



**THE DEVELOPMENT OF A TOURISM MANAGEMENT FRAMEWORK FOR
THE CONSERVATION OF NATIONAL PARKS IN RWANDA**

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DECLARATION

I, Emmanuel Nsabimana, student number 20422645 of the Cape Peninsula University of Technology, hereby declare that the contents of this Doctoral thesis represent my own unaided work. References to other works that reinforced this thesis have been acknowledged. This thesis has not been submitted previously for academic examination towards any qualification. Furthermore, it represents my own opinions, not those of the Cape Peninsula University of Technology.

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ABSTRACT

This study sought to develop a tourism management framework for the conservation of Rwanda's national parks to ensure the upliftment of surrounding communities through tourism projects. The research, carried out between 2015 and 2018, specifically sought to establish the effect of local community capacity building, decision-making processes, reporting channels, compensation processes and local community involvement and participation as possible components of a tourism management framework for the conservation of the national parks in Rwanda. The study used a mixed methodology with surveys and semi-structured interviews, on a population including local community members, termed "households" in this study, government officials and experts in areas of tourism and conservation (government officials and conservation experts were interviewed). For local communities, a sample of 993 households spread across the three national parks under study was used. To collect data from local communities the researcher developed a structured questionnaire that was administered with the assistance of two research assistants. A pilot study was carried out in two different villages with 10 households in each village. It revealed that some people did not know how to read, or they simply lacked the knowledge to answer the questions, though they ought to have had the information required. Data processing and analysis is essential to ensure that all relevant data is gathered for making sound comparisons. The research used descriptive, correlation and regression analysis to analyse the data. The data collected from the open-ended questions were analysed using content analysis. The study developed and validated a tourism management framework for the conservation of Rwanda's three national parks using conservation of national parks as the dependent variable, while community capacity building, the decision-making process, reporting channels, compensation and local community involvement and participation were used as the five independent variables for the framework. The results of regression estimates indicated that community capacity building, reporting channels, compensation and local community involvement and participation had a positive and significant effect on the conservation of Rwandan national parks, while decision-making had an insignificant effect on the conservation of national parks in Rwanda. In addition to the developed tourism management framework, the study identified a communication gap amongst stakeholders and the research proposed a communication strategy that could be adopted to ensure the framework was successfully implemented. Finally, recommendations were made to specific stakeholders for the effectiveness and efficiency of the developed framework. The recommendations addressed action for policymakers, local communities, and the private sector.

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DEDICATION

This thesis is dedicated to my wife Regine Mutimukeye, my daughters, Kanyana Nsabimana Gaga Lee-Ann, Impano Gaju Emma Briella and Isumba Gisingizo Belcia for their love, support, encouragement, and inspiration.

GLOSSARY

Akagera National Park: A national park located in Eastern Rwanda and used to define the scope of study for this research.

Virunga National Park: A national park located in the Northern Province of Rwanda and used to define the scope of study for this research.

Nyungwe National Park: A national park located in the southwest part of the Western Province of Rwanda and used to define the scope of study for this research.

Community: The term community is used extensively in the peer-reviewed literature although it is used differently by researchers across various disciplines (Cobigo et al., 2016:181). Barrow and Murphree (1998:10) indicate that the definition of community is rarely addressed explicitly in approaches that seek community involvement in wildlife management. In this study, the definition by MacQueen et al. (2001:1931) has been adopted and we define a community as a group of people with diverse characteristics who are linked by social ties, share common perspectives, and engage in joint actions in geographical locations or settings. Community, in this study, is a social group whose members reside in a specific locality, who share a system of government and who often have a common cultural and historical heritage.

Community involvement: Community involvement is a process that engages people within a local area in organisation and development, for example, involving local people in tourism and conservation activities. Appropedia (n.d.:1) describes community involvement as people and communities playing a full part in decision-making and so influencing the decisions which affect their lives. It is also about community empowerment, for example through access to appropriate information and advice. Proper community involvement is not about allowing mere comment on decisions that have already been taken. Instead, it begins at the design stage, the very beginning of any project or programme.

Community conservation: The term community conservation refers to wildlife conservation efforts that involve rural people as an integral part of wildlife conservation policies. Barrow and Murphree (1998:10) indicate that community conservation has been used to denote a range of mechanisms and arrangements for community and local resource user involvement with and benefiting from conservation resources. It includes protected area outreach, collaborative management, co-management, joint management, community-based conservation, and community-based natural resource management. The elements of community conservation can be varied but will include at least local resource users and the conservation resource, be under some form of conservation policy and

legislative regime and may also include state conservation authorities, will have varying institutional arrangements, with an equally diverse array of potential levels of participation but will ultimately be based on ownership.

Rwanda: A small landlocked country in the Great Lakes region of east-central Africa. It is bordered by Uganda, Burundi, the Democratic Republic of Congo (DRC) and Tanzania. The study took place within and around three national parks in the country.

Tourism: Tourism can essentially be described as an industry that provides tours and services to tourists. The United Nations World Tourism Organisation (UNWTO) (2004:6) defines tourism as a social, cultural, and economic phenomenon that entails the movement of people to countries or places outside their usual environment for personal or business/professional purposes. These people are called visitors (which may be either tourists or excursionists; residents or non-residents) and tourism has to do with their activities, some of which imply tourism expenditure.

North American Industry Classification System (NAICS): Created jointly by the Canadian, US and Mexican governments to ensure a common system across the three countries. The British Columbia Ministry of Jobs, Tourism and Skills Training (2013:7) has broken down the tourism industry into broad industry groupings using a common classification system and created the following groups:

- Accommodation
- Food and beverage services (commonly known as “F&B”)
- Recreation and entertainment
- Transportation; and
- Travel services.

Tourism development: The term can be defined as a long-term process of preparing for the arrival of tourists and entails planning, building, and managing attractions, transportation, services, and facilities that serve tourists. Saner et al. (2015:233) discuss the use of tourism strategies for a country to create revenue-generating opportunities (tax revenues) and provide sustainable employment for semi-skilled or unskilled workers. They indicate that such tourism development strategies require systemic thinking and comprehensive investment portfolio strategies regarding the tourism industry as a whole. This means going beyond investing in hotels and includes transportation infrastructure, catering, restaurants, safe water, and financial systems. In other words, the destination

countries need to review their tourism value and supply chains and identify structural impediments to the full utilisation of their tourism assets and facilities

Participatory tourism: Participatory tourism is a tourism planning approach that aims to involve people in tourism development planning. It involves stakeholders such as local communities, governments, and non-government organisations to participate in the planning process. Smith (2014:8) defines participatory tourism as responsible tourism which includes every stakeholder of a certain destination to create authentic, new products that later affect their everyday life and surroundings. The financial sustainability of the local community is secured by involving their stakeholders and services which help develop a destination. The participation of the local community in the decision-making process benefits the local economy and boosts residents' respect for their traditional lifestyle and values.

ACRONYMS AND ABBREVIATIONS

AMC	Akagera Management Company
ANOVA	Analysis of Variances
ANP	Akagera National Park
APN	African Parks Network
β	Beta
CAMPFIRE	Communal Areas Management Programme for Indigenous Resources
CBD	Convention on Biological Diversity
CBO	Community-based organisation
CBT	Community-based tourism
CBTE	Community-based tourism enterprise
CITES	Convention on International Trade in Endangered Species of Fauna and Flora
CPUT	Cape Peninsula University of Technology
DMA	Destination management area
DRC	Democratic Republic of Congo
EAC	East African Community
EDPRS	Economic Development and Poverty Reduction Strategy
FON	Friends of Nyungwe
GDP	Gross domestic product
GIS	Deutsche Gesellschaft für Internationale Zusammenarbeit
GMFNP	Gishwati-Mukura Forest National Park
GNP	Gross national product
GoR	Government of Rwanda
GTZ	German Technical Co-operation Agency
ha	Hectare
HMRM	Hierarchical Moderated Multiple Regression model
HWC	Human-wildlife conflict
ICT	Information and communications technology
IGCP	International Gorilla Conservation Program
ITK	Indigenous traditional knowledge
IUCN	International Union for Conservation of Nature
IYE	International Year of Ecotourism
km	Kilometre
km ²	Square kilometre
LTLC	Local Tourism Liaison Committee

MINIRENA	Ministry of Natural Resources
MNE	Multi-national enterprise
MSME	Micro, Small and Medium Enterprise
NAICS	North American Industry Classification System
NFC	New Forest Company
NFNP	Nyungwe Forest National Park
NGO	Non-governmental organisation
NISR	National Institute of Statistics of Rwanda
NNP	Nyungwe National Park
ODI	Overseas Development Institute
ORTPN	Office National de Tourisme et Parcs Nationaux
PES	Payment for environment services
PPC	Pro-poor conservation
PPT	Pro-poor tourism
RDB	Rwanda Development Board
RDB-TC	Rwanda Development Board – Tourism and Conservation Unit
REB	Rwanda Education Board
REMA	Rwanda Environment Management Authority
RMSEA	Root Mean Square Error of Approximation
RNRA	Rwanda Natural Resources Authority
ROR	Republic of Rwanda
SGF	Special Guarantee Fund
SME	Small and medium enterprise
SMME	Small, medium, and micro enterprise
SPSS	Statistical Package for Social Sciences
ST-EP	Sustainable Tourism and Environment Protection
TALC	Tourism area life cycle
TRS	Tourism revenue-sharing
<i>Umuganda</i>	Monthly statutory community public work platform
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNWTO	United Nations World Tourism Organisation
USAID	United States Agency for International Development
VNP	Volcanoes National Park
WCS	Wildlife Conservation Society

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CHAPTER 1

INTRODUCTION AND BACKGROUND TO THE STUDY

1.1 Introduction

Tourism has become one of the world's largest industries in the 21st century. In particular, tourism helps developing nations to earn the needed foreign exchange to boost their economies. Rwanda, as a developing country, is no exception to this, where tourism plays an important role in job creation, investment attraction and poverty alleviation.

The Rwandan tourism industry has been identified by the government as a priority focus, given its potential to contribute to export diversification, growth and to Rwanda's national goals as set in the Vision 2020. Rwanda sees tourism as a strategy to help diversify the national economy while creating high-quality opportunities for the private sector, communities, and the overall population (Nielsen & Spenceley, 2010:212).

Rwandan tourism is based on the natural environment in its national parks, the three most-visited being the Volcanoes National Park (VNP), home of the mountain gorillas, located in the north of the country, the Nyungwe National Park (NNP) in the south and the Akagera National Park (ANP) in the east. These parks have provided a level of subsistence for the local communities around them. The ANP is challenged by ongoing encroachment to solve agricultural and pastoral land shortages and for hunting and firewood (Mazimhaka, 2007:498) For hundreds of years the park has been considered the natural or providential right of the communities to sustain their daily lives and the same is true of the other parks.

For many years, conflict between local populations around these parks and government authorities has existed. The government has initiated a series of proclamations relating to the environment and the conservation of natural resources, but these legal measures have not necessarily produced positive results. For example, in the ANP, the killing of park rangers by poachers in December 2010 is an indication of this ongoing conflict. To ease the tensions between the government and the local communities around the national parks, the Rwandan government developed a strategy of profit sharing, involving communities in the conservation of the parks, such that they benefit from the activities in and around the parks.

1.2 Background to the study

According to Grosspietsch (2006:24):

“Rwanda possesses three main national parks, the VNP is located in north-western Rwanda, bordering the Virunga National Park in the DRC and the Mgahinga Gorilla National Park in Uganda. VNP is known as a haven for mountain gorillas and is home to five of the eight volcanoes of the Virunga Mountains which are covered in rainforests and bamboo”.

The popular zoologist Dian Fossey used the VNP as her base until her murder in 1985.

“The VNP was gazetted in 1925 as a small area bounded by the Karisimbi, Bisoke and Mikeno volcanoes and was intended to protect gorillas from poachers. This was the first national park to be created in Africa. Subsequently, in 1929, the borders of the Park were extended into Rwanda and the Belgian Congo (now the Democratic Republic of Congo), to form the Albert National Park, a huge area of 8 090 kilometre², managed by the Belgian colonial authorities, who were in charge of both colonies” (Briggs & Booth, 2001:16).

Rwanda Environment Management Authority (REMA) (2009:22), reports that 700 hectares (ha) of the park was designated for human habitation in 1958.

After the DRC (formerly known as Zaire) gained independence in 1960, the VNP was split in two and upon Rwandan independence in 1962, the new government agreed to maintain the park as a conservation and tourist area, despite that the new republic was already suffering from overpopulation problems (REMA, 2009:22). The VNP was halved in area in 1969 and between 1969 and 1973, 1 050 ha of the park was cleared to grow pyrethrum, a plant that is used to produce insecticide (Office National de Tourisme et Parcs Nationaux [ORTPN], 2004, cited by REMA, 2009:22).

The VNP became a battlefield during the Rwandan Civil War, with the park headquarters being attacked in 1992. The research centre was abandoned, and all tourist activities (including visiting the gorillas) were stopped, only to resume after 1999 when the area was deemed safe and under control (Briggs & Booth, 2001:26).

The NNP was established in 1933 as a forest reserve and is in the southern part of Rwanda. According to Nyungwe Forest National Park (NFNP) (2020:1), the forest is “a high-altitude, mountainous tropical forest that is set on 970 kilometres² as a conservation area”. Barnett and Dardis (2011:4) indicate that the NNP is in the Albertine Rift, which runs through the six countries of Burundi, the DRC, Rwanda, Tanzania, Uganda, and Zambia. The Rwenzori Mountains form a striking feature within the Albertine Rift (Barnett & Dardis, 2011:4)

In the south, the NNP neighbours the Kibira National Park located to the north of Burundi. Barnett and Dardis (2011:4) contend that Nyungwe is one of the largest mountainous rainforests remaining in Africa and currently having the status of a national park makes it the biggest protected high-altitude rainforest in East Africa. The Nyungwe forest reserve was awarded the status of a national park in 2005 (Rutebuka et al., 2018:72).

REMA (2009:23) highlights that:

“Nyungwe’s biodiversity is one of the most endemic-species-rich areas in Africa and is very considerable by African standards. Along with its biodiversity, Nyungwe is an important water catchment for Rwanda and contains many natural resources integral to Rwanda’s human populations”.

REMA further states that:

“Rwanda, being one of the most heavily populated areas of Africa, with over 10 million inhabitants in a country of 26 338 kilometres² means that Nyungwe is under constant threat from anthropogenic and environmental stresses”.

Lastly, the ANP is in the Eastern Province of Rwanda, towards the northern part of the province. The Park borders Uganda in the north and Tanzania in the east. Reduced to almost a third of its original size (250 000ha) due to the resettlement of refugees repatriated after the civil war of 1994, the park currently covers only 1 085 kilometres², slightly more than 100 000 ha in size (Nsabimana & Spencer, 2013:102).

According to Rutagarama (2006, cited by Nsabimana, 2010:55), the wildlife populations have been decimated by the poaching that occurred in the early 1990s and post-civil war. Nsabimana (2010:56) informs that “the remaining lakes in the Park are routinely used to water domestic cattle”. Nsabimana (2010:57), however, contends that:

“The ANP is worthy of a visit despite the challenges mentioned above as there is plenty of game, including buffalo, elephant, zebra, giraffe, hippo and various antelopes, which are reasonably visible”.

The over-dependence on agriculture and Rwanda being the most populated country in Africa, threatens Rwanda’s biodiversity. These threats are mostly linked to population pressures that also cause poverty within communities. Further to agriculture, mining and housing also pose problems to biodiversity.

With a human population estimate at over 11 262 564 million in 2016 (NISR, 2016:18) on a land surface of 26 338 kilometres², “Rwanda has a population density of 340 persons per onekilometre², ranking Rwanda among the most densely populated countries in the world” (NISR, 2012:14).

“With a population growth rate of 2.9% per annum, the population of Rwanda is expected to total 16 million by 2020, unless family planning, education and outreach strategies are intensified” (Republic of Rwanda [ROR], 2000:3).

REMA (2009:7) believes that natural ecosystems and species are put under pressure and threatened by the high density of human populations as there is the risk of forest invasion, poaching and using some of the land, like wetlands, for crop production.

REMA (2007:14) explains that “continued transformation of land and biodiversity habitat for human population use has and is threatening biodiversity in Rwanda due to the high density of population”. REMA continues, “biodiversity can be explained as some of the most acute problems; in this regard being the loss of forests through clearing for development or conversion to agricultural land and ad hoc reclamation of wetlands for construction and industrial development, especially in urban areas”.

REMA (2009:19) argues that:

“Overexploitation of bio-resources and destructive harvesting practices have resulted in a reduction or loss of populations among many plant and animal species, leading them to the verge of extinction. The over-exploitation of wood products for poles, fuelwood and charcoal has led over the years to the loss of the majority of national forests”.

An article in *The New Times* reports that the potential use of bamboo and the success of handcrafted goods has caused an increase in bamboo cutting in the NNP and VNP which could be a threat to the integrity of these parks (Tashobya, 2016:3). The Government of Rwanda (GoR) adopted a biodiversity policy in 2011 that elucidated strategies on how to protect the country’s biodiversity (ROR, 2011a:3). According to Nsabimana and Spencer (2015:50), the government report highlights that:

“Rwanda’s biodiversity resources are a valuable natural endowment that offers a wide range of benefits and opportunities for local and national economic development, improved community-livelihoods and the provision of environmental goods and services, such as biodiversity and watershed protection”.

ROR (2011a:2) reports that Rwanda’s challenges entail struggling to “sustainably manage its biodiversity for present and future generations, by better balancing human needs with those of the environment”. Some of the conservation challenges included in the report as reviewed by Nsabimana and Spencer (2015:50) are:

“...the lack of a clear national-level conservation-planning framework, insufficient institutional capacity to efficiently and effectively manage wildlife and conservation and that key stakeholders are not systematically involved in conservation and do not reap the full benefits of the facilities available to communities”.

Local communities should be considered as conservation stakeholders. However, the increase of the population poses threats to biodiversity and a balance needs to be established. ROR (2011a:8) points out that Rwanda’s density of population is 340 persons per one kilometre² on average, with some rural districts recording densities of up to 1 000 people per one kilometre². There is no doubt that biodiversity will suffer from population increase as agriculture and housing become the most important requirements of local community residents, thus causing “degradation of natural resources through deforestation, soil erosion, reduction of biodiversity and the cultivation and other unsustainable uses of the wetlands”. In addition, Tusabe and Habyalimana (2010:1) opine that “Rwandan protected areas have been exposed to significant pressure on resources, as the ever-increasing population forces people to look for additional land for cultivation”. This claim is supported by the United States Agency for International Development (USAID) in their argument that “demographic pressures in Rwanda have posed major challenges to natural forests and protected areas” (Bisoza & Ndangisa, 2013:7). The authors list water collection, agriculture encroachment, medicinal plant collection, woodcutting for firewood, poaching, construction, bamboo harvesting and beehive placement as the biggest threats to biodiversity conservation.

Considering these challenges, it is crucial to think of alternative ways for people to sustain their livelihoods without compromising the sustainability of biodiversity. In Rwanda, most of the biodiversity is found in the national parks and communities surrounding the national parks need to find an alternative livelihood, besides destroying the resources and invaluable biodiversity of fauna and flora of the parks. One approach to help preserve biodiversity and to enhance the lives of communities living around the parks is to promote community participation as the most important conservation stakeholders. With this outlook, this study formulated a management framework that could cater to both community and the biodiversity needs within the national parks in Rwanda. This framework will promote community participation, which is seen as a solution to improving the livelihoods of people, together with preserving the parks' biodiversity.

1.3 Problem statement

Through the Vision 2020 initiative, Rwanda recognises tourism as one of the strategies adopted to curb rampant poverty among Rwandans, especially in rural areas. Using the tourism potential of the national parks, the government regards local communities as beneficiaries of the tourism activities in and around the national parks and as such, aims to achieve two major objectives, a) the conservation of the biodiversity within the national parks and b) poverty reduction among the communities living around the national parks, following a pro-poor tourism (PPT) approach. Several PPT projects have been implemented in different parts of the country but specifically around the national parks, including a profit-sharing scheme.

Despite the introduction and implementation of tourism-related initiatives, several challenges still exist. Rwanda still (in 2018) has no clear legal and management framework on biodiversity conservation, including the sharing of benefits from biodiversity resources. There are still doubts about how the tourism revenue-sharing (TRS) policy should be introduced to local communities, who should benefit and who should not benefit. It appears difficult to track the impacts of this scheme accurately as little effort has been made to determine a baseline against which to measure improvements in biodiversity conservation and community livelihoods.

1.4 Study aim and motivation

Considering the challenges and problems described in the conservation of Rwanda's three major national parks, the study aimed to analyse the impacts of PPT on local communities around the three national parks. This analysis incorporates the involvement of different stakeholders, including professionals and experts, to develop a tourism management framework to optimise the conservation of the said parks and thereby improve the socio-economic conditions of local communities.

Rwandan protected areas have been subject to significant pressure on resources, as the ever-increasing population forces people to look for additional land for life-sustaining cultivation. This became most serious after the 1994 genocide when many returning Rwandans needed land for settlement. The VNP, for example, has been reduced to under half its original size (Tusabe & Habyalimana, 2010:2) while the ANP has been reduced by two-thirds of its original size (Kanyamibwa, 1998:1403). The conflict also reduced protection in the national parks, leading to increases in animal-trafficking and poaching of rare, endangered, and valuable flora and fauna, for wood and meat to be sold in local markets.

Being aware of the importance of tourism in improving the economy post- the genocide, the Rwandan Government extended its efforts to protect the three national parks. This renewed focus on conservation created three key problems for people living around the parks in that people were deprived of grazing land for their cattle, of land for cultivation and meat from game. Crop depredation (especially wheat, potatoes, and beans) by wildlife became an issue surrounding the national parks, increasing the frustration of local communities.

Community access to the parks was limited and benefits such as cooking fuel, wild fruits, honey, and traditional medicinal plants, were foregone. These problems created conflict between the communities and the parks' management. The conflict arising from these problems includes resource access which has caused tensions between the use of protected lands and natural resources for revenue and livelihoods and the tourism conservation of those natural resources for ecosystem services, biodiversity, and future generations.

Crawford (2012:4) mentions a range of resource types and livelihood conflicts apparent in the NNP, such as harvesting of bamboo and firewood, hunting of game, artisanal and industrial mining, beekeeping, farming (including cannabis), traditional medicines and livestock grazing. Most of these conflicts are also occur in the other two national parks. Crawford (2012:9) emphasises that tension between communities and park officials is heightened by the destruction of community crops by park fauna and the lack of compensation for those losses. Furthermore, institutional conflict existed because of lack of community access to the resources in park buffer zones and lack of co-ordinated decision-making and management of the zones. There was no benefit-sharing mechanism for buffer-zone resources, which exacerbated the tension between park personnel, the communities and the institutions managing the buffer zones.

Benefit-sharing conflict relating to the inequalities among communities in the distribution of park revenues and payments for ecosystem services lead to the question of why communities should protect the park if they received no benefit from it. Although the above conflicts are perceived (in 2018) to still exist, the GoR, through the Rwanda Development Board (RDB) has tried to implement strategies to help communities understand the importance of conservation

for tourism purposes of the national parks. These initiatives include a policy on a 5% revenue-sharing scheme and PPT projects.

A revenue-sharing scheme was launched by the Rwandan government in 2005, whereby it was decided that 5% of all revenue from the three national parks would be distributed to the communities surrounding each park to help them fund projects. Several tourism-related projects have been funded by this scheme, including the construction of infrastructure and schools, provision of clean water, funding income-generating activities such as beekeeping and a handicraft association. However, the scheme was criticised because projects were decided by top administration (district level) and projects were forced on the communities without consultation and communities had no powers in decision-making. Indeed, it is unclear who benefits from this scheme and what factors are considered when deciding on which projects to fund or not to fund (ROR, 2005:5).

PPT projects that have a direct impact on the livelihood of poor people are seen as a strategy to involve communities in tourism and conservation issues. For example, in January 2012 a new tourism product, supposedly to be pro-poor based, called the Congo-Nile trail was launched. It is a 10-day hiking experience, which covers a wide range of attractions on Lake Kivu shores, a distance of 227 kilometres stretching from Rubavu (a city in the north-west of Rwanda) to Rusizi (a south-western city), via Karongi, Nyamasheke, Rusizi and Nyamasheke districts, bordering the NNP.

The Congo-Nile trail features coffee and tea plantations and scenic beauty. Local people could benefit from this trail by being employed as tour guides and conservation staff. Local foods and other commodities would provide a market from tourists hiking the trail. However, no studies have been conducted to determine whether the intended objectives regarding benefits to local communities have been achieved. Discussions on conflicts and proposed solutions indicate a dire need to develop a tourism-related management framework. This management framework would consider existing problems and develop guidelines on how to increase community benefits and participation to improve conservation of the parks under study.

Against this background, this study sought to achieve the following objectives.

1.5 Research objectives

1.5.1 General objective

To develop a tourism management framework for the continued conservation of the three national parks to ensure the upliftment of surrounding communities through tourism projects.

1.5.2 Specific objectives

- To establish the effect of local community capacity-building for conservation of the national parks in Rwanda.
- To determine the effect of the decision-making process on conservation of the national parks in Rwanda.
- To establish the effect of reporting channels on conservation of the national parks in Rwanda.
- To establish the effect of a compensation process on conservation of the national parks in Rwanda.
- To establish the effect of local community involvement and participation on conservation of the national parks in Rwanda

1.5.3 Research questions

- To what extent does local community capacity-building affect conservation of the national parks in Rwanda?
- How does the decision-making process affect conservation of the national parks in Rwanda?
- How do reporting channels affect conservation of the national parks in Rwanda?
- How does a compensation process affect conservation of the national parks in Rwanda?
- How does local community involvement and participation affect conservation of the national parks in Rwanda?

1.6 Significance of the study

The development of a management framework will contribute to the conservation of the three Rwandan National Parks. The framework will increase community participation in conservation matters as well as promote poverty reduction within the local communities around the three parks through extended tourism projects. The study will increase the theoretical contribution to the academic environment will gain from this study which will add to the existing body of knowledge (literature) and provide fresh insight into the Rwandan tourism industry, which is still (in 2018) under-researched. Apart from the researcher's affiliated institution and his position in the RDB responsible for tourism initiatives, this study will contribute to other academics and researchers who are interested in similar studies.

The study is significant for the RDB, which is the authority that oversees tourism and conservation in Rwanda. The study will add to the theoretical knowledge contribution, and provide a management framework for improving the management and the conservation of Rwandan national parks, which will provide the RDB with guidelines on how to reduce poverty among local communities around the national parks through PPT practices. Finally, the study is significant to the local communities around the three national parks in that they will benefit from and contribute to tourism and conservation activities.

1.7 Study methodology

This section briefly describes the methodology adopted in conducting the study, including the research design, population, sample size and sampling techniques. A detailed discussion of the methodology is contained in Chapter 4.

The research design adopted for this study was both exploratory and analytical, using quantitative and qualitative data. The study explored the impacts on local communities living around the three Rwandan national parks. An analysis of these impacts, combined with input from local communities and policymakers, was done to find a starting point in formulating a tourism management framework for these three parks. The study used survey questionnaires to collect quantitative data from local communities, while in-depth interviews were conducted to seek qualitative data from policymakers and tourism experts.

