

## **Contribution of tourism revenue sharing (TRS) program on transforming the living conditions of communities around Nyungwe National Park**

**Herman Irabona Muragizi & Dr Military Ngamata Olivier**

University of lay Adventists of Kigali, P.O Box: 6392 Kigali Rwanda

E-mail: [irabonamuragizi@yahoo.fr](mailto:irabonamuragizi@yahoo.fr) & [kahundwe@yahoo.fr](mailto:kahundwe@yahoo.fr)

### **Abstract**

The tourism revenue sharing with local communities is one of the community conservation tools through which community-park relations can be improved. The concept of benefit sharing became more significant when the Convention for Biodiversity (CBD) was developed and approved in 1992. This international convention included three objectives – one of these three was the “*fair and equitable sharing of the benefits arising out of the use of genetic resources*”. The present study adopts a survey research methodology in order to get information from different stakeholders of tourism industry in Rwanda. Also, the study was covered all the available secondary data on tourism area of Nyungwe National Park, in order to understand the contribution of tourism benefits in transforming the living conditions of communities near and around Nyungwe Forest National Park.

Benefit sharing programmes allow access to park resources, which may consist of natural resources that can be sustainably harvested, such as water and other natural products, as well as a share of parks’ financial revenue earned through tourism or other activities. Therefore, revenue is just one of the benefits that can be shared with local communities. It is an investment in conservation and it must demonstrate a favorable conservation impact. From 2005 to 2016, 121 community projects have been financed around Nyungwe National Park by government of Rwanda for a total amount of us dollars 924.864. These projects have impacted the socio-economic conditions of beneficiaries. Therefore, 90% of respondents have observed that the Tourism Revenue Share have a positive impact on decreasing the illegal activities in NNP, 23% of respondents have observed that their income increased through TRS projects and has facilitated food availability and promoted their livelihood. According to respondents also, after project implementation, the health access was increased up to 92% from 58%.

**Key concepts:** Revenue sharing, socio-economic development, NNP conservation.

## 1. Introduction

According Kamuzinzi and al. (2012), the tourism industry has thrived, emerging from an unrecognized economic sector to become one of the world's greatest export industries. Having capitalized on advancements in communication, transportation and a liberalized global market environment, tourism has shown consistent growth, reporting an average annual growth rate of 7% per year (UNWTO, 2012). Globally, tourism plays a vital role in the social and economic development of many countries, (Bin & Nel, 2002). From the social perspective, tourism promotes the respect and preservation of the communities' cultures around the world (Global education center, 2005) and promotes social exchange (Simpson, 2008). For the environmental perspective, tourism has the ability to recover the degraded areas, as with examples of Sydney Harbour Rocks areas (Ryan, et al, 2009).

Tourism revenue sharing in Rwanda can be traced back to the 1950s when the Belgian colonialists used it as a tool to elicit cooperation from native Rwandans settled in areas adjacent to the country's game reserves. At that time the monetary benefits were delivered to the local communities while the

local communities received the direct share of meat from the crop raiding animals that were short by the game departments (Naughton, 1999). Since 1996 Rwanda has been stable in terms of political conditions and biodiversity conservation policies have been pursued in consistent and determined manner.

Economically, tourism creates employment opportunities (Lee & Chang, 2008). The United Nations World Tourism Organization (UNWTO) estimates that tourism contributes more than 75 million direct jobs worldwide. Apart from direct jobs, tourism creates indirect and induces employment opportunities to communities. With these types of employment opportunities (that is, direct, indirect and induced), tourism offers women and youth fast entry into the workforce (UNWTO, 2012).

For Adams and Hulme (1998), developers had taken time and effort to inform local communities of specific tourism development plans and seek to marginalize to deprive them of anticipated economic benefits. However, the needs of local community's participation in park protection should be taken fully into account, particularly since they are often dependent on the natural resources that attract tourists to an area and generate income for the national

economy. At the same time, the concept of tourism and revenue sharing must include the aspect of sustainability, which is *“environmentally responsible travel and visitation to natural areas, in order to enjoy and appreciate nature (and any accompanying cultural features, both past and present) in a way that promotes conservation, has a low visitor impact, and provides for beneficially active socio-economic involvement of local peoples”* (World bank, 2008).

