

## CONTRIBUTION OF COMMUNITY CONSERVATION PROJECTS ON IMPROVED LIVELIHOODS, AND SUSTAINABLE BIODIVERSITY CONSERVATION IN NYUNGWE NATIONAL PARK

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**ABSTRACT:** *Recently, Rwanda Development Board (RDB) has established a revenue sharing scheme (RSS) to create a win-win approach in protected areas for effective biodiversity conservation and management. Through this scheme, around 1 billion Rwandan francs were invested to support around 152 Community Based Conservation Projects (CBCs), and integrated conservation and development projects (ICDPs). This paper assessed the contribution of conservation projects around Nyungwe National Park (NNP). It evaluated their efficiency and effectiveness, and their socio-economic impact to the local community development. Secondary data about the revenue sharing projects and the amount of money allocated to each project were collected from RDB office. Primary data were collected through the interview and focus group discussion. To verify the findings from RDB, interview and focus group discussion (FGD) were used. Interview was done with local peoples around Nyungwe National Park and with community conservation wardens, while threats to NNP were verified by the consultation of reports from ranger based monitoring officers. The results showed that the value of resources collected by people from the park is higher than the revenue sharing support offered by RDB and consequently the revenue sharing scheme did not significantly reduce threats to biodiversity and its impact around NNP. We recommend the revision of the whole revenue sharing scheme, taking into account the cost of livelihoods of community surrounding the park.*

**KEYWORDS:** efficiency, effectiveness, integrated conservation, development projects, revenue sharing scheme

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### INTRODUCTION

Integrated conservation and development projects (ICDPs) are included in community based conservation projects (CBCs) and they are defined as approaches to the management and conservation of natural resources in areas of significant biodiversity value that aim to reconcile the biodiversity conservation and socio-economic development interests of multiple stakeholders and partners at local, regional, national, and international levels (Franks and Blomley, 2004). The term ICDP was firstly used in the Luangwa valley integrated conservation and development project jointly conducted by Food and Agriculture Organization (FAO) and the Government of Zambia in the mid-1960s (Child and Dalal-Clayton, 2004). Since then, the ICDPs have been widely used as

the innovative idea and applied to many different types of conservation initiatives and projects around the World with governments and organizations whose primary mission was biodiversity conservation and community development around protected areas (Campbell and Vainio-Mattila, 2003).

ICDPs were conceived as one of the solutions to human wildlife conflicts and extreme poverty reduction around protected areas. The main purpose was that ICDPs may reduce threats to ecosystems and help in improving community livelihoods and reduce environmental degradation (Robinson and Redford, 2004). In addition, ICDPs were suggested to promote the financial stability of local communities through the use of funds invested in different developmental projects such as agriculture, and entrepreneurial activities (Adams et al., 2004), and they should be more likely successful when there is a proper understanding of the root causes of environmental degradation and when relevant national, regional, and international policies are understood by local people (Franks and Blomley, 2004).

Since its creation and investment in conservation studies, ICDPs failed to meet their objectives in different areas of the World. Adams et al. (2004) indicated that ICDPs were likely to fail because decision makers and implementers under considered the real socio-economic situation of the community around protected areas. These authors realized that issues associated with ICDPs failure are linked to the lack of integrating biodiversity conservation and poverty alleviation, lack of strong policies and law enforcement that help wildlife conservation and community development, leading to the competition for natural resources.

Wells et al. (2004) identified a number of factors associated with the failure of ICDPs, including over-optimistic goals settled by leaders in conservation activities, weak assumptions, unconvincing local participation in biodiversity conservation, corruption in revenue sharing funds distribution, lack of leadership in environmental conservation, targeting wrong threats, uncertain financial sustainability, low benefit generation to all local communities, and the focus on the needs of donors instead of the needs of the local people. McShane and Wells (2004) indicated that the cause of the failure is rooted in the top-down process, where beneficiaries were not consulted before the policy development and ICDPs projects implementation. To solve the problem, Sayer and Campbell (2004) suggested that successful ICDPs should focus on an understanding of existing environmental and social status as well as action research and the use of both local and external knowledge. They suggested that the good governance of natural resources should motivate the payment of incentives to the local communities for sustainable management of biodiversity.

In Rwanda, Nyungwe forest reserve was promoted to the level of a national park in 2004. Back in the past, local communities used Nyungwe forest as a source of wild meat, timber, gold mining honey-bee collection, land for cultivation and collection of other non-timber forest products such as medicinal plants and materials for making crafts (ORTPN, 2005). The upgrading of that forest

reserve to the level of a national park increased the restrictions on access to natural resources leading to substantial loss of income to the local communities as it was observed elsewhere (Namara, 2005). Instead, it promoted tourism with the aim of generating national income, and then compensates the income lost by the local people through revenue sharing programs (Beeton, 2006), and hence reinforce conservation of Nyungwe National Park (NNP). The revenue sharing money were used to finance the ICDPs and the implementation was mostly done by local government, local cooperatives, religious organizations, and local Non Governmental Organizations (RDB, 2012).

Less research was done to evaluate the contribution of revenue sharing on the conservation of NNP and its impact on the improvement of the livelihood of local communities around NNP. The main objective of this study was to assess the effectiveness of tourism revenue sharing programs towards the socio-economic development of local communities around NNP. The specific objectives were: (i) To examine the social impact of tourism revenue sharing programs towards the development of local communities; (ii) To examine the economic impact of tourism revenue sharing program on the development of local communities; and (iii) to analyze the challenges faced by local administration and beneficiaries in management of revenue sharing.

The study was set to answer the following research questions: Is there any social impact accruing from tourism revenue sharing programs towards the development of local communities? Is there any economic impact accruing from tourism revenue sharing programs and CBCs towards the development of Nyungwe local communities? What are the possible challenges faced by local administration and beneficiaries in management of revenue sharing and CBCs? We hypothesized that tourism revenue sharing programs contributed effectively on socio-economic development of the local communities around NNP.

## **METHODS**

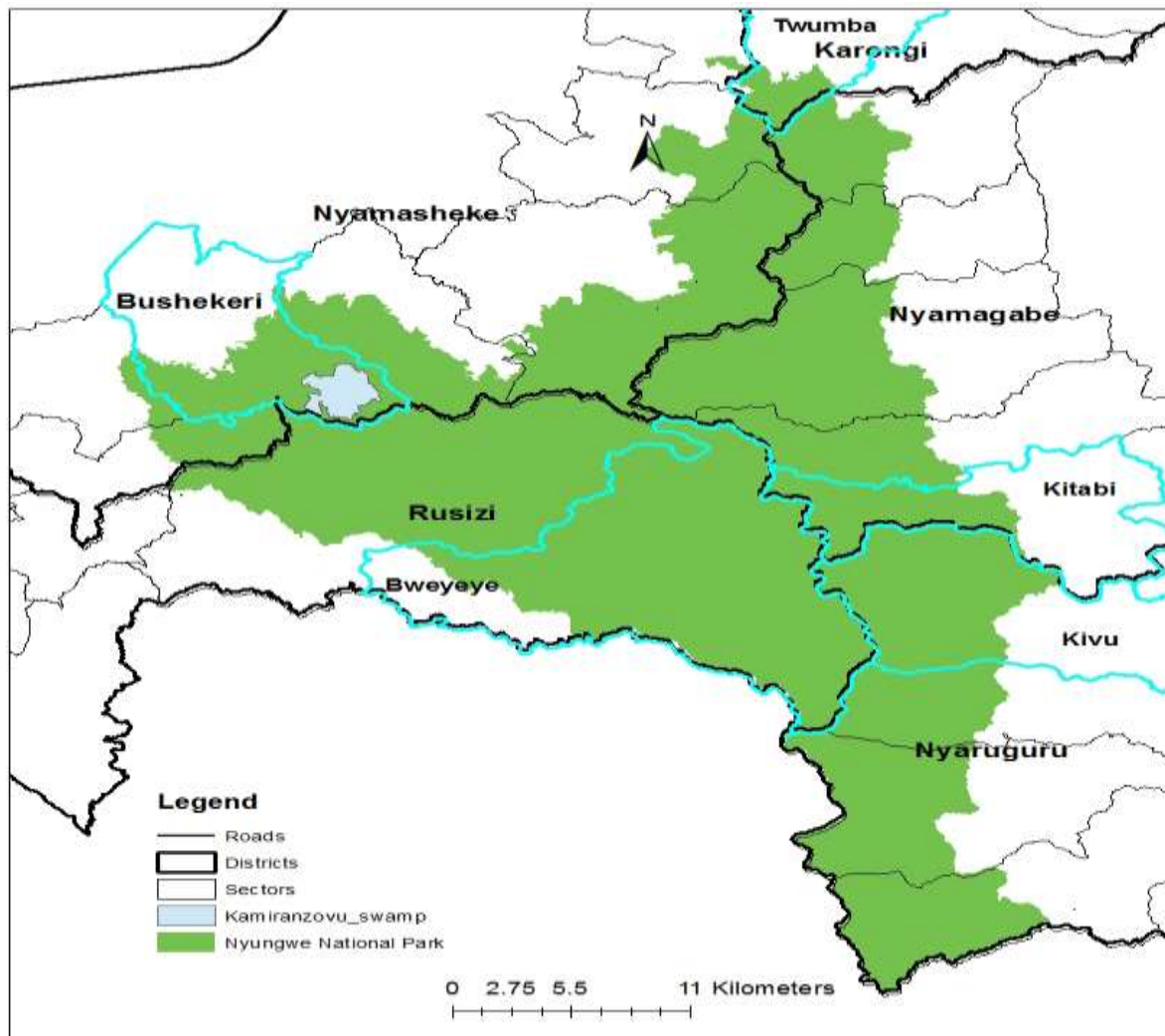
### **Study area**

Nyungwe National Park is located in the south-western part of Rwanda, in the Albertine rift. It is a tropical montane rain forest rich in biological diversity, some of them being endemic to the park or in the Albertine rift (Musabe, 2002). Geographically, the park is located between 2°15' and 2°55'South and 29°00' and 29°30'East at elevation gradient varying between 1,600 m and 2,950 m (Plumptre et al., 2002). This forest is continuous to Kibira National Park in Burundi (Weber, 1989; Dowsett, 1990; Vedder and Fashing, 2002).