The population for this study comprised three different groups—the local communities adjacent to the three national parks, government officials (policymakers) in tourism and conservation and experts in the areas of tourism and conservation. Local communities provided information relating to the impacts of PPT projects on the communities and their views on conservation of the parks. The government officials (policymakers) generated information that established current strategies on PPT and the conservation and management of the parks. Lastly, the experts assisted in providing information that was required to formulate the tourism management framework.

For sampling, the researcher used a mixed technique, dependent on the type of population sampled. The researcher used a simple random sampling technique to select the communities to participate in the study. Each Park was treated separately as conservation issues are essentially different in each of the three parks. When selecting households to participate in the study, convenience sampling was used until the desired number of respondents was reached. The same technique was used to select a person to represent the household, with a combination of purposive sampling technique, as the qualifying respondent target had to be above 18 years of age.

For government officials (policymakers), a purposive sampling technique was used. This meant that the selection depended on available information, that if a certain official at a specific institution was involved in tourism and conservation in Rwanda, he/she would be approached. The same purposive sampling technique was applied to establish who among the experts would participate in the study. However, in this case, it was combined with the snowballing technique in which existing study respondents recruit future respondents from among their acquaintances and so the sample group grows (Etikan et al., 2016:6). In this category, different backgrounds were targeted to gather a range of opinions, including scholars from non-governmental organisations (NGOs) involved in tourism and conservation, as well as academics researching in the same fields.

A variety of methods was used to collect information, depending on the type of respondent. In the case of the local communities, a survey method was used. The researcher developed a structured questionnaire (Appendix A) that was distributed to members of the communities. The questionnaire was set in English, with a translated version in *Kinyarwanda*, the local language of respondents, available to those who cannot speak English. Two trained field assistants helped to distribute and collect the questionnaires from the respondents across all parks. The questionnaire was first tested on a small sample of respondents to detect possible errors before the final version was printed and distributed.

For the policymakers', in-depth semi-structured interviews were conducted based on an interview guide (Appendix B) which allowed for response questions from the participants to clarify information on the study issue. For the experts, a qualitative questionnaire was used (see Appendix C). The focus in this category was on generating ideas that would help to formulate and develop a tourism management framework. The researcher approached this respondent category at a later stage of the data collection exercise as information from the communities and policymakers served as background information to the experts.

1.8 Delineation of the study

The study was carried out in three of the Rwandan national parks and only communities living in very close proximity to the parks were considered for inclusion. Although the study tried to describe the impact of tourism on rural communities, the intention was to develop a tourism management framework. Therefore, the data was used to provide a clear understanding of the situation among the local communities so that loopholes/problems were identified, which constituted the basis for the formulation of the proposed framework. Park staff included in the study are employed at a management level and all the experts involved in the study have recognised tertiary tourism affiliations.

1.9 Definition of basic concepts

This section discusses the concepts that are basic to the understanding of the research topic and the direction of the research. The aim is to highlight how they are conceptualised in different contexts and their significance in this study.

1.9.1 Tourism

According to Cooper et al. (2005:13), tourism can be defined from both the demand and supply sides. These authors describe the demand side as persons travelling for leisure, business or other purposes and staying in places away from their usual environment for not more than a year. From a supply side, the authors suggest that “tourism is an industry that consists of all those firms, organisations and facilities which are intended to serve specific needs and wants to tourists” (Cooper et al., 2005:15).

1.9.2 Pro-poor tourism

Ashley et al. (2001:22) describe PPT as:

“...tourism that generates net benefits for the poor. Benefits may be economic but they may also be social, environmental or cultural. Pro-poor tourism is not a specific product or sector of tourism but an approach to the industry, which involves a range of stakeholders operating at different levels, from micro to macro. These stakeholders include the government, private sector and civil society, as well as the poor themselves who act as both producers and decision-makers”.

1.9.3 Management

After more than four decades, management is still considered an art. Samuel (2006:66) describes management as getting things done through formally organised groups; it is the art of creating an environment in which people can perform and co-operate towards the achievement of group goals. Management is the art of knowing what to do, when to do it and to see that it is done in the best and most cost-efficient, way.

Management is a “purposive activity” as indicated by Kaehler and Grundei (2019:22). They further contend that management influences market, production and resource operations in an organisation and its units. It may address both people and non-people issues and is exerted by multiple organisational actors through either anticipatory norm-setting or situational intervention to achieve the unit’s objectives.

In his definition, Enamhe (2014:11) regards management as a versatile tool “that directs group efforts toward the attainment of certain pre-determined goals”. Enamhe contends that “it is the process of working with and through others to effectively achieve the goals of an organisation, by efficiently using limited resources in the changing world”.

1.9.4 Management framework

The researcher defines a management framework as a set of assumptions, concepts, values and practices that guide the development of a management plan. Therefore, a management plan is an explicit set of rules governing how to apply the principles and framework of natural resource management in each area. This plan may be adapted to various changes in the natural and social environment or upon new information about how a system functions.

1.9.5 Conservation

The International Union for Conservation of Nature (IUCN, 1980:12) defines conservation as the “management of human use of the biosphere so that it may yield the greatest sustainable benefit to present generations while maintaining its potential to meet the needs and aspirations of future generations”. Thus, conservation encompasses preservation, maintenance, and enhancement of the natural environment.

1.9.6 National Park

Dudley (2008:16) describes a national park as “a large protected area, natural or near-natural, which is set aside to protect large-scale ecological processes, together with the species and ecosystems characteristic of the area” A national park also provides a foundation for environmentally and culturally compatible spiritual, scientific, educational, recreational and visitor opportunities.

1.10 Study structure

This section describes the main points discussed in each of the seven chapters of the thesis.

Chapter 1 outlines the background and introduces the study. The problem under study is defined and the motivation for undertaking the study is highlighted. The chapter also presents the research aim, study objectives, research questions and methodology applied and describes the key concepts of the study.

Chapter 2 discusses literature related to tourism and conservation issues. In this chapter, particular attention is paid to tourism development theories with specific emphasis on the PPT approach. Both positive and negative impacts of tourism are addressed. The chapter further discusses the link between tourism and conservation, using tourism as an incentive for biodiversity conservation. A general explanation of conservation models is offered, with a specific and critical look at the community conservation model.

Chapter 3 focuses on tourism and conservation issues in Rwanda. A detailed background is given to each of the three national parks under study. The concept of tourism revenue sharing is also discussed in this chapter.

Chapter 4 describes the study's research design and the different types of the population considered in the study are explained. The chapter discusses the mixed methodology applied and techniques for sample selection and collection of primary data.

Chapter 5 presents, and analyses data obtained from household respondents. It must be noted that the data analysis responds to the first five research questions.

Chapter 6 presents and analyses the primary data obtained from the interviews with government officials and park authorities. The chapter gives complementary information to some data in Chapter 5 and helps to answer the first five research questions fully.

The information obtained in Chapters 5 and 6 helped the researcher to engage the experts through a qualitative questionnaire. The data from tourism experts are simultaneously reported in Chapter 6 as complementary to the data obtained from the first two categories of respondents. The experts' ideas led to the formulation of a tourism management framework for the three Rwandan national parks under study, which is discussed in this chapter.

Finally, Chapter 7 summarises the research findings, draws conclusions and suggests several recommendations for different stakeholders who will play a key role in the implementation of the proposed framework.

1.11 Chapter summary

This chapter introduces and provides a background to the study, the aim of which is to develop a tourism management framework for three of Rwanda's national parks. The problem statement, study aim, research objectives and questions are stated. The delineation of the study, its significance and the research contribution of the study are discussed. The chapter also briefly outlines the research design, methodology and sampling techniques employed. An overview of the study structure concludes the chapter.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter reviews literature relevant to the study. It addresses several issues concerning tourism, conservation, and community participation in tourism-related matters, generally discussing both positive and negative impacts. A discussion of the local community involvement and participation paradigm in the tourism industry is offered, by examining some key points emerging from various studies, reports and other sources of information. The chapter examines various levels of community participation and commences with a discussion of the overall concept of community participation in the context of the tourism industry.

The chapter also identifies factors that influence local communities and attract their participation in the tourism industry. Some examples of the common benefit-sharing systems widely applied in the industry across various parts of the world are highlighted and the concept of TRS is discussed. The link between community involvement, community participation, tourism development and how the latter is linked to poverty alleviation, is highlighted and management approaches that are widely used in managing national parks are outlined. The chapter concludes with a section on the concept of adaptive management as a tourism management philosophy.

2.2 General literature

This section reviews general literature relevant to the contribution of tourism to economic development. Since the 1960s, impact studies have emerged with a focus on economic development, where nations needed to measure their development through reference to the Gross National Product (GNP), the multiplier effect and the level of employment (Krannich et al., 1989:198). The 1970s saw the impact of tourism ventures on social-cultural issues (Bryden, 1980:93), while Butler (1980:7) indicated that the environmental impacts of tourism were also emphasised by tourism researchers in the 1980s. The 1990s tourism impact studies brought attention to the shift from mass tourism to sustainable tourism and this idea alerted new forms of tourism, including community tourism, heritage tourism and ecotourism (Jurowski et al., 1997:6).

Tourism has experienced many economic and environmental impacts as well as social consequences and therefore, knowing these effects is vital for decision-makers. The initial development of tourism saw several researchers vying to identify its various perceived impacts (Belisle & Hoy, 1980; Sheldon & Var, 1984; Liu & Var, 1986; Perdue et al., 1987; Ross, 1992:14). The literature indicates that various methodological approaches were developed

based on major impacts and variables identified through those studies, where most of the researchers identified the perceived impacts through resident surveys.

There is a general recognition of positive economic impacts from tourism development but some negative social and environmental impacts such as prostitution, crime, pollution, public safety issues and traffic congestion were also found. One may argue that the latter discussion is old but Mason (2003:28) found impacts of a greater or lesser degree, which have been evoked to support statements in this study. Mason pointed out that “the impacts of tourism can be positive or beneficial but also negative or detrimental” and further argued that “whether impacts are perceived as positive or negative depends on the value position and judgement of the observer of the impacts” (Mason, 2003:28). For example, in the economic sector, he propounded his argument, saying that “only economic impacts are considered, and the example relates to the building of a hotel in an area with little tourism activity”. (Mason, 2003:28) explains:

“It is possible for one observer to express a view that the building of the hotel will create more jobs, both in the building and running of the hotel, and the observer would consider this to be a positive impact”

Furthermore:

“Another observer may claim that, although jobs will be created, they will only be part-time, semi-skilled, poorly paid and lacking a career structure, as well as taking people away from traditional forms of employment”.

The observer in the latter statement sees the construction of the hotel as having a negative impact.

Looking at the conservation and environmental effects of nature, one may think that tracing a passage within a national park to help tourists pass without disturbing the environment, while also generating income, is a positive impact. However, another observer will see it as a negative impact, arguing that the more passages that are created will increase the number of visitors, which will lead to deterioration of the environment.

Hence, discussions on the impacts of tourism require a balanced attitude and consideration of a wider range of attitudes of different viewers emanating from different interests.

Mason (2003:28), however, adds that:

“It is predictable for researchers and policy-makers to note a number of both positive and negative effects of tourism in this context while positive economic benefits usually include contributions to the local economy and job creation”.

And further articulates that:

“Positive social impacts of tourism can include the revival or boosting of traditional art or handicraft activity as a result of tourist demand, while positive environmental effects of tourism may include revenue generated from visits to sites of natural attraction, which is used to restore and maintain the attraction, as well as enhance interest from visitors in the importance of the natural environment and therefore a greater willingness to support measures to protect the environment”.

Chang et al. (2018:2) documented the impacts of tourism and indicated that even if tourism could generate negative impacts, public sectors often consider positive economic impacts as the main tourism impact and therefore select tourism as the preferred development approach instead of other industrial options, especially for rural area development.

Nevertheless, negative economic impacts have been documented by various scholars. Chang et al. (2018:3), Kumar et al. (2015:37) and Mason (2003:29) all agree that tourism could bring negative economic impacts. Chang et al. (2018:4) believe that inflation is one of the negative economic impacts of tourism. Similarly, Mason (2003:29) and Kumar et al. (2015:38) highlight that the hike in prices of housing, land and food during tourist seasons are some of the negative impacts of tourism.

Mason (2003:29) highlights the negative environmental consequences of tourism, including pollution from vehicle emissions, visitor littering, habitat disturbance and damage to landscape features. Mason expands on the negative socio-cultural impacts, such as the loss of cultural identity, particularly when tourists come from the developed world and the hosts are in a developing country

Different factors have been used by different researchers in the study of tourism impacts as perceived by residents. These factors include the community location relative to the tourism area, socio-demographic characteristics among community residents, and economic dependency on tourism for employment (Tichaawa & Mhlanga, 2015:3-4) and by comparing local entrepreneurs, public officials, and other residents (Mutana & Mukwada, 2017:8).

Lohmann (2004:2) elaborates on the above arguments:

“The economy (e.g., exchange rates, loss of jobs), politics (e.g., the enlargement of the EAC, taxation, environment), crisis and threats (e.g., terrorism, epidemic diseases, earthquakes), demographic change (e.g. age structure, migration, educational level) and technology (e.g. transport, communication, information), may all be regarded as influencing factors in tourism impacts”.

Lohmann further points out that “emerging factors constitute other categories of factors that cannot be negated in tourism’s impacts” (Lohmann, 2004:3).

In most cases, the studies concluded that there was little constant distinction in perceived tourism impacts by socio-demographic characteristics, while on the other hand, perceived impacts of tourism diminish when local residents reside far from the tourism sites. However,

as many local people are dependent on income from tourism, the impacts are viewed in a positive light.

The studies on tourism impacts include the development of impact assessment scales by different researchers and scholars (Chen, 2000:7), such as Kim (2002:38) who touched on tourism impact attributes that were later used by different scholars in examining tourism-related impacts. For example, Mason (2003:28-29) and Shariff (2013:391) re-examined Kim's (2002:38) attributes and restructured them into fewer identical impact domains.

In Kim's (2002:38) paradigm, the tourism impacts are broken down into positive economic impacts and negative economic impacts, positive social impacts and negative social impacts, positive and negative cultural impacts, and positive and negative environmental impacts. Table 2.1 lists positive and negative impacts of tourism per Kim's views and other researchers on the same topics, such as Mason (2003:29).

Table 2.1: Major positive and negative impacts of tourism

Economic impacts	<p>Positive impacts:</p> <ol style="list-style-type: none"> 1. Provides employment opportunities 2. Generates supply of foreign exchange 3. Increases income 4. Increases gross national products 5. Improves infrastructure, facilities and services (sewage system) 6. Raises government revenue (tax) 7. Diversifies the economy <p>Negative impacts:</p> <ol style="list-style-type: none"> 1. Causes inflation of land value 2. Increased demand for local products, raising prices on food and other products 3. Diverts funds from other economic development projects 4. Creates leakage through demand for imports 5. Results in seasonal employment 6. Displaces traditional patterns of labour 7. Involves costs of providing the construction and maintenance of infrastructure
Social impacts	<p>Positive impacts:</p> <ol style="list-style-type: none"> 1. Creates favourite image of the country 2. Provides recreational facilities for residents as well as tourists 3. Facilitates the process of modernisation 4. Provides opportunities for education <p>Negative impacts:</p> <ol style="list-style-type: none"> 1. Creates resentment and antagonism related to dramatic differences in wealth 2. Causes overcrowding, congestion, traffic jams 3. Invites moral degradation resulting in increased crime, prostitution, drug trafficking 4. Causes conflicts in traditional societies and in values
Cultural impacts	<p>Positive impacts:</p> <ol style="list-style-type: none"> 1. Encourages pride in local arts, crafts and cultural expressions 2. Preserves cultural heritage <p>Negative impact:</p> <ol style="list-style-type: none"> 1. Create a demonstration effect whereby natives (locals) imitate tourists and relinquish cultural traditions.

Environmental impacts	<p>Positive impacts:</p> <ol style="list-style-type: none"> 1. Justifies environmental protection (e.g. marine reserve) and improvement 2. Protects wildlife 3. Encourages education on the value of nature-based tourism <p>Negative impacts:</p> <ol style="list-style-type: none"> 1. Fosters water pollution, air pollution and disposal of solid waste 2. Tramples delicate soil and beaches 3. Destroys coral and coastal dunes 4. Disrupts flora and fauna (wildlife, plant life wetlands)
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Source: Adapted from Kim (2002) and Mason (2003)

2.2.1 Economic impacts

Different positive economic impacts are observed in the available literature. Among the most important are the creation of jobs, earning foreign exchange, running small businesses and improved living standards. Economic benefits that communities expect to get from an increase in tourism activity are the major motivations used to promote tourism development. Most of the studies on impact assessment, such as Mason (2003:28), Nkurayija (2011:11062), Machogu (2014:12-14) and Munyiri (2015:47), include questions related to the economic impacts of tourism on community residents. Studies indicate that residents expect tourism to increase their standard of living (Kim, 2002:38), that it improves the economy (Kavita, 2014:61) and that tourism helps the host community and country to earn foreign exchange (Kim, 2002:38). Most importantly, tourism generates employment (Kavita, 2014:61) and increases revenue for local businesses (Kim, 2002:38), as well as shopping facilities (Kim, 2002:38).

Local residents indicated that tourism improves community infrastructure and service (Kavita, 2014:62). Nevertheless, inflation, negative exchange rates, general unemployment and negative feelings have also surfaced because of tourism. The employment of non-locals in managerial and professional positions was revealed by Kim (2002:38) as one of the big negative perceptions of host communities. As tourism is a luxury product and mostly consumed by foreigners and influential locals who are perceived to be wealthy, tourist services and facilities are likely to increase the cost of living by increasing, for example, the cost of land and housing, prices of goods and services and cause shortages of consumer commodities (Kim, 2002:38). However, Kavita (2014:64-65) deductively concluded that residents felt tourism's economic gains outweigh social costs in most cases. Studies on tourism economic impacts have put a greater focus on employment opportunities, the revenue that a community derives from tourism activities and the cost of living

2.2.2 Employment opportunities

Different studies carried out in different parts of the world indicate that in general, residents perceive employment as a positive result of tourism. Tyrrell and Spaulding (1984, cited by Chai Li & Syazni, 2015:146) found that employment is one of the four most frequently mentioned

positive impacts of tourism. A comparative study by Tosun (2002:242) indicates that the residents from Urgup, Turkey, Nadi, Fiji and Central Florida in the United States of America perceived employment opportunities as a positive tourism impact. A number of other studies promoted this view (Pisam, 1978:10; Liu & Var, 1986:195; Davis et al., 1988:4; Keogh, 1989:266; Soutar & McLeod, 1993:573; Weaver & Lawton, 2001:351). Choi and Murray (2010:580) supported Tosun's (2002) study. However, in many of these studies, the seasonality character of the tourism industry has brought some disappointments, as there is then a disruption in employment structures. To explain the meaning of the seasonality character of the tourism industry, in short, seasonality in the context of this study is associated with social, economic, and environmental impacts as a major issue for the tourism industry. Lee et al. (2008:2) explain that "seasonality is generally defined depending on the context from which it is studied, that is, hospitality, tourism or leisure and conservation, in this study". Rwandan tourism experiences such seasonality. For example, Lee et al. (2008:2) articulated that seasonality places immense pressure on remote or isolated tourism enterprises, which often struggle to staff their businesses with available and appropriate staff, exposing them to a lack of service consistency compared to enterprises located in more populated areas. In understanding Lee et al.'s (2008:2) views, the researcher concurs with the authors that any strategies to combat the negative effects of seasonality, positive and negative impacts, may not be transferable across the industry.

2.2.3 Revenue from tourism-related local businesses

Enhancing small businesses selling tourism-related products is another type of economic impact of tourism on the local communities of a given tourist destination. The more the tourists spend on the local products the greater the positive impact becomes. In Rusu (2011:70), the concept of the multiplier effect is not solely for tourism only since it is universally accepted for exogenous change in any economic activities and tourism is not an exception. In the context of tourism of this study, Rusu mentions "the multiplier effects are those economic impacts brought about by a change in the level or patterns of tourism expenditure" (Rusu, 2011:71). Importantly, "the multiplier is derived from the fact that the value of expenditure is multiplied by some estimated factor to determine the total economic impact" (Rusu, 2011:71). In relating multiplier effects to this study, they often capture the secondary effects of tourism spending and show the wide range of sectors in a community living in the areas around the parks that may benefit from tourism and conservation.

Ashley et al. (2001:59) argue that "expanding business opportunities for the poor through small enterprises, particularly in the informal sector, often provide the greatest opportunities for the poor". Ashley (2007b, cited by Spencer et al., 2014:574), in a study on Rwanda, found that small businesses selling directly to tourists provided significant income to local people. Ashley (2007b:577) mentioned that local artisans and farmers make products, which are bought

directly by tourists; traditional dancers perform for tourists for direct payment and some villagers conduct local tours for tourists. In another study carried out in Zambia, Dixey (2005:24) established that local people were engaged in direct selling to tourists through a camping business, chalet accommodation business, guesthouse operation, village tours, wildlife walks, entertainment business and curio market.

However, even though the approach of using small businesses among local communities provides direct benefits, several constraints and challenges exist. For example, a lack of product development ideas and business skills (Dixey, 2005:26) are among the limitations of this route. Furthermore, a lack of funds and capital to develop the enterprises to an acceptable standard is experienced by most communities that cannot get assistance from financial institutions because they do not have collateral (Nicanor, 2001:9).

2.2.4 Cost of living

Numerous scholars examined and noted an increased cost of living as one of the negative economic impacts caused by the rise in the cost of services and goods (Pisam, 1978:11; Belisle & Hoy, 1980:85; Keogh, 1989:240; Weaver & Lawton, 2001:352; Tosun, 2002:240; Mbaina, 2017:95). However, Sheldon and Var (1984:45) were not entirely convinced that rising prices of services and goods were due to tourism growth. Husband's (1989:254) study on Zambia, over three decades ago, found that very few respondents in Zambia felt that tourism was the cause of the high cost of living. This argument is supported by Banda and Cheelo (2012:16), who articulate that "while Zambia has abundant high-quality tourism assets, the industry remains fragmented and faces a number of growth constraints". They argue further that "the promotion of tourism is inadequate, and the sector's development is constrained by emerging crime, poor infrastructure and entry barriers for tourists" (Mbaina, 2003; Banda & Cheelo, 2012:16). In addition, a study carried out by Keogh (1989:240) in the same period in New Brunswick (Canada) found that only 26% of respondents thought that adding a new park would increase prices in stores.

Tourism was also seen as the cause of rapid price increases in the purchase of land. A study by Lundburg (1990), for example, established that building a new hotel caused an increase of almost 20% when the site was being developed. This claim is confirmed in Okello's (2014:7) paper, in which he stressed a similar constraint across the entire East African Community (EAC), including Rwanda. In a list of the challenges, Okello (2014:7) mentions:

"A lack of harmonisation between national policies on land-use, wildlife and tourism, resulting in pervasive land-use and human-wildlife conflicts; the lack of a system to ensure equitable sharing of benefits and opportunities of tourism with local communities; the unplanned expansion of the accommodation sector in some localities of nations, resulting in over-supply of accommodation compared to the demand; pressure for lower contract rates from foreign tour operators; little or no surplus for re-investment in improvement and a deterioration of the product; a lack of world-class accommodation and other facilities;

inadequate funding for sustained tourism marketing and promotion; a lack of product and market diversification to the exclusion of other potentially viable products; an overreliance on traditional source markets in Europe and North America; a relative neglect of domestic and regional tourism; a lack of adequate training, examination, control and licensing of key operators in the industry; relatively high cost and erratic supply of utilities, such as electricity and telecommunication services; and cumbersome visitor entry formalities”.

Earlier, Pisam (1978:11) and Mbaina (2005 & 2011a) indicated that residents viewed the increased cost of land and housing as a direct negative impact of tourism. Three decades later, Okello (2014:11) argues that:

“From time to time, both the investor and local partner’s use of the land and other capital is unacceptable, especially if greater degradation and exploitation of the capital (land and other natural resources) is heavy and jeopardises the integrity of the capital in the future and for posterity”.

In a Turkish study, 70% of respondents felt that tourism causes an increase in the value of properties and hikes the prices of houses (Var et al., 1985:655; Weaver & Lawton, 2001:352; Tosun, 2002:244). Having noted the direct impacts of tourism on people’s lives from three to four decades ago, the more recent study of Okello (2014:9) confirmed the repeat scenario. However, some researchers offered different arguments and undecided opinions. For instance, Belisle and Hoy (1980:95) estimated that almost 90% of the people they asked were neutral on the statement that tourism affected the cost of housing and land. In a Colorado survey, Perdue et al. (1987:426) reported that about 50% of interviewees believed that tourism caused unfair increases in the cost of real estate, while other respondents did not agree. The above divergent arguments indicate that although changes in real estate prices have been significantly linked to the development of tourism, there are often mixed feelings from the residents.

2.2.5 Social impacts

Social negative impacts of tourism have also been documented. Kavita (2014:64) highlights that “tourism increases traffic congestion and overcrowding in public areas and brings social problems” and further argues that:

“Tourism contributes to social ills such as begging, gambling, drug trafficking and prostitution, as well as the uprooting of traditional society and causes deterioration of the traditional culture and customs of host countries.”

Adding to Kavita’s argument above, Ahmed (2015:33) stresses that “tourism can change the way people live, think and work and can change the social values of the people involved”. Ahmed (2015:33) also believes that

“...when tourism achieves its most noble social goals, it helps to develop the sense of a global community, where people share their cultures, their festivals and their special experiences”.

They share and respect each other's opinions and lifestyles. Ahmed (2015:33) continued, reporting that the failure of tourism to achieve high ideals could result in social disorder, crime, degradation, loss of community values and senses of either inferiority or superiority, both of which could be dangerous. Furthermore, "tourism may contribute to excessive consumption of alcohol, increased traffic congestion and overcrowding because of tourist numbers" (Kavita, 2014:64). Tourism encourages the improvement of recreation amenities, amusement parks and roads but it overpopulates movie venues, theatres, sports events, concerts and movies (Kavita, 2014:64). Kavita's argument is consistent with that of Ahmed, who tackled the issue of social capacity at tourism destinations.

Kavita (2014:64) and Ahmed (2015:33) agree that when people engage in recreational activities, they need a minimum amount of physical space to pursue those activities in an unconstrained manner. However, we also need to accept the exchange of traditions, values, behaviour, and cultures have always been pull factors for tourism (Bersales, 2003:239). Bersales propounds that tourism is "considered a framework where hosts and tourists could learn more about each other through direct interaction", which explains why "tourism requires host communities to be more responsive and educated to provide quality services to tourists". The presence of tourists in a destination, therefore, creates the opportunity for "interactions between locals and tourists, generates the emergence of new ideas, values and motivations for social and economic progress" (Bersales, 2003:239).