In Rwanda a Revenue Sharing Program was created in order to provide solutions to biodiversity conservation through supporting the improvement of living conditions of communities near and around national parks. Infrastructure development like Health centers, schools, and roads/bridges and support local entrepreneurship (bee keeping, hand craft, culture promotion, ....) were developed and financed from tourism revenue sharing (TRS) to support local development economic (LED).

## **2. Concept of revenue sharing**

Protected areas share benefits with local communities in the form of natural products (water, honey, medicine, and fuel wood), cultural/spiritual values, environmental services (climate, rainfall), income from

conservation based enterprise, and finally a share of tourism benefits. The main point is that tourism revenue sharing is just one of the types of benefits that are shared with local communities. However, it must be distributed in fair and transparent mechanisms that benefit the people most affected by costs of living adjacent to the parks. An economic valuation study of the Virunga Volcanoes and Bwindi forest in Uganda (Hatfield, 2004), demonstrated that the value of the continued conservation of these forests outweighs the costs overall, but that much of the value of these forests is realized at the national and international levels, while at the local level there is a net loss. Revenue Sharing is meant to promote a more equitable sharing of the costs and benefits of conservation.

A Revenue Sharing programme is just one of the many activities that a park's revenue (gross income) supports.

Revenue sharing policies usually stipulate a certain percentage of gross revenue that will be shared. Revenue Sharing programmes differ across the countries in the region.

- Uganda launched revenue sharing programmes with 20% of gorilla permit fees (lower priced at \$120), and over time a series of policy

changes resulted in current policy of sharing 20% of entry fees, although this is currently under review (2005).

- Kenya in the 1990s shared 25% of entry fees to support projects in communities, but this programme was subjected to a lot of political problems and over time was discontinued. However, Kenya's parks do still support projects on an ad hoc basis.
- Tanzania shared 7.5% of the operating budget of each PA. Therefore, if a park has a small budget, the amount set aside for revenue sharing is low.
- In Rwanda, ORTPN has adopted Revenue Sharing (RS) as a priority programme to support conservation by increasing local community support for conservation because:
  - RS can help reduce demand for protected areas' resources by promoting alternative sources of materials and income,
  - RS can generate goodwill/trust by investing in projects that address local communities' priority needs.
  - RS can act as a direct incentive for conservation by providing a long-

term flow of benefits, from protected areas to communities, which are contingent on local support for conservation, thereby providing a direct and strong link to the parks.

### **3. Revenue sharing in Rwanda and conservation**

From 2004, ORTPN initiated a revenue sharing programme by distributing 42 million FRW from revenue generated in 2003. These funds were allocated to the districts bordering the three national parks in the ratio of 50% PNV: 25% PNA: 25% PNN (OTPN, 2005). Five years after, the amount total amount affected in the community projects was evaluated to 1.04 billion, respectively 324 million for ANP, 396 million NNP and 422 VNP (RDB, 2012).

Districts are leaders in identifying projects to fund. While this approach might prove successful in conservation terms by influencing political support at district level, it probably has had little impact on the primary target group at community level – poorer households within park-adjacent communities.

### **3. Methodology**

#### **3.1 Presentation of NNP**

Located in the South West corner of Rwanda, Nyungwe National Park is an untouched natural rainforest that is filled with exciting biodiversity. According Rwanda Development Board report (2016), the NNP cover over 1000 square kilometers, it is one of the world most beautiful and pristine mountain rainforests. Home to habituated chimpanzees and 12 other primates species (including a 400-strong troop of habituated Ruwenzori Black & White Colobus), it's also a birder's paradise with over 300 species, including 16 endemics, and is home to 75 different species of mammal. Sounds and views collaborate to create a one-of-a-kind wildlife experience. Exploring through the forest, travellers will witness the lush green mountains and cooling mist in a landscape that won't be soon forgotten. Cultural activities are also available around the forest.

Not only is a significant portion of the Park's 970 km<sup>2</sup> undisturbed primary rainforest, but it harbors a far greater diversity of plant, insect, bird and mammal species than other primary rainforests of similar size.