Our research was conducted in and around NNP, in Kitabi Sector of Nyamagabe District, Kivu Sector of Nyaruguru District, Twumba Sector of Karongi District, Bweyeye Sector of Rusizi District, and Bushekeri Sector of Nyamasheke District (Figure 1). These locations were selected purposively, because there are many community conservation projects (RDB, 2012). First, five

districts surrounding the park were selected using a stratified random sampling technique. This was done to capture variation in location, access to markets and income among villages. Secondly, in each of the five districts one sector that is contiguous to the forest was selected. Finally, from each sector 100 households (total 500 households) were selected randomly in the cells located nearby the forest.

Secondary data about revenue sharing and threats on NNP were collected from RDB office between May and October, 2017. The list of all projects supported through revenue sharing (RS), the amount of money spent on each project, the lists of threats that NNP is facing were collected with the main purpose to assess if there is a correlation between RS and decrease in illegal activities in NNP.



**Fig. 1.** The study area (Adapted from Management of Information System/Ranger Based Monitoring)

**Data collection**

Between May and October, 2017, the questionnaire, which was developed originally in English, was translated into the local language (Kinyarwanda) and administered orally for interviewees outside of the population of study to test for the validity, clear understanding and clarity of questions. The questionnaire had three main sections including the respondent's background, questions about the role of biodiversity conservation and ecosystem services from NNP and the questions related to the use of tourism revenue sharing and its contribution to local community development.

In addition, section 2 and 3 were also discussed with local people through the focus group discussion (FGD). A total of 5 focus groups composed of 11 people selected by local leaders to represent others were organised, and there was a list of topics to discuss. Respectively, respondents were asked to report all natural resources they used to collect from the forest and now they are no longer allowed to go in the forest to collect. We also discussed about the income generated from these natural resources and the loss they face when they were stopped to use the forest natural resources. We were also interested to know the alternatives to replace the loss, and how they want to contribute to the conservation of the park. Finally, we discussed about the tourism revenue sharing, specifically how they obtained that funding, how they participate in the termination of the project and the level of satisfaction by the contribution of RS on socio-economic development.

To verify the findings from RDB office, interview and focus group discussion with local people, an interview was conducted with community conservation wardens, and then after, we visited the local area where these projects took place, in order to match the information from RDB, local communities and community conservation wardens. Reports done at the ranger based monitoring programs were also consulted in order to verify the level of threats on NNP.

**Data analysis**

Collected data were analyzed by the use of Statistical Package for Social Sciences (SPSS) and Management of Information System (MIST) software. Correlations were calculated between tourism revenue sharing and threats around NNP. Graphics and tables were used to compare our results while percentages were calculated to show the frequency of the situation and the perceptions of interviewed people. The Geographical Information System (GIS) was used to map illegal activities in the park referring to the ranger based monitoring (RBM) information. The households' dependence on the NNP was calculated as the ratio of annual income earned from forests to the total annual income earned from wealth and other sources such as agriculture, and off-farm employment in order to compare the revenue sharing support and the value of what people used to get from the forest and hence conclude if local people face the income loss of from the resources collected from NNP as follows:

$$\text{Household annual income} = \sum (\text{Forest income} + \text{Agriculture income} + \text{Return to wealth} + \text{Wage income})$$

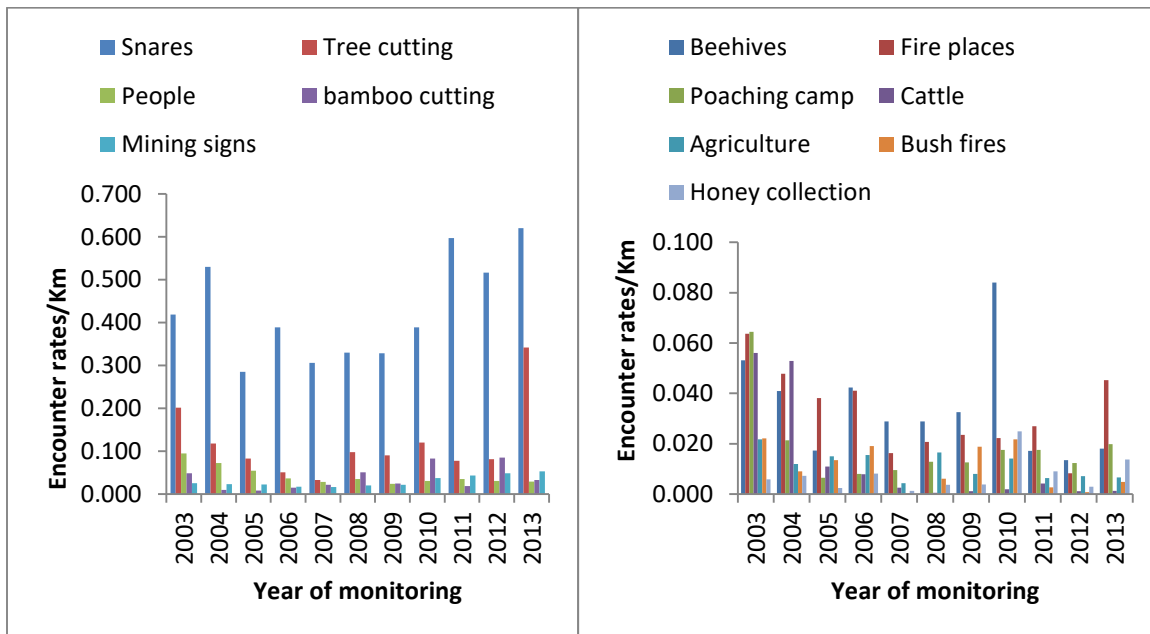
## RESULTS

### Community dependence on NNP

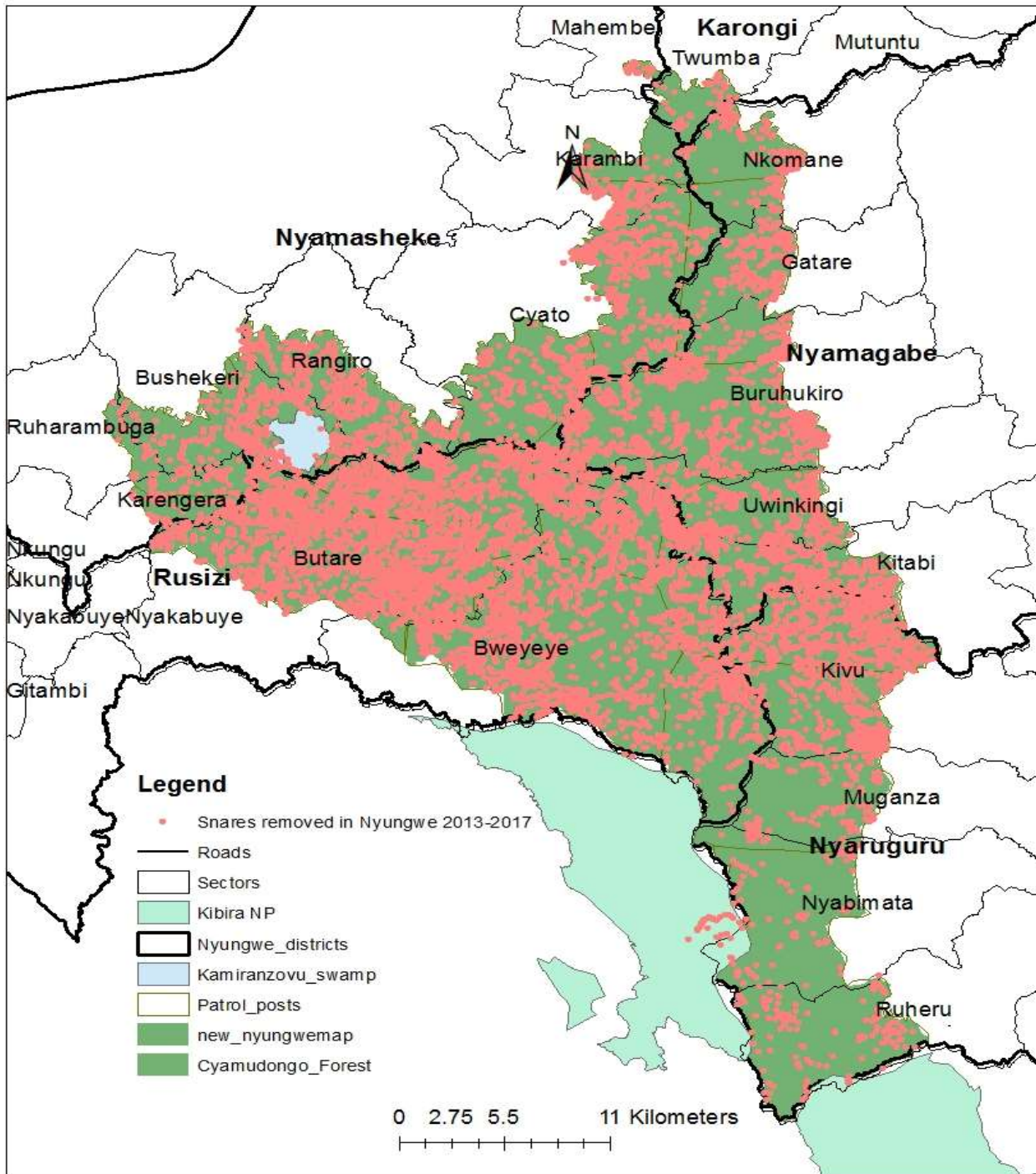
Results of this study indicated that 56.2% of the respondents were between 21 and 40 years old, 14.2% were between 41 and 50 years old, while 29.6% were beyond 50 years old. For a total of 500 local people interviewed, around 38.6% were male, while around 61.4% were females. During our survey, more than 92.6% respondents mentioned snares as the first illegal activity in NNP, while 75.1% put tree cutting on the second place. Yellow backed duiker, black fronted duiker, and bush pigs are the most poached wild animals as they were reported by 91.6%. Participants in the focus group discussion reported that the black fronted duiker was sold at around 25,000 Rwandan francs, while the bush pig was sold at 31,000 Rwanda francs at the local market. They said that the yellow backed duiker was rarely sold at the local market because they are very few in NNP. They tend to extinct in this ecosystem. Trees collected in the forest were mainly used for timber and one timber was sold between 1,200 and 3,000 Rwandan francs depending on the size and the tree species. Some of respondents in the interview (31.3 %), mentioned that exotic tree species were stolen and sold as poles where one pole was sold at around 6,800 Rwandan francs.