Chong (2015:2) reports that "the congestion level can be portrayed by the duration of the network which is influenced by queues" and that "congestion is a characteristic of a trip, often affecting the tourist's behaviour". The characteristics of trips include whether "the trip faces congestion, total distance and time travelled due to congested circumstances and addition of duration of delays to the total time of the trip" (Chong, 2015:2). According to Mathew (2012, cited by Chong, 2015:2), intolerable congestion as the time travelled, or postponement above the agreed norms may differ because of transport facility, time of the day, travel approach and geographical setting. Rothman (1978:12) concluded that seasonal visitors and residents stopped their activities during the high tourism season because of congestion. In Liu and Var's (1986:199) study it was not surprising to observe that in more than three decades there were already negative impacts, as Hawaii experienced crowdedness during high tourism seasons, explaining the congestion.

Crime, selling of drugs and alcohol, as well as immoral activity like prostitution are also considered negative impacts associated with tourism. Kavita (2014:67) supports Smith's (1992) finding in Pattaya, that prostitution is increased by tourism development. The same study also found a link between drug abuse and tourist deaths, police corruption and sex-related diseases. A Florida study revealed that residents believed tourism was the cause of increased alcoholism and crime (King et al., 1993:652; Kavita, 2014:67). The researcher is of

the view that the increase of crime due to tourism development in developing countries is a common problem and Rwanda is no exception, except that Rwanda has crime prevention management in place. In the researcher's opinion, crime is a global issue but the rigour of the fight against it and reducing its impact on residents to the minimum involves a combination of soft and hard measures for effective prevention.

2.2.6 Cultural impacts

Var and Kim (1990, cited by Kim, 2002:32) argued that though tourism may contribute to creative ideas, reviving traditional arts and crafts, tourism is usually condemned for disruption of local traditions and negatively influencing social and cultural behaviours. Pearce et al. (1996, cited by Ahmed, 2015:34) report that:

“The societal choice of strategies to cope with changes depends on the characteristics of the host community, the number and the type of tourists and the level of changes affected by tourism”.

Although people of different backgrounds in the same destination may have different preferences, some locals may derive more benefits because they view tourism more favourably (Cater, 1987, cited by Ahmed, 2015:34). For instance, “age differences among local populations are highly correlated to the differences toward tourists; young people may adopt values about sex, dress and morality quite differently” (Ahmed, 2015:34).

Based on the literature reviewed, the researcher is bold in his assertion that places adopt tourism for its economic benefits but there is nonetheless a rise in crime levels and prostitution, as well as displacement caused by high land costs and losing the cultural heritage of local people (Mbaina & Stonza, 2011b; Ahmed, 2015:34). Ahmed continued, believing that “tourism has been charged not only with the debasement of socio-cultural factors but also with the degradation of the environment”.

“Acculturation takes place when two or more cultures come in contact for a sustained period and ideas are exchanged” (Liu & Var, 1986, cited by Kim, 2002:32). “In the case of relatively undeveloped countries, however, local cultures and customs tend to be taken over by more-developed cultures, especially Western cultures” (Liu & Var, 1986, cited by Kim, 2002:33). This discussion aligns with Ahmed (2015:34) who stated that “almost everything we believe and do as individuals reflects a degree of cultural conditioning”. Ahmed (2015:34) states that a culture can be resilient but also acknowledges that cultures are indeed dynamic and since they are an easy way of communication between the host and visitors, it was easier for cultures to modify. “It is argued that once a society comes into contact with another society, change is inevitable” (Ahmad, 2015:34).

2.2.7 Environmental impacts

Tourism can be viewed as having either a positive or a negative impact on the environment. People may argue that tourism brings environmental awareness to the local communities and therefore positively contributes to environmental protection. Tourism may also encourage environment-related investments by destinations (Kim, 2002:38; Mbaina, 2003). In some studies, respondents indicate that tourism contributes to the beautification of places by removing rubbish and unwanted things in preparing for tourists. In one study, “residents agreed with statements that suggest that tourism improves the appearance of their town or surroundings” (Perdue et al., 1987, cited by Kim, 2002:35). A study conducted by Ritchie (1988) about three decades ago, “found that 91% of respondents agreed that tourism affected the quality and upkeep of attractions and 93% believed that tourism affected the quality of national and provincial parks positively” Ritchie (1988:211).

However, other studies, including Ahmed (2015:33-34), reported negative environmental impacts caused by tourism. “Environmental pollution, degradation of vegetation, destruction of natural resources and depletion of wildlife are some of the negative environmental impacts of tourism” (Kim, 2002:37-38). Sethna and Richmond (1978:33) reported that the Virgin Islanders believed that water and beaches were being spoilt by tourism practices, while in Pisam’s (1978:11) study, Cape Cod residents felt that tourism brought litter and noise and negatively affected air and water quality.

2.3 Theoretical framework

The theoretical framework for this study is a collection of interrelated concepts that guided the researcher in determining what needed to be measured and what statistical relationships to look for. The researcher was enabled with a systematic demonstration of how the tourism industry is interconnected with PPT, whereby the linkage between tourism and poverty alleviation was established. Linking the tourism industry to poverty reduction involves a comprehensive understanding of the overall dimensions of poverty.

The World Bank (2001:15), in their development report 2000/2001, described poverty reduction as a series of interrelated economic, social, and political processes that strengthen each other in ways related directly to the life of underprivileged people.

Poverty is a deficiency of income and possessions to meet the basic needs of life such as foodstuff, shelter, clothes and adequate levels of health and education. According to Jamieson et al. (2004:34), this scarcity of assets includes a lack of good health, the skills necessary for employability, land/housing and access to basic infrastructure services such as clean water, sewage, roads, and telecommunications, to name a few. In the researcher’s opinion, a poor person is limited to savings or access to credit, social assets are known as a network of

contacts and mutual obligations, for which they may feel uncomfortable when they fail to respond to the needs of someone whenever they are called upon to intervene

Poverty is a sense of being voiceless (unheard) and powerless in various institutions of state and society. This means that no one hears the poor, even if they have a genuine argument to any topic of debate in the world in which they live. It is the wealthier persons who are heard because they possess valuable assets. In the researcher's opinion, this is moral corruption and unfair consideration because nobody in the world is born rich. The researcher's argument is supported by different scholars of more than two decades ago, including Havel (1996:146) Jamieson et al. (2004:34), Mbaina (2005), and Mbaina and Stonza (2010) who opine that poor people face heartless treatment in their relations with influential people, including public officials. Poverty and poor people are interchangeable concepts. The researcher is of the view that poverty is a status of extreme vulnerability to various undesirable shocks, with no power to fix them (Mbaina, 2005) (see the discussion in section 2.4.3 regarding rewards to alleviate poverty). Jamieson et al. (2004:34) propound that poor people are at risk of various health problems, natural and human hazards and they are not capable of rapid recovery from those socio-economic, physical, and emotional shocks.

To the researcher's knowledge, the above primary causes are seen as micro-level reasons since they are mostly observed at community and individual levels but there are also macro-level causes that are observed at national, regional, and international levels. To fix the macro-level causes, one needs to be a vertical critical thinker to face the issues related to economic growth, inequality of income distribution, inter-regional and governmental instability.

It is very important to understand that the measurement of poverty differs from country to country, whether developed or developing. From time to time, gross domestic product (GDP) has been used to measure the national level of poverty, whereas income, informal employment, lack of freedom to choose a desired quality of life, lack of land tenure for housing or lack of basic infrastructure have been used to measure the local level poverty. Although the root causes of poverty have been established in the previous paragraphs, the researcher is of the view that currently no framework for poverty alleviation in all its dimensions exists and there is a dire need for a framework to action effective poverty reduction.

The World Bank (2001:18) declares that quality national economic development is crucial to successful poverty reduction. Consequently, all efforts should be channelled jointly by destination managers to achieve significant poverty reduction.

In a different scenario, it has been observed that destinations grow from their poverty to sustainable development and local communities increase their income (World Bank, 2001:16; Jamieson et al., 2004:36). On the other hand, it was argued that income poverty would inevitably rise with economic deterioration in any country if the issues related to good

governance, a favourable business environment and inequality of income destinations are not fixed (Blake et al., 2008:110). This means that genuine pro-poor benefits will be echoed in a destination if governments strive to establish genuine mechanisms against socio-economic divides with sound institutional frameworks.

Scholars on poverty reduction and economic growth have argued what it requires to ensure empowerment and security to the poor plus the establishment of proper processes towards guaranteed economic achievement and a visible reduction of the poverty rate in each nation (Jamieson et al., 2004:99; van der Duim et al., 2006:111; Zhao & Ritchie, 2007:121).

The above argument is supported by the World Bank (2001:16) and Zhao and Ritchie (2007:121) who stressed the importance of promoting job opportunities, empowering disadvantaged people and enhancing safety and security in conjunction with actions at local, national, regional and global levels.

Theoretically, tourism is related to poverty reduction due to the economies of scale of a given destination (Luvanga & Shitundu, 2003:43; Blake et al., 2008:119). The tourism share to the economic growth of a certain destination is generally viewed in three major elements, namely tourists as mostly consumers, tourists as an opportunity to diversify local economies and finally, tourism as labour-intensive and small-scale opportunities compared to other non-agrarian activities.

Firstly, tourists are regarded as consumers within the tourism value chain whenever they arrive at the destination and give opportunities to local communities to create income. This means that the host communities are no longer surviving only on agrarian activities but rather that they innovate projects that could benefit the tourists and visitors, such as food supplies and services. In addition, a sub-value chain could be created to increase local production and improve the lifestyle standards of the host communities. For example, the host communities would get additional income from selling agricultural and husbandry products such as fruit, vegetables, beef, lamb, pork, chicken, eggs, fish, and seafood. If the tourism contribution extends to entire economic sectors such as manufacturing, handicraft, beekeeping, dairy, retail, wholesale transport and communication, financial institutions services, research development and innovation, there is no doubt that the industry stakeholders at their multi-levels will benefit from the industry; this is the best practices of tourism at the destination (Luvanga & Shitundu, 2003:42; Honeck, 2008:18).

Secondly, on tourists as an opportunity to diversify local economies, it is the researcher's view that remote areas could be attractive places to live and people's well-being and capabilities could be evidence that tourism is not only for the rich but that also disadvantaged people could benefit directly and indirectly. The researcher's argument is supported by Luvanga and Shitundu (2003:45) who point out that remote areas could be input suppliers to the tourists

because they would follow the organic nature of the landscape, culture, and wildlife of such destination. This means that the earnings from the tourism sector would benefit local communities in remote areas. This could be enhanced further by the government and the influential international private sector if the latter set up extensive infrastructure aimed at changing people's lives through job creation and offering social services in the remote areas under discussion. In other words, decentralisation of tourism could have a significant impact at the grassroots level for people in remote areas since it could create employment centres and income-generating activities for poor and disadvantaged people.

Thirdly, considering the arguments of Luvanga and Shitundu (2003:42), Chok and Macbeth (2007:155), Scheyens (2007:235) and the United Nations Conference on Trade and Development [UNCTAD] (2007:3), tourism offers a wide range of income-generating activities, adding to agrarian activities, just to promote the PPT benefits. It is an avenue to promote the gender balance and remove the economic divide, since it caters to women, the youth, skilled and semi-skilled labour and disadvantaged groups such as disabled people (Blank, 1989:17; Luvanga & Shitundu, 2003:42; Johannesen & Skonhoft, 2005:211; Li, 2005:138; UNCTAD, 2007:3).

In the researcher's opinion, tourism is an appropriate area in which to measure the impacts of the country's investments aimed at the improvement of local communities' well-being based on tourism offerings and tourism demand. This will remove the traditional paradigm of thinking that tourism is only for the local elite, international and expatriate companies (Tosun, 2000; Overseas Development Institute [ODI], 2006; Scheyvens, 2007; Zhao & Ritchie, 2007; Blake et al., 2008). Similarly, tourism cannot be seen as the optimum economic sector for poverty reduction without considering other positive external factors that include multinational-enterprises (MNEs), small and medium enterprises (SMEs) and small-scale domestic entrepreneurship.

Concerning worldwide poverty alleviation based on the tourism industry, the researcher disagrees with Luvanga and Shitundu (2003), Jamieson et al. (2004) and ODI (2006) because of the influence of the globalisation phenomenon, information technology divide and economies of leakages that are promoted worldwide. However, the researcher does agree that poverty could be reduced based on the quality of political will and good governance that aims at promoting PPT in a particular destination. For example, the government could jointly deploy a certain investment in a particular destination and with other influential stakeholders, they could create tourism demand and tourism supply to prolong the tourists' stay experience in that area and could serve as a means of poverty reduction (Luvanga & Shitundu, 2003:42).

2.4 Empirical review

This section discusses the variables used to construct the proposed framework for the three protected areas recognised currently by the conservation management authorities of Rwanda. These variables emanate from the reviewed studies.

2.4.1 Community capacity building on conservation of the national parks

Many development initiatives have embraced community participation as an important element. For instance, Baral and Heinen (2007:520) indicate that the World Bank promotes host community-based organisation (CBO) programmes to ensure the local communities' involvement in the tourism activities to address the inefficiency problem that has characterised highly centralised development approaches, especially in the developing world.

Scholars of the 20th and 21st centuries have criticised the lack of sustainable initiatives with the emphasis on the need for empowerment of local communities in the decision-making process that strengthens their ability to act themselves. These arguments have been propounded by writers such as Havel (1996), Songorwa (1999) and Ribot (2004) in their reviews which articulated that the government should not focus on the superficial participation of stakeholders under the pretence of efficiency and equity of programmes. The government should rather ensure sustainable endeavours that lead to a viable, enabling environment that benefit those most vulnerable to the negative impacts of tourism. Local communities need a real stake in the tourism development of the destination in which they live.

Over more than two decades ago, Havel (1996:145) argued that local communities needed to be empowered to become involved in decision-making for better tourism planning development and implementation from the bottom-up. This can only be achieved if the government and other influential stakeholders invest in human capital of education and health and invest in social capital, including local-level institutions and participation processes.

Ultimately, one could ask whether the highlighted efforts could succeed, and the critical answer seems to be provided by Havel (1996:145), Wang and Wall (2005:48) and Tosun (2006:495), who stress that intervention to the question raised should be led by genuine institutions, legal policy frameworks and innovative facilitation already established in the destination.

Considering that conservation is one of the tourism niches, numerous studies (Wang & Wall, 2005:48; Tosun, 2006:495) report that there is a very limited number of professionals in the Rwandan conservation arena. This may be true due to the uncoordinated implementation of capacity building efforts and the development of local people in conservation.

In addition, the professionalism of existing human capital in the hospitality sector such as hotel employees, guides, waitrons, and other key personnel quality is critically questionable compared to regional competitors (ROR, 2009:8).

Over a decade ago, Rwanda had a bad image in the hospitality and tourism industry. Rwanda was burdened with poor training facilities, poor equipment, limited industry-related books related to the industry, slow and erratic Internet connectivity, which was non-existent in some companies, inconsistent curricula development and ill-trained staff. However, the recent online publication by Ngabonzisa (2019:7) reports an improvement in the rankings of accommodation establishments and new emerging upmarket hotels such as the One & Only Nyungwe House Resort, Singita Kwitonda Lodge, Kigali Marriot Hotel, and the Radisson Blu Hotel. Tourism involves extensive human interaction, which is a key factor in successful tourism endeavours. The success of protected areas such as national parks is dependent on the quality of service offered and the interaction among people. ROR (2009:8) argues that the government is also a major factor in the success of both domestic and international tourism for them to work better for local communities.

Through the National Biodiversity Strategy, the ROR (2016:77) predicts that nurturing local residents by enabling them to participate actively in tourism conservation should involve both short-term and continuous tertiary education. The strategic plan advanced that capacity building of local people should be bolstered through the development and implementation of short courses, medium and long-term training programmes for the benefit of early to mid-career professionals. Furthermore, short courses and short-term training should be implemented for improving the knowledge and skills of experienced staff from various relevant organisations. Post-graduate diploma programmes should be implemented for biodiversity conservation practitioners in medium-term training, whilst long-term training would include MSc and PhD programmes. The government strategy envisages that training will be offered by different institutions specialising in biodiversity, agro-biodiversity, biotechnology, and related fields. This upskilling would be offered by public and private higher learning institutions and non-government organisations.

An RDB official interviewed indicated that there is a clear strategy in place for the development of local communities. He further indicated that by partnering with international donors such as USAID, Wildlife Conservation Society (WCS) and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIS), they have been able to form co-operatives around the national parks where local people are taught skills such as basket-weaving, carving and other handicraft-related projects. The RDB develops capacity through funding schools in the local communities to teach children and drives awareness campaigns through the mass media. Capacity building is necessary for conservation, tourism, and entrepreneurial activities so that communities have livelihood alternatives, with experts providing guidance in this field.

2.4.2 Decision-making process on conservation of the national parks

Apleni (2012, cited by Safari, 2017:99) argues that community members need to get involved in the tourism decision-making process for sustainable conservation management of protected areas. Apleni terms this spontaneous participation, which is a bottom-up process with full empowerment of local community residents in the tourism decision-making process. The researcher supports Safari' appreciation of such participation, in which community members align themselves with opinion-leaders in the tourism industry, which translates to leadership by community members.

Induced participation is passive and indirect top-down involvement (Apleni, 2012, cited by Safari, 2017:99). Tourism analysts indicate that this kind of participation is mostly of benefit to influential interest groups comprising governmental tourism institutions, private and international tour operators. These interest groups are of the view that this form of participation cannot have pro-poor impacts because it promotes influential group opinions and not necessarily the concerns of local community members. Safari indicates that coercive participation is self-imposition in tourism planning and development (Apleni, 2012, cited by Safari, 2017:123). The local leaders are rarely consulted, which means that community members are not aware of current happenings in the tourism industry.

In reviewing the three typologies, Tosun (2006:497) notes the mismatching arguments of tripartite community participation compared to the opinions of Pretty (1995:1250) and Arnstein (1971:15). The following paragraphs discuss in detail the application of those levels of community participation in the tourism industry.

Tosun (2006:497) regards the spontaneous community participation approach as the best and believes that the community potential could be identified during this type of participation. Tosun agrees with citizen power in Arnstein's study and with self-mobilisation and interactive participation as in Pretty's model. This level emphasises the provision of full managerial authority and responsibility to the host community. It is an ideal model of community participation in the tourism development process because community members align themselves with the opinion leaders in the tourism industry (Safari, 2017:97). Tosun (2006:498) likens induced community tourism in his model to the level of citizen presence in Arnstein's (1971) approach. Tosun (2006:497) advocates that the host community needs to be heard and to have the opportunity to raise their voices regarding the tourism development process. This is considered in Pretty's (1995:1255) typology as efficient participation through discussion or involvement for material motivation. In this type of participation, there is usually partial involvement of the host community in decision making but no control or power to get their views considered for implementation. This is usually because there are other influential stakeholders with driven purposes, like international tour operators, corporate organisations

and government bodies who apply some hiring practice level point (tokenism) as described in Arnstein's (1971:20) typology.

2.4.3 Reporting channels on conservation of the protected areas

In general, regular dissemination of information to communities of governmental policies such as the tourism revenue-sharing policy and compensation policy for beneficiaries is possible through a variety of channels that include written materials, radio broadcasts and public meetings. This must be done regularly and should be considered a key operational requirement for the national parks. If officials are not communicating information on these schemes and policies, then in all likelihood communities are not being informed of other important issues either. Without a high level of regular communication, talk of community participation has no real meaning.

Local communities usually have some traditional governance and consultation structures. These structures may not always be the most ideal settings to use but they could provide a starting point for a communication process with communities. It is also important to note that when communicating with local communities about issues, such as the percentage benefit-sharing schemes, these may be alien concepts that need to be repeated over time until communities can grasp the idea. Depending on the levels of education of people in these communities, the language may have to be revised and communicated in straightforward terms so as not to cause confusion.

The discussion of communication with local communities is usually dependent on the participation role these communities are given in the overall management of any tourism or conservation spectrum. Community participation has been debated extensively in many developments. Numerous scholars have tried to develop models that put community participation into context, but these models have been generally in the context of development studies, not necessarily related to any economic sector (Arnstein, 1971; Pretty, 1995; Tosun, 2006). Simply put, Tosun (2006:496) laments that these studies focused mostly on participatory approaches in development studies, although they do provide an important guide towards more interactive and authentic community participation. However, Tosun (2006:494), after a thorough review of these studies, examined community participation in the tourism industry and designed a model that could be applied specifically to the tourism industry. His model suggested three forms (typologies) of participation which:

“...contextualises community participation as a categorical term that allows participation of people, citizens or a host community in their affairs at different levels: local, regional or national”.

These three typologies are spontaneous community participation, coercive community participation and induced community participation (see Figure 2.1). Tosun (2006) compares

his three forms of community participation to those proposed by Pretty (1995:1255) and Arnstein (1971:22).

7. Self-mobilization	←	8. Citizen control	Degrees of Citizen Power	→	<u>Spontaneous Participation</u> Bottom-up; active par.; direct participation; par. in decision making, authentic participation; self planning;	
6. Interactive participation		7. Delegated power				6. Partnership
5. Functional participation	←	5. Placation	Degrees of Citizen Tokenism	→	<u>Induced Participation</u> Top-down; passive; formal; mostly indirect; degree of tokenism, manipulation; pseudo-participation; participation in implementation and sharing benefits; choice between proposed alternatives and feedback.	
4. Participation for material incentives		4. Consultation				3. Informing
3. Participation by consultation		2. Passive participation				2. Therapy
1. Manipulative participation	1. Manipulation	1. Manipulation				
Pretty's (1995) typology of community participation	Arnstein's (1971) typology of community participation		Tosun's (1999a) typology of community participation			

Keys: Corresponding categories in each typology → ←

Figure 2.1: Normative typologies of community participation

(Tosun, 2006:494)

Each of his levels of community participation in the tourism industry is discussed separately in detail in the following paragraphs.

Tosun (2006:494) positions spontaneous community participation as the highest level of community participation, on a par with citizen power in Arnstein's model and self-mobilisation and interactive participation in Pretty's model. This level provides full managerial authority and responsibility to the host community. It is an ideal model of community participation in the tourism development process. Tosun (2006:495) considers induced community tourism in his model, like the degree of citizen tokenism in Arnstein's (1971:22) model and that through an opportunity to hear and to be heard, the host community has a voice in the tourism development process. This is considered in Pretty's (1995:1255) typology as functional participation by consultation or participation for material incentives. In this type of participation, there is usual partial involvement of the host community in decision making but they have no control or power to get their views considered for implementation. This is usually because there are other powerful interest groups such as international tour operators, multinational companies, and government bodies, thereby applying some degree of tokenism as described in Arnstein's (1971:22) typology. This top-down approach, which assigns indirect and passive participation to host communities, is found mostly in developing countries and community

participation is done merely by endorsement and sometimes participation in implementing tourism development issues or decisions that are brought to them.

The third and lowest level of participation in Tosun's (2006) model is coercive community participation. Opposing persuasive participation (called induced participation), the author ranked coercive community participation the lowest due to the limited involvement of local communities in decision-making. Nevertheless, to avoid potential socio-political risks for tourism development and tourists, Tosun (2006:495) contends that certain decisions are made specifically to satisfy host communities' basic needs. This kind of participation is viewed by many people as compromising stronger participation and an approach by which powerholders seek to foster tourism development primarily to satisfy the wishes of decision-makers. It is like the passive and manipulative structures as described in Pretty's typology and manipulation and therapy identified in Arnstein's model (Tosun, 2006:497). While various scholars argue that tourism development has advanced and evolved from numerous forms of community participation, the coercive community is seemingly identical to the participation level of Kibicho (2003:35). In Kibicho's study examining how Kenya's coastal tourism involved communities, he found that support for tourism development had linkages with local participation in tourism businesses.

In the view of the above discussion, it must be emphasised that sustainability is a key element to consider in tourism development and as Vincent and Thompson (2002:155) believe, without community support its achievement is not possible. Tosun (2000:616) and Li (2005:139) suggest that community participation, which came as a result of Western thinking after the failure of traditional philosophies on how societies should be organised and development is achieved, is very important and seeks to address sustainability issues within the tourism industry.

The central purpose of community participation is sustainability (Johannesen & Skonhoft, 2005:211; Vincent & Thompson, 2002:156), promoting tourism for the community and with the community, which requires community involvement in tourism activities. The authors highlight that participation of the community should lead to a better life for the people in the communities and significantly, gain their support of conservation initiatives (Songorwa, 1999:2062). The researcher strongly believes that community participation is vital for progress in tourism development, especially because local communities and tourist attractions co-exist as most of the natural and wildlife attractions are located in areas close to rural communities. However, at times local communities suffer the negative consequences of tourism and are sometimes seen as tourist attractions themselves (Scheyvens, 2002:113; Kibicho, 2003:38; Li, 2005:137; Beeton, 2006:23; Tosun, 2006:496).

The normative typologies of community participation, summarised by Tosun in Figure 2.1, are very relevant to this study because they guide the research in understanding how to assess local residents' involvement in conservation within the three Rwandan national parks.

Further to understanding community involvement and participation in tourism and conservation matters, the concept of a pro-poor conservation approach was examined. Pro-poor conservation aims to generate increased income for the poor and to ensure that conservation and tourism contribute to poverty reduction (Safari, 2017:98). To this end, PPT is an approach, not a product, to be used to unlock opportunities for the poor for economic gain and other livelihood benefits (Safari, 2017:98). Safari's discussion notes that community involvement can be regarded as part of the inevitable "democratisation" of community life, as more nations embrace fully market-based economic systems and citizens demand more participation in all issues that touch their lives, including issues surrounding tourism development (Safari, 2017:98).

As per Safari's (2017:98) views, the PPT approach focuses on strategies that enhance benefits to and unlock opportunities for the poor, whether for economic gain, other sources of revenue benefits, or participation (Apleni, 2012:4). Apleni further suggests that PPT manifests in four areas, notably that tourism is a diverse industry that increases the scope for wider participation, including the participation of the informal sector. The customer comes to the product, which provides considerable opportunities for linkages (e.g., souvenir selling). Tourism is highly dependent upon natural capital (wildlife or culture), which are assets to which the poor have access, even in the absence of financial resources and tourism can be more labour intensive than industries such as manufacturing. In contrast to other modern sectors, a higher proportion of tourism benefits (for example jobs, informal trade opportunities) go to women.

The researcher's explanation of these four points is that the diversity and broad scope of the tourism industry permit the participation of even the informal sector. There are different ways in which communities could participate, which in turn enhances tourism growth.

In the above section, the researcher established a contrast between the two factors that influence the participation of local communities in the process of tourism decision-making.

According to Tosun (2000:616), Li (2004:179), Li (2005:137) and Zhao and Ritchie (2007:124), the participation of real people in the process of tourism decision-making around the protected areas is influenced by the design of the tourism decision-making process and employment opportunities. Chok and Macbeth (2007:147) explain that pro-poor tourism principles are clear guidelines to how local communities should participate in tourism decisions for the industry as well as their own development. Chok and Macbeth's arguments are supported by Zhao and Ritchie (2007:122) who aver that local communities' involvement reflects the opinions of tourism actors in both public and other tourism-related decision-making agencies

Tosun (2000:616) and Li (2005:137) discuss the lack of community involvement in decision-making on tourism-related developments in developing countries, a situation which unfortunately fails to uplift the economic lives of residents in these countries. Both Tosun and Li justify why community benefits from tourism are still limited for these people and their lifestyles remain unimproved. In line with this argument, Kibicho (2003:38) reported that in Kenya, a well-known African country, local communities were left behind in its coastal tourism planning development, which is why the tourism industry had negative impacts on the well-being of these communities.

