

Final Project Evaluation Report

Your Details	
Full Name	Jules Cesar Dushimimana
Project Title	Assessment of major factors influencing continuous poaching and their impact on the conservation of Nyungwe National Park
Application ID	24165-1
Grant Amount	£5,000
Email Address	jduce@gmail.com
Date of this Report	31 /12/2018

1. Indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

Objective	Not achieved	Partially achieved	Fully achieved	Comments
<p>The main objective of this research was to assess major factors that influence continuous poaching and its impact on the conservation of NNP with the following specific objectives:</p>				
<p>To assess the relationship between poverty and poaching</p>				<p>The analysis of Nyungwe National Park ranger-based monitoring data of all arrested poachers from 2013 to September 2017 showed at 68.3% that there is a strong relationship between poaching and poverty as almost all arrested poachers are poor because they were mostly in the first and second social economic categories. This was confirmed by the findings from our interviewees in this study at 75.7% that poverty is the major factor influencing continuous poaching. Although poverty was ranked as the major factor, poaching should be considered as a complex problem because other factors such as community proximity to the park, cultural related issues, commercial poaching and indirect involvement of females were also identified in this study .</p> <p>N.B: (social economic category is a scale that the government of Rwanda use to know the life style of the community . 4 categories are known . 1st and 2nd are for poor families , 3rd is for medium and 4th for rich people)</p>
<p>To assess the relationship between poaching and community proximity to the park</p>				<p>Our findings have shown that the more people are very close to the edge of the park the more the probability to be involved in poaching increases. This means that there is a relationship between poaching and the community proximity to the park. In most of the cases a higher percentage of our respondents</p>

				(>60%) were ranging between 1 to 2 km from the edge of the forest which confirmed the ranger-based monitoring data, where also a higher number of arrested poachers were living in less than 2 km away from the edge of the park.
To assess who are the main actors in poaching				The findings from this study showed that adult males (18-40 years) are most involved in poaching with 58.3%. Although there was no females arrested in Nyungwe National Park in the last 5 years doing poaching related activities, the results from our study revealed evidence that a certain number of females are indirectly involved in poaching activities as they pack food for their husbands when going in the forest; females also sell meat poached by their husbands and they cook this meat. This kind of involvement is not highly considered but once discouraged it may reduce a number of people going into Nyungwe for poaching. Other zone of attention in our study was to explore whether there are community members participating in poaching while their relatives are employed by the national park or its partners. Well known cases were reviewed in the ranger-based monitoring and were proved by a number of our respondents (52.3% agreed this statement and 8.1% strongly agreed that some community member poach while their relatives work in Nyungwe National Park or are employed by the partners of the park). Local communities said that the reason behind that is because they don't find a direct income from the salary of their relatives.
To assess the perceptions of the local community on the impact of poaching on				Beyond a focus on factors influencing poaching we wanted to understand if at least communities around Nyungwe National Park know the

<p>conservation of Nyungwe National Park.</p>				<p>impact of poaching on the conservation of NNP. A high number of the respondents demonstrated that poaching has caused animals to become extinct (41%), similar to what was found by Henry et al. (2012) and has caused animal population declines (Arevalo et al., 2016), whereby others know that poaching causes anthropogenic fire associated with loss of different trees species (Dobson et al. 2005) and they also mentioned that poaching may result in reduction of tourism revenues in the park (Obour et al., 2016). However, a high number of respondents in our study suggested that offering more temporary jobs to communities surrounding the park, creating more cooperative of ex-poachers, provision of domestic animals and involvement of local authorities at the village level in conservation activities will be a viable solution to stop continuous poaching in NNP.</p>
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2. Please explain any unforeseen difficulties that arose during the project and how these were tackled.

During our field work in data collection time, we faced two major challenges; increase in transportation fees due to increase in fuel taxes and the rainy period. To overcome these unforeseen difficulties some solutions were immediately adopted: for the increase in fuels taxes which affected our planned transportation fees, we increased transportation fees from £5 planned to £6; and for the rain that caused delays in the timing of our plan field data collection we immediately purchased waterproof equipment. All these unforeseen cost £600 that the foundation have given as extra fund to what we have previously put in our planned budget as it will be explained in the detailed budget use.