Other activities realized in NNP and they are no longer allowed to do include mining reported by around 36.8% of the respondents, bee keeping reported by around 16.0%, collection of medicinal plants reported by around 3.1% of the respondents. However, they didn't specify the amount of the income they generated from these activities.

Results indicated that some illegal activities from 2003 to 2013, the period after which Nyungwe forest was declared a national park and local people were stopped to collect natural resources in the forest. Snares and tree cutting come at the frontline of illegal activities mentioned by some local people (98.3%). Data collected from rangers based monitoring indicated poaching, mining, tree cutting, bee keeping and forest fire to be the most occurring illegal activities (Figure 2).

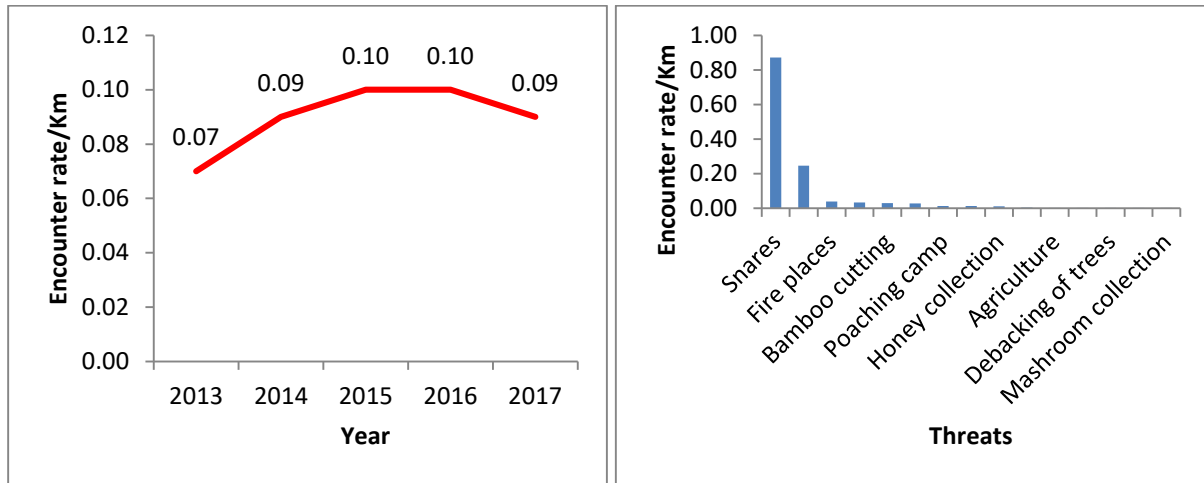


**Fig. 2.** Frequency of High threats in NNP **Fig. 3.** Frequency of Moderate threats in NNP

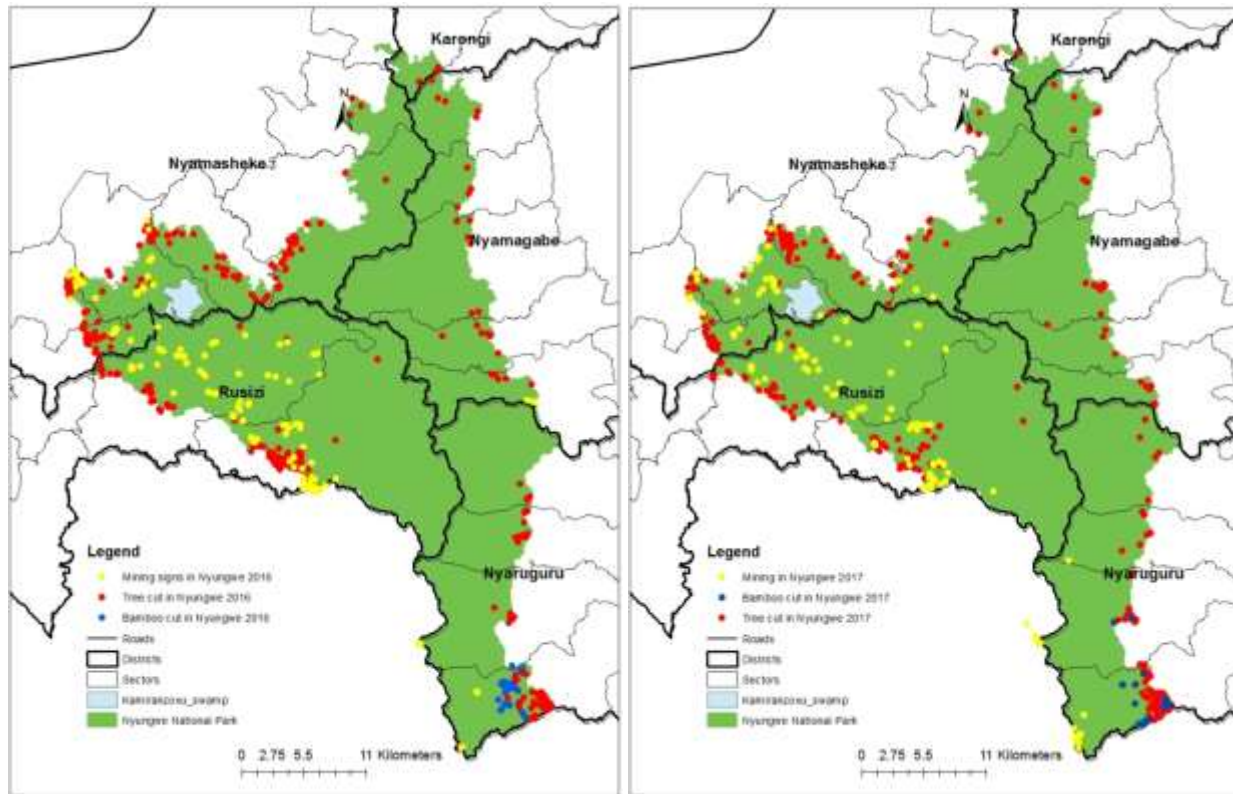


**Fig. 4.** Snares removed from Nyungwe between 2013 and 2017





**Fig.6.** Mean average of encounter rate of **Fig.7.** Threats encountered in Nyungwe 2013-2017 threats in Nyungwe 2013-2017



**Fig.9.** Tree&bamboo cutting, and mining 2016 **Fig.9.** Tree&bamboo cutting 2017

### **Contribution of Revenue Sharing to improving community livelihoods**

Results indicated a total of 120 projects associated to the budget of 1,133,195,986 Rwf. These projects were realized in Karongi, Nyaruguru, Nyamagabe, Rusizi and Nyamasheke. From 2005 to 2017, nineteen projects (12.5%) were financed with RwF 100,651,872 in Karongi District, thirty two projects (21.05%) were sponsored with RwF 215,064,014 in Nyaruguru, while Nyamagabe got the funds for twenty nine projects (19.07%) with RwF 230,040,865, Nyamasheke received the funds of RwF 308,144,027 to support its 35 approved projects (23.02%), and Rusizi has executed 37 projects (24.34%) sponsored with RwF 279,295,208.

Funded projects were of different categories and included RwF 63,119,016 the money for park resources alternatives (5.57%), RwF 362,622,715 (32%) for income generating activities (32%) and social infrastructures investment such as schools and hospitals was RwF 707,114,295 (62.4%). While selecting the projects to be funded through the revenue sharing scheme we realized that there were steps adopted by Rwanda Development Board.