Even in third world westernised countries, the same challenge was observed by Tosun (2006:496). Tosun agrees that tourism issues exist everywhere in the world and to solve them, no single stakeholder should be left behind. Tosun further emphasises that the needs of local communities should be part of the agenda of key points to be discussed by decision-making bodies and local government agencies.

It must be realised that community involvement in decision-making is not merely to get funds, it is crucial in the realisation of the socio-economic benefits of tourism for community upliftment. The researcher believes that the negative impacts of tourism on communities are inevitable if tourism planners fail to include them in important elements of tourism management. Inclusion of communities, who often serve as hosts in the tourist destinations, as discussed in sections 2.2.2 and 2.2.3, of tourism impacts, would allow them to become involved and participate in planning decisions regarding tourism development. This is important in mitigating the negative impacts of tourism development (Tosun, 2000:618; Li, 2004:178).

Much of the literature, including Li (2005), seems to support the idea that if local communities want to benefit from tourism they must be integrated into the decision-making process. However, Li (2005:132), while studying community decision-making participation in tourism development in the Sichuan Province of China, pointed out that there was weak local participation in the decision-making process, yet local communities received satisfactory benefits from tourism. It is important to note, therefore, that integration of local communities into the decision-making process is "...not a final goal itself" but only one of the many ways through which community participation can be achieved (Li, 2005:133).

Another way to involve and attract community participation and ultimately their support in tourism development is through local job creation (Zhao & Ritchie, 2007:132). Since tourism is labour-intensive and offers small-scale opportunities (Chok & Macbeth, 2007:150; Scheyvens, 2007:241) and since it happens in the community, arguably, it is thought to be one of the best-placed potential sources of employment opportunities for local communities, inclusive of women and the informal sector (Blank, 1989:19; Li, 2005:141; Johannesen & Skonhoft, 2005:209; Scheyvens, 2007:241). Community participation via employment opportunities, as

workers or as small business operators, could be a catalyst in the development of tourism products and services, arts, crafts, and cultural values, especially through taking advantage of the possible abundant natural and cultural assets available in communities in developing countries (Scheyvens, 2007:239). Tosun (2000:619) stressed that community participation through working in the tourism industry has been recognised to help local communities, not only to support the development of the industry but also to receive more than economic benefits.

Apart from participation in the decision-making process and the high need by local people to be consulted about local tourism development issues, Kibicho (2003:39) further identified that 88.6% of the 236 members of the local community who participated in his study stated that encouraging local people to invest in, operate small-scale businesses and work in the tourism industry, is a suitable means for community participation. This supports Tosun's (2000:626) contention that in many developing countries community, participation through employment as workers in the industry or through encouraging them to operate small-scale businesses "...has been recognised to help local communities derive more economic benefits rather than creating opportunities for them to have a say in decision-making processes of tourism development" (Tosun, 2000:626). Zhao and Ritchie (2007:133) add that communities, as a way of participation and as the input of the local workforce, may pursue tourism-related economic activities as paid or self-employed workers. While participation through employment has impacts that are more direct on the lives of poor households, it is arguably a useful way to curb poverty at the household level since it diverts the economic benefits tourism brings directly to the family level (Zhao & Ritchie, 2007:134).

2.4.4 Compensation process in the conservation of the national parks

This section discusses issues related to the compensation fund provided by the GoR to mitigate the damages caused by wild animals. Three questions were asked in the study to determine the level of policy awareness of respondents and their perceptions of the compensation process. The compensation law was gazetted in August 2011 (ROR, 2011b:1). This law grants compensation to any person who has been injured or whose property was damaged or destroyed by wild animals. Four categories of compensation are determined by this law. Article 4 of the law explains compensation to the relatives of someone killed by an animal, who are entitled to compensation for moral loss, economic loss, medical expenses, transport fees and burial fees. In Article 9, the law stipulates that those entitled to such compensation are the spouse if the deceased was married and to children, parents, or brothers and sisters. If the person was injured, compensation shall be given to the victim, to parents or guardian if the victim is a minor.

Article 5 defines compensation for people injured by animals, who will be compensated commensurate with the level of disability and loss incurred, as well as for economic loss, medical expenses, and transport fees. Article 6 provides compensation for loss or damage of property, stipulating that a person whose property was damaged by an animal shall be compensated on real-cost valuation.

The Special Guarantee Fund (SGF) is charged with evaluating the level of damage and calculating the compensation thereof. However, the law also makes clear that if someone is found to have caused the destructive behaviour of the animals, they will be held responsible and have to pay damages. Examples are visitors to national parks who do not follow the guidelines for appropriate behaviour towards animals and thus provoke an attack, or someone creating a fire that causes panic among animals. This law was adopted just days after the destruction of crops worth 6 million Rwandan francs in the Munini cell of Rwimbogo sector in the Gatsibo district, by over 70 stray elephants from the Akagera National Park (New Times, 2011:5).

Involving local communities surrounding the protected areas is one of the strategies to conserve species in the destination. However, this is not sufficient and some scholars like Timothy (1999:382), Tosun (2000:622), Li (2004:188; 2005:139) and Mbaina (2005; 2017) argue that tourism benefit-sharing should be promoted to gain community trust.

Although several studies, including Mbaina (2017), established that tourism is an instrument for alleviation of poverty, in the researcher's opinion they lack critical realistic evidence. Tourism is indeed a significant sector, and it is potentially associated with economic growth in most countries where poverty is prevalent (Wilkerson, 1996:80; Mbaina, 2003; Chok & Macbeth, 2007:152; Zhao & Ritchie, 2007:122; Scheyvens, 2007:240). Li (2005:137) explains that tourism benefit distribution should not leave out the efforts of local communities when struggling to show their participation in the conservation of protected areas (Mbaina, 2010; 2011). Bearing this in mind, conservation management planners should rethink how to nurture the local communities' talents and get them involved in their decision-making meetings. A similar argument to Li (2005) was raised earlier in Songorwa's (1999:2062) study, explaining that equitable benefits of tourism is a result of successful community participation in tourism and these equitable benefits must remain in the hands of community members transparently.

In the EAC, of which Rwanda is one of the six partner states, Uganda itself tried the TRS approach to attract the local communities' participation. The results demonstrated that communities living near the protected areas could develop a good relationship with governmental bodies whose mandate is the conservation management of protected areas. Archabald and Naughton-Treves (2001:137) were of the view that donations to the local communities from wildlife-based tourism resources conservation improve their well-being

through implementing the basic infrastructure needed by all residents living around protected areas, such as the construction of schools and dispensaries and the supply of water and energy.

Table 2.2 lists conservation programmes with benefit-sharing schemes in protected areas in sub-Saharan Africa. According to Makame and Boon (2008:99), 29% of revenue from Jozani National Park activities in Zanzibar goes directly to community project development such as schools, health services, water, and energy projects.

Given the trust between local communities and protected area authorities that the TRS programme creates, the researcher believes that TRS programmes should be maintained and promoted across sub-Saharan Africa since TRS addresses the resource issues in areas beyond the boundaries of protected areas.

Although there is existing literature on TRS from protected area conservation management to local communities living around the protected areas, there is very limited information on how much local communities are receiving from TRS schemes. In addition, there is a gap between general tourism literature reviews and empirical studies on how tourism businesses like accommodation establishments at destinations share their revenue to the benefit of local communities living near protected areas.

Essentially, TRS programmes promote tourism development and ensure that local communities enjoy tangible benefits from the industry while participating in wildlife conservation (Archabald & Naughton-Treves, 2001:135). A similar scheme, the Rwanda Tourism Revenue Sharing Policy, exists in Rwanda under the RDB but it is a programme that demands ongoing review since the tourism industry in Rwanda grows every year. The topic of TRS is addressed in Chapter 3 of this study.

Table 2.2: Conservation programmes in protected areas in sub-Saharan Africa with benefit-sharing schemes

Name of conservation project	Country
Amboseli Park/Wildlife Extension Project	Kenya
Aire-Tenere Park	Niger
Mountain Gorilla Project	Rwanda
Ngorongoro Conservation Area	Tanzania
Luangwa Integrated Rural Development Project	Zambia
CAMPFIRE Programme	Zimbabwe

Source: World Bank (1997:3-4)

Meyer (2007:566) innovatively suggested a conceptual framework that would have a positive impact on the accommodation sector of the tourism industry at a destination. Meyer believes that the accommodation sector has a positive impact on the local communities and points out the benefits to local community members who are actually employed in the sector and also to local suppliers in the accommodation businesses.

Unlike the tour operators located in foreign countries, the accommodation sector can create economies of linkages at the destination. Meyer's (2007:566) framework allows any tourism analyst to easily interpret the obvious contribution of the accommodation sector to the local communities living near to the protected areas and the benefits flowing to local community members.

Figure 2.2 below presents Meyer's (2007:576) four broad points of the linkage opportunities for local communities. These benefits include employment, the spectrum of procurement—local, regional and international, the creation of SMMEs, development and outsourcing and other types of economic ties.

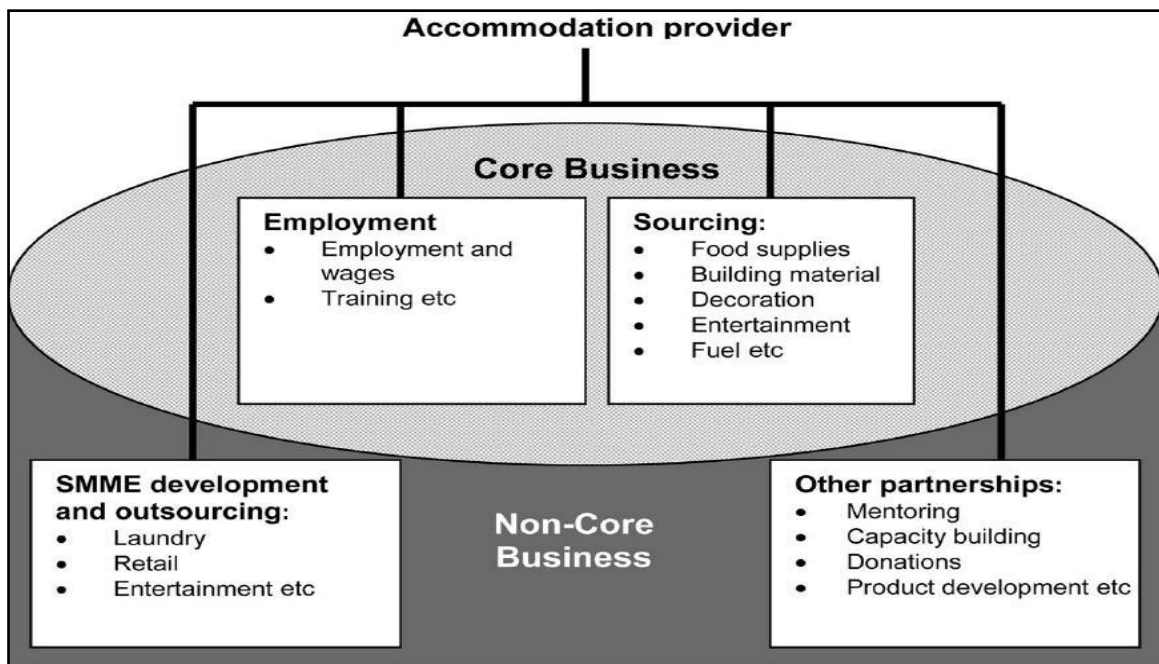


Figure 2.2: Adapted prospective linkages between the accommodation sector and the local residents

(Meyer, 2007:576)

Figure 2.2 outlines how the accommodation sector could benefit the local communities in protected areas as a rural tourism strategy. With developmental programmes for community development, there is the potential to link the agricultural activities of local communities with tourism. For example, there very few government initiatives to support tourism establishments situated in rural areas but there is the potential to source, where possible, local food supplies for these establishments. In so doing, the private sector and NGOs (donors) could support government initiatives and strengthen the inter-sectoral linkages between tourism and agriculture, which would create many opportunities for local communities. The researcher believes there is a great need for synergy to make tourism work for the poor (local communities surrounding the protected areas). The result of such a synergistic approach would be the creation of an economy of linkages as opposed to an economy of leakages.

In brief, several scholars, old and current, are supportive of local community participation in decision-making processes and benefits of tourism development to the communities (Timothy, 1999:384; Tosun, 2000:621; Li, 2004:188; 2005:139).

Tosun (2000:626) and Zhao and Ritchie (2007:126) suggest that empowering the local communities by employing them in the tourism industry ensures a direct, sustainable flow of tourism benefits to them. Simmons (1994:104), Songorwa (1999:2068) and Zhao and Ritchie (2007:126) stress that involving the local communities in tourism problem-identification,

planning, implementation, monitoring and evaluation processes effectively ensures distribution of tourism benefits to the local communities.

Researchers such as Wang and Wall (2005:51) found that community participation was a tool for harmonising policy-making decisions in tourism and tourism benefits for local communities as well. Timothy (1999:379) asserted that local communities should be involved in the tourism decision-making process to empower them to define their own destiny. Wang and Wall (2005:51) advocate that empowering the local communities requires involving them in the process of aligning their livelihood priorities with the available resources under their control.

Involving local communities in tourism activities assists them in benefitting from developmental programmes such as capacity building, education of local community members, hospitality entrepreneurship, English language courses, accounting, and hygiene (Timothy, 1999:381).

Timothy (1999:382) refers to the positive outcome in Indonesia, where local communities assisted in improving the image of the destination by becoming involved in tourism programmes from which they benefit. The participation of local people was in the form of taxi drivers, guesthouse owners/managers, restaurant owners and street vendors of consumables at the destination.

2.4.5 Local community involvement and participation in conservation of the national parks

With the new paradigm shift to local communities' participation in tourism development, Doxey (1976:26), Butler (1975:87; 1980:7), Simmons (1994:100) and Tosun (2000:620) point out that the degree of dependence on residents for their acceptance of the industry is in direct relationship with their degree of exploration of benefits from the industry. This means that not everybody among the residents at the protected area will understand the organic nature of the sector and its direct positive impact on their daily lives. Simmons (1994:101) and Weber (2012:488) indicated that the local communities should get involved from the exploration stage to avoid uncertainties and lack of proper understanding about the development of tourism business in the destination area.

In the researcher's opinion, Weber's (2012:488) argument to involve local communities from the initial stages is the best way if the destination managers wish to celebrate the industry's exploits without leaving behind the crucial stakeholders at a grassroots level.

Tosun (2000:621) and Weber (2012:476) are witnesses to the feelings of local communities living in the vicinities of the protected areas after they accepted the introduction of tourism in previously unoccupied areas. For example, in the Western Province of Rwanda, a new protected area called Gishwati-Mukura Forest National Park (GMFNP) has been established. When it was proclaimed, there was no basic infrastructure, and it is only now that local

communities are grasping the opportunities and benefits that tourism businesses offer. Local people will start feeling that they are agents of change in the area. They will build small-scale guest houses, graded and ungraded hotels, souvenir shops, offer cultural entertainment and become suppliers of foodstuffs (Tosun, 2000:622; Weber, 2012:477).

Simpson (2008) argues that the more that government agencies involve local communities in decision-making processes, the more local communities would feel responsible, effective, and significant in the industry. More than three decades previously, D'Amore (1983, cited by Timothy, 1999:382), emphasised that involving local communities in tourism activities would allow them to have a sense of ownership and citizenship.

Against the above argument, Tosun (2000:627) observed that opportunities for local communities to participate "may vary over time with the type and scale of tourism developed, thresholds of entry and the market served". Tosun's study viewed the relationship between local community participation and the tourism development process in the context of Butler's (2011) Tourism Area Life Cycle (TALC) of the evolution model. In a contemporary tourism review, Butler (2011:3) and Weber (2012:436) explained that although TALC is an old model, it is still relevant in today's world of tourism because it attempts to describe and understand the process of the development of tourist destinations in a wide variety of settings. Although it has been reviewed and criticised, TALC has shown its relevance in tourism research and its suitability in the present day, despite the rapidly changing world. According to Butler (2011:5), local communities should be protected from losing control over tourism development due to capital investment influencing policy decision-makers.

Zhao and Ritchie (2007:122) warned that if nothing is done in favour of local communities, it will be difficult for them to open any businesses because they lack financial muscle. In addition, Tosun (2000:627) suggested that to protect the local communities against becoming distanced from the industry, the tourism governmental bodies in partnership with other influential stakeholders should empower local communities through transformative programmes such as organising workshops and coaching and mentorship initiatives. Zhao and Ritchie (2007:123) support Tosun's argument that nurturing the talents and skills of local communities through transformative programmes will break down the barriers to local communities' effective participation in the tourism markets.

The dynamics around local communities' participation in protected area development and management have been voiced at an international level. For example, the United Nations General Assembly designated 2002 as the International Year of Eco-tourism (IYE). This aims to achieve the goals of the United Nations Agenda 21 to promote the protection of environment friendliness and development. Among the specific objectives of the IYE was to establish an

awareness of ecotourism's capacity but not leaving behind the betterment of the conservation of natural and heritage resources (UNWTO, 2002:2).

UNWTO (2002:2) voiced the same argument, arguing that awareness and improvement of such natural resources would remain merely paperwork if nothing was done to motivate the people living in the vicinities of the protected areas. This justifies the reason why Shen (2009:24) emphasised the role of both ecotourism and tourism activities in the economy of developing nations by saying "...a powerful engine of economic development recently embraced and pursued enthusiastically by most developing countries". Shen (2009:26) observed:

"...a significant shift from an initial focus on economic benefits and later environmental and cultural protection, to a poverty emphasis from the beginning of the new millennium".

This means that the efforts to reduce poverty should be backed up by innovative and sound management of cultural and natural resources (Goodwin, 2000:11; UNWTO, 2002, cited by Shen, 2009:26). These authors support those positive outcomes could result from the adoption of an integrative approach to involve local communities of rural areas in the national and international influential policies drafting process and get their votes for their best choices to improve their livelihood and opportunities to shape their future.

UNWTO (2004:4) and Shen (2009:112) affirm that tourism is a tool for poverty reduction through different developmental programmes. For example, launching the Sustainable Tourism and Environment Protection (ST-EP) programme by UNWTO and promotion of PPT have contributed to the increase of net benefits for the poor. UNWTO (2005:5) reported that improving the linkage between formal tourism businesses and local communities' activities under the banner of tourism sub-value chains could speed up poverty reduction by ensuring economic growth, biodiversity conservation and social-cultural integrity (UNWTO, 2005:5).

Van der Zande (2003:22), with other aggressive writers such as Boo (1993:23) and Eagles et al. (2002:77), established that the tourism field offers the best practices if it inclusive of other disciplines to add value to the tourism experience. For example, Boo (1993:21) and Eagles et al. (2003:77) viewed tourism as an umbrella of biodiversity, biology, agriculture, culture, environmental education, and many fields that engage multi-skilled experts, including business and management sciences. They believed that the more tourism is broadened, so the experience is opened to many tourists with different economic needs and wants. Furthermore, economic analysts whose focus is tourism development believe that wider tourism offerings meet the demands for socio-economic development of a growing world population. This establishes the point that the positive impacts of tourism are obvious in diversified niches of tourism.

On the other hand, no one can ignore the negative impacts of tourism, especially environmentally related due to limited capacity to protect the environment (Cole et al., 1987:33; McNeely & Thorsell, 1989:30; Buckley & Pannell, 1990:28; Mbaina, 2003). Over two decades ago, Dowling (1993:55) revealed that environmentally negative impacts are caused by the fact that local people do not benefit sufficiently from their legitimate economic activities such as agriculture, forestry, mining, and urbanisation and that they use protected areas to balance their needs. Table 2.3 below lists the negative impacts of human use on the environment.

It was recommended by the IUCN (2001:11) that research efforts should be intensified around protected areas and improved quality of management of the protected areas should consider the input of people at a grassroots level, for the development of a successful conservation management framework.

According to ROR (2011a:25), the three national parks discussed in this study are not exempt from negative impacts. For instance, the Rwanda Biodiversity Policy of 2011 states that adverse impacts on freshwater systems are of critical concern, given the increasing demand for water in the country. Salinisation, eutrophication and pollution by heavy metals, industrial effluents, pesticides, insecticides, and herbicides have considerably reduced the quality of both surface and groundwater. Catchment areas have been impacted negatively by afforestation, alien plant invasion, irrigation, over-abstraction and human settlement, which have substantially reduced natural run-off and groundwater levels (ROR, 2011a:25). It is the view of the researcher that this has undermined local natural governance and conservation decision-making.

Table 2.3: Negative impacts of human use on the environment

Negative impacts of human use on the environment	
1	Trail creation (and deterioration)
2	Habitat loss
3	Campsites (and deterioration)
4	Emissions and air pollution
5	Litter
6	Firewood collection
7	Overcrowding
8	Visual and noise impacts
9	Tracks and recreation vehicles
10	Overfishing, undersized fishing
11	Warehousing and packaging
12	Impacts on vegetation
13	Human waste problems
14	Damage to sand dunes/reefs
15	Wildlife disturbances, habitation or impact
16	Soil compaction or erosion
17	User conflicts
18	Increased fire risk
19	Water pollution (physical or biological)
20	Damage to archaeological sites
21	Over-development
22	Trampling (human or horse)
23	Weeds, fungi, and exotic species
24	Changed watercourses
25	Cultural vandalism
26	Taking souvenirs (fauna and flora)
27	Boats damaging dams or rivers banks

Source: Cole et al. (1987:33); McNeely & Thorsell (1989:33); Buckley & Pannell (1990:29)

The existing gap between tourism and protected areas is related to non-consultation with policymakers and it is the view of the researcher that the sustainability of Rwanda's biodiversity requires ongoing and open communication between the local communities and the authorities of the three national parks. Engagement between these parties on biodiversity protection, including the benefits to local communities, could be a strategy to ensure the sustainability of biodiversity. The current disjuncture in the administrative governance of the three national

parks in which local community and natural resource interests are seemingly at stake is a structural administrative governance contradiction that potentially precipitates natural resource conflict between those who govern (state agencies) and the governed (community).

This study notes the locational interdependence of local communities as the defining link for positive human-biodiversity relations in the three national parks. It is only logical that communities that surround the national parks and their resources are justified in terms of their fundamental right to participate in contributing to the three national parks' processes to improve their local livelihoods by collaborative conservation.

In the researcher's opinion, park tourism management challenges are not a negative issue. The big problem is how to manage the positive and negative impacts. The researcher therefore supports the arguments of Buckley and Pannell (1990:28) who shared some strategies to manage park tourism. In their study, they note that ecotourism and sustainable tourism activities seem to be a direct response to the impact of human activities on the environment in which we live and work.

On the same topic, Cole et al. (1987:35) reiterated that protected area stakeholders should be aware of the collective impact and adjustable management practices to maximise the benefits from positive impacts and minimise the negative impacts on the environment.

Various authors have at different times shared similar views on the misinterpretation of the role of local communities in the management of protected areas. For example, Matawonyika (1989:37), Strasdas et al. (2002:11) and Jaireth and Smyth (2003:98) were all of the opinion that tourism is likely to be negatively affected if protected areas management did not adopt the approach of engaging local communities on matters relating to the roles they play in the best practices of professionalism in the industry (Mbaina, 2011a; 2011b).

The researcher is of the view that it would be a mistake if protected areas management did not include the input of local communities on problems that concern them. Although local communities may be limited in terms of acting professionally in the conflict between and within communities, it does not mean they are incapable of conflict resolution.

In modern protected area management, crisis management of the areas should be proactive and not stop at the traditional way of handling conflict with surrounding communities. The researcher agrees with Carruthers (1995:16) and van Sickle and Eagles (1998:229) that the concepts of the policy framework of the past two decades is too traditional. It is outdated and does not meet the demands of current tourism-related protected areas because it does not involve local communities in such matters.

The three national parks offer venues for defining tourism practices in Rwanda. The 2009 Rwandan tourism policy projected increases from \$210m with 980 000 arrivals in 2009 to \$627m with 2 219,000 arrivals in 2020, contributing to tax revenue, boosting the balance of payments, and contributing to the sustainable economic growth and equitable distribution of wealth for the benefit of all Rwandans (ROR, 2009:6). This will not happen if a balance is not established with conservation of the environment and support for society and culture (ROR, 2009:5).

It is believed that the Rwanda Tourism Policy would contribute to the attainment of Vision 2020 objectives and Economic Development and Poverty Reduction Strategy (EDPRS) targets 1 and 2 through the following:

- Product development and diversification: to develop a range of quality tourism products and services capable of attracting and meeting the needs of international, regional, and domestic visitors.
- Marketing and awareness: this means that a project should be clear, distinctive and project an image of Rwanda as a wildlife, ecotourism, cultural and conference destination that is attractive to a high-value market.
- Capacity building: to develop systematic, high-quality training, to create a skilled workforce in value jobs at every level of the tourism and hospitality industry.
- Communities and MSMEs: to provide support to MSMEs, ensuring that they have the capabilities and capacities to enter the tourism value chain, while also ensuring that communities contribute to and benefit from the tourism industry.
- Access to Rwanda as a destination: to ensure that international tourists experience minimal inconveniences in their journey to Rwanda in terms of air and land access, as well as in visa and other requirements.
- Framework of regulation: to establish and maintain regulation that enables the tourism industry to develop in a fast yet sustainable manner.
- Infrastructure development: to prioritise the provision of infrastructure within the Destination Management Areas (DMAs) and their associated corridors.
- Land: to enable tourism investments through ensuring the availability and security of land tenure for development.
- Environmental sustainability: to ensure that the tourism sector is planned and developed to the benefit of future generations of Rwandans, in terms of the sustainability of resource use, the protection of wildlife and the environment.
- Investment and financing: this objective should be achieved through developing incentives and a financial architecture that supports investment in the tourism industry.

In brief, the objectives are set in the mirror of job creation, strengthening professional competencies, local community participation in the development of the sector for their own benefit, improved use of information and communication technology, rational use of existing

physical infrastructure and development of new infrastructure, strengthening public-private sector partnerships and the diversification of sustainable tourism products. Concerning the use of information and communication technology in tourism, the researcher concurs with Safari (2017:115) that there is still much to do to have digitalised communities around the national parks of Rwanda. Considering Rwanda's turbulent history, notably the devastation caused by the 1994 genocide, it may take time to integrate information and communications technology (ICT) fully into the tourism industry (Safari, 2017:115). Safari put forward the argument that there is no awareness of the existence of ICT from which communities' benefit because many still do not have access to computers, the Internet and other communication resources.

