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Introduction

The economic and social recovery of Rwanda from the genocide of 1994 and the conservation efforts to maintain the population of mountain gorillas (*Gorilla beringei beringei*) in the Virunga National Park (VNP) are separate aspects of Rwanda's recent history.

They have however both been, in different ways described as, a success story. This literature review examines the Rwandan gorilla population and its conservation management in the context of the Rwandan genocide of 1994 and seeks to identify links between mountain gorilla management and national rehabilitation

The 1994 Genocide and recovery

Staub (2007) relates how about 700,000 of the minority (about 14%) Tutsis were killed by the Hutu majority (about 85%) over a 100 day period from April 1994. About 50,000 Hutus were also killed. The killings were rooted in a long history of violence and conflict, and the deep division between Hutu and Tutsi was crystallised by the Belgians during their control of the country, which lasted from 1916 to independence in 1962. Post-genocide, the GDP of Rwanda has increased steadily from a low in 1994 of \$754mm to \$6.3bn in 2011 (World Bank, 2013). The tourism industry has been an important part of this recovery, and gorillas have been the unique selling point for the Rwandan tourism industry.

Gorillas in Rwanda

The Mountain Gorilla sub species is characterized by the IUCN as endangered, and has two sub-populations, estimated by them at 300 in Bwindi Impenetrable Forest in Uganda (Bwindi), and 380 in the Virunga Volcanoes Range (VVR). The VVR is about 450km² at elevations between 1850m and 4507m. The VVR population is split across 3 countries, Rwanda (VNP); Democratic Republic of Congo (Mikeno Sector of Virunga National Park) and Uganda (Mgahinga Gorilla National Park).

The 380 figure used by the IUCN for the VVR derives from a 2003 survey (Gray et al 2003). More recent figures available from the International Gorilla Conservation Program (IGCP), estimate 880 gorillas, 400 in Bwindi, 480 in VVR (IGCP 2013). Pressures on the gorilla population include habitat loss, poaching, disease (in some cases human transmitted), wildlife trading and conflict. While the Gray study is encouraging, with an annualised growth of 1.15% in the population from 1989 to 2003, it is cautioned that nearly all the growth is in one section of the VVR, where a heavily research and tourist habituated group grew from 80 gorillas to 137 between 1989 to 2003. In this same time scale 24 to 29 gorillas were killed by insecurity or poaching.

The Tourism Industry

The progress of tourism in Rwanda is portrayed as a success by Nielsen and Spenceley in a 2010 paper entitled “The Success of Tourism in Rwanda – Gorillas and More” (Nielsen and Spenceley 2010). Tourism centered around mountain gorilla conservation has a long history in VNP. Dian Fossey’s work in the 1960’s and 1970’s brought the plight of the gorillas to international attention; in 1989 official tourism was encouraged under the Mountain Gorilla Project (MGP) set up by the African Wildlife Foundation, World Wide Fund for Nature and Fauna and Flora International as a part of a strategy which also encompassed anti-poaching and education in the conservation strategy. The intent was to provide incentives for the Rwandan government and park authorities to conserve the park and to create local jobs and revenue. The MGP evolved into the IGCP. When the VNP re-opened in 1999 it had 417 visitors. In 2008 17,000 (which is a full uptake of the limited permits) visitors visited VNP to see the gorillas, and another 3000 to the other Rwandan national parks. In 2010, \$202mm was earned from tourism receipts, nearly double the contribution from the export of coffee and tea at \$111mm (IMF, 2012). The actual contribution of gorilla tourism to this can be put into context in the following way – each of the 3 major hotels in Kigali produces about \$500,000/annum for unskilled and semi-skilled workers, food producers and artisans. Gorilla tourism in Musanze and VVR is estimated to produce \$1,000,000 per annum for poor workers and producers, as well as considerable additional grant monies.

Factors contributing to success of tourism in Rwanda are stated by Nielsen and Spenceley to be: clear strategy and vision; early involvement of the private sector; a context of improving governance; an investment friendly business environment, a choice to aim for high end tourism rather than mass tourism following a comparison of Mauritius and Kenya’s tourist industries; gorillas as a unique selling point; extension to conference and birding visitors; intensive marketing and public relations in key customer countries such as the UK and US to seek to change the association with genocide. The Rwandan government is engaged in ongoing efforts to broaden the range of Rwandan tourism, for example by promoting birding and conference activities.