Data collected from RDB offices indicated that a revenue sharing of 5% from tourism is used to develop communities around protected areas by supporting community projects and infrastructure development, and the Government shifted from 5% to 10% in which NNP gets 30% of the amount allocated to all three national parks. The results showed that only 20.6% of interviewed people are benefiting from revenue sharing and it help them to improve their livelihood.

A correlation of 0.018 between revenue sharing and community development was found. Data from households' survey indicated that around 20.6% of the local people have accessed to the revenue sharing funds. Around 87.8% of the respondents indicated that the existing funds are not enough to finance any small-scale projects, so they use the funds only for home needs. All of them responded that the small revenue sharing affects the sustainability of the projects funded. For the challenges identified by local communities on revenue sharing scheme, 22% of the respondents identified limited funds for revenues sharing as a major problem, while 15% of the respondents reported the mismanagement and the lack of distributional consistent policy, and lack of fairness in distribution. Other 23.6% of the respondents suggested a need for increase of revenue sharing as a major solution, while 17.2% suggested the development of management strategies, government intervention and follow up, consistent revenue sharing distribution policy, and the use of co-management strategies.

For the improvement of their social economic development and compensation of the income lost from the natural resources they use to collect in NNP, around 26.8% of the local people interviewed suggested job opportunities, other 22.8% want the support for their own and personal developmental projects, while 22.6% need the training on conservation and project development.

### **Economic situation of local communities around NNP**

Results of this study have shown that 84.6% of all interviewed local communities are relying on agriculture, while 3.4% are doing animal husbandry. Soil acidity in that region does not allow enough crop yields for bean and soy beans. Around 28.6% of the respondents reported that the crop yield for beans and soy beans is below 100 kg per season for a plot of around one ha. Around 13.2% of respondents indicated that the yield is above 100kg per season and per 1hectar for those who have the capacity of buying chemical fertilizers.

The comparison between the income generated from natural resources collected in NNP and that from tourism revenue sharing as well as other activities we realized that an average of 49, 590 Rwandan francs (57 US dollars) per household and per month was collected from natural resources collected in NNP. We also found that an average of 99.18 Rwandan francs (0.114 US dollars) per household and per month reached the local people. These results indicate a big loss relative to income that was generated from the natural resources collected from NNP. The income generated from job and agricultural activities was not calculated as the local people responded that they produce what they eat at home, not for the local market. Only 4.6% of the respondents were capable to pay medical insurance because of ICDPs. 4% were capable to build the houses and 11.6% were capable to pay the school fees for their children.

During the focus group discussion, we realized that 85.1% don't know revenue sharing. 95.1% reported that they didn't participate in revenue sharing scheme development. Only 25% were aware of the revenue sharing scheme and only 14.8% were involved in the development of revenue sharing projects. Concerning the knowledge of the local people about biodiversity of NNP and its importance, results indicated that local communities are aware of existing biodiversity mainly plants and animals. Around 89.4% of the respondents reported 13 animal species including primates, birds, amphibians, reptiles and insects, while 28 plants species were recorded in this study (Table 1).

**Table 1. Knowledge on NNP animal biodiversity**

<b>Animals</b>	<b>Number of respondents</b>
Baboons	378
Colobus monkeys	264
Blue monkeys	155
Mona monkey	105
Chimpanzee	248
Mangabey	88
Bush pig	71
Duiker	21
Birds	91

Snakes	74
Chameleon	9
Lizards	19
Amphibians	17

**Table 2. Knowledge on NNP plant biodiversity**

Plants	Number of respondents
<i>Macaranga kilimandscharica</i>	120
<i>Syzygium parviflorum</i>	101
<i>Maesa lanceolata</i>	38
<i>Hagenia abyssinica</i>	40
<i>Polyscias fulva</i>	58
<i>Parinari excelsa</i>	39
<i>Galiniera saxifraga</i>	42
<i>Sericostachys scandens</i>	67
<i>Solanum sp</i>	45
Ferns	53
<i>Keetia gueinzii</i>	32
<i>Sinarundinaria alpina</i>	37
<i>Myrianthus holstii</i>	30
<i>Xymolos monospora</i>	33
<i>Harungana montana</i>	49
<i>Geranium arabicum</i>	45
<i>Drymaria chordata</i>	65
<i>Verectaria major</i>	27
<i>Cyanotis barbata</i>	28
<i>Dissotis rwandensis</i>	38
<i>Pavetta rwandensis</i>	37
<i>Lindernia nummulariifolia</i>	35
<i>Pteridium aquilinum</i>	56
<i>Impatiens sp</i>	38
<i>Senecio sp</i>	46
<i>Crasocephalum paludum</i>	49
<i>Phyllanthus sp</i>	66
<i>Kyllinga stenophylla</i>	67

Around 90.4% of the respondents identified biodiversity as source of food; other 78.4% said that it is a source of income, while 26.6% of the respondents identified biodiversity as a provider of

ecosystem services such as rain and clean air. Another considerable number (64.4%) identified biodiversity as a source of tourism development.

## **DISCUSSION**

Significant contribution in terms of money through revenue sharing was found in other studies even if the impact of the investment in CBCs is still minor (Kamuzinzi et al, 2015). While the government of Rwanda views tourism revenue sharing programs as a significant approach to rural development especially for the people around the national parks in terms of poverty alleviation, health promotion, economic empowerment, and education enhancement among other things findings of this study indicated that the local government and the community conservation wardens didn't put consistency in following up the impact of the projects supported through the revenue sharing scheme (Umuziranenge and Muhirwa, 2017) and this resulted in low appreciation of the contribution of revenue sharing to community livelihoods improvement (Imanishimwe et al, 2018).

This study indicated that a number of CBCs in which more than one billion Rwandan francs was invested in different developmental activities, but more than 80% of those projects are no longer there because of corruption, lack of project management skills, and plan for project sustainability. The same situation was observed in other countries as per the number of publications in community conservation sector (Kamuzinzi et al., 2015). Other studies showed that over the last ten years, tourism in Rwanda has recorded significant growth potential, with the industry's contribution to the country's GDP growing at a steady rate (Mwandosya, 2007).

Even though our results showed that tourism revenues did not significantly contribute to the improvement of livelihoods around NNP (Kamuzinzi et al., 2015), other studies indicated how tourism is very powerful tool for economic development for the people around protected areas (Ian et al., 20017). From the social perspective, tourism promotes the respect and preservation of the communities' cultures (Global Education Center, 2005) and promotes human welfare (Simpson, 2008). For the environmental perspective, tourism has the ability to recover the degraded areas due to the reduction of over exploitation of natural resources (Ryan et al., 2009). This means that the issue is not tourism itself but the problem is how decision makers, managers, and practitioners implement the tourism revenue sharing policy.

The fact that there is no involvement of local communities in decision making, most of them were not even aware of this program and those who knew it expressed that it doesn't contribute much to their welfare. Our results showed that human wildlife conflicts, lack of education, and extreme poverty are the main issues and that the revenue sharing was not able to address them. This led to a number of threats to NNP as it was noted in the research of Kamuzinzi et al. (2015).

Some projects are no longer active (appendix 2) because the selection criteria are not strong enough and when the projects are supported, there is no consistent follow up due to the corruption factor and lack of accountability for some staff in charge.

Even though our studies showed that around one billion Rwandan francs was invested in CBCs around NNP, but there is no significant ratio of income per household around NNP. Other studies showed that over the last ten years, tourism in Rwanda has recorded significant growth potential, with the industry's contribution to the country's Gross Domestic Product (GDP) increasing at a steady rate (Mwandosya, 2007). This scenario was observed because there is no transparency in projects identification and the corruption affects the effectiveness and efficiency of projects implementation. The beneficiaries do not get the real amount of approved funds and their objectives are not met (Kamuzinzi et al., 2015).

While the invested money in ICDPs around NNP should have contributed a lot to the job creation, there are no clear figures of created jobs and low numbers of employed people were observed. Apart from the employment opportunities, the tourism industry contributes significantly to the foreign exchange of many nations (Lee & Chang, 2008). On the global scale, tourism generated revenue equivalent to US \$944 billion (UNWTO, 2013). It is not surprising that the tourism industry is considered a lead export sector that accounts for 30% of the total export service worldwide and nearly 45% in developing countries (UNWTO, 2010). For example, in one of the developing countries, in Rwanda, where this study is undertaken, tourism has been growing in terms of tourists' arrivals and revenue since 1998. Despite the number of tourists visiting NNP, most of the local people have never seen a dollar and there is no foreign exchange bureau around this park. This indicates that RSS didn't yet make local people financially smart.

The people adjacent to the park mentioned that what they get from illegal collection of forest resources is higher than the support they get from revenue sharing scheme and mentioned that the delay of compensating them when they face crop raiding by wild animals is one of the reasons that cause them to damage the forest. Regarding the knowledge of Nyungwe biodiversity, the respondents showed a good knowledge (Tables 1 and 2) but we realized that some people were not updated as they were mentioning animals absent in that park such as lions, buffaloes, and elephants.