Again, the presence of tourism in the three national parks could be observed from within and around the parks. There are numerous campsites and forms of accommodation and attractions such as hiking, chimpanzee tracking, other primates, birdwatching, the canopy walkway, hiking trails, culture, community-based tourism (CBT) and vegetation. It is important to note the difference between campsites and accommodation. By accommodation, the researcher refers to permanent facilities with solid walls made of brick and stone or other local building materials. Most tourist lodges have many of the amenities one would find in a hotel, such as a restaurant, swimming pool, bar, en-suite bathrooms, toilets and gift shops. Accommodation is graded by stars, e.g., 3-star, 4-star and 5-star. The higher the star grading of the lodge, the more likely it is to have better service, better facilities, and higher prices. On the other hand, campsites offer unstructured stays and usually comprise large walk-in tents or canvas structures with en-suite facilities including flush toilets and hot showers. They may be permanent or mobile. Around the parks, there are CBT activities such as tour guiding, cultural trips and handicrafts.

Arguments abound about the type, level, and extent of tourism that a national park should offer as a product and still ensure that tourists do not destroy the ecological integrity of the resource (Prosser, 1994:22; Mabunda, 2004:30). The most common argument is that national parks should follow ecotourism principles as opposed to mass tourism because ecotourism involves a specific interest group, whereas mass tourism is all about revenue to be generated in new cultures as a major interest and there is no adequate preparation. Thus, according to (Mabunda, 2004:30), ecotourism can be defined as:

“...tourism involving travel to areas of natural or ecological interest, most of the time under the guidance of a naturalist, having the objective of learning about the environment, focussing on wildlife awareness and conservation of the environment”.

Although this study does not focus on ecotourism, it is imperative to adopt the principles of this field and incorporate them into protected-area tourism to ensure the sustainability of the parks' tourism. The prefix 'eco' to tourism originates from the Greek word *oikos*, meaning house or habitat. Over the years, it has evolved to become synonymous with ecology (Wearing & Neil, 2000:127; Mabunda, 2004:31). The environment which a human inhabits is fundamentally his

home, dwelling or life-supporting system. Despite the “fashion”, the origins of ecotourism are deeply rooted in the philosophical heritage embraced by environmentalists and conservationists (Ziffer, 1989:22, Mabunda, 2004:31).

Ecotourism evolved in reaction to the rapid destruction of the world’s natural habitats that were considered vital reservoirs of biodiversity (Lindberg et al., 1998:17; Mabunda, 2004:31). Ecotourism was seen as a viable alternative to logging, oil drilling, mining, and other extractive industries. In Africa, ecotourism unfolded as an alternative to a failed colonialist philosophy of wildlife management based on separating people from protected areas (Mfunda, 1998:44; Mabunda, 2004:31). Faced with rampant poaching activities, some scientists and park managers argued that wildlife would only survive if those living on the parks’ borders enjoyed some kind of reasonable benefits from wildlife conservation and tourism (Matawonyika, 1989:33; Mabunda, 2004:31). It is therefore accurate to say ecotourism was the world’s acknowledgement of and reaction to sustainable practices in global ecological practices (Diamantis, 1999:118; Mabunda, 2004:31).

Ecotourism scholars agree that to overcome the rampant and destructive poaching activities requires proactive decisions such as educating local communities on benefits from protected area conservation. This is directly opposite to the colonialist approach which separates the protected areas from people living in their vicinities (Diamantis, 1999:119; Mabunda, 2004:31). Alternatively, conservation managers should consider the reasonable capacity of the destination management, health of the species and the role of the host communities in sustainable tourism.

One of the study’s objectives is to develop a tourism management framework for the conservation of the three protected areas to guarantee the development of local communities through tourism projects in Rwanda. However, it is first necessary to highlight that in any protected area of Rwanda, a common characteristic is that the local communities rely on directives from local and provincial tourism management of the area. One of the challenges that hinder the pro-poor benefits around the three national parks is the lack of integrated tourism management. Thus, adaptive management in the context of sustainable tourism and adaptive management as a tourism management philosophy is needed for a comparative analysis of global management approaches, protected area-management paradigms. Management paradigms are discussed in this section.

The philosophy of adaptive management is a relatively new concept that is becoming popular in the normal conservation community (Salafsky et al., 2001:16). It originated from different studies including business management sciences, science, philosophy, arts and social science, community development, professional practice, and eco-system management. According to Salafsky et al. (2001:12), adaptive management is a form of management that

incorporates research in conservation action. Specifically, it is the integration of design, management and monitoring to test assumptions systematically and to adapt and learn.

Salafsky and Margolius (1999:12) propose the meaning of adaptive management as a way of defining actions, systematic decision-making and learning in which an establishment acts responsibly towards sustainable tourism in a given protected area and becomes responsive to environmental and social transformation with the ability to respond rapidly and conveniently to such alteration. Salafsky et al. (2001:13) explained that this is not easy. The following evolving tourism conditions should be fulfilled:

- Hypotheses and test assumptions should be a continuum.
- Experiments should be simple and easy to understand and solve problems of ordinary people with whom we live.
- Create, examine, and employ accurate data with supporting evidence.
- Establish the impact of a chosen trajectory course of action; and
- Accept failure if that opens an opportunity to succeed and predict the bright future with rational programme decisions.

Noble (1999:101) and Salafsky et al. (2001:12) supported each other on the importance of understanding the dynamics influencing the success of protected area management. They highlighted that an organisation with a clear mandate in an open environment should adopt a framework for systematic analysis and learning.

Regarding ecosystem management and tourism resources, Healy (1994:599) and Berkes and Folke (1998:54) explained that the tourism sector shows evidence that all the features in protected areas are both consumptive and non-consumptive. They are made of both natural and highly developed tourism-based natural beauty of landscape components such as the atmosphere, water resources, wildlife, landscapes, people, local cultures, shops, banks, medical facilities, roads, and accommodation units. Having considered these resources, Selsky and Memon (2001:2) reflected that these components only build the experiences of tourists at the destination. Therefore, protected area management should create a balance between the quality and quantity of the constituents' resources adaptation due to tourist use.

Given the tourist resources characteristics, Hunter (1997:852) asserted that conservation managers should always consider the tourist time and money value of the end consumer. The tourist experience has been also discussed by other scholars of the 20th century who point out that tourism product diversification associated with visited destination area integrity will inevitably increase the visitors' experience (Bromly, 1991:121; Holling et al., 1998:350; Ostrom et al., 1999:279). The tourists' experience is what makes the destination competitive, and it

requires the triangulation of management approach to ensure the quality and quantity of the natural environment and socio-culture resources (Briassoulis, 2000:26).

In support of the above argument, Berkes and Folke (1998:52) and Holling et al. (1998:355) used the adaptive management paradigm to highlight the rationale of integrating local community participation into protected areas management. They report the advantages and value of combining modern content knowledge with indigenous knowledge, progressive monitoring and evaluation, flexible policy design and regular reviews of management practices.

Berkes and Folke (1998:53) and Hunter (1997:859) anticipated that using a triangulation approach to manage the protected area would not remove the many and conflicting stakeholders' interests. The researcher agrees with the opinion of these authors since tourist activities in developing countries are limited to scarce species such as gorillas that have been promoted by influential consumers located in developed countries. This proposes that developing countries will try to impose their tourism requirements on the supply country – in this case visiting the gorillas. These developed countries will be quick to exploit the gaps at the destination to influence what they want (how, when, and where to visit the gorillas) and not what the tourism supplier may propose as an alternate tourism product to grow the national GDP.

In the researcher's view, the management of Rwanda's protected areas requires a management framework unique to its needs, not an established framework borrowed from abroad. Thus, the researcher married the principles of adaptive management in terms of a management philosophy for this study. Furthermore, the researcher believes that past failures must be acknowledged, and a lesson learnt. A framework that includes the participation of local communities in an integrative approach will shape successful tourism management practices for the protected areas of Rwanda.

2.5 Knowledge and research gaps

In reviewing existing research related to management frameworks for the conservation of national parks, the current study identified contextual and conceptual gaps that need to be filled. Similar studies have been undertaken but these were outside of Rwanda, such as the Asian studies of Zhao and Ritchie (2007), Tosun (2000) and Simmons, (1994). Therefore, the current study endeavours to address these research gaps. In addition, studies conducted locally did not focus on local community capacity building, local communities' involvement in decision-making processes, reporting channels, compensation and local community involvement and participation in the overall conservation of national parks in Rwanda.

2.6 Chapter summary

The theoretical review in this chapter considered the historical aspects of tourism management frameworks and described different important concepts to consider in establishing the management of protected areas. Veal (1997:122) found that the most critical issue related to tourism and conservation is building a genuine conceptual framework that links all stakeholders of the framework ecosystem. Veal highlighted that a person involved in such exercise should understand the typical concepts that contribute to tourism and conservation of the protected areas.

According to Veal (1997:127), a successful conceptual framework should follow a non-linear process that includes identification, definition, exploration of the relationships between concepts and functionality of the concepts. In the researcher's opinion, for the success of the built conceptual framework, an expert should identify all stakeholders within the ecosystem of tourism and a conservation conceptual framework. The framework should adopt an inclusive approach that integrates tourism and livelihood strategies and interdependent activities, which will result in producing positive livelihood outcomes. In addition, a more proactive approach is needed to ensure a sustainable conceptual framework. This approach will not succeed if there is no practical support for the conservation of natural and cultural resources and local community participation in destination management.

It follows that an innovative conceptual framework aims to contribute to poverty reduction in developing nations whereby tourism revenue-sharing is an indicator to measure how the local community's benefit from the industry.

In Cole's (2006:66) argument, it is surprising that scholars of his time still puzzle over the meaning of community participation. In the researcher's critical thinking, he thinks that those who still hesitate about the role of community participation in the decision-making process are perhaps misinterpreting the meaning of this category of stakeholders. They avoid the interpretation of community participation, not because it is difficult but because they want to maintain their singularity in the conceptual framework that works for the rich, not for the poor. Therefore, in some places in the world, poverty has a cultural legacy because people do not want to change their mindsets (Mbaina, 2011a; 2011b).

Cole (2006:66) supported the good intention to reduce poverty but this will only be achieved if practitioners of tourism and conservation of protected areas redefine the concept of community participation properly. It requires a new paradigm shift, away from the egocentric interest of a handful of wealthy beneficiaries of the industry. The researcher's view is that community participation in the democratisation of the industry gives voice to people at a grassroots level. They need to feel they belong in the ecosystem of tourism that benefits the poor. For example, the complexity of community participation could be overcome by providing diversified jobs for

skilled and unskilled people living around protected areas. Moving forward with the purpose of this study, the existence of the protected areas, the reasonable people living in the vicinity of these protected areas and their expectations from the exploitation of such tourism resource, will justify the relevance of Cole's (2006:67) definition of community participation.

Cole's (2006:67) meaning of community participation is unquestionable since his definition has the elements of equity and equality in the decolonised economy of tourism around the protected areas. In the researcher's interpretation of Cole's definition of community participation, it is an inclusive state whereby a member of the community who lives in that state directly or indirectly participates in tourism decision-making processes and/or operates a tourism-related business or works in tourism as an individual or in a group for symbiotic benefit.

A further aim of this chapter was to analyse protected area-management systems and their management to create benchmarks that could guide the development of a theoretical tourism management framework for the conservation of Rwanda's national parks. The chapter revealed an evolution in the management systems of parks over the past decades. The modern paradigm stresses the role of an integrative approach to the management of protected areas whereas the classic management paradigm excluded people from this.

Different systems, ranging from biosphere reserves and co-management to transfrontier parks, exist as part of the enlargement of the scope of protected area management. Public enjoyment and biodiversity conservation are the two components through which the capacity of specific protected areas will be increased to generate sufficient revenue to finance its operations.

The relevance of ecotourism and sustainable tourism principles in providing human benefits to the public to make parks sustainable is emphasised. Tourism is a legitimate function that could contribute immensely to the conservation of biological diversity in protected areas. Protected areas tend to be seen and managed as islands, ignoring the essential links with local communities, other stakeholders and the wider natural environment beyond their boundaries.

The next chapter, Chapter 3, discusses specific issues and associated challenges relating to Rwandan tourism and conservation of the three national parks under study. The chapter also addresses the proposed tourism management framework.

CHAPTER 3

TOURISM AND CONSERVATION IN RWANDA

3.1 Introduction

This chapter discusses the geographical and historical context of Rwanda, tourist attractions and specific issues relating to Rwanda. It further discusses strategic programmes to engage local communities living in the vicinities of the national parks and explains how they benefit from tourism projects in conservation. The concepts of community needs, economic benefits, decision-making, communication, theories of decision-making, tourism potential, tourism impacts, pro-poor tourism, and the tourism supply chain as well as tourism success after the genocide, are addressed in this chapter.

Rwanda is a landlocked country in East Africa covering 26 338 square kilometres. It shares borders with the DRC in the west, Uganda in the north, Tanzania in the east and Burundi in the south. Rwanda is known as one of the most densely populated nations in Africa and its population growth rate is one of the highest in the world (Briggs & Booth, 2007:2).

Ecologically, Rwanda has four protected areas, namely the ANP, the NNP and the VNP. The fourth one, the GMFNP, formerly known as Gishwati Nature Forest Reserve, was declared a national park in 2016 by law 40/2015 of 29/08/2015 (Official Gazette no 5 of 01/02/2016) (ROR, 2015:11). The GMFNP is not a subject of this study as it was declared a national park after the commencement of the study. Rwandan protected areas safeguard several species of animals, such as the rare mountain gorillas, golden monkeys, owl-faced monkeys, eastern chimpanzees, and the Ruwenzori Turaco, as well as Africa's 'Big Five' (Briggs & Booth, 2007:2-3).

In earlier years, Rwanda always had a rapidly increasing density of inhabitants compared to bordering countries, which is in evidence today. Over 90% of the populace survive in countryside areas and are occupied in farming. Farm production in Rwanda is oriented toward subsistence, where beans and sorghum, supplemented by sweet potatoes, cassava, and peas, are the principal food staples (Briggs & Booth, 2007:3)

Coffee and tea are important cash crops for some farmers and important sources of foreign exchange for the nation. Rwanda's agricultural system is labour intensive, where hoes and machetes are the basic farm implements. In recent years (post-1994), tourism has taken over and proved to be the premier foreign currency earner for the country.



Figure 3.1: Map of Rwanda indicating the location of national parks

(Safari Bookings, 2020:1)

Rwanda falls within the savannah biome, mostly grassland interspersed with widely spaced trees (Shorrocks, 2007:1; Vande Weghe & Vande Weghe 2011:121). The savannah biome covers a fifth of the earth's land surface and is densely populated by humans, domestic animals, and wildlife (Sankaran et al., 2005:846). Most savannah countries have warm and relatively dry climates (Shorrocks, 2007:1). Interconnected dynamics implicated in the configuration of savannah flora include weather, soils, time, geomorphology, herbivores, hydrology, geology, natural fire, fire caused by humans and the paleoclimate (Goudie, 2006:40).

A mixture of herbivore browsing and fire, for example, could be used as a management tool to control tree cover by suppressing tree establishment and density and facilitate the coexistence of trees and grasses in savannahs (Staver et al., 2009, cited by Gatali, 2013:5). Gatali (2013:5) also points out that savannah wildlife has an ecological, scientific, financial, and aesthetic value but also a cost in terms of loss in human life, loss of property, crops, livestock and income. Gatali argues that frequent conflict between humans and wildlife might be due to specific interests of people living close to wildlife, that some protected areas are sited in regions of high

population density or because of human interference (e.g., hunting, poaching, bush fires and habitat destruction).

In the case of Rwanda, for example in the ANP specifically, the wildlife-human conflict has often resulted in farmers losing considerable portions of their crops to wild animals, deaths of people and killing of livestock. Most damage is due to elephants, buffaloes, and hippos. However, the Rwandan government has put in place compensation mechanisms through a special guaranteed fund established by Law No. 52/2011 of 14/12/2011 in the Official Gazette No. 03 of 16/01/2012 (ROR, 2012:9). Other preservation issues for the ANP are associated with domestic animals and flora and fauna using the same area for grazing, especially in the confined areas, which draws severe opposition from local farmers but also results in easily spread animal diseases (Gatali, 2013:5). Rwanda has different organic ecosystems that contain outstanding biodiversity of flora and fauna (Wong et al., 2005:12, ROR 2011a:8, Vande Weghe & Vande Weghe, 2011:121; Gatali, 2013:5). Informally, these ecosystems are the primary sources of biodiversity and inherited resources and provide health and cultural benefits to people. More than 30% of these ecosystems fall within the Savannah biome (Gatali, 2013:5).

Although Rwanda currently has four national parks. The fourth one, the GMFNP, is not included in this study because it was gazetted as a national park in 2012, before the commencement of this study. Furthermore, tourism activities were only launched in this national park in 2018. Administratively, the three national parks under study had been under the management of the former Office Rwandais du Tourisme et des Parcs Nationaux (ORTPN) between 1973 and 2008 when a new board, the RDB, was formed through merging five different national agencies, including ORTPN. However, in 2010, the ANP was put under joint management when an agreement was signed between African Parks and the RDB, launching the Akagera administration, known as the Akagera Management Company (AMC), through board members from the RDB and African Parks both co-operating to manage the protected area.

3.2 Akagera National Park

The ANP was originally established in 1934 with an area of 1 790 square kilometres. In 1997, the new limits of the park were officially established by abolishing the former Mutara Hunting Domain and by further reducing the area of the park to only 108 500ha (Briggs & Booth, 2007:229). At the same time, those who had settled within the new boundaries were resettled outside of the park. This reduction of practically two-thirds of the ANP's primary surface had of course harmful effects on the biodiversity of this habitat. Moreover, the new limits of the park neither accounted for ecological facts nor potential problems of animals crossing the parks' limits. Currently, the ANP still represents an exceptional conservation area. About 50% of its surface and is made up of wetlands, which shelter sitatunga, hippo and a wide variety of water

birds, one of which is the unique and impressive shoebill. The vegetation comprises a mixture of grass, arbustive and arborescent savannahs, giving shelter to a score of large mammal species such as zebra, antelope, buffalo, elephant, giraffe, rhinoceros, and large carnivores. ANP is a significant and very important conservation area of biodiversity on both a national and international level and provides tourism and employment (Briggs & Booth, 2007:221). The ANP is the largest protected wetland in Central Africa. Over two decades ago, Dugan (1990, cited by Briggs & Booth, 2007:221) stressed the importance of the ANP because of the high biological diversity associated with wetland ecosystems. Nationally, the Akagera region may be the only refuge of flora and fauna of savannah and dry forest in a country where the reduction in biodiversity resulting from human exploitation is about 90-95% (Nyilimanzi et al., 1997:33). Besides being populated by large mammals, its savannahs and dry forests are a natural counterpart to the wet forests of NNP and the mountain forests and alpine habitats of the VNP. Ultimately, the ANP is part of Rwanda's heritage and is well known because of employment opportunities within the park. It provides employment for several members of the local communities. Various activities in the park, such as the maintenance of dirt roads or fishing in the lakes of the park, depend on local labour. In addition, for the recruitment of guards and guides for ANP, RDB favours those who come from the districts bordering the park.



Figure 3.2: Akagera National Park map

(Google Images, 2020:1)

The ANP has the distinction of being the most-visited park by Rwandan (domestic) tourists. For more than two decades, scholars and researchers such as Nyilimanzi et al. (1997:34), Vande Weghe (1990:133), Vande Weghe and Dejace (1991:17), Williams and Ntayombya (1999:16) and Briggs and Booth (2007:14) have argued that the park is one of the prime parks in Africa and even in its reduced state, it is still attractive and important for tourism. Arguably, Nielsen and Spenceley (2010:242) explained that besides the mountain gorillas in the VNP, the ANP enhances visitors' experience with a variety of flora and fauna, including elephant, hippo, giraffe and zebra, while the introduction of lion and black rhino has made it a very attractive destination for many tourists, both domestic and international.

Tourist activities in the ANP commenced in 1975 (Briggs & Booth, 2007:3), one year after the creation of the National Office of Tourism and National Parks (ORTPN [Office Rwandais de Tourism et Parcs Nationaux]). Since then, the number of tourists has steadily increased, as the ANP is one of the most beautiful parks in the country. For Rwandan visitors, the ANP is the only place to see a range of large African fauna and the ancestral landscapes of East-Rwandan savannahs.

Safaris (game drives) are the main tourist attraction in the ANP. They allow the observation of 20 large mammal species, of which the sitatunga, the roan antelope and the oribi are the rarest. In addition, more than 530 other species are to be seen, including some rarely seen bird species such as the Nile shoebill, the papyrus gonolek, the white-tailed warbler, the red-faced barbet, and the crested barbet (Briggs & Booth, 2007:188). It also offers the opportunity for tourists to admire the mountainous landscapes and the lakes where hippo and crocodile abound. As tourists want a variety of experiences in a Rwandan destination, the ANP also offers boat trips on Lake Ihema, sport fishing on Lake Shakani and camping, where tourists can erect tents, even inside the park at Muyumbu, Mutumba, Shakani, Kirara and Kajumbura. There is also the Ruzisi tented lodge that provides options for the erection of own tents (Briggs & Booth, 2007:189).

3.3 Nyungwe National Park

Of the three national parks, "Nyungwe is the newest, having been inaugurated in 2005 but attracts far fewer visitors than either Volcanoes or Akagera" (Hansen, 2012:6). Nyungwe is known as one of the oldest continuous rainforests in the world and the best-preserved montane (high altitude) rainforest in East Africa. Not only is a significant portion of the park's 970 square kilometres undisturbed primary rainforest but it harbours a far greater diversity of plant, insect, bird and mammal species than other primary rainforests of similar size (Briggs & Booth, 2007:129; Hansen, 2012:6). Since the most recent ice age, changing weather patterns reduced precipitation levels in most of the rainforests in Central Africa to the point that they

were fundamentally changed into savannah-like open canopy grasslands with less important, wider spaced trees (Hansen, 2012:6).

“Species that were endemic to a closed canopy wet rainforest environment either decomposed or managed to make their way to one of three remaining rainforests, one of which was Western Nyungwe” (Hansen, 2012:6).

The NNP has retained relatively greater biodiversity than most rainforests which, even though they mutated to wet, closed canopy rainforests, as weather patterns normalised, “were not in a position to regenerate the same richly layered diversity of flora and fauna that Nyungwe can boast” (Hansen, 2012:6).

NNP is home to about 13 species of primates, including one of Africa’s greatest concentrations of chimpanzees and monkeys (Briggs & Booth, 2007:138-139; Hansen, 2012:7). Regardless of the wonders of Nyungwe’s topography and ecosystems, “for the most part tourists arrive with the single objective of spending quality time with chimpanzees” (Hansen, 2012:7). This is because the majority of Nyungwe visitors have been induced to come as an add-on to a visit to the VNP, which is known as “the world’s premier location for viewing mountain gorillas in their natural habitat” (Hansen, 2012:7).

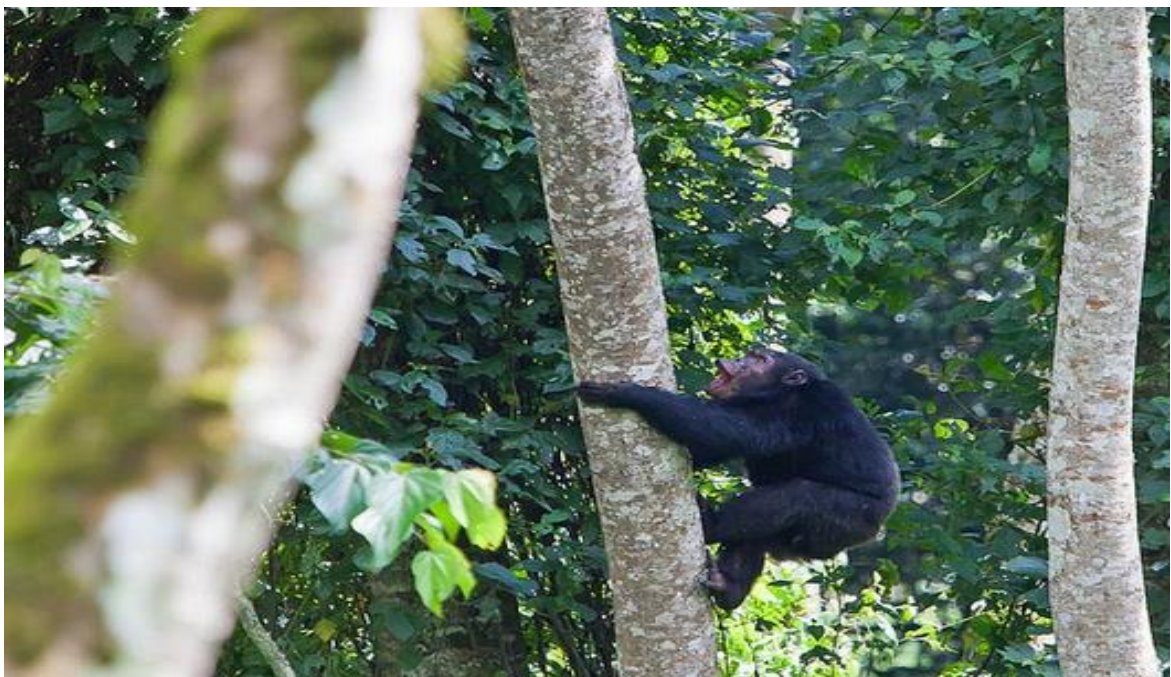


Figure 3.3: A chimpanzee climbing a tree in Nyungwe National Park

Source: Timbuktu Travel (2020:1)

The NNP is described by Birdlife International as "the most important site for biodiversity conservation in Rwanda". It is home to around 310 bird species, 27 of which are common to the Albertine Rift. Some travellers are only interested in viewing birds, and they are known as

birdwatchers. Nyungwe also offers experiences of the rainforest from a new perspective, the Canopy Walkway. Suspended 60 metres above the forest floor between giant trees and towers, East Africa's only Canopy Walkway provides a stunning view of the Park's amazing wildlife and nature. The Walkway is accessible as part of a specialised guided tour from the Uwinka Visitor Center (NFNP, 2020:1).

The NNP was established for a reason. It offers services and livelihood opportunities for many people from 2adjacent communities. Sadly, the ongoing illegal exploitation of forest resources, such as hunting, tree cutting, mining, agriculture expansion and honey collection, is gradually leading to a littered forest and the loss of the park's biodiversity. To decrease this burden on the park, the RDB, in partnership with partners like the WCS, has worked to generate sustainable options that offer livelihood opportunities for local people (Crawford, 2012:1).



Figure 3.4: Nyungwe National Park, aerial view from the Canopy Walk

Source: NFNP (2020:1)

One of the major threats to the Nyungwe forest is the increase of wildfires. Between 1997 and 1998, fires damaged more than 12% of the Nyungwe forest (Briggs & Booth, 2007:199). In many cases, fires were started by people to smoke the hives of wild bees to collect honey. Working with park authorities, the partners now promote beekeeping outside of the park as a sustainable alternative to the illegal harvesting of honey within the park, which nurtures local livelihood opportunities and adds value to the protection of the forest (Crawford, 2012:6).

Given that illegal honey harvesting is the main cause of fires in Nyungwe, local beekeepers around Nyungwe are encouraged to approve sustainable and gainful beekeeping methods outside the park. Drawing together beekeepers around the NNP, honey co-operatives to promote sustainable and profitable beekeeping activities outside the park have been established.