Local benefits of tourism, and conservation linked community development critiqued

Spenceley et al (2010) use value chain analysis to examine the extent to which gorilla tourism in VNP benefits the poor and make suggestions for increasing local benefits. The authors conclude that in 2009, of \$42.7mm turnover around VNP from accommodation, excursions, shopping and excursions most came from accommodation. \$1.8mm could be characterized as “pro-poor”, being 4.3% of destination turnover and 65.7% of destination expenditure. The definition of poor was those who but for a salary from tourism would be earning less than \$2/day, an international rather than local benchmark. The following activities were identified as benefiting local people: employment (in hotels and restaurants); direct income from joint ventures; cultural tourism excursions; shopping and craft; and donations, as well as benefits from VNP revenue sharing and access to natural resources. After a very thorough survey of formal and informal employment and spend in and about the VNP, the authors conclude that the proportion of pro-poor destination spending is greater than other comparable tourism initiatives in other countries and that 455 people have full time jobs as well as at least 136

casual jobs for those originating from poor backgrounds. Noting the success of the Sabyinyo Lodge, a community owned eco-lodge leased to an operator (which pays \$50/bed night and 7.5% of revenue to the local community concession granters), in maximizing local revenue, resulting in about three times the local benefit as compared with other hotels, further joint ventures are recommended. Additionally, private sector interventions to change philanthropic engagement by business owners into changes to core procurement and staffing practices are suggested, as is increased employment of local staff and further business linkages with local entrepreneurs. It is also noted that lack of skills in a range of disciplines including marketing and tourism and hospitality holds the sector back, and that enhanced private, non-governmental organization (NGO), research agency and government dialogue is required to provide the mechanisms to retain income locally.

Caution about the conservation benefits of some community development initiatives is expressed by Martin et al (2010), building on earlier qualitative work (Rutugarama and Martin, 2006). The authors note the attractions of linking community development and conservation with the promise of reconciling apparently incompatible objectives, and locate the efforts to achieve this in the debate between “fortress conservation” and “community conservation” advocates. Noting that whilst there is some “backlash”, the latter philosophy prevails, they examine IGCP programs critically and identify that the conservation logic of contractual obligation is beginning to, and needs to, supplement income-demand and physical dependency conservation logics, since flaws in income demand conservation logic (ie unverifiable assumptions that forest products are sub standard or perfectly substitutable, or that locals are unable to take employment and harvest forest goods), and limited cases of physical dependency (eg eco-lodges) where there is a clear linkage to conservation outcomes, mean that it is often not the case that projects are effectively linked to conservation outcomes. Problems with scale (local cost, national or even international benefit), equity (difficulty in ensuring that the poor benefit from eg schooling and infrastructure initiatives), and national and local policy alignment are examples of identified flaws. However unwillingness outside the NGO community to enter into formal understandings, combined with difficulty in enforcing mooted contractual conservation obligations, render effective linkage of conservation outcomes to development initiatives a continuing challenge. They do however note the success of ranger based monitoring in enforcement and targeting community initiatives, and transboundary cooperation and revenue sharing arrangements in eliminating conflict between Virunga habitat countries which experience gorillas moving over the border, and in enforcing park rules against perpetrators who, in the absence of cooperation, would be able to escape simply by crossing borders.

Contributory factors to effective gorilla conservation

Aspects of the transboundary cooperation developed at the institutional level between the national park management authorities and the park rangers at the individual level are described by Martin et al (2011), Robbins et al (2011) and Plumptre et al (2007). Gray and Kalpers (2005) describe the ranger based monitoring of the gorillas used to track them and target community interventions.

Martin et al (2011) survey the interaction of conflict and co-operation in the environmental management of the Virunga massif. The authors adopt an analytical framework that takes conflict and co-operation as existing together, and describe the evolution and effects of transboundary cooperation. The slow evolution of formal revenue sharing agreements (2006 MoU on revenue sharing) from informal cooperation between protected area staff driven by job-affinity and a collective identity is noted, and in these conditions communication, economic rules of the game, rules and ownership are identified as being crucial. For example revenue sharing mitigated dispute where gorillas crossed borders and enhanced mutuality. Therefore with appropriate institutions and relationships it is possible to create conditions in which the “low politics” of resource management can continue successfully despite “high political” antagonism. There is therefore a complex relationship between environment management and security.