Notable among the mammal species in Nyungwe are the 13 species of primates, including L'Hoest's monkeys, colobus, mangabeys, the exceedingly rare owl-faced monkey and one of Africa's greatest

concentrations of chimpanzees. However, instead of appreciating the wide-spectrum wonders of Nyungwe's topography and ecosystems, most tourists arrive with a narrow focus on a single objective: to spend quality time with chimpanzees. This orientation arises because the majority of Nyungwe's visitors have been induced to come as an add-on to a visit to Volcanoes National Park (VNP), which is known as the world's premier location for observing mountain gorillas in their natural habitat.<sup>1</sup> However, chimpanzees are far less sedentary than gorillas, spending much more time in the high canopy, and are also more intelligent, which makes it easier for them to keep their distance from clumsy bands of tourists, so that relatively intimate experience with the gorillas is hard to replicate with chimpanzees.

### 3.2 Data collection

Following a literature review different documents were consulted for secondary data. For primary data, interviews were conducted with 50 respondents and 10 members of four cooperatives. Total Population beneficiaries of project developed around NNP in Rangiro Sector in May 2016 was 612. The same time interview were conducted with two members of RCA leaders, one member of RDB employee deployed at to evaluate the impact

infrastructures developed on social economic conditions of beneficiaries. In additional, at central level, interview was conducted with Rwanda Development Board.

#### 4. The Results and Discussion

Tourism revenue sharing (TRS) has become a popular strategy for integrated wildlife conservation and rural development in Africa. In Rwanda, 10% of tourism revenue is invested annually in communities adjacent to protected areas (Ian E. Munanura and Al. 2014).

From field results, 100% of respondents know the use of fund from TRS. In general respondents are happy with the projects developed by RDB with partnership of local authorities at district level.

At the same time, 90% of respondents have observed that the TRS have a positive impact on decreasing the illegal activities in NNP.

The main illegal activities developed by community surrounding NNP are fire woods, honey collection and other construction materials, farming activities, hunting, water and mining extraction. TRS is the best tool to ensure sustainable conservation, to increase community responsibility for conservation, to improve the livelihoods of surrounding population, to compensate for loss of access and/or crop damage.

The TRS has also promoted the community ownership and contributes to reduce conflicts among park guards and surrounding population. During the year 2010, Frw 52.806.000 were invested in different economic projects around NNP. The graph below shows the distribution by district.

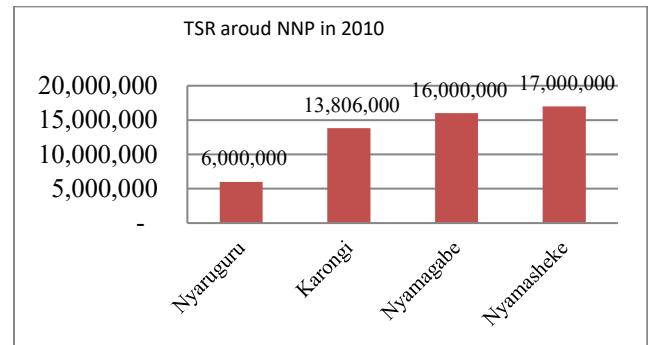


Figure 1: fund for economic projects by district (2010)

In general, 23% of respondents have observed that their income increased through TRS projects.

TRS have facilitated surrounding population to put in place their own economic activities. Among them, supporting local population working in cooperatives, bee keeping projects, training in saving stoves, pottery activities, maracuja crop projects, constructions of tile factory, porters activity club, etc. These projects have promoted is a positive sign of trust and empowering the local community for park conservation and poverty reduction.

According to population surrounding NNP, the revenue from TRS has promoted their

livelihood. The revenue earned has facilitated food availability.

Community's revenue rate has changed overtime. 28% of population has average revenue of 7.500 Frw. After implementation of TRS, the average revenue was increased up to 32.500 Frw.