In the researcher's observation, Nyungwe is important to local communities but they do not exploit this protected area in a symbiotic manner. Efforts to promote sustainable beekeeping around Nyungwe are focused in key areas by setting up businesses, improving business skills and building local organisations. These local organisations, such as co-operatives, support local beekeepers to procure infrastructure and equipment, market Nyungwe honey by linking

honey co-operatives to local markets, develop and implement outreach and education programmes to prevent forest fires and promote best practices in beekeeping development.

The project has seen 13 legally registered co-operatives related to beekeeping activities working around Nyungwe. They are well recognised and comprise over 1 300 beekeepers, many of whom used to harvest honey illegally within the park. Through the 'Ubwisa bwa Nyungwe Beekeeper Union', these 13 co-operatives now showcase the potential of protected areas. The partners have established specific programmes to improve the capacity building of the co-operatives through training, procuring beekeeping equipment, promoting the establishment of new beekeeping co-operatives, and supporting the protection efforts of Nyungwe (Initiatives, 2020:1).

3.4 Volcanoes National Park

Established in 1925 as part of the then-Albert National Park, the VNP is the oldest national park in Africa (Briggs & Booth, 2007:199; Bush et al., 2010:17). The Park is in the north of Rwanda, neighbouring the DRC and Uganda and covers medium and high altitudes towards the south of the Virunga Volcanoes chain, along which the park stretches for 40 kilometres. At its narrowest point, the park is a little over one kilometre wide. Covering an area of approximately 160 square kilometres at the heart of the Albertine Rift, the VNP is part of a unique trans-boundary network of protected areas stretching across Uganda, the DRC, Rwanda, Burundi, and Tanzania (Briggs & Booth, 2007:201).

According to Hansen (2012:7), for Rwanda, the packages offered by the adventure, generalists and wildlife tour operators are mainly mountain gorilla tours (three to five days) to the VNP, linked with another East African destination. Thus, despite Rwanda's success in terms of recovery from its status as a tourism pariah two decades ago (following the genocide), it is not yet regarded as a first-tier, stand-alone destination for leisure tourists but rather as a secondary location, only worth including for tourists who have already decided on a multicountry itinerary in East Africa (Hansen, 2012:7).



Figure 3.5: Mountain gorillas within the Volcanoes National Park

Source: Volcanoes National Park, Rwanda (2020:1)

The region is home to a diverse range of fauna and flora. The Virunga Massif Forest block itself, of which VNP is a part, is a unique trans-boundary collaboration between the authorities of the three national parks that protect the Massif, which includes the VNP, the Virunga South National Park in the DRC and the Mgahinga Gorilla National Park in Uganda. Together they make up a trans-boundary protected area complex covering approximately 450 square kilometres (Briggs & Booth, 2007:222) (see Figure 3.6 below). The VNP is world-renowned as the habitat of a sizeable and globally important group of the rare mountain gorilla (*Gorilla beringei beringei*), which are endemic to the Virunga Massif, as well as many other species in the Albertine Rift Region. In recognition of the VNP's international, regional as well as local significance, VNP was included in the worldwide system of Biosphere Reserves under the United Nations Educational, Scientific and Cultural Organisation (UNESCO) Man and Biosphere Programme in 1983 (UNESCO, 2017:3).

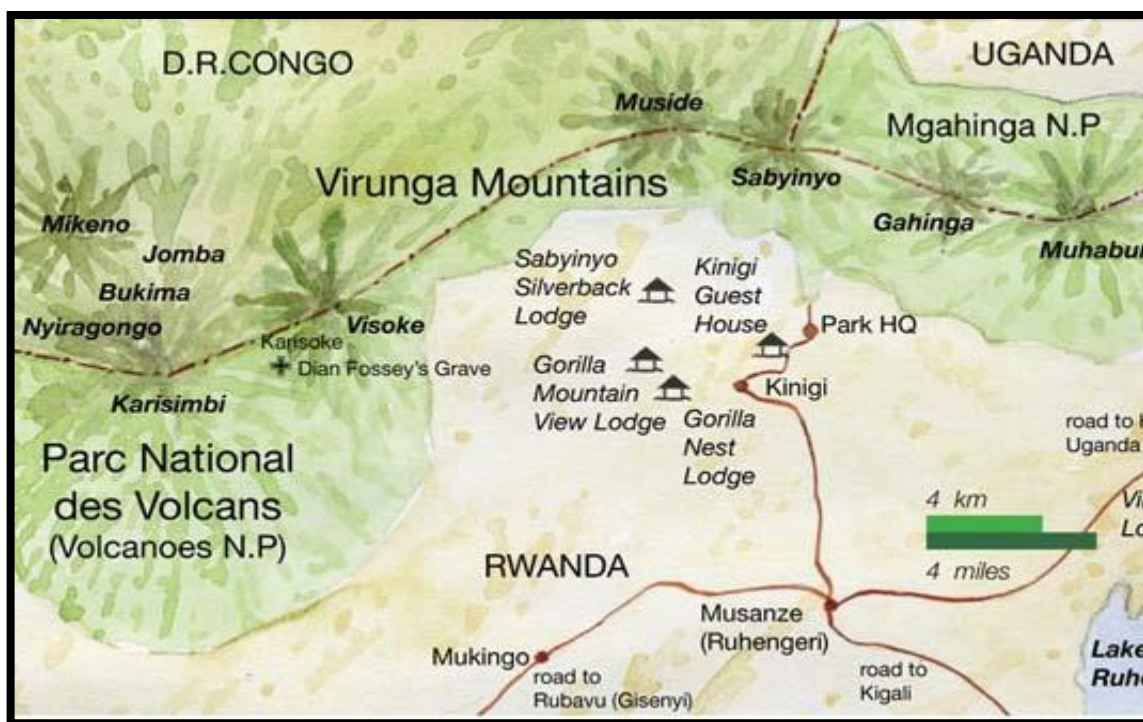


Figure 3.6: Map of Volcanoes National Park and neighbouring protected areas in the Virunga Massif

Source: Volcanoes National Park (2020:1)

In the face of its exceptional biodiversity principles, the park is confronted by a range of threats from humans. In this regard, the park is situated in the most densely populated part of the Country of a Thousand Hills, which is the result of the highly fertile volcanic soils and favourable rainfall patterns that are characteristic of the region. The population density in the area continues to rise, where over 600 people are constrained in one square kilometre, mainly skewed towards younger age groups (National Institute of Statistics of Rwanda [NISR], 2012:16).

This accounts for the exceptionally high human pressures on the VNP itself. Agriculture constitutes the primary livelihood of all community areas neighbouring the park and is largely subsistence in nature. Typical crops include Irish potatoes, sorghum, beans, and wheat (Briggs & Booth, 2007:202). Productivity is relatively poor because of the proliferation of diseases, as well as poor agricultural practices and insufficient available land for cultivation, which has been estimated at no more than 0.25 to 0.8ha per person. Another reason for poor harvests is crop damage by wildlife in areas neighbouring the national park, which continues to occur despite the stone wall that has been constructed along the boundaries of the VNP to ease the negative effects of wildlife on community farms. In addition to subsistence crops, income is supplemented through cash crops such as coffee, tea, tobacco, and pyrethrum (Briggs & Booth, 2007:202-204).

Marrying the country's interests in both protected areas and local communities, Bush et al. (2010:14) report that the achievement of biodiversity conservation should be directed by following community programmes, such as:

- Supporting hands-on skills and capacity building of farmers adjacent to the national parks.
- Local revenue-generating projects, different revenue strategies and the establishment of micro-credit facilities.
- Establishing a community conservation department within the protected area authorities which meets regularly with the communities.
- Providing a trust fund that supports the development of basic infrastructure such as schools, health dispensaries, community health centres, clinics, and other community facilities.
- Providing water and treatment of sanitation points and rehabilitation centres for adults and people living with disabilities in the areas surrounding the parks, and
- Facilitating the local community benefits from the park assets such as allowing them to harvest medicinal plants and herbs from the forest.

The programmes intend to promote benefits to the surrounding communities and to mitigate the negative effects of living alongside the national parks, such as impacts of crop-raiding or loss of access to the park's resources but on the other hand, to assist in community protection of the resource. Lack of synergy in managing surrounding communities could impact negatively on social and local communities' growth. Sola (2004:253) highlights that in southern African for instance, possible vulnerabilities could easily be created around communities, noting that income from the tourism industry at 5% of annual income was allocated to the upliftment of the communities neighbouring the parks, however, the positive impacts were not sufficient (Sola, 2004:253).

The war in Rwanda between 1990 and 1994 affected the national parks negatively, as well as communities. Priority was given to efforts to rehabilitate people and the natural reserves. This assistance came from the intervention of international influencers such as the German Technical Co-operation Agency (GTZ). For more than a decade, the GTZ supported the GOR in the restoration of the ANP by the project GTZ-PRORENA-AKAGERA whose mission was confined to a consultative function (Schoene, 2003, cited by Gatali, 2013:8). Gatali elucidated that the long-term endurance and sustainability of the ANP was greatly reliant on the turnaround of the harmful impact on its flora and fauna, as well as preservation efforts and tangible organisational decisions by proactive managers (Gatali, 2013:8).

The researcher cautions that it is critical to guard against contentment, especially in terms of monitoring the long-term impact that humans can have on vegetation and wildlife of the ANP. While indigenous communities were passive about the positive impacts of the ANP on their

lives, their habits placed much pressure on the park's biodiversity. Gatali (2013:8) pointed out that many threats to the park's biodiversity were manmade, such as illegal activities of poaching, burning, and fishing, as well as the natural phenomena of soil erosion, floods, and drought. In setting initiatives to remove those threats and protect the biodiversity, the Rwandan leadership started to mobilise security and public safety personnel such as the army, police and local people to stop the fires set by poachers within the park, but those measures were not sufficient to deal with the gravity of the issues.

In addition, the manmade threats included the 1990 to 1994 warfare and the post-conflict period after 1994 to biodiversity degradation and high human population densities (416 people per square kilometre (NISR, 2012:12)). This situation increased competition for natural resources and put severe pressure on the park's biodiversity, exacerbated by poor and inconsistent preservation management (Gatali, 2013:8). Some of the proposed initiatives are revenue sharing, community involvement in management of the parks and governmental and community co-operation to reduce major threats to the park's conservation efforts.

3.5 Revenue-sharing scheme

In 2005, the National Tourism offices, known in French as the Office Rwandais de Tourisme et des Parcs Nationaux (ORTPN), later part of RDB, made the first move in a revenue distribution system whereby 5% of tourism revenues from park charges were going to be invested into residents' projects around the three national parks. This was to guarantee that the local inhabitants considered the parks as their own. Uwingeli (2009), in an interview, indicated that local government institutions needed to guarantee the participatory mixture of local projects to finance, and that the responsibility was enhanced from first to last writing annual action plans that needed to be sent out every year. Tusabe and Habyalimana (2010:2) explained that the project funds had been utilised for a series of projects, ranging from environmental protection with practical programmes of tree planting, soil erosion control and fencing of protected areas to limit access by poachers, education, healthcare, water and sanitation, basic infrastructure, and food security, to other income-generating activities.

To understand the concept of revenue sharing, it is a programme adopted by different governments to share tourism revenue with their respective local communities, especially those who surround the protected areas. The main point here is that TRS is just one of the benefits that are shared with local communities (ROR, 2005:2). It is an obvious observation that protected areas share problems and benefits with local communities in the form of natural products (water, honey, medicine, and fuelwood), cultural/spiritual values, environmental services (climate, rainfall), income from conservation-based enterprises and finally a share of tourism benefits.

The TRS revenue in Rwanda has been widely used on communal projects, such as schools, water, bridges, and health centres. It cannot be stated that the strategy has been successful because, as yet (2018) no scientific study has been conducted. However, RDB officials indicate that the initiative has been largely positive, using indicators such as reduction of bush fires and animal poaching, increased reports from local communities to RDB (through informants), voluntary return of wild animals captured outside the parks by local residents and increased participation in conservation activities by former poachers.

However, even though this is a positive sign of the fund's successes, it must be remembered that (detailed in Chapter 5) local residents expressed a lack of awareness of the fund itself. This is probably a result of the fund being used to fund only communal projects and targeting mostly a few members of communities who are directly linked with conservation or anti-conservation practices. This calls for the TRS to consider increasing individual-based benefits. Individual tourism project-competition should be initiated to encourage rural young people, for example, to venture into tourism enterprises, which will then increase awareness of the locals of the TRS. The impact of TRS on the communities would thus be measured at both a collective and individual level and should be traceable. As this chapter discusses tourism related to the conservation of the national parks, the changes should go together with changes for the poor communities surrounding the national parks. This implies that as tourism grows, in principle, so too will the profits received by the underprivileged people.

Ashley (2007a:7) reported that tourism would make better local economic improvement if a network of projects and opportunities are built around it and there are several ways for tourism to generate income for underprivileged people. The author reiterated that creating linkages around the parks should not be seen as a demanding, conventional undertaking but as a practical agreement between people who are determined to improve their lifestyles through profitable opportunities offered by the national parks (Ashley, 2007a:7). TRS could set aside funds in a scheme for micro-credit financing. The introduction of such schemes would assist community members with start-up capital and is an innovative way to increase community participation. The strategy should include financial management training in micro-credit schemes for all community members.

3.6 Community involvement management

Community involvement management is a way to structure and manage the communities' participation in the conservation of national parks. Lack of community involvement in TRS management would create gaps between the programmes and potential beneficiaries. It is essential to regard communities as resources that also need to be preserved, as well as to create a friendly environment where they feel they are participants in TRS management. Striking a balance between park authorities and the communities and offering them some form

of incentive, can go a long way in establishing sustainable environmental conservation collaboration (Muzeza, 2013:262).

At this level, the community is the key stakeholder in planning project development, by mobilising resources for better planning and actively engaging in elected steering committees to represent their fellow-community members (Safari, 2017:100). Safari further points out that involving local communities in the concept contributes to monitoring the use of government funds and increases accountability between public servants and communities. Furthermore, the action would help nurture personal and community behaviour.

Swanepoel and de Beer (2011:75) argue that community involvement in the management of TRS models should essentially be:

- To enhance the ability of a group of people to make knowledgeable decisions and prioritise needs.
- To promote the legitimacy of any communities to make up-to-date decisions and prioritise needs, and
- To promote continuous contribution of the local people in the development and monitoring of available services, facilities and projects and the expansion or adaptation of such services.

Given the above arguments, the researcher borrows from Swanepoel and de Beer's (2011:75) opinions that the communities' last level of involvement requires their willingness to contribute both human and natural resources and to support the project objectives.

It is the researcher's opinion that if the TRS is not correctly introduced and discussed with the community participants, it will not be accepted by the very people it is designed to benefit. The local communities must be accepted as equal partners in the conservation projects; if this is not done, and the communities feel they are being patronised, any attempts to introduce conservation in the national parks will fail.

However, if TRS is undertaken fairly and transparently to the people most affected by the cost of living adjacent to the parks, the project will grow and be a successful link in the value chain. It is very important to balance the overall costs of these natural reserves on both a national and international scale to avoid any possible net loss as has been experienced in some cases where an economic valuation study of the Virunga Volcanoes (and Bwindi Forest in Uganda). That study revealed that the value of the continued conservation of these areas outweighed the costs overall, however, much of the value of the forests was realised at a national and global level, while at the local point there was a net loss. The bottom line is that revenue sharing is meant to promote a reasonable allocation of the expenditure and returns from preservation.

This leads to the engagement of the government in co-operating with the community since the latter is the channel of the government's vision and objectives.

3.7 Government and community co-operation

Government policy is dependent on long-term commitment and can therefore only come to fruition in the long-term. In general, government policy is also dependent on a well-organised system through which it can implement and define its goals, decide the scale of and identify the policies through which development efforts are to be launched in deprived areas. Over more than two decades ago, Mmakola (1996, cited by Swanepoel & de Beer, 2011:79) argued that it is unfortunate that the government policy must be implemented before it means much and for that reason, an organised community is necessary to put policies into practice. Participatory management, therefore, helps to ensure that government policies are implemented. This is to explain the symbiosis between local populations and government about project implementation, such as TRS and compensation programmes, for example. The government can offer good programmes but if there is no collaboration between government and local communities, poverty reduction is doomed to fail.

In the context of this study, tourism in and around the national parks should benefit the country and all the players, including the poorest of communities neighbouring the protected areas. It is clearly explained in the Rwanda wildlife agency's document that revenue sharing is in line with the government's decentralisation policy in that it helps to empower local communities in their self-development, but its effectiveness will depend on the participation of local communities (ROR, 2005:4). The symbiotic relationship should make the rationale behind revenue sharing a reality. It is believed that groups of people surrounding protected areas know how to uphold park running, regardless of the reality that they live with problems from national parks (crop-raiding, social transformation). In this case, revenue sharing would be an effective tool to ameliorate the complexities that could occur in the absence of a conducive atmosphere for communities' symbiotic relationships with the national parks. Unless communities are empowered, integrated into the governance structures, and have some form of natural resource authority to participate in conservation and derive benefits from the national parks, the parks will continue to face significant problems such as poaching, people and animal conflict and illegal activities in the parks.

3.8 Agricultural encroachment into protected areas

Gutierrez et al. (2005:92) explained that tourism growth might boost demand for farming foodstuffs, create earnings for farming technology and increase farming activities. Ecotourism may be *raison d'être* for constructing a protected area and could offer motivation for natural and sustainable farming (Gutierrez et al., 2005:92). From an economic viewpoint, a protected area will be sufficiently strong if the exact group of people of socio-cultural and historical

context are in favour of protected areas (Gutierrez et al., 2005:92). This should involve local ecotourism platforms, clubs, community members, government representatives, ministries and officials as the affected stakeholders. In addition, agriculture extension officers, local biologists, economists and socio-economist surveyors should be regarded as experts or contactable persons for multidimensional benefits in the area of conservation.

Based on the above arguments, the researcher endeavours to illustrate the complexity of national parks conservation in the following sections.

3.8.1 The undefined role of communities

Blurred levels of local community participation in resource governance and lack of clarity on benefit-sharing mechanisms lead to mistrust between supporters of national parks and the communities.

3.8.2 In other dimensions, there is a lack of collaboration

There is usually a lack of collaboration between local communities and conservationists who view biodiversity conservation as a technical field that they assume local people do not understand. The top-down approach in nature conservation is contrary to contemporary conservation advocated by developmentalists (Wilshusen et al., 2002:18) because the process simply allows for the broad participation of people at a grassroots level, hence it is regarded as more people-driven than a government-led process. To this end, it has been postulated that the people living around the protected areas, if consulted and involved, ultimately decide the fate of forests and wildlife (Wilshusen et al., 2002:19). In this regard, it is clear that communities that are precluded from giving input into national parks conservation development, when the very environmental decisions have a bearing on their lives, particularly on the sensitive issues of their livelihood interests, easily abdicate from collaborating in conservation. This was one of the aims of the current study to establish at the three national parks under study.

3.8.3 Exclusive focus on ecological and biodiversity

There is no guarantee of successful conservation outcomes when groups of people like key actors are excluded from the management of natural resources. Much is expected of these communities in terms of collaborating in the preservation of protected areas.

3.8.4 The tendency of the national parks to impede local people

Social and cultural dysfunction and disruption are caused by restrictions and threats of removal from locals' important customary places. The study noted that this tendency disregards the fact that various cultural groups' perceptions, beliefs, environmental cultural practices, and interactions with the natural world could be harnessed for positive conservation outcomes.

There is an oversimplification of rural communities' motives and cultural practices to support conservation.

3.8.5 Governance processes in the national parks marginalise local communities

Local communities become marginalised because rapid institutional changes cause conservation power and authority to reside in high-level state, regional inter-governmental and international institutions. Management of natural resources by indigenous people using traditional practices are viewed with contempt. The general assumption is that local communities cannot guarantee the protection of wildlife species, which connotes that local communities cannot adapt to social change.

3.8.6 Tourism businesses accrue benefits for communities

There is also a question on the widely accepted generalisation that tourism businesses accrue huge benefits to communities through the 'trickle-down theory' in the form of employment creation and infrastructure development. While the macro-benefits from tourism at the countrywide and regional level are spoken of highly, it is noted that the 'trickle-down theory' has emerged strongly as the mode for the communities to benefit but this cannot do much to effectively benefit communities on a larger scale. This is simply because from a neo-liberal model, which drives this development model, economic development is problematic and Ong (2006, cited by Muzeza, 2013:95) argues:

"In contemporary times, neoliberal rationality informs action by many regimes and furnishes the concepts that inform the government of free individuals who are then induced to self-manage according to market principles of discipline, efficiency and competitiveness".

Two modalities are clear from this analysis on competition and commercialisation of the resources. As such, neoliberal conservation advocates for opening of natural resources to market forces, which entail that an increasing amount of life's facets are embedded within a competitive market whereby communal natural resources, either found inside or adjacent to national parks, could be traded in monetary means (commercialisation) to the global market. This is typical of the current non-consumptive ecotourism and safari operations emphasised in national parks communities. The relationship between natural resources and the local populace's livelihood cannot be underestimated. Culture and nature are not costly for their own sake but embedded in human valuation, which makes sense for them to conserve culture and nature as integral to their survival (Pearl, 1989, cited by Muzeza, 2013:95). Every culture of a people, as well as every religion, has distinctive concepts linking humans to the natural environment. These concepts are an embedded indigenous knowledge system, which is a force that motivates conservation at the local level—but only if communities see benefits from the resources and regard them as their own (Pearl, 1989, cited by Muzeza, 2013:95).

3.9 Community needs

Gachet and Brézillon (2005:11) note that the word community derives from the Latin word *munus*, which means gift and *cum*, which means together, among each other. As a result, community means “to give among each other”. A community can be described as an integrated social group of people sharing an environment, normally with shared interests. Furthermore, a community can be defined in a top-down manner as the social order at large, a confined set of people that reside in the same environmental area (Gachet & Brézillon, 2005:11). The authors indicated that physical closeness shows how persons connect in social interaction.

This discussion on community needs deals with the presence of local communities surrounding the protected areas, supervised by an organised institution. There is no institutional support for a development process, with the result that efforts collapse as soon as benefactors start to withdraw structural support (Swanepoel & de Beer, 2011:76). It could be said that there is no holistic approach supported by centralised, non-participatory decision-making. It is believed that development efforts are fragmentary, quite often contradictory, and nearly always in competition with each other to the detriment of those who need help (Swanepoel & de Beer, 2011:76). The principles of community development compel parties to concentrate on flexibility in a simple, step-by-step manner. The focus must be on local situations, be socially sensitive and responsive to the local human needs and wishes. Development cannot take place in a vacuum. Local structures need to be created by the people to promote development. Local communities are best placed to know their needs, such as clean water, electricity, schools, clinics and hospitals. Local people are aware of the chaotic situation and for that reason, all activities must be structured and appropriate to the task to arrive at the solution.

Importantly, to understand the economic benefits of the revenue-sharing scheme, discussions are needed between tourism authorities and local communities on employment opportunities and environmental change in general.

From the research, employment around the national parks remains elusive if it is considered the number of skilled inhabitants working in the infrastructures established in the vicinities. The current study noted with concern that over-publicised tourism performance and specifically the predicted plentiful employment benefits, is not a homogenous benefit across households and that not too many people in the rural areas could benefit substantially from it. There are obvious criticisms against over-emphasising tourism employment if considering the monetary benefits that come with it. In this view, not too many local people are qualified to occupy managerial positions in the overall tourism sector in the areas.

Therefore, the idealised employment opportunities in tourism around the protected areas have limitations in that only a particular number of people could be employed who are not necessarily native to the area. As a result, the per capita spread of tourism employment does

not compensate for the loss of existing livelihood practices in protected conservation areas. Caution is needed to prevent the risks to local communities that come with a loss of access to strategic natural resources through engaging the local communities in the project's decision-making.

3.10 Decision-making

Figure 3.7 illustrates decision-making as a series of actions linking exploring for information, learning from experience, and ultimately reaching a decision.

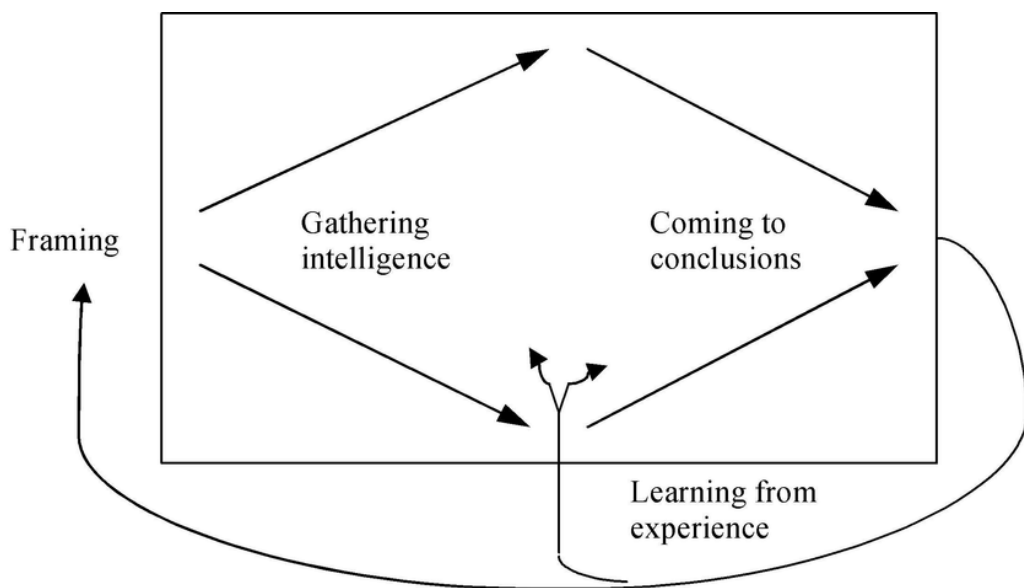


Figure 3.7: Stages of the decision-making process

(Turpin & Marais, 2004:156)

Participatory decision-making is crucial. Local knowledge and skills should be used through participation, local people are experts in their own situation and this expertise should be used (Swanepoel & de Beer, 2011:76). Nothing is done in isolation in the world in which we live. Swanepoel and de Beer (2011:76) indicate that local people value their situations, wishes and ambitions more than any person on the outside. This means that the people themselves are best placed to judge their own situations, which is why local people should be actively included in any decision-making process which impacts their lives. In addition, it is the autonomous right of people to participate in decisions that affect their lives. When communities are excluded from participating in issues that concern their lives, it is an infringement of their rights and therefore of their human dignity.

According to Swanepoel and de Beer (2011:76-77), community participation refers to local people who voice their opinion on tourism activities in the area in which they reside.

The area of participation where the community may get involved includes identification of the issues on which they can make decisions, their needs and wants, challenges they regard as significant or things they think should change. The reason for engaging the community is a process of good governance, to afford them a voice to address their needs and change their circumstances for the better. They need to take full responsibility and control over their own projects and processes with the help of coaches and mentors. Ideally, involving local communities in decision-making processes on a given tourism project affecting people goes together with fixing issues related to the economic benefits, including multiplier effects and socio-cultural benefits such as education and healthcare.