Robbins et al (2011) quantitatively examined the different management strategies used in the conservation of gorillas, and examines in detail the differential success of habituated as compared with unhabituated gorilla groups in VVR. In the study, the key finding was that achieving population growth for some species such as the gorilla is hard to do with ecosystem based conservation, but that considerable success can be achieved with what the authors characterize as “extreme conservation” involving: close monitoring and habituation; veterinary treatment extending beyond immunization to treatment of infection; habitat corridor creation; ecotourism; removal of predators and invasive species; captive breeding and translocations.

The conclusions drawn are that very expensive conservation measures may well yield positive results, and that where conditions are suitable, and aspects such as limited range and limited populations are indicators of suitability, these interventionist techniques could be used elsewhere.

Plumptre et al (2007) describe the benefits of managing certain species at a landscape scale, particularly in fostering cooperation over boundaries, and while stating and approving of the efficacy of the approach in managing the gorilla, urge the extension of the approach to other species within the Virunga landscape, learning from the success of the gorilla program.

Gray and Kalpers (2005) describe the IGPC methodology of ranger based monitoring in the Virunga massif across the three interlinked national parks, where it is seen as a key protected area management tool. It is designed to reveal ecosystem and community change, and meets the need for simple and appropriate monitoring of complex situations without requiring additional resources, and to find a way of continuous monitoring rather than the discontinuous snapshot approach often found with one-off scientific studies. It requires systematic collection of ranger observations without increasing ranger workload, concentrates on key species and broad trends, and uses relatively simple data sheets and training tools (such as standardized place names and gorilla identities) as the main instruments, and deliberately avoids high technology approaches to provide resilience in times of conflict. By giving relative autonomy to rangers in the collection of data, data collection has proceeded even in times of conflict. It is however predicated upon relatively high ranger staffing levels – Virunga has 266 field staff per 1000km² which is

about ten times the norm for protected areas globally, and the cost of this is justified by the revenue earning potential of the gorilla population.

Gorillas and conflict

In a quantitative study assessing the environmental impact of warfare Glew and Hudson (2007) seek to systematize sometimes poor quality data on the effect of conflict on the environment. In examining Rwanda and the gorilla population they observe that the seriousness of the Rwandan genocide on the human population was not matched by high impact on the ecology – violence does not itself result in an adverse environmental impact. Rather, the consequent civilian displacement causes environmental damage as refugees seek fuel and food. Thus the genocide led to adverse environmental effects in North and South Kivu in DRC caused by displaced Rwandans in 1994-1997. The targeting of illegal resources is a function of generalized breakdown of law enforcement and targeting of illegal resource, sometimes by military but more often by conflict affected civilians, and the tendency of the conservation donor community to leave as conflict begins to arise and only return when the reconstruction process is well advanced tends to mean that the environmental adverse impact is longer in time than other conflict effects. The relatively low impact in VVR may be contrasted with the high impact in Akagera National Park where the Rwandan Patriotic Front soldiers based there caused a 60—90% loss of ungulates in the course of feeding themselves.

Psychological National Rehabilitation

Staub (2006) seeks to create a theory from a political psychology perspective of how groups can reconcile after violence, and the ways in which the psychological recovery of individuals can be aided by institutions and the creation of shared narratives. The necessity of both top down approaches involving leaders and the media and bottom up approaches involving the local populace is examined. The processes enabling the genocide are described, as is the aftermath and efforts at reconciliation. No mention is made in this study of how key national environmental assets can be used to create the shared narratives.

Conclusion: The Role of the Mountain Gorilla in National Rehabilitation

The success of tourism in Rwanda post genocide is substantiated by the economic data, and the key role of gorillas in the choice of high end tourism as key to recovery plays its part. The institutional transboundary regime together with personal relationships amongst staff, effective high spend and commitment of staff is the key to the gorilla conservation success. The effectiveness of community development in assisting with conservation is variable. Although no literature was found to focus on environmental concerns as a “shared narrative” counter to sectarian concerns, the multi-dimensional approach and success of a transboundary approach to gorilla management offers pointers to how shared resource management objectives may overcome difference, and lead to surprisingly positive results.

It would also be interesting to see how the Hutu Tutsi antagonism played out in the context of the VVR amongst individuals with a shared collective identity concerned with the conservation of the natural resource of gorillas.

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