3. Briefly describe the three most important outcomes of your project.

The main objective of my project was to come with a strong understanding on the factors that cause continuous poaching in Nyungwe National Park. Through the findings of this study, the main causes of poaching were understood, categories of people involved in poaching were identified and perceptions of the community on the impact of poaching on the conservation of Nyungwe National Park as outcomes of this project were known. In the general context it is known that no one

single factor can cause poaching, but according to the findings of this study, poverty was ranked to be the first factor to influence poaching. Therefore, as most of development projects and other existing initiatives which were introduced to support conservation activities will be based on the knowledge of what cause poaching and the need of the community, the knowledge of these factors will have a positive impact on the conservation of Nyungwe National Park by reducing illegal activities, ensuring sustainable conservation and increase community responsibility for conservation through sharing results from this study with different stakeholders including communities. Secondly, the knowledge of these factors will have a positive impact on the livelihoods of poor families around the park as park managers will build on these findings and strengthen their efforts by contributing to poverty reduction, compensate for loss of access and/or crop damage and providing alternatives to park resources and to encourage community-based tourism. Then, the knowledge of these factors which cause continuous poaching will also bring park-community relationship by building trust, increasing ownership, reduce conflicts, increase participation in conservation and empowering communities.

4. Briefly describe the involvement of local communities and how they have benefited from the project.

In most of our working areas, communities were highly involved as on the first hand some community members participated in data collection and thereafter received some food allowances, and on the other hand through the interviews guided by a check list of questionnaires they participated by providing their opinions when they answered to the questions asked by the interviewer and they could get a prize such as soap to clean or schools items depending on the category of the respondents and as we have been working in very remote areas, we use motorbike as transportation means, therefore all this motorcyclist was paid.

5. Are there any plans to continue this work?

Although the results from this study revealed that poverty is the major factor that influence continuous poaching in Nyungwe National Park. One of the recommendations after the completion of this study was that there should be a deep study that analyses all parameters of poverty to clearly reconfirm that poverty is the major factors influencing continuous poaching. I will therefore continue to analyse those poverty parameters which were not analysed during the lifetime of this project to advocate on what should be done by decision makers to alleviate poverty in order to combat significantly the issue of poaching in Nyungwe National Park

6. How do you plan to share the results of your work with others?

The results from this work will be shared in different ways. First of all The results from this research will be presented at University of Rwanda in the biology department for my award of a master's degree in biodiversity conservation and natural resources management. Results will also be presented in a research symposium organised by the centre of excellences in biodiversity and the Rwanda Development Board (the

government institution with a mandate to oversee all national parks and protected areas in Rwanda). These results will be also published in a peer-reviewed article and also as now I was promoted from a tourist guide position to a community conservation warden in NNP, the results will be shared with my colleagues and as we sit on the same table while taking decisions on how to improve the management of the park these should be used to know where to put much efforts in our community partnership programme throughout existing revolving fund programme and revenues sharing programme. This will be presented again in our meeting with local authorities and communities in sectors which our research covered through our existing programme that we call conflict resolution forum aiming at sharing the result from ranger based monitoring which is done on a quarterly basis.

7. Timescale: Over what period was the grant used? How does this compare to the anticipated or actual length of the project?

Data collection was supposed to start in March 2018 and the final report to be presented by the end of December 2018.

Before I received the funds some activities such as project fine tuning and design, meeting different stakeholders (park staff, academic staff, local community leaders, and research assistants), research permit, field reconnaissance and putting together the field equipment to be used in the survey were already done. After receiving the funds I undertook data collection, data analysis then research presentation at park level and final report. Following the research permit that I had, I could not go beyond the planned time on the research permit which end in December 2018. I was therefore urged to work hard to comply with the time on the research permit.

8. Budget: Provide a breakdown of budgeted versus actual expenditure and the reasons for any differences. All figures should be in £ sterling, indicating the local exchange rate used. It is important that you retain the management accounts and all paid invoices relating to the project for at least 2 years as these may be required for inspection at our discretion.