The absence of expected economic benefits and socio-cultural benefits creates mistrust in terms of conservation agencies and the communities, with the imposed limitations on their participation in natural resource governance negatively affecting their existing subsistence livelihood practices. In that context, it has been observed that tourism areas have become a playground of the rich, who benefit more from tourism to the detriment of the local people (Munthali, 2007, cited by Muzeza, 2013:99). However, in Muzeza's (2013) study, he argued that there are problems with a community development approach to the conservation of national parks. In other words, and more realistically, tourists who visit the protected areas under the new and not so popular experimental concept of planners, do not yield substantial enough benefits to create a decent livelihood for local communities. The current study aims to identify the role of local communities in decision-making concerning the three national parks under study.

3.11 Tourism supply chain

According to Nelwamondo (2009:58) and Zhang et al. (2009:348), tourism supply is related to the availability of key components of the tourism industry by host governments or destinations. Such key components comprise infrastructure (airports, hotels) and superstructure, for example, supermarkets and malls, attractions, recreation facilities, marketing/promotion and destination image. Further key components are supply chain actors such as airlines, tour operators, cruise ship lines and recreation facilities.

Safari (2017:104) points out that the tourism supply chain approach is still new in Rwanda. He argues that few studies on the subject had been conducted, including that of Ashley (2007b:4) but it is still too early to believe that the indigent understand how to diversify income, other than agrarian activities, hence there is no practical inclusion of the poor in tourism supply chain management.

Concerning the tourism supply chain on PPT in Rwanda, it is important to understand the process of establishing linkages between tourism firms and poor households in Rwanda and that there are opportunities for such entry (Safari, 2017:104). The scenario may differ between

upmarket tourism firms and smaller firms (Safari, 2017:104). In large markets, the tendency is to outsource the products from abroad and the impact on the poor is limited to wages and some skills acquired during on-the-job training in the host country (Safari, 2017:104). Ashley (2007b:5) indicates that smaller firms and hotels, for example, are an important domestic market for farmers and workers. For farmers, the hotel market has many advantages beyond the mere value of contracts, such as nearby reliable markets. This enables farmers to develop specialty crops suitable for tourist consumption like potatoes, rice, beans, maize flour, fruits and vegetables. However, there is a need for collaborative efforts within the private sector where farmers, hotels, government, and agricultural supporters could help by including poor farmers in the food chain and increase their sales (Safari, 2017:104). In the researcher's opinion, the supply chain concept could be used to strengthen the initiatives to connect and interconnect top-down and bottom-up stakeholders of the national parks for the country's economic growth in general and for the economic growth of communities living in the vicinity of the national parks. The supply chain mentioned here is a step for tourism development of the disrupted country, well-known because of the horrible Rwandan genocide against the Tutsi from 1994. This is briefly explained in the next section.

3.12 Genocide and tourism growth in Rwanda

According to Safari (2017:94), tourism was a secondary revenue stream, based mainly on viewing Rwanda's gorillas. Nielsen and Spenceley (2010:211) report that Rwanda's gorillas first attracted international interest due to the conservation efforts of Dian Fossey in the 1960s and 1970s. In the post-genocide period the gorillas themselves, as a tourism product, featured in numerous documentaries and attracted such international public figures as celebrities like the Microsoft™ magnate Bill Gates, actress Natalie Portman and the American media mogul and philanthropist Ted Turner (Safari, 2017:94). The researcher concurs with Safari (2017:94) that the celebrities' physical presence, during the Rwandan cultural annual gorilla-naming ceremony, has contributed to the reversal of the negative perceptions that many international celebrities had about the country. The question would be how many celebrity minds have a different perception? There should therefore be a further study on celebrity perceptions of the genocide impacts on international tourism. Nielsen and Spenceley (2010, cited by Safari, 2017:94) report that the attraction of gorilla tourism led to almost 22 000 visitors to Rwanda's three national parks in 1990. However, the numbers collapsed during the civil war, the genocide, and the subsequent periods of insecurity between 1994 and 1998. Nielsen and Spenceley indicate that 17 000 visitors came to see the gorillas in 2008, which is a significant increase in numbers from the late 1980s and an exciting recovery from only 417 tourists in 1999 after the reopening of the park (Nielsen & Spenceley, 2010, cited by Safari, 2017:94).

According to the NISR, the RDB reports that the number of gorilla visitors had increased to 19 783 in 2008. Table 3.1 indicates a tourist arrival trend up to 2015 and it shows that numbers

have been increasing. The arrival number of tourists to view the mountain gorillas reached 27 111 in 2015, while the total number in the same year to the three national parks reached 72 790, up from 43 083 tourists in 2008, indicating a viable and sustainable industry.

Table 3.1: Tourist arrival trends in Rwanda’s three national parks 2008–2015

Year	Volcanoes National Park		Akagera National Park		Nyungwe National Park		Total
	Number	%	Number	%	Number	%	
2008	19,783	46	18,490	43	4,810	11	43,083
2009	18,865	49	14,890	39	4,695	12	38,450
2010	23,372	52	16,180	36	5,755	13	45,307
2011	26,821	47	22,457	39	8,274	14	58,153
2012	28,483	47	25,200	41	7,621	12	61,304
2013	25,199	41	29,687	48	6,902	11	61,788
2014	27,885	41	30,846	45	9,140	14	67,871
2015	27,111	37	36,862	51	8,817	12	72,790

(NISR, 2016:14)

Reported trends indicate that Rwanda considers gorilla-viewing tourism as a valuable conservation tool in the country’s development, where the revenue funds the national parks and facilitates conservation activities; 5% of revenue goes to community projects (Nielsen & Spenceley, 2010:210). Since May 2017, the percentage of revenue sharing increased to 10% following the doubling of the gorilla-viewing permit fee.

The researcher initially questioned how equity and fairness is practised in the revenue-sharing scheme between the residents surrounding the protected areas and how conflict is managed with those outside of the parks who think they are advantaged participants in other forms of tourism. The familiarisation of gorillas to the presence of humans and gorilla trekking is a huge tourist attraction and survey findings report that despite strict rules applied to gorilla-family trekking, tourists wished to pay a higher price for a reasonable number of entry permits to the Virunga protected area, which are usually sold out (Safari, 2017:94). In May 2017, the gorilla trekking permit fees were doubled, from USD 750 per permit to USD 1500 per permit, according to a statement by the RDB, a state agency in charge of tourism (Independent.co.uk., 2017:1).

Beyond this one success story of tourism development in Rwanda, there is still a need to improve the distribution of tourism opportunities at other destinations of the country (Safari, 2017:94). In 1994, the primary tourist destination in Rwanda was the VNP in the Northern Province because of the gorillas and the VNP continues to dominate the tourism industry (Safari, 2017:94). Gradually other parks, such as the ANP and the NFNP, began to attract

visitors (Safari, 2017:94). In any country, political stability is an important factor for tourists because political instability damages and undermines the industry (Safari, 2017:94). This is what happened in Rwanda during the genocide and civil war between 1994 and 1998. Prior to 1994, Rwanda did not have an important tourism industry but as the number of visitors grew in the following years, the need for a clear tourism strategy became a priority (Safari, 2017:94). Goals needed to be set, objectives identified and policies and guidelines for tourism development needed to be implemented (Safari, 2017:94).

Safari (2017:94) reports that the period post-genocide of 1994 to 2001 marked a promising tourism-friendly environment by a new Rwandan government. Nielsen and Spenceley (2010, cited by Safari, 2017:96) indicate that the first meetings held with the private sector regarding the development of the tourism sector took place in 1999 in Kigali. From 2000 onwards, Rwanda participated in major tourism fairs and in late 2001 the Tourism Working Group, which included both the public and private sectors, was established (Safari, 2017:94). It is reported that the travel and tourism economy of Rwanda grew by 14% in 2018, ranked as one of the fastest rates in the world, according to the World Travel & Tourism Council's (WTTC) annual review of the economic impact and social importance of the sector released recently (Exploring Tourism Rwanda, 2019:1). Consequently, the Rwanda Tourism Strategy was developed and approved by Cabinet in 2002 and a National Tourism Policy was in place by 2006 (Safari, 2017:94). A revisited national tourism plan was designed and implemented in 2007 to create momentum (Nielsen & Spenceley, 2010:195). The tourism strategy identified visitor destination areas throughout Rwanda for tourism promotion and development (Safari, 2017:94).

The criteria for selection of these destination areas were based on climate, the mountain landscape, tourist targets and populations inhabiting the mountain (Safari, 2017:94). Nielsen and Spenceley (2010:212) report that the revival of tourism, based on high-end visitors to view gorillas, has played a role in the increase of tourist arrivals. This development is supported by Travelandynews (2019:1), reporting that that revenue from gorilla tourism has grown by 25% in Rwanda. At that time, word-of-mouth referrals ensured more visitors every year as a mode of international marketing. However, Rwandan tourism is not limited to gorillas and three national parks (Safari, 2017:95). The country also benefits from many business and conference travellers, mainly from the DRC as well as neighbouring countries of the EAC, Burundi, Kenya, Rwanda, Tanzania and Uganda (Safari, 2017:95). This is evidenced by the growing number of hotel bookings and restaurant reservations. Nielsen and Spenceley (2010, cited by Safari, 2017:97) also indicated that besides national and international investments in coffee and tea exports, the contribution of tourism has significantly increased revenue in the post-genocide period.

3.13 Chapter summary

In modern times, no one can deny that flourishing conservation is associated with sustainable development. It is not easy to envisage a sustainable future for the residents neighbouring the national parks from only agrarian activities—they need to diversify their income and capitalise on their proximity to the national parks. This chapter covered specific issues relating to the upliftment of people from tourism revenue sharing and such systems need to be extended to other local communities. National parks authorities should consider community conservation projects in their planning, which would also add value to community-friendly law enforcement activities supporting people's development in the destination area management.

The chapter also addressed local communities' benefits through their economic, socio-cultural needs, decision-making, communication, theories of decision-making and tourism potential. Tourism impacts, PPT, genocide and tourism supply chain were all discussed in the context of tourism in the conservation of the three national parks of Rwanda.

CHAPTER 4

RESEARCH METHODOLOGY

4.1 Introduction

This chapter describes the methodology applied in developing a tourism management framework for the conservation of Rwanda's three national parks. The chapter begins by outlining the research objectives and questions, followed by a discussion on the qualitative and quantitative methods and a combination of both as they were used to achieve the research objectives. The chapter also discusses the sampling and data collection methods.

4.2 Research design

According to Blanche et al. (2009:44), "a research design is a strategic framework for action that serves as a bridge between research questions and the execution or implementation of the research". The authors further indicate that:

"...research may be designed to be (a) exploratory, (b) descriptive or (c) explanatory. An exploratory study is used to make preliminary investigations into relatively unknown areas of research and employs an open, flexible and inductive approach to research as it attempts to look for new insights".

Denscombe (2010:105) contends that even though exploratory studies are more likely to be used where no theory exists on which to build, or where little information is available, most qualitative studies tend to use an exploratory approach. Denscombe further argues that:

"Exploratory designs are used mostly when researchers want to discover a new theory or provide fresh and unblinkered descriptions and in this instance, the design is not intended to test an existing theory".

Gravetter and Forzano (2009:149) argue that "a descriptive study intends to answer the current state of individual variables for a specific group of individuals". They note that a descriptive study is not concerned with the relationship between variables, rather a description of individual variables and phenomena. An explanatory design aims to provide causal explanations of a phenomenon (Blanche et al., 2009:44). The current study used a mixed methodology and therefore adopted two designs to complement each other— a descriptive and an exploratory design. The descriptive design was used to describe the impacts of tourism benefits on local communities around the national parks and the challenges faced, while the exploratory design aimed to gain deeper insight and ideas from policymakers and tourism experts to help develop a new tourism management framework for the conservation of three of Rwanda's national parks.

4.3 Qualitative versus quantitative research

To achieve a specific research objective, the first step is to identify suitable techniques and methodologies to be used (O'Connor, 2001:11). These methodologies are either qualitative or quantitative. Quantitative research relies on statistical analysis on which to test a hypothesis or to draw conclusions (Romeu, 2007:299). In most cases, quantitative methods conclude by proving or disproving a certain theory that was tested (Selamat, 2008:6). Researchers in quantitative studies should know exactly what they are looking for before they start the study (Neill, 2007:82).

On the other hand, qualitative studies use knowledge, thinking and discussions to draw conclusions (Hart, 1999:177). A qualitative study usually does not produce generalisable results. Qualitative methods are exploratory or descriptive in nature and are not normally used when theory testing is required (Babbie, 1998:6). In other words, qualitative research is finding out what has happened in a particular area of research and understanding why it has happened.

The difference between the qualitative and quantitative methodologies lies in the nature of data collected and how it is analysed. It is now widely accepted that the two methods complement one another (Fielding & Lee, 1991:101). A researcher could learn more about an area of interest if both quantitative and qualitative techniques are applied (Selamat, 2008:5) and qualitative methods are extremely useful to enable a researcher to place quantitative findings in context (Ross, 1999:11).

The main objective of the study was to develop a new tourism management framework. Much of the thinking would come through discussions and expert knowledge. However, firstly, a descriptive survey among the local populations around the national parks had to be undertaken to gather data for the basis of the framework development. For this reason, the researcher elected to use a mixed methodology in this study.

4.4 Population under study

Gray (2009:112) defines a population as the total number of possible units that are included in a study. The population in this study comprised three different target groups. These were local residents living adjacent to the three national parks, the park authorities and government officials (policy-makers) in tourism and conservation-related matters and finally tourism and conservation experts.

The researcher interviewed local residents to get information related to the impacts of PPT on their communities and their views on the conservation of the parks. They were asked about their awareness of the tourism revenue-sharing policy and give their perceptions on its

implementation as well as the compensation fund. Respondents were selected from 41 sectors surrounding the national parks (Bush et al., 2010:16; Nsabimana, 2010:55; Crawford, 2012:6).

The second category of respondents included park authorities and government officials (policymakers) in charge of tourism and conservation-related matters. The researcher approached this category to obtain information regarding the current strategies developed regarding PPT, conservation and management of the parks as well as the participation of local residents surrounding the parks in tourism and conservation matters and decision-making. In this category, NGOs acting within the conservation environment of the national parks were approached.

Six Park authorities—three park wardens and three community conservation managers—from the three national parks were interviewed. Two authorities from the Rwanda Development Board Tourism and Conservation Unit (RDB-TC) were also interviewed—the officer in charge of the revenue-sharing scheme and the officer in charge of research and monitoring. In addition, three NGOs operating within the national parks including the Nyungwe Nzisa Project operating within NNP, the International Gorilla Conservation Program (IGCP) operating within VNP and the Karaoke Research Centre also operating within VNP responded to the interviews. An officer from REMA was also interviewed.

The third respondent category included tourism and conservation experts. These provided expert opinion on the previous two respondent categories' interview responses. Their opinions helped the researcher in the formulation of a tourism management framework for the conservation of the three national parks.

4.5 Sample size and sampling techniques

This section discusses sample size and sampling techniques used for the three types of respondent categories.

4.5.1 Local residents adjacent to Rwanda's national parks

It must be noted that the unit of analysis under the first category of respondents (local residents) was a household. According to the NISR (2016:23), by 2014 Rwanda had 2.41 million private households spread among 416 administrative sectors. This translates to an average of around 5 794 households per sector. Considering that 41 sectors surround the three national parks under study and given an average of 5 794 households per sector, it means that the total population under this category was 237 554 households. In this context, Sekaran (2000:295) explains that a population of 1 000 000 units will require a sample size of at least 384 units. Since the total population under this responded category was less than one million, the sample of 384 households was sufficient. However, after consulting the Cape

Peninsula University of Technology's (CPUT) statistician, the sample size was increased by three times, given the geographical location of the three national parks under study.

The statistician argued that the three national parks under study were geographically scattered and therefore there might be different factors that could influence the findings. For instance, human-wildlife conflict (HWC) on each of the parks and the type of tourism activities conducted in each park could be among the factors influencing the findings. The statistician recommended a sample of 384 households in every park under study, which amounted to 1 152 households in total. However, due to time constraints and accessibility difficulties, the researcher administered 1 034 questionnaires of which 993 questionnaires were fully completed.

A multi-stage sampling technique was used to arrive at the actual participating households. Firstly, the researcher identified all the administrative sectors surrounding the national parks, which numbered 41 sectors (6 at ANP, 23 at NNP and 12 at VNP). Given the geographical dispersion of the sectors, the researcher deliberately selected a sample of 5 sectors from each of the three national parks under study, which were later picked using purposive sampling.

To begin with, the researcher set some selection criteria. Firstly, the sample should have at least one sector from the remote area and at least one sector located at the main entrance of the park, believing that there might diversity in terms of perceptions of residents living near the two different locations. For ANP, 5 of the 6 sectors neighbouring the park were randomly selected while from each of the other two parks, 5 sectors were purposively picked, bearing in mind the two conditions set above—remoteness and park entrance.

Households that responded to the questionnaire were selected using convenience sampling (a non-probability sampling technique). This technique was used due to factors including accessibility, limited time and the vastness of the study areas that were to be covered. It was not easy for the researcher and research assistants to return to the study areas often as most of the places were very remote. The researcher proceeded by approaching households to get the head of the household to respond to the questionnaire. If there was nobody at home, the researcher and his assistants moved to the next household.

4.5.2 Government officials and decision-makers

For the government officials (policymakers), a purposive sampling technique was used. This means that the selection depended on the initiative of the researcher to identify an official involved in the matters of tourism and conservation in Rwanda. Target respondents were drawn from different institutions that were believed to be involved in tourism and conservation issues as indicated under the section on population of the study. The researcher managed to reach 11 authorities including 3 officers from the parks (1 from each park), 1 officer from RDB-

TC in charge of the tourism revenue-sharing scheme, 1 officer from REMA, 2 officers from NGOs and 5 executive secretaries of sectors in neighbourhoods of the national parks. In total 11 officers were reached.

4.5.3 Expert opinion technique

An expert opinion technique can be described as a research technique that attempts to solicit and compile opinions from a carefully selected panel of experts within a particular field of study (Donegan, 1997:27; Fraser, 1999:496; Cline, 2000:87; Nehiley, 2001:14). The expert opinion was used on the basis that “two heads are better than one” (Ludwig, 1996:12). The overall aim of the technique is to gather stakeholder knowledge to assist in solving a problem. The researcher intended to obtain similar arguments that would eventually be used in developing a tourist management framework. Even if there is no similarity in arguments this technique often helps to clarify the situation and improve understanding of the field of research in question (Singh & Kasavana, 2005:29). The main objective of this study was to develop a tourism management framework for the conservation of three of Rwanda’s national parks and the opinions of experts in the field were paramount.

4.5.4 Selection of experts

The most critical part in using the expert opinion technique is the selection process (Lang, 2003:559) because the calibre of the panel of experts largely determines the quality of the results obtained (Bramwell & Hykawy, 1999:50; Day & Bobeva, 2005:111). The aim of the selection process was to identify individuals that matched the criteria outlined for inclusion in the study. Some researchers have suggested that it is the duty of the researcher to ensure that there is a representative cross-section of the stakeholders involved (Linstone & Turoff, 2002:101). There was absolutely no attempt made to ensure that all stakeholders and players in the tourism and conservation areas were included. It was simply a case of getting the best people to participate in the research, but critical attention was given to the fact that people who participated should at least be academics, practitioners, consultants or policymakers.

The first issue regarding the panel selection process involves the decision of how to define an “expert” in the context of a particular study. This is not a simple task (Fisher, 1978:379). The definition of an expert very much depends on the subject matter being investigated (Campbell et al., 2004:430) and normally concludes with a strict set of criteria with which an individual must comply to be included in the study (Bramwell & Hykawy, 1999:50).

Gutierrez (1989:33) defines an expert as a person who is actively involved in the area of research, has an intimate knowledge of the area and is committed to a deeper understanding of that area. Therefore, experts should be chosen according to their “knowledge, capabilities and independence” (Reid, 1988:234). A well-selected team of experts should have the ability

to identify a broad range of ideas and perspectives concerning a specific area of interest (Saisarbitoria, 2006:788). The panel's level of expertise is critical to the success of the study as these individuals need to make a valid and competent contribution to the process (European Commission, 2003:4). It was crucial to attract the interest of the right type of people who understand the issues, have visions, and represent a substantial variety of viewpoints (Czinkota & Ronkainen, 1997:831). In the case of this study, an expert's level of expertise was extremely important as otherwise they would be unable to provide enough information, both in breadth and depth, to complete this study successfully. Experts must be both knowledgeable and experienced in the areas of protected areas tourism and conservation.

When selecting individuals based on their expertise one needs to use clearly defined selection criteria that are transparent and can be verified (de Meyrick, 2003:12). As already mentioned, these criteria can radically differ, depending on the scope, context and aims of the research. Expertise is normally decided based on an individual's knowledge of the subject matter or their publication record (Gordon, 1994:202; Campbell et al., 2004:432). Determining a person's expertise is a very subjective process so in this research an expert was determined based on their publication record.

The size of the expert team is important because the reliability of the results improves with an increase in the number of participants (Dalkey et al., 1972:76). One must remember that it is not the aim of a qualitative study, as the expert opinion technique, to produce statistically significant results (Gordon, 1994:203). The size, yet again, depends very much on the nature and context of the research being undertaken (Hasson et al., 2000:1009). The number of participants required in an expert study depends on how many experts are required to deliver a representative collection of knowledge (Story et al., 2001:490).

Brockhoff (1975:300) suggests that the minimum acceptable size of a successful expert opinion study can be as low as four participants. On the other hand, Reid (1988:237) reports on a healthcare study that had an expert team as large as 1 685 members. However, typically the size of the expert team varies between 7 and 35 participants (Day & Bobeva, 2005:112). Czinkota and Ronkainen (1997:832) argue that a panel size larger than 30 participants rarely uncovers any additional new ideas. Ludwig (1997:2) suggests that a high level of reliability can be achieved with a team as small as 13 members. If the expert team size is too big (several thousand) there is a high chance that all the panellists may not display the appropriate level of expertise to participate fully (Saisarbitoria, 2006:786).

The success and credibility of the results obtained from an expert opinion technique very much depend on the composition of the team of experts (Campbell et al., 2004:430). The results of a successful team selection process are twofold, firstly, choosing an appropriate team improves the probability of the study producing high-quality outcomes and secondly, once the

outcomes are published there is more chance that they will be accepted by both academics and practitioners (Lang, 2003:560).

In this study, the selection process began by identifying a team of experts for possible inclusion in the research. The selection was an extremely rigorous process that commenced in June 2013 and ran up until December 2015. The selection criteria for this research comprised individuals who had delivered two or more presentations on tourism and conservation-related topics at peer-reviewed international hospitality and tourism conferences or written two or more papers in refereed journals (or a combination of both) on topics related to this research.

This approach was applied as it was deemed that it would reveal people who have an intimate knowledge of management and conservation of protected areas and tourism and would have the insight that would allow them to prioritise these criteria effectively (Cline, 2000:101). To arrive at the number of potential participants, the researcher used the opportunity of an international tourism conference (ATLAS conference) that was held in Rwanda in June 2013 and Tanzania in June 2015. Lists of participants at both conferences were received but several opportunities arose where the researcher was able to interact with presenters just for acquaintance purposes. The researcher was himself present at both conferences but did not reveal his intention to use participants as potential expert panellists so as not to bias them. After the conferences, the researcher used the lists of delegates and conducted Internet searches to select those who met the criteria set above. An email was sent to those that were identified, inviting them to the study and also asking them to recommend other experts they thought would be suitable for the study. The target population size was not determined but the researcher wished to maximise the size as much as possible because the response rate in qualitative studies is very low. This study managed to receive completed responses from 26 experts out of 156 interview guides that were sent out.

4.6 Data collection methods

A variety of methods were used to collect information, depending on the type of respondent. In the case of local communities, a survey method was used. The researcher developed a structured questionnaire that was administered with the help of two research assistants. A pilot study was first carried out in two different villages with 10 individuals from each village. It was discovered that some people did not know how to read, or they simply lacked the knowledge to answer the questions. The researcher decided to change the methodology and re-administered the same questionnaire using a semi-structured interview technique at two other villages and the results were consistent. This technique allowed respondents to give information easily to the researcher, rather than them attempting to complete the questionnaires themselves.

This technique proved useful as the realisation rate of responses was 96% of all targeted households. The researcher also gained insight into topics that were not included in the questionnaire but still relevant to the study, bearing in mind that the main objective of the study was to use some qualitative data to develop a new tourism management framework for the conservation of Rwanda's national parks and not necessarily proving statistically the objectives.

The questionnaire was set in English with a translated version in the local language of respondents, *Kinyarwanda*, to make it understandable for those who did not speak English. Even though the researcher and the research assistants spoke both languages, it was important to translate it so that there were fluency and consistency in the questions that were posed to every respondent. This phase began in May 2013 and ended in December 2014. The pilot study, the actual survey and interviews with tourism policymakers were all done within the same period.

For the policymakers, the researcher conducted face-to-face interviews with eight interviewees and telephonic interviews with three other interviewees. The researcher was guided by a pre-designed interview schedule that guided him in what questions to ask so there was an element of consistency and relevance. However, the questions were open-ended, and interviewees were free to say whatever they wanted on each question. It was a very time-consuming process because the 8 face-to-face interviewees refused to be recorded and asked the researcher to make notes as they proceeded. Three of these interviewees had asked to have the interview guides before the meeting to prepare the answers. The researcher recorded the information in a dedicated notebook, sometimes using codes for the answers that were given.

4.7 Pilot test

In testing the validity and reliability of the community residents' questionnaire a pilot study was conducted on 10 community households from each of the three parks under study. These communities were not considered for actual data collection of the study. According to Sekaran (2006:113), "a pilot study is conducted when a questionnaire is given to just a few people with an intention of pre-testing the questions". "Pilot test is conducted to detect weaknesses in design and instrumentation and to provide proxy data for the selection of a probability sample" (Cooper & Schindler, 2011:65). Kvale (2003:279) contends that a pilot study ensures that flaws, limitations and other weaknesses in the research are discovered and corrected before the actual study is conducted. Minor changes were made to the questionnaire before the collection of research data.

4.7.1 Reliability of the research instruments

Reliability measures consistency by how a measurement tool used in the same way every time on similar subjects and similar conditions yields consistent outcomes (Cronbach, 1951). Cronbach's alpha is a reliability coefficient that indicates how well items in a set are positively correlated to one another (Sekaran, 2003:155). Mugenda and Mugenda (2003:27) indicate that to establish the reliability of the study instrument it must produce consistent data. The reliability is established through repeated trials. Statistically, reliability is based on the idea that individual items should produce results consistent with the overall questionnaire. To establish reliability, Cohen et al. (2013a:79) recommend Cronbach's alpha α , which involves splitting data into two and computing the correlation coefficient. According to Engelbrecht (2012:342), a value of 0.8 is generally acceptable for a cognitive test as an indicator of reliability. Bryman and Cramer (2005:32) argue that reliability of 0.7 to 1.0 is usually considered suitable. For this study, an alpha coefficient of 0.7 and above was assumed reliable.