Resources encroachment within protected areas especially in Nyungwe National Park indicates the danger of human pressures for resources as shown in the above results. Looking at the figures 2,3,4,8, and 9 we got in this research; it is obvious that there is no significant decrease in illegal activity in the park. The number of illegal activities in 10 years ago was somehow low not because the poachers were not many at that time but because the RDB staff were few and during their patrols they could not cover a huge area to report all cases of illegal activities (RDB, 2015). In recent years, RDB increased the number of staff and the numbers of illegal activities increased because the staff was able to patrol different areas. Increase in equipment also resulted in finding

a significant number of threats to biodiversity in NNP. Our results showed that there were the cooperatives of former poachers and beekeepers that were used to destroy the forest but some people are still involved in illegal activities in the Park (RDB, 2015).

## **CONCLUSION AND RECOMMENDATIONS**

Human health depends on biodiversity that provides ecosystem services to all humankind. Biodiversity is only safe and secured when people protect ecosystems. People are also part of biodiversity, so damaging biodiversity is damaging oneself. There is a very direct linkage between biodiversity conservation, ecosystem services, and the improvement of community livelihoods. Human activities in protected areas such as poaching, tree cutting, mining and bamboo cutting in Nyungwe National Park make biodiversity conservation more challenging. Poverty increase, lack of conservation ethics as well as misunderstanding of communities about biodiversity conservation are among the causes of people encroachment in the park. Although these activities are still happening, biodiversity conservation in and outside of protected areas is our duty. It will be achieved by ensuring multi-disciplinary collaboration to conserve and protect reserves and protected areas such as National Parks and forests. It is obvious that there is a good biodiversity policy in Rwanda that considers the adjacent communities around the National Park.

It is obvious that what people get from the forest is higher than what they get through Revenue Sharing Scheme. That is why illegal activities are still going on in Nyungwe National Park. The selection procedure of funded project has been corrupted as per local communities and the benefits are not equally shared. A small percentage of people are happy because they were supported but a big number becomes unhappier and threaten the Park due to the gap in creating a win-win situation in biodiversity conservation. The issue of human wildlife conflicts which is not solved professionally and on time reduced community engagement in NNP conservation. The Revenue sharing focused only on developmental projects didn't engage many people and it didn't provide conservation education. The scheme in the past 13 years was not capable to meet its goals and didn't show a measurable change in community livelihoods. With these scientific facts and figures, we recommend the Government of Rwanda to review the whole RS Scheme and build it on local community suggestions.

The Special Guarantee Fund can be at Park level to solve issues on ground than being centralized. It is recommended that efforts in conservation education can be enhanced so the Park can celebrate safety in the future. We highly recommend that there can be a special program of RS Monitoring and Evaluation in Rwanda Development Board to ensure consistency in project identification and implementation. The impact evaluation is also advised to ensure the Sustainable Conservation of Nyungwe National Park. There is a need to assess the perceptions of the local people on the contribution of Revenue Sharing projects in their social welfare. An assessment on the effectiveness of revenue sharing to promote community livelihoods around the park is needed.

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## Appendices

### Appendix 1

#### QUESTIONNAIRE

##### PhD Research Project Description

The research project aims to investigate **the linkage between biodiversity conservation, ecosystem services, and community development**. The purpose of this survey is to obtain your opinions on the biodiversity conservation, ecosystem services, and community development. The research you asked to participate is done by a Doctoral student at the University of Rwanda, as part of his academic requirements. However, the researcher will share major findings with decision makers in government and non-governmental institutions. Please ask the researcher to explain any words or information that you may not clearly understand. Your participation is voluntary, and please feel free to withdraw at any point during the survey, or to skip questions you may not want to answer.

Benefits include the knowledge that your input has helped to shape this research which will strengthen ecotourism and conservation sector in Rwanda. *There is no compensation for your participation.* At any point before, during or after the survey, if you would like to withdraw from the study, there will be no penalty. Participating in the survey at this time will indicate that you have heard or read and understand the information explained above. *You will have the right to information on the results of the study later if you wish.*

It is okay if you don't know the answers to some of the questions.

**I. General information about the respondent and her/his economic status**

1. Names: .....
2. Stakeholder category: Farmers, Cooperative member, Public Servant, Private Sector Servant, Consultant, Student, Retired
3. Location of the interview:
  - i. District
  - ii. Sector
  - iii. Cell
  - iv. Village
4. What is the main land use type(s) in your surrounding?
  - i. Tea plantation,
  - ii. Agriculture
  - iii. Forest plantation
  - iv. Other? Specify
5. Sex :
  - i. Male
  - ii. Female
6. Age (<20, 20-40, >40) (indicate or underline your age category)
  - i. Less than 20
  - ii. Between 21 and 40

iii. Between 41 and 50

iv. Above 50

7. What is your business?

8. Do you have bank account?

9. Are you in the cooperative?

i. If yes, what is the name of that cooperative?

10. What is your economic status category (ubudehe)? .....

11. Do you have medical insurance card? (Answer Yes or No): .....

12. Where do you get money to pay for your needs? .....

13. How often do you go to Nyungwe National Park?

14. How far is your home / company from Nyungwe National Park? (indicate the walking time)

i. <30 minutes,

ii. 30-60 minutes,

iii. >1 hour

15. How many people are there in your household? .....

16. Have you been involved in any training related to the forest or activities in the forest?

i. If yes, give a specific forest activity have you trained for.

.....

17. Do you have electricity in your household / at your business? (yes/no)

- a. If yes, when did you get electricity? Approximate the year:
18. Do you have water in your household? .....
- i. If not where do you get water and how much time do you use to get water?  
30 minutes, 30 – 60 minutes, >60 minutes?
19. Which fuel do you use for cooking/production in your household/business?
- a. Fuel wood
- b. Charcoal
- c. Other fuel, specify?
20. In which category of education are you? 1) No formal education( )  
2) Primary School ( ), 3) Some secondary studies ( ), 4) Secondary School ( ), 5) University  
( ), 6) TVET ( )
21. Do you have a part-time or a permanent job? If yes how much income do you generate on  
monthly basis?
22. Is that job linked to Nyungwe National Park, buffer zone, or tea?
23. Do you have domestic animals? How many?
24. Describe how you spend your money in the month
25. Are you a farmer? What do you grow mostly?
26. How much crop yields do you produce on monthly basis?

**II. Assess perceptions of local community on the importance of biodiversity conservation**

27. What is biodiversity?

28. How often do you visit the National Park? .....

29. Do you believe that the National Park is important for you/your business? (Yes/No)

a. If yes, what are the ecosystem services does Nyungwe National Park provide to you?

b. If no, why is it not important?

30. Have the benefits you were used to get from the forest changed during the last 10 years or since it became a National Park?

.....

31. Do you wish to have more benefits from the forest? (Yes/No)

a. If yes, which are the most important benefits you wish to have from the forest?  
.....

b. If no, are there any special reasons why you don't wish more benefits from the forest? Which are they?  
.....

32. Do you believe that the Nyungwe forest or the National Park has any negative influences on your daily life and/or your business? (Yes/No)

- a. If yes, which are the most negative effects of the forest to you and your household?
  
33. Do you see biodiversity around your household? What are they and what is their role in your daily life?
  
34. How do you conserve the biodiversity you interact in daily life?
  
35. What are the animals and plants do you know in Nyungwe National Park?
  
36. Do you teach your children the role of biodiversity conservation?
  
37. How do you value biodiversity?
  - i. Source of money
  - ii. Source of food
  - iii. Ecosystem services. Specify
  - iv. Others? Specify
  
38. How does biodiversity of Nyungwe contribute to the development of your family and your country?
  
39. Are you aware of threats that Nyungwe National Park is facing? Yes or Not
  - i. If yes, what are those threats?
  
40. Are you aware of the illegal activities that are conducted in the park? Yes or Not.
  - i. Why are illegal activities still happening in Nyungwe National Park?
  - ii. Where do you see the weaknesses? What solutions can you propose?
  
41. Except for your own and your households/ business benefits, do you think that there are



any other benefits from the forest?

- a. If yes, which benefits do you believe are most important benefits of the National Park?
- .....

42. Would you like to cultivate/increase crops in the forest area?

43. Do you/your business benefit from tourism? (Yes/No)

44. How do you feel about increasing tourism in and around Nyungwe National Park?

45. Are you/your business affected by natural disasters? (Landslides, heavy water flow etc)

- a. If yes, what kind of disasters?
- b. If yes, how often do they occur?
- c. If no, do you know other people that are affected by natural disasters?

46. Do you need to boil/filter your water before use?

47. Do you use water for irrigation of the crops?

48. Do you get food from the forest?

- a. If yes, what kind of food do you get?
- b. If no, from where do you get your food?

49. Do you use wood for fuel from indigenous trees of Nyungwe National Park or from exotic tree species which are in Nyungwe National Park?

50. Do you get charcoal locally made by wood from Nyungwe National Park? Do you make those charcoals on your own? When are you used to do that?
51. Do you get material for construction from Nyungwe National Park? If yes, which tree species do you use?
52. Do you get material for craftwork from Nyungwe National Park? If yes, which tree species do you use?
53. Do you get any medicine from Nyungwe National Park? If yes which plants do you use?
54. Do you get anything else from Nyungwe National Park?

**III. Assess the contribution of community conservation projects on improved livelihoods**

55. Are you aware of some conservation projects that have been conducted in and around Nyungwe National Park? If yes enumerate them. Were they successful on your perspective? If no, why were not they successful?
56. Were you involved in the conservation project around Nyungwe National Park?
- i. If yes, which project, when?
  - ii. How did that conservation project contribute to your livelihoods improvement?
57. How do you describe the sustainability of conservation projects around Nyungwe National Park?
58. Did Integrated Conservation Projects and Development help you to get medical insurance?
59. Did Integrated Conservation Projects and Development help you to pay school fees for your Children?
60. Are you employed in a conservation project around Nyungwe National Park?

i. If yes, which conservation project where you are employed?