Item	Budgeted Amount	Actual Amount	Difference	Comments
Research design		100		Self-funding including and time considered here
Research permit		10		Self-funding
Site visit and site identification		300		Self-funding considering in kind contribution time included here
Printing for research questionnaires	200	200		We printed extra copies because it would not have been easy for someone who is

				surveying turning back for find out an new questionnaire once some are misused as the travelling cost was going to double
Subsistence payment for people who participated in data collection	3600	3150	-450	As planned in the project I managed to use the planned amount for subsistence payment
Field equipment (waterproof jackets, jungle boots, and bags) and prizes such as soaps, pens, notebooks.		390	+390	This materials were not planned during the planning process but due to unpredicted whether I decided to purchase waterproof jackets and jungle boots in other to facilitate the field staff while heading to field data collection and bags were purchased for easier transportation of research questionnaires during the rain period and also prize were purchased because we spent enough time these prize were given not as a compensation but to show that at least we valued the time given to us by the respondent NB: Here this amount used were not planned but Rufford have given 600£ to be used for unplanned activities that may arose
Transport fees for people who participated in field data collection	1200	1260	+60	During our field work in data collection time we face two major challenges(increase in transportation fees due to increase in fuels taxes and the rain period)therefore where I planned to use 5£ it was shifted to 6£ NB: Here this amount (210) used were not planned but Rufford have given 600£ to be used for unplanned activities that may arose
Data analysis		150	+150	My in kind contribution

TOTAL	5000	5560	+270	<i>Exchange rate: 1£= 1107 Rwandan francs but as the amount was transferred in dollars there was some very little changes once I went to withdraw on my Dollars account as Dollars increased .</i>
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9. Looking ahead, what do you feel are the important next steps?

The focus of this study was limited on assessing major factors which influence continuous poaching and their impact on conservation of Nyungwe National Park. The findings revealed that poverty comes on the first rank as a factor, therefore if by chance I get another fund from Rufford or anywhere else I may be able to secure a fund, the next step will be to go deep in studying all parameters that cause poverty in the landscape of Nyungwe. Thereafter we will recommend decision makers to use available financial means to eradicate this poverty through existing development programs and with different partner /NGOs working in conservation of Nyungwe National Park to develop a sustainable mechanism which help community to develop some small business which can help in getting what they used to go to look in the park.

10. Did you use The Rufford Foundation logo in any materials produced in relation to this project? Did the Foundation receive any publicity during the course of your work?

Yes For sure, the Rufford Foundation logo was used in all materials that I produced (e.g. research questionnaire) in relation to this project and the foundation received publicity during the course of my work

11. Please provide a full list of all the members of your team and briefly what was their role in the project.

1. **DUSHIMIMANA Jules Cesar** - a researcher
2. **NDIKUMANA Abel** - he holds a bachelor's degree in applied geography with a strong knowledge in GIS and statistical analysis. he was very helpful in data screening and analysis
3. **DUSHIMIMANA Alberique** - he hold a secondary education certificate in humanities. he helped in data collection as an interviewer
4. **MUNYESHYAKA Vianey** - he is a local community and a president of a cooperative of ex-poachers around nyungwe national park he helped a lot to introduce my interviewer and helped them to carry prizes
5. **UMUTESI Clementine** - she is doing education at university level. she helped in data collection

6. **RURIKUNKIKO Ezechiel** - he is assistant planning research and monitoring warden of Nyungwe National park he provided an update on existing data of all arrested poachers that I use d as secondly data during this study
7. **NDIKUBWIMANA Innocent** - he is a planning research and monitoring warden of Nyungwe national park he also provided information on Ranger based monitoring that I also reviewed since the starting process of this work
8. **TUGENDAHAYO Fidele** - as a community development manager at the wildlife conservation society in their projects operating in and around Nyungwe National Park and he helped me in finding the sample frame and calculating the sample size.
9. **Prof. NSABIMANA Donat** - he is currently a senior lecturer at University of Rwanda and especially he was my supervisor since the starting period of my work
10. **Deborah** - she has done literature, English and Kinyarwanda. she helped me in data collection but also some in translations
11. **TUYIRATE Gerard** - he holds an advanced Diploma in peace building and conflict studies. helped me in data collection
12. **HATANGIMANA Ignace** - he hold a diploma in wildlife management he was very fruitful in data collection and that analysis.

12. Any other comments?

Firstly, I would like to thank the generosity of the Rufford Foundation for supporting this project. Your support was a high contribution to the conservation on Nyungwe National Park as the findings of this study will be used as a baseline for different development projects which aim at collaborative conservation effort where poor community members will be considered in any type of development project for the sustainable conservation of Nyungwe National Park.

As the findings from this research will be shared with park managers, it will be used as a useful tool that will help in planning. Apart from development project that we recommended to focus on poor families, education and outreach programmes should focus on young generation in schools as it was seen through our findings that people aged between 18 and 40 are more likely to be involved in poaching related activities.

Lastly, more funding are still needed for more studies to be done to complement on the findings of this project so that the poaching issue is careful addressed.