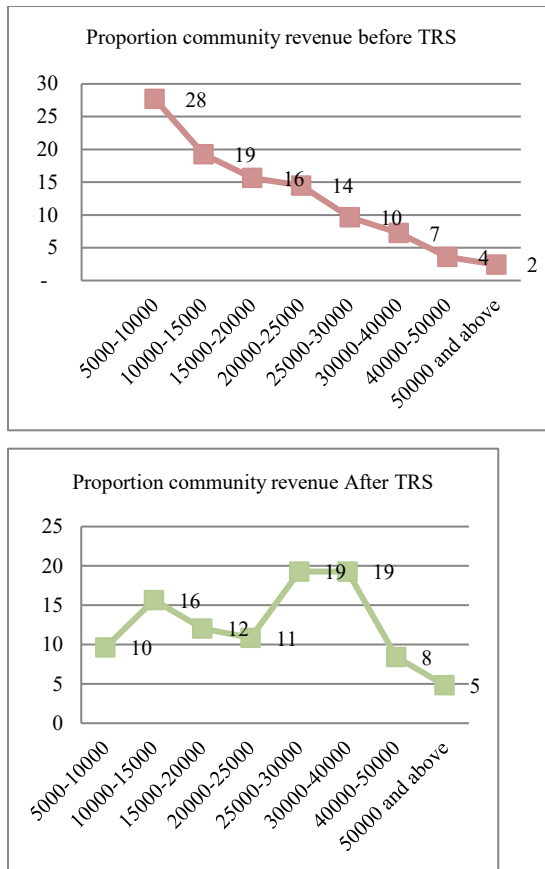


Figure 2: Proportion community revenue before and after TRS (august, 2017)

The increase of economic activities and revenue has facilitated the promotion of socio-economic welfare of projects beneficiaries.

According respondents, 58% had capacity of

access to medical assurance before TRS. After project implementation, the health access was increased up to 92%.

The TRS has also contribution to increase the education access by easily providing school materials for students. The tables below show the change in % of the education access before and after TRS implementation.

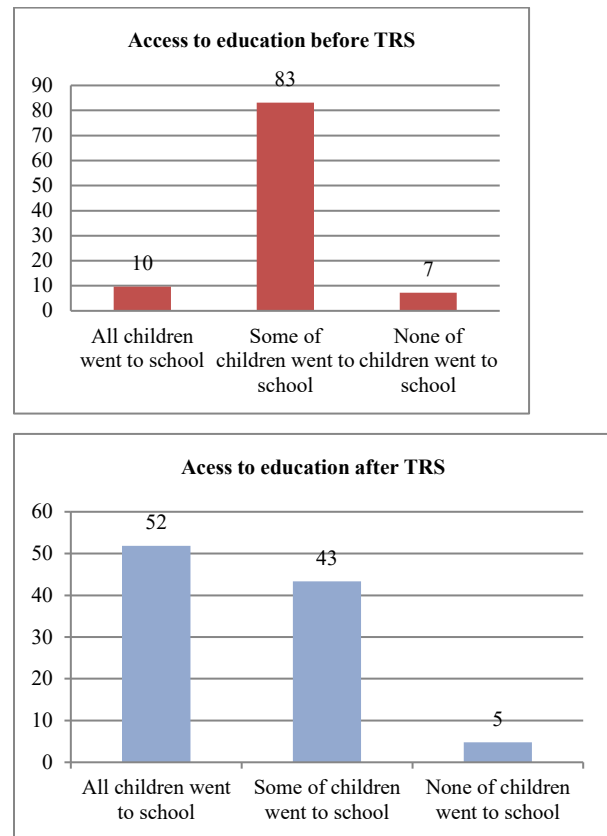


Figure 3: Access to education before and after TRS (august, 2017)

In general, all respondent are satisfied by the projects financed by RDB thought TRS. From their own statement “in our family we used to go in the forest to collect fire woods for cooking and for other necessary needs

*and that it was very tiring as it took us more time to go and return, since the construction of energy savings stoves we are no longer going to forest to look for woods as we are now using few charcoals to cook in the new stoves and the recovery time is used for other family interesting activities”.*

## 5. Conclusion

From the results of the study, the findings show that the TRS program had improved the quality of life of people living around NNP. In particular, the improvement is observed in income increase due to different projects financed by RDB. The revenue has facilitated the food availability, health and education access. The programme of TRS has also contributes to promote NNP conservation and to reduce conflicts among different stakeholders.

## 6. Acknowledgements

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