61. Do you have a house from the money you got in a conservation project?

62. Do you have livestock from a conservation project you participated in?

63. Were you supported through revenue sharing scheme?

64. Do you get the benefits from revenue sharing scheme? If yes, list them

65. What are the challenges do you think Revenue Sharing scheme faces? What solutions can you propose?

66. Do you have water in your household because of the money you got in a conservation project where you were employed?

67. Do you have electrical power because of the money you got from a conservation project?

68. What is the linkage between biodiversity conservation and livelihoods improvement?

69. Are you interested in biodiversity conservation projects?

70. How do you want to be involved in conservation project for your economic development?

71. How will you continue to integrate the development of your household and biodiversity conservation?

#### **IV. TOPICS TO BE DISCUSSED IN FOCUS GROUPS DURING THE FIELD**

##### **SURVEY**

1. Local community perceptions on the role of biodiversity conservation for economic development

2. The impact of integrated and conservation projects to the community development

3. The challenges of community conservation projects around Nyungwe National Park

4. Best practices of integrating biodiversity conservation and community

development

5. The role of local community in Nyungwe biodiversity conservation
6. The contribution of local community in conservation project management in and around Nyungwe National Park
7. The linkage between biodiversity conservation, ecosystem services, and community development around Nyungwe National Park

**Ange IMANISHIMWE, PhD Student**

## **Appendix 2. Projects supported through Revenue Sharing Program 2005-2016**

**THE STATUS OF ALL PROJECTS FUNDED FOR THE COMMUNITIES LIVING NEAR NYUNGWE NATIONAL PARK : 2005-2016**

NO	Type	Category	District	Sector	Beneficiary	Project	Budget	Year	Status of Implementation	Type	Update on Status of RS Project
1	Bee keeping	Agriculture	Nyaruguru	4 Sectors	Cooperative	Bee keeping project in Nyaruguru	4,500,000	2005	FINISHED	INCOME GENERATING ACTIVITY	Operational
2	Health	Infrastructure	Rusizi	Butare	Sector	Gasumo Dispensary in Butare Sector, Rusizi District	11,000,000	2005	FINISHED	INFRASTRUCTURE	Operational
3	Improved stoves	Equipment	Nyamagabe	5 Sectors	5 sectors	Stove Project in Nyamagabe District	5,000,000	2006	FINISHED	ALTERNATIVES	Not Operational
4	Roads	Infrastructure	Nyamaseke	Ruhambuga	District	Rwabidege-Kanyinya road rehabilitation project in	13,866,200	2006	FINISHED	INFRASTRUCTURE	Operational

						Nyamasheke District					
5	Tile factory	Infrastructure	Karongi	Twumba	Cooperative	Twumba Tile factory Project in Karongi	3,056,800	2007	FINISHED	INCOME GENERATING ACTIVITY	Operational
6	Fodder production	Agriculture	Nyamagabe	Gatare	Cooperative	Fodder Project in Gatare Sector, Nyamagabe District	5,000,000	2007	FINISHED	ALTERNATIVES	Operational
7	Fruit production	Agriculture	Nyamagabe	Nkomane	Cooperative	Maracouja & Fodder project in Nkomane Sector, Nyamagabe District	4,860,000	2007	FINISHED	INCOME GENERATING ACTIVITY	Not Operational
8	Education	Infrastructure	Nyamasheke	Karambi	School	Karambi School in Nyamasheke District	3,951,250	2007	FINISHED	INFRASTRUCTURE	Operational
9	Health	Infrastructure	Nyamasheke	Karambi	Health center	Ngange Health Center Project in Karambi Sector, Nyamasheke District	8,375,250	2007	FINISHED	INFRASTRUCTURE	Operational
10	Fruit production	Agriculture	Nyamasheke	Rangiro	Cooperative	Maracouja project in Rangiro Sector, Nyamasheke District	7,600,000	2007	FINISHED	INCOME GENERATING ACTIVITY	Operational
11	Water supply	Infrastructure	Nyaruguru	Kivu	Sector	Water sources development project in Kivu Sector, Nyaruguru District	8,000,000	2007	FINISHED	INFRASTRUCTURE	Operational
12	Health	Infrastructure	Rusizi	Bweyeye	Sector	Bweyeye maternity Project in Rusizi District	9,903,821	2007	FINISHED	INFRASTRUCTURE	Operational
13	Education	Infrastructure	Rusizi	Nkungu	School	Rususa School project in Nkungu Sector, Rusizi District	8,279,255	2007	FINISHED	INFRASTRUCTURE	Operational

14	Education	Infrastructure	Nyamasheke	Kagano	School	APEKA School Project in Kagano Sector, Nyamasheke District (Rescue)	30,000,000	2008	FINISHED	INFRASTRUCTURE	Operational
15	Health	Infrastructure	Nyamasheke	Karambi	Health center	Ngange Health Center Project (Sanitation) in Karambi Sector, Nyamasheke District	2,257,800	2008	FINISHED	INFRASTRUCTURE	Operational
16	Education	Infrastructure	Rusizi	Nkungu	School	Matare District College Project in Rusizi District	10,000,000	2008	FINISHED	INFRASTRUCTURE	Operational
17	Education	Infrastructure	Rusizi	Nkungu	School	Rususa School project in Nkungu Sector, Rusizi District (Rescue)	10,000,000	2008	FINISHED	INFRASTRUCTURE	Operational
18	Tile factory	Infrastructure	Karongi	Mutuntu	Cooperative	Construction of a tile factory in Mutuntu Sector	7,806,000	2009	FINISHED	INCOME GENERATING ACTIVITY	Not Operational
19	Tile factory	Infrastructure	Nyamagabe	Gatare	Cooperative	Support to construction of a tile factory with Twitezimbe Babumbyi	2,335,533	2009	FINISHED	INCOME GENERATING ACTIVITY	Not Operational
20	Culture	Sensitization	Nyamagabe	Kitabi	cooperative	Support to a community tourism initiative in Nyamagabe with "Friends of Nyungwe"	10,000,000	2009	FINISHED	INCOME GENERATING ACTIVITY	Operational
21	Education	Infrastructure	Nyamasheke	Kagano	School	Construction of a water tank at APEKA secondary school	5,015,000	2009	FINISHED	INFRASTRUCTURE	Operational
22	Education	Infrastructure	Nyamasheke	Karambi	School	Construction of 2 classrooms	7,000,000	2009	FINISHED	INFRASTRUCTURE	Operational

						at Karambi Secondary school					
23	Health	Infrastructure	Nyam asheke	Karambi	School	Supply of solar electricity to Ngange health Center	2,000,000	2009	FINISHED	INFRASTRUCTURE	Operational
24	Tile factory	Infrastructure	Nyam asheke	Rangiro	Cooperative	Construction of a tile factory in Rangiro Sector	7,000,000	2009	FINISHED	INCOME GENERATING ACTIVITY	Operational
25	Bee keeping	Agriculture	Nyuru guru	Kivu	Cooperative	Support to bee products processing project with KAUKI	4,500,000	2009	FINISHED	INCOME GENERATING ACTIVITY	Operational
26	Bee keeping	Agriculture	Nyuru guru	Kivu	Cooperative	Support to fencing bee keeping areas against wildlife (with KAUKI)	1,800,000	2009	FINISHED	ALTERNATIVES	Operational
27	Tile factory	Infrastructure	Nyuru guru	Kivu	Cooperative	Support to Construction of a tile factory with Turwany Nyakatsi	5,000,000	2009	FINISHED	INFRASTRUCTURE	Operational
28	Water supply	Infrastructure	Rusizi	Butare	Sector	Support water supply project with ENTRESEP	5,000,000	2009	FINISHED	INFRASTRUCTURE	Operational
29	Health	Infrastructure	Rusizi	Bweyeye	Sector	Supply of equipment to a maternity and 2 cultural troops in Bweyeye Sector	6,167,000	2009	FINISHED	INFRASTRUCTURE	Operational
30	Education	Infrastructure	Rusizi	Nkungu	Sector	Construction of a water tank at Matare secondary school	5,014,000	2009	FINISHED	INFRASTRUCTURE	Operational
31	Education	Infrastructure	Rusizi	Nyakabuye	Sector	Construction of a dormitory at the Inyange Secondary school	10,335,000	2009	FINISHED	INFRASTRUCTURE	Operational
32	Turwany Nyakatsi	Infrastructure	Nyam agabe	Uwinkingi	Sector	Support to housing for	6,000,000	2010	FINISHED	INFRASTRUCTURE	Operational

						20 poor families					
33	Turwanye Nyakatsi	Infrastructure	Karongi	Twumba	District	Support to housing for 20 poor families	6,000,000	2010	FINISHED	INFRASTRUCTURE	Operational
34	Turwanye Nyakatsi	Infrastructure	Rusizi	Bweyeye	Sector	Support to housing for 20 poor families	6,000,000	2010	FINISHED	INFRASTRUCTURE	Operational
35	Turwanye Nyakatsi	Infrastructure	Nyaruguru	Ruheru	Sector	Support to housing for 20 poor families	6,000,000	2010	FINISHED	INFRASTRUCTURE	Operational
36	Turwanye Nyakatsi	Infrastructure	Nyamaseke	Karambi	Sector	Support to housing for 20 poor families	6,000,000	2010	FINISHED	INFRASTRUCTURE	Operational
37	Education	Infrastructure	Nyamaseke	Cyato	School	Construction of 4 classrooms at Bwanama Primary School	11,000,000	2010	FINISHED	INFRASTRUCTURE	Operational
38	Education	Infrastructure	Rusizi	Nkungu	School	Completion of construction of a refectory at Rususa Secondary School	12,350,117	2010	FINISHED	INFRASTRUCTURE	Operational
39	Agriculture	Infrastructure	Nyamagabe	Buruhukiro	Cooperative	Support to construction of a maize grinding plant with IPFG	10,000,000	2010	FINISHED	INCOME GENERATING ACTIVITY	Operational
40	Education	Infrastructure	Karongi	Twumba	School	Construction of 4 classrooms 6 toilet at Munigi in Gisovu cell	5,823,333	2012	FINISHED	INFRASTRUCTURE	Operational
41	Agriculture	Agriculture	Karongi	Mutuntu	Cooperative	Multiplication of Elephant grass by Tebuka Mutuntu cooperative	3,600,000	2012	FINISHED	ALTERNATIVES	Operational
42	Agriculture	Agriculture	Nyaruguru	Muganza	Cooperative	Supporting small factory of Maize and wheat	11,250,000	2012	FINISHED	INCOME GENERATING ACTIVITY	Operational
43	Agriculture	Agriculture	Nyaruguru	Muganza	Cooperative	Supporting mushroom project by Turwanye	4,000,000	2012	FINISHED	INCOME GENERATING ACTIVITY	Not Operational



						imirire mibi cooperative					
44	Agriculture	Agriculture	Nyarusuru	Busanze	Cooperative	Multiplication of Bamboo by IMBEREHE ZA cooperative	3,596,666	2012	FINISHED	ALTERNATIVES	Not Operational
45	Tourism Promotion	Infrastructure	Nyamagabe	Kitabi	Cooperative	Supporting Water and Electricity to KCV of Friends of Nyungwe	6,000,000	2012	FINISHED	INCOME GENERATING ACTIVITY	Operational
46	Tile factory	Infrastructure	Nyamagabe	Uwinkingi	Cooperative	Supporting kiln by Tuzamurane Rubyiruko Cooperative	5,846,667	2012	FINISHED	INCOME GENERATING ACTIVITY	Not operational
47	Agriculture	Infrastructure	Nyamagabe	Buruhukiro	Cooperative	Construction store of maize by Twisungane Cooperative	7,000,000	2012	FINISHED	INCOME GENERATING ACTIVITY	Operational
48	Sport and leisure	Infrastructure	Nyamaseheke	Bushekeri	Sector	Construction house for youth	10,000,000	2012	FINISHED	INFRASTRUCTURE	Operational
49	Education	Infrastructure	Nyamaseheke	Mahembe	School	Construction of 3 classrooms giko primary school	8,846,667	2012	FINISHED	INFRASTRUCTURE	Operational
50	Health	Infrastructure	Rusizi	Bweyeye	Health center	Construction of Health Post at Rasano cell	16,481,635	2012	FINISHED	INFRASTRUCTURE	Operational
51	livestock	Livestock	Rusizi	Nkungu	Cooperative	Supporting Poultry project	2,365,032	2012	ONGOING	INCOME GENERATING ACTIVITY	Not Operational
52	Tile factory	Infrastructure	Rusizi	Gitambi	COFABRI	Building the modern Kiln in Gitambi sector	7,649,883	2012	FINISHED	INCOME GENERATING ACTIVITY	Operational
53	Education	Infrastructure	Rusizi	Butare	EP Rugera	Construction of 3 classrooms Rugera primary school	11,173,825	2013	FINISHED	INFRASTRUCTURE	Operational
54			Nyarusuru	Ruheru	Koperative Girubuzima (KOGIRU)	Tile factory Project in ruheru	7,000,000	2013	FINISHED	INCOME GENERATING ACTIVITY	Operational

55	Agriculture	Infrastructure	Nyaru guru	Muganza	Cooperative de transformation des céréales de Muganza (CTCMU)	Construction of shelter where to put maize grinding machines	8,000,000	2013	ONGOING	INCOME GENERATING ACTIVITY	Operational
56	Agriculture	Agriculture	Nyaru guru	Ruhuru	KOAUBU	Bambou multiplication	4,435,625	2013	ONGOING	ALTERNATIVES	Not Operational
57	Art	Handcraft	Nyamagabe	Gatare	Koperative Jyambere rubyiruko	Animal skins processing	10,000,000	2013	ONGOING	INCOME GENERATING ACTIVITY	Not Operational
58	Agriculture	Agriculture	Nyamagabe	Uwinkingi	Koperative Nyungwe Nziza	water retention and harvesting for vegetables and fruits	3,188,625	2013	FINISHED	INCOME GENERATING ACTIVITY	Operational
59	Tile factory	Infrastructure	Nyamagabe	Nkomane	Koperative Abadacogora	tile factory Project in Nkomane sector	6,247,000	2013	ONGOING	INCOME GENERATING ACTIVITY	Not received fund
60	livestock	Beekeeping	Nyam asheke	Karambi	KOVUKA	Beekeeping Project	5,810,000	2013	FINISHED	INCOME GENERATING ACTIVITY	Operational
61	Health	Infrastructure	Nyam asheke	Karambi	KOTEGA	Construction of Maternity	6,349,875	2013	FINISHED	INFRASTRUCTURE	Operational
62	infrastructure	Infrastructure	Nyam asheke	Imirenge 7	Disitric	Construction 30 stock of biogaz in seven sectors	6,000,000	2013	FINISHED	ALTERNATIVES	Operational
63	infrastructure	Infrastructure	Nyam asheke	Ruharambuga	Sector	Water sources development	5,000,000	2013	FINISHED	INFRASTRUCTURE	Not Operational
64	Education	Infrastructure	Nyam asheke	Cyato	E.P.Bwanama	Finishing the construction of classroom	4,050,000	2013	FINISHED	INFRASTRUCTURE	Operational
65	Health	Equipment	Rusizi	Nyakabuye	Communities/Caritas Diocese	Health center equipments	6,261,800	2013	FINISHED	INFRASTRUCTURE	Operational
66	Art	Handcraft	Rusizi	Bweyeye	Koperative Wisira inyuma Bweyeye (KOWIBWE)	Purchase the land of soil and sand living	2,000,000	2013	FINISHED	INCOME GENERATING ACTIVITY	Operational

67	Agriculture	Agriculture	Karongi	Twumba	COABISETWU	Nursery of tree plantations and fruit	4,500,000	2013	FINISHED	ALTERNATIVES	Operational
68	Agriculture	Agriculture	Karongi	Mutuntu	Koperative Ubufatanye Manji	Nursery of tree plantations and fruit	3,274,250	2013	FINISHED	ALTERNATIVES	Operational
69	Health	Infrastructure	Rusizi	NYAKABUYE	Umurenge wa Nyakabuye	Expansion of Gaseke Health post and equipped	6,200,000	2014	FINISHED	INFRASTRUCTURE	Operational
70	Education	Infrastructure	Rusizi	BUTARE	EP RUGERA	Construction of 3 classrooms Rugera primary school	9,339,317	2014	FINISHED	INFRASTRUCTURE	Operational
71	livestock	Beekeeping	Rusizi	BWEYEYE	KAUBWE	Bee keeping project	1,769,400	2014	FINISHED	INCOME GENERATING ACTIVITY	Operational
72	Agriculture	Agriculture	Karongi	Mutuntu/Kanyege cell	Koperative Ubufatanye Manji	Construction store house of Irish potatoes and maize	6,000,000	2014	FINISHED	INCOME GENERATING ACTIVITY	Operational
73	Beekeeping	Beekeeping	Karongi	Twumba	COABISETWU	Beekeeping Project	2,923,487	2014	FINISHED	INCOME GENERATING ACTIVITY	Operational
74	infrastructure	Infrastructure	Nyamagabe	Kitabi	Kitabi sector	Construction of 10 houses to relocate Mushabarara communities	16,000,000	2014	FINISHED	INFRASTRUCTURE	Under on going
75	livestock	Agriculture	Nyamagabe	Gatare	Coperative Abaturambuto	Multiplication of Irish potatoes seed	6,308,717	2014	FINISHED	INCOME GENERATING ACTIVITY	Not Operational
76	infrastructure	Infrastructure	Nyamagabe	Karengera	Karengera sector	Water supply project in 3 cell	6,000,000	2014	FINISHED	INFRASTRUCTURE	Not Operational
77	Education	Infrastructure	Nyamagabe	Bushekeri	GS Gisakura	Rehabilitation of Gisakura schools	13,384,540	2014	FINISHED	INFRASTRUCTURE	Operational
78	Beekeeping	Beekeeping	Nyamagabe	Ruhambuga	Coperative KAURU	Modern Beekeeping	6,385,921	2014	FINISHED	INCOME GENERATING ACTIVITY	Operational
79	livestock	Livestock	Nyamagabe	Cyato	DIUP	Livestock (Cows and Pigs)	1,000,000	2014	FINISHED	INCOME GENERATING ACTIVITY	Operational

80	Agriculture	Agriculture	Nyarusuru	Kivu	Kivu Park	Nursery of tree plantations and fruit	6,500,000	2014	FINISHED	ALTERNATIVES	Operational
81	livestock	Beekeeping	Nyarusuru	Nyabimata	Koperative Dukwizuburyohe Nyabimata	Beekeeping Project	6,500,000	2014	FINISHED	INCOME GENERATING ACTIVITY	Operational
82	livestock	Beekeeping	Nyarusuru	Muganza	Koperative Dukwizuburyohe Muganza	Beekeeping Project	6,194,342	2014	FINISHED	INCOME GENERATING ACTIVITY	Operational
83	Agriculture	Agriculture	Nyarusuru	Ruheru	KOAUBU	Bamboo multiplication	3,114,375	2014	FINISHED	ALTERNATIVES	Operational
84	livestock	Beekeeping	Rusizi	BUTARE	KODUBABU	Bee keeping project	5,000,000	2014	FINISHED	INCOME GENERATING ACTIVITY	Operational
85	Livestock		Karongi	Mutuntu	COOPERATIVE UBUFATANYE MANJI	Livestock (Cows)	4,000,000	2015	ONGOING	INCOME GENERATING ACTIVITY	Operational
86	Agriculture	Agriculture	Karongi	Twumba	COPIAG	Construction of store house (Irish potatoes, Maize and Ingano)	5,815,835	2015	ONGOING	INCOME GENERATING ACTIVITY	Operational
87	Education	Infrastructure	Nyamasheke	Cyato	E.P Rwumba	Construction of 2 classrooms	10,500,000	2015	ONGOING	INFRASTRUCTURE	Operational
88	Education	Infrastructure	Nyamasheke	Mahembe	E.P Nyarusiza	Construction of 3 classrooms	9,510,000	2015	ONGOING	INFRASTRUCTURE	Operational
89	Tourism Promotion	Infrastructure	Nyamasheke	Bushekeri	Nyungwe Cultural Village Cooperative	Tourism based on Rwandan Culture	9,437,507	2015	ONGOING	INCOME GENERATING ACTIVITY	Operational
90	Education	Infrastructure	Rusizi	Bweyeye	E.P Runyovu	Construction of 2 classrooms	7,989,589	2015	ONGOING	INFRASTRUCTURE	Operational
91	Livestock	Beekeeping	Rusizi	Butare	Koperative Dufatanye Bavumvu	Extension of construction and purchase honey extraction machine	3,500,000	2015	ONGOING	INCOME GENERATING ACTIVITY	Operational

92	Education	Infrastructure	Rusizi	Butare	E.P Rugera	Extension of construction (3 classroom and Water Tanks)	9,500,000	2015	ONGOING	INFRASTRUCTURE	Operational
93	Health	Infrastructure	Rusizi	Nkungu	20 Household /Caritas	Construction of 20 toilet for community living around cyamudongo	3,550,000	2015	ONGOING	INFRASTRUCTURE	Operational
94	Agriculture	Infrastructure	Nyamagabe	Gatare	GS Gatare	Water tanks and grow fruit	6,539,589	2015	ONGOING	INFRASTRUCTURE	Operational
95	Livestock	Livestock	Nyamagabe	Gatare	Cooperative KIGIA	Livestock of Pigs	2,000,000	2015	ONGOING	INCOME GENERATING ACTIVITY	Operational
96	Infrastructure	Infrastructure	Nyamagabe	Kitabi	Sector	Finishing the 10 houses to relocate Mushabarara communities	10,000,000	2015	ONGOING	INFRASTRUCTURE	Operational
97	livestock	Beekeeping	Nyamagabe	Buruhukiro	Cooperative Uryange rwa Buruhukiro	Beekeeping	6,000,000	2015	ONGOING	INCOME GENERATING ACTIVITY	Operational
98	Agriculture	Infrastructure	Nyarusuru	Nyabimata	Cooperative KOTEBINYA	Constructio of ware house	7,969,600	2015	ONGOING	INCOME GENERATING ACTIVITY	Operational
99	Agriculture	Agriculture	Nyarusuru	Nyabimata	Cooperative ABAHUJIMBAR AGA/RUHERU	Multiplication of Maize	5,170,400	2015	ONGOING	INCOME GENERATING ACTIVITY	Operational
100	Agriculture	Agriculture	Nyarusuru	Muganza	TWIYUBAKE-RUKORE(COTIRU)	Agriculture vegetables and fruits	4,995,000	2015	ONGOING	INCOME GENERATING ACTIVITY	Operational
101	Agriculture	Agriculture	Nyarusuru	Ruheru	KOPERATIVE TURENGERE UBUZIMA RUHERU(COTIRU)	Multiplication of Bambous in cell : Ruyenzi, Uwumusebe ya, Remera, Gitita, Kabere(Ruheru), Nkandana Kirarangombe(Busanze)	6,404,589	2015	ONGOING	ALTERNATIVES	Operational

102	Education	Infrastructure	Nyamasheke	RANGIRO	EP KAMATSIRA	Rehabilitation of 6 classroom, toilet and Office	15007532	2016	NOT YET STARTED	INFRASTRUCTURE	Will be changed
103	Education	Infrastructure	Nyamasheke	KARENGERA	EP KANYINYA	Construction of 3 Classroom	15,418600	2016	NOT YET STARTED	INFRASTRUCTURE	Will be changed
104	livestock	Livestock	Nyamasheke	KARAMBI	KOPERATIVE TUBUNGABUNGE IBIDUKIKIJE ABISHYZEHA MWE	Livestock of Pigs	3,000,000	2016	ONGOING	INCOME GENERATING ACTIVITY	Under on going
105	Tourism Promotion	Infrastructure	Nyamasheke	Bushekeri	NYUNGWE CULTURAL VILLAGE COOPERATIVE	Tourism based on Rwandan Culture ( Construction of Reception, Restaurant and two Traditional houses for accomodation)	15,350,000	2016	ONGOING	INCOME GENERATING ACTIVITY	Under on going
106	Agriculture	Infrastructure	Karongi	Mutuntu/Kinyonzwe	Coop Dukoranumurava A	Construction of house and purchse grinding machine	6,000,000	2016	ONGOING	INCOME GENERATING ACTIVITY	Under on going
107	Health	Infrastructure	Karongi	Twumba	Twumba Sector	Rehabilitation of Gisovu health post and purchase the water tank	7,286,673	2016	ONGOING	INFRASTRUCTURE	Under on going
108	Education	Infrastructure	Rusizi	Butare	EP Rugeti	Construction of 3 Classroom	10276320	2016	ONGOING	INFRASTRUCTURE	Under on going
109	Health	Infrastructure	Rusizi	Gitambi	Household 17/CARITAS	Construction of 17 toilet for community living around cyamudongo	2819800	2016	ONGOING	INFRASTRUCTURE	Under on going
110	Health	Infrastructure	Rusizi	Nkungu	Household 25/CARITAS	Construction of 25 toilet for community living	3885000	2016	ONGOING	INFRASTRUCTURE	Under on going

						around cyamudongo					
111	Education	Infrastr ucture	Rusizi	Bweyeye	EP Runyovu	Construction of 2 Classroom	95000 00	20 16	ONGOING	INFRASTR UCTURE	Under on going
112	Agricultur e	Infrastr ucture	Rusizi	Nkungu	Coop COAA NKU- Kora (Amafi-ingurube)	Livestock of Fish and Pig	34232 00	20 16	ONGOING	INFRASTR UCTURE	Under on going
113	Education	Infrastr ucture	Rusizi	Butare	EP RUGERA	Purchase the equipments of schools	33123 63	20 16	FINISHED	INFRASTR UCTURE	Opera tional
114	Education	Infrastr ucture	Nyaru guru	Ruheru	EP Yanza	Construction of 2 Classroom	14,51 8,500	20 16	ONGOING	INFRASTR UCTURE	Under on going
115	Education	Infrastr ucture	Nyaru guru	Muganza	EP Gahurizo	Construction of 2 Classroom	13,69 8,183	20 16	NOT YET STARTED	INFRASTR UCTURE	Under on going
116	Livestock	Livest ock	Nyaru guru	Kivu	Coop Tworore tubungabunga Ibidukikije	Livestock of modern cows	5,000, 000	20 16	NOT YET STARTED	INCOME GENERAT ING ACTIVITY	Not yet starte d
117	agricultur e	Agricu lture	Nyam agabe	Kitabi	Coop Sugira Nyungwe Kitabi	Agriculture of trees and vegetables no damaged by wild animals	3,860, 000	20 16	NOT YET STARTED	ALTENAT IVES	Not yet starte d
118	Livestock	Beekee ping	Nyam agabe	Gatare	Ihuri ry'abavumvu	Purchase beekeeping equipmeents for union beekeepers ( Zone Bunyambiri and they have head quarter at Gatare sector0	6,000, 000	20 16	NOT YET STARTED	INCOME GENERAT ING ACTIVITY	Not yet starte d
119	Education	Infrastr ucture	Nyam agabe	Uwinkingi	GS Kibyagaira	Construction of 2 Classroom	9,000, 000	20 16	NOT YET STARTED	INFRASTR UCTURE	Not yet starte d
120	infrastruct ure	Infrastr ucture	Nyam agabe	Kitabi	KOTUBUKI	Construction of middle market at Kitabi center	15,00 0,000	20 16	NOT YET STARTED	INCOME GENERAT ING ACTIVITY	Not yet starte d