4.7.2 Validity of the research instrument

Validity can be described as the extent to which the instrument measures what it purports to measure (Jankowicz, 2005:97). Validity ensures meaningfulness and the accuracy of conclusions that are based on the research results (Bryman & Cramer, 2005:32). Validity can be examined from three dimensions. These include content, construct, and criterion validity (Orodho, 2009:22). The current study relied on instruments developed in other related studies as well as concepts generated from a broad range of relevant literature and expert opinion. Content validity is based on the extent to which a measurement reflects the specific intended domain of content. Content validity was ensured by designing the instrument according to the study variables and their respective indicators of measurement. Construct validity was maintained by restricting the questions to the conceptualisations of the variables and ensuring that the indicators of a particular variable fell within the same construct

4.8 Data processing and analysis

The raw data collected from the field was transformed into meaningful information as it was cleaned, edited, and then coded. Marshall and Rossman (2007:82) and Kothari (2012:97) define data analysis as "the computation of certain measures along with searching for patterns of relationships that exist among data groups". Data processing and analysis is essential to ensure that all relevant data is gathered for making contemplated comparisons and analysis (Mugenda, 2008:34). The researcher used descriptive analysis, correlation analysis and regression analysis to analyse the data. The data collected from the open-ended questions were analysed using content analysis.

According to Prasad (2008:177), content analysis is any research technique for making

inferences by systematically and objectively identifying specified characteristics within the text. Yin (2002:24) defined content analysis as a research method that uses a set of procedures to make valid inferences from the text. Neuman (2006:8) lists content analysis as a key non-reactive research methodology and describes it as a technique for gathering and analysing the content of the text. The 'content' refers to words, meanings, pictures, symbols, ideas, themes, or any message that can be communicated. The 'text' is anything written, visual or spoken that serves as a medium for communication (Neuman, 2006:11). Content analysis was used to analyse qualitative data. The text of the open-ended questions was studied and subdivided into themes, guided by the objectives of the study. The themes then guided the researcher in the analysis of the data. According to Mbwesa (2006:12) and Mugenda and Mugenda (2003:14), descriptive analysis involves finding numerical summaries to provide a deeper insight into the characteristics and description of the variables under study.

Correlation analysis involves using the collected data to determine whether a relationship exists between two or more quantifiable variables, where the magnitude and direction of correlation is expressed by the correlation coefficient (Cohen et al., 2013a:133). According to Cohen et al. (2014:89), linear regression analysis involves measuring the linear association between a dependent and an independent variable. It assumes the dependent variable is predicatively linked to the independent variable. Regression analysis therefore attempts to predict the values of a continuous interval or scaled dependent variable from the specific values of the independent variable.

The study used both qualitative and quantitative data as advocated by Neuman (2006:5) and Babbie (2007:7). Qualitative data from open-ended questions were analysed using content analysis while the Statistical Package for Social Sciences (SPSS) software version 21 was used in running the statistical tests. SPSS was chosen because, as indicated by Castillo (2009:11), it is user friendly and gives all the possible analyses. The categories of responses were identified, coded and entered into an SPSS variable datasheet for both descriptive and quantitative analysis.

The descriptive analysis generated measures of central tendency, that is, frequencies, percentages, means and standard deviation which were presented in tables and interpreted appropriately. Conditional linear regression tests were conducted before the data were analysed further. These tests determined the adequacy of the sample size for factor analysis. Autocorrelation tests determined if there was a correlation between the residue terms for any two observations, multicollinearity tested whether more than two independent variables were inter-correlated, outlier tests identified if any observation was far-placed from other observations, Bartlett's test examined if correlation matrix was an identity matrix and normality

tests determined if data were normally distributed. After conducting diagnostic tests, factor analysis was done to identify factors that might not be instrumental to the study. Finally, correlation analysis and regression analysis were conducted.

4.8.1 Correlation analysis

Pearson's correlation coefficient was used to determine the magnitude and direction of the relationships between the dependent variable and independent variables. The values of the correlation coefficient are between -1 and +1. A value of 0 implies no relationship, a +1 correlation coefficient indicates that the two variables are perfectly correlated in a positive linear sense, that is, both variables increase together. A value of -1 correlation coefficient indicates that two variables are perfectly correlated in a negative linear sense, meaning that one variable increases as the other decreases (Neuman, 2006:7; Sekaran, 2008:65; Kothari, 2012:101; Collis & Hussey, 2013:77).

The purpose of the Pearson's correlation coefficient was to establish the magnitude and direction of the relationship between each independent variable with the individual parameters. The correlation strengths were interpreted using Cohen et al.'s (2013b:137) decision rules, where 0.1 to 0.3 indicates a weak correlation, 0.31 to 0.5 indicates moderate correlation strength and greater than 0.5 indicates a strong correlation between the variables. The decision rule was used by Nguyen and Quynh (2011:66) in their study of the determination of the correlation between customer attitude towards consumer issues and expectations on government intervention.

4.8.2 Regression analysis

To determine the capacity of variables, independent and dependent, a regression analysis is used. When there is a linear relationship between two variables, the regression analysis predicts the outcome of the independent variable to influence the dependent variable. The t-test and F-test, R square and Analysis of Variances (ANOVA) tests were generated by SPSS to examine the significance of the influence of the independent variable on the dependent variable and to establish the extent of the relationship between the two variables. Hierarchical Moderated Multiple Regression model (HMRM) was also used to establish "the effect of the moderating variable on the whole model where the R^2 values with and without the moderating variable were compared" (Brace et al., 2012:126).

The research objectives were tested using the p-value approach at 95% confidence level based on linear regression analysis output produced by SPSS. The decision rule was that the objectives should be rejected if the calculated p-value was less than the significance level (0.05) and accepted if the calculated p-value was greater than the significance level (0.05). The significance of the independent variables was tested using F-test and p-value

approaches. The decision rules were to reject any objective where the effect of the independent variable(s) is insignificant if the computed F-value exceeds the critical F-value or if the p-value was less than the critical value of 0.05. Since the study had five independent variables, a simple linear regression model was used for each of them. Multiple linear regression analysis was used to establish the combined relationship between all independent variables and the dependent variable. Table 4.1 below shows the results of the regression analysis of all the independent variables.

Table 4.1: Equation 3.4

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e \dots\dots\dots \text{Equation 3.4}$ <p>Where,</p> <p>Y= Conservation of national parks</p> <p>X₁ = Community capacity building</p> <p>X₂= Decision-making process</p> <p>X₃= Reporting channels</p> <p>X₄= Compensation process</p> <p>X₅= Local community involvement and participation</p> <p>ε = error term</p> <p>B₀, 1, 2, 3, 4, 5 = Regression Sensitivities/Coefficients</p>

4.9 Ethical considerations

To ensure that the study was fair and impartial and did not harm respondents in any way, ethical issues were considered. Firstly, the researcher obtained a letter from CPUT which, in principle, approved the research. With this letter and a research synopsis, the researcher contacted the RDB to express his desire to conduct a study on the Rwandan National Parks and the local communities around them. After due consideration, the RDB granted permission for the study to be conducted (see Appendix E).

The approval letter from RDB and the research proposal were submitted to CPUT’s Ethics Committee This was done to ensure adherence to all CPUT’s guidelines in conducting primary research. Approval was granted by CPUT’s ethics committee for the research to be undertaken (see Appendix D). In addition, the research questionnaires used to collect primary data had an introductory paragraph informing the participants about the objective of the study, that the study was being conducted for academic purposes, that the collected data would remain confidential and that participation in the study was voluntary.

4.10 Chapter summary

The chapter described the methodology applied in the study. The research design was defined, stating the population, the sample size used for the study and tools used to gather research data. The chapter highlighted the three categories that were targeted for the study, being local communities around the three national parks under study, government officials and park authorities, as well as tourism and conservation experts. The different techniques used to determine the target population for information gathering were explored.

The concepts of reliability and validity as applied in this study were explained. A detailed description of the methods used to analyse the data was an important section of this chapter. Regression and correlational analyses were used to analyse the quantitative data while content analysis was used to report and analyse qualitative data.

Specifically, the regression analysis used the dependent variable of conservation of national parks, while a combined relationship of five variables including community capacity building, decision-making process, reporting channels, compensation process, local community involvement and participation were used as independent variables. Finally, the chapter described the proposed tourism management framework for this study with brief explanations of each of the variables of the framework.

CHAPTER 5

DATA ANALYSIS, RESULTS AND DISCUSSION

5.1 Introduction

This chapter presents the results of the data analysis. The study employed percentages, frequencies and correlation analysis to test how community capacity building, decision-making processes, reporting channels, the compensation process and local community involvement affect the conservation of Rwandan national parks.

5.2 Response rate

The study administered 1 034 questionnaires to selected household respondents surrounding the three national parks under study with a target of achieving at least 300 completed questionnaires from each park's local communities. In total, 993 questionnaires were completed and returned, which represented a response rate of 96%. This response rate was considered most adequate based on the view of Babbie (2004:8). The high response rate was attributed to the follow-up on respondents by the researcher and research assistants where in most circumstances they assisted respondents to fill in the questionnaires and returned them immediately.

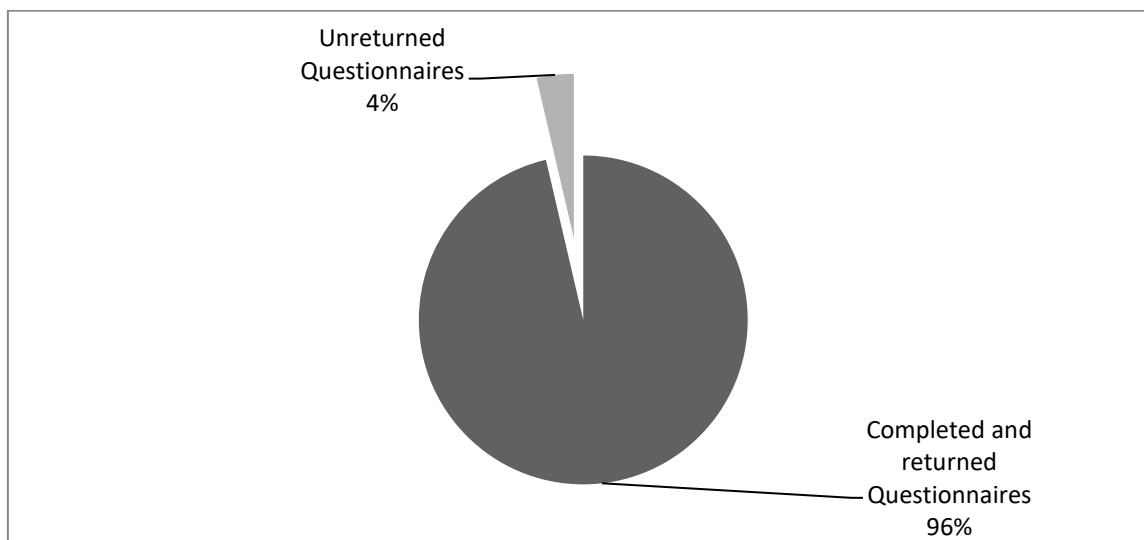


Figure 5.1: Response rate

5.3 Demographic characteristics results

In this section, the results of the demographic characteristics of the respondents are presented. These include the age, gender of the respondents, respondents' role in the family and their

level of education. Demographic characteristics of the respondents are important because any activities based on the involvement of the local communities in the conservation of the national parks utilises such information for planning and logistic purposes.

5.3.1 Age of the respondents

Concerning the age of the respondents, the study findings show that 54.1% of the respondents were between 31 and 40 years old, 35.4% were between 41 and 50 years, 5.7% were between 21 and 30 years while 4.9% were less than 20 years old. The findings demonstrate that households close to Rwandan national parks are headed by middle age individuals who are still energetic and can be used by the government and other bodies mandated to conserve the parks by mutual arrangement.

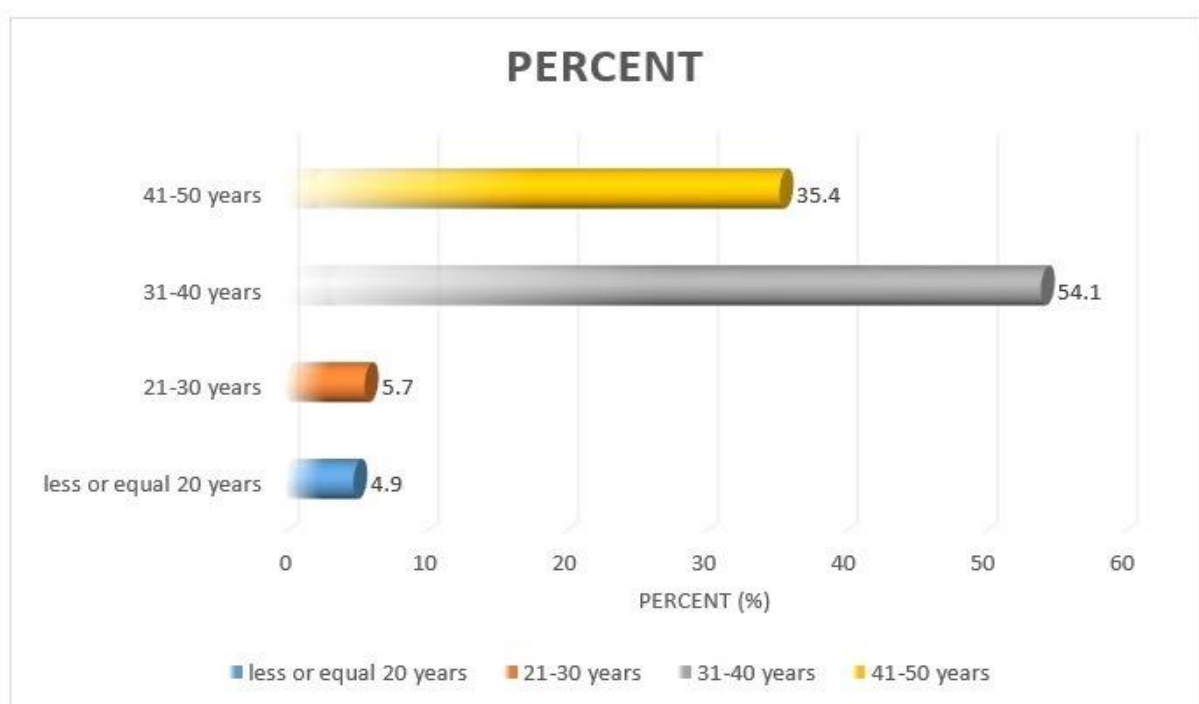


Figure 5.2: Age of the respondents

5.3.2 Gender of the respondents

Figure 5.3 indicates that the majority (61%) of the households living near the national parks were headed by males while 39% were headed by females. The findings show that the interviewed households are headed by members of both genders. The study findings give a clear understanding of the role of various genders in conservation efforts of the Rwandan national parks.

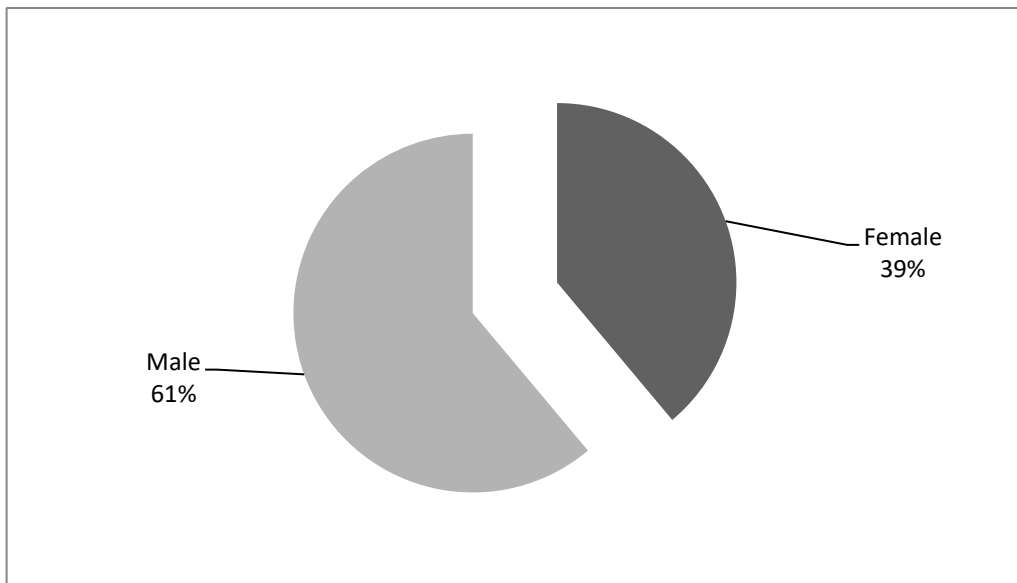


Figure 5.3: Gender of the respondents

5.3.3 Respondents' role in the household

Figure 5.4 indicates that 82% of the interviewed respondents were household heads and 18% were dependants. It must be noted that since most of the respondents were household heads their views reflected those of most of the members of the family. Similarly, the household head understands how the family can leverage on closeness to national parks to earn a living as well as assisting the government conservation efforts to ensure maximum revenue is generated from the national parks.

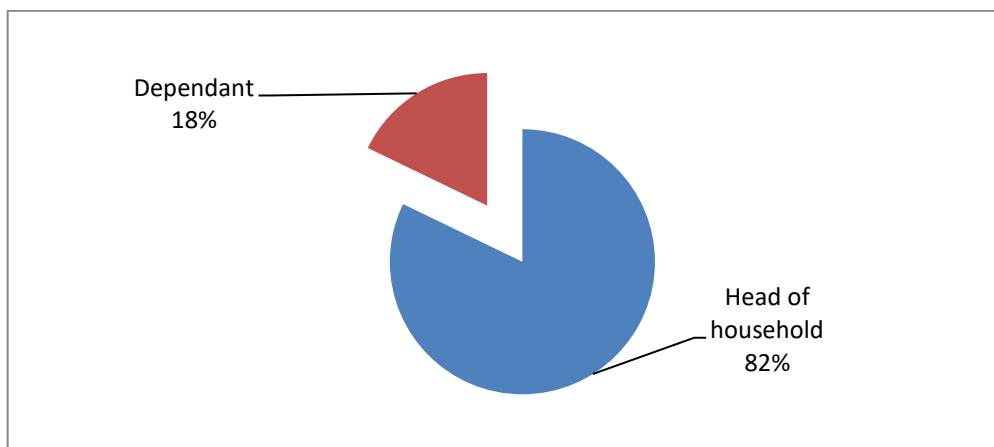


Figure 5.4: Respondents' role in the household

5.3.4 Respondents' highest education level

The findings in Figure 5.5 show that respondents with primary education were the highest at 37.3%, followed by those with secondary education at 28.4% and those who have never attended school at all at 23.5%. Those who indicated that they had attended vocational training and were university graduates were 6.2% and 4.6% respectively. The findings reveal that residents who lived close to the national parks had a low level of education, which infers that those with an education sought different sources of livelihood, most probably in major towns and/or cities where they can access white-collar jobs, leaving the less educated behind. These findings indicate a need for local community capacity building and training in matters of environment conservation and tourism to enable a decent living for residents through activities in the national parks close to their homes.

Lack of education by local communities living close to the national parks could imply that these people engage in illegal activities in the national parks for a living. Hence training those, paying and involving them in the conservation of national parks could lead to significant improvement in the management of the Rwandan national parks.

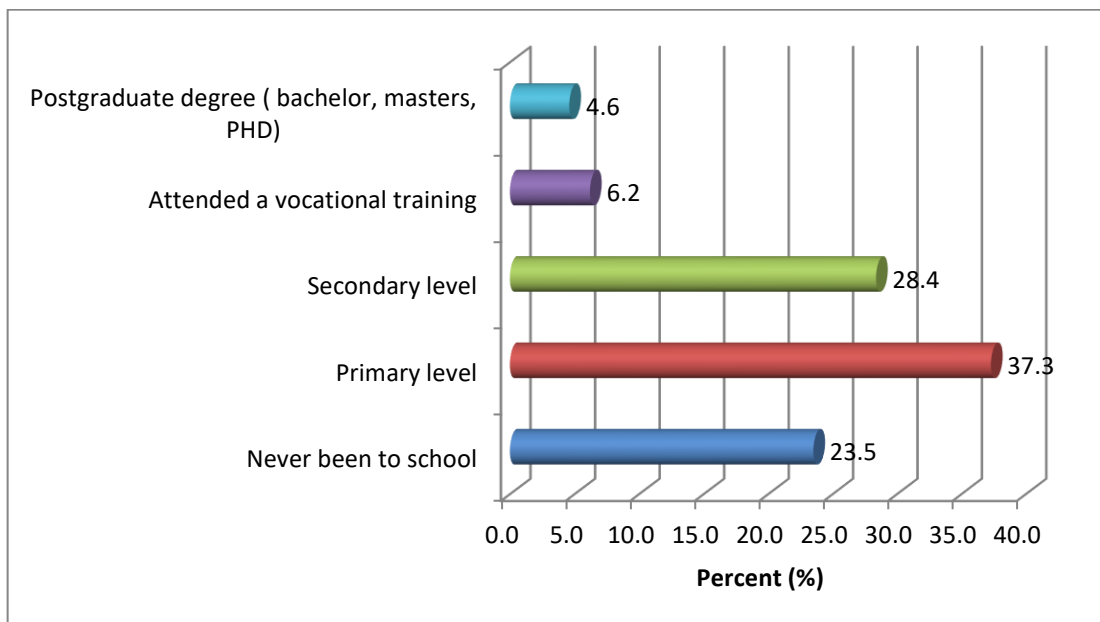


Figure 5.5: Respondents' highest education level

5.3.5 Park closest to respondents' home

The findings in this section show that 37% of the respondents live close to ANP, 33% live near to VNP and 30% live adjacent to NNP. The results further indicate that the study proportionally included households living close to the three national parks in Rwanda. The study captured

the perspectives of these individuals, and the findings can be used in the conservation efforts in all three national parks under study.

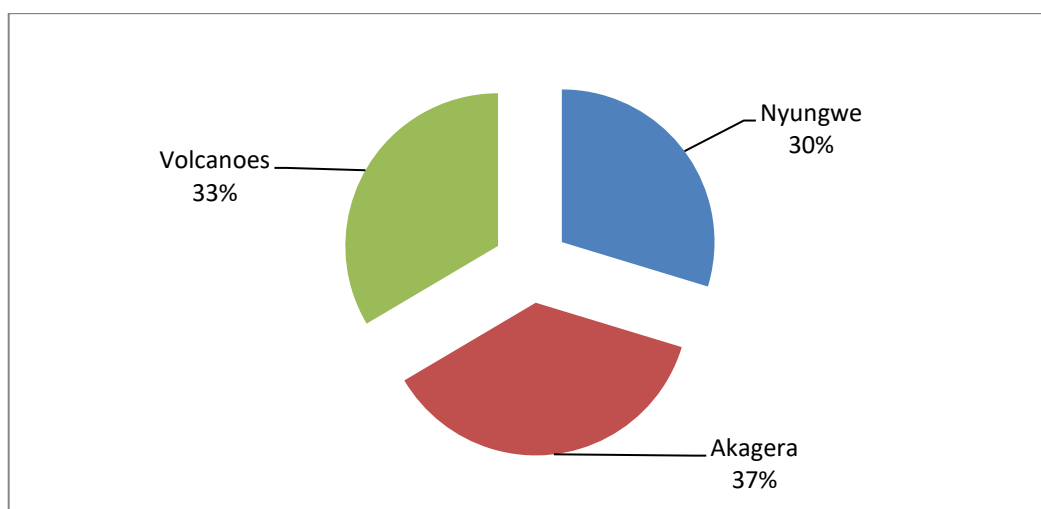


Figure 5.6: Park closest to respondents' home

Table 5.1: Respondent's sector of residence

No	Sector's name	Frequency	Percent	Cumulative %
1	Ndego	74	7.5%	7.5%
2	Rwinkwavu	78	7.9%	15.3%
3	Mwiri	76	7.7%	23%
4	Rwimbogo	83	8.4%	31.3%
5	Karangazi	73	7.4%	38.7%
6	Kitabi	60	6%	44.7%
7	Kivu	55	5.5%	50.3%
8	Bweyeye	62	6.2%	56.5%
9	Gisakura	64	6.4%	62.9%
10	Rangiro	65	6.5%	69.5%
11	Cyanika	66	6.6%	76.1%
12	Nyange	59	5.9%	82.1%
13	Kinigi	67	6.7%	88.8%
14	Mukamira	54	5.4%	94.3%
15	Bugeshi	57	5.7%	100%
	Total	993	100%	

5.4 Descriptive results of predictor variables

This section presents the descriptive findings on how respondents responded to the statement used to measure the effect of local community capacity building, the decision-making process, reporting channels, compensation process and local community involvement in the conservation of national parks in Rwanda. Based on this raw data, the framework proposed in Chapter 3 was validated to test whether the adoption of suggested activities may have an impact on the conservation of national parks. In this section, percentage, weighted average, and standard deviation were used and the findings were presented in tables.

5.4.1 Local community capacity building and conservation of national parks

The study sought to establish whether local community capacity building influenced the conservation of the national parks in Rwanda. Table 5.1 presents the findings on the level of agreement or disagreement by the respondents on the statement used to measure local community capacity building and conservation of the national parks in Rwanda.

The respondents were asked whether all community members around national parks were properly trained in the conservation of the parks. The results show that 42.7% and 43.2% strongly disagreed and disagreed respectively. The mean of 1.84 confirms that most of the respondents disagreed. The standard deviation of 0.99 indicates a slight variation of responses from the mean response. The findings imply that local communities around the national parks are not trained in park conservation.

On whether the local community members were properly educated on national park management, the mean score of 1.87 indicates that most of the respondents in the survey disagreed. The result shows that local communities that live close to the three national parks under study lacked knowledge of national park management. The study further sought to find out from the respondents whether the training initiative aimed at equipping local residents with management skills helps in the management of Rwandan national parks. In addition, should the promotion of community-based programmes to ensure participatory methods and to address the inefficiency problem be encouraged. The mean scores of 4.93 and 4.84 respectively indicate that most of the respondents agreed and strongly agreed.

Finally, the respondents were asked whether community capacity building creates an enabling environment needed by local communities to benefit from tourism and conservation of national parks. The corresponding results as shown by the mean score of 4.84 indicate that most of the respondents agreed.

Based on these findings, local communities that live around the three national parks could not be involved in conservation efforts of the national parks. However, the findings indicate that community members showed the willingness to be involved in government efforts of national

park conservation. Building the capacity of local communities, especially on matters of environment management and involvement in tourism activities, will benefit both the national parks and local communities through income generation.

Table 5.2: Local community capacity building

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Standard Deviation
All community members around national parks are properly trained to conserve the park	42.7%	43.2%	5.7%	4.6%	3.8%	1.84	0.99
Local community members are properly educated on national park management	43.2%	41.1%	7.3%	2.4%	5.9%	1.87	1.06
Training initiatives aimed at equipping local residents with management skills help in the management of national parks in Rwanda	5.4%	5.4%	6.5%	42.4%	40.3%	4.93	1.08
Promotion of community-based programmes to ensure participatory methods and to address the inefficiency problem should be encouraged	3.8%	3.2%	8.1%	43.0%	41.9%	4.84	0.97
Community capacity building create an enabling environment needed by local communities to benefit from tourism and conservation of the national parks	3.2%	4.6%	7.3%	42.4%	42.4%	4.84	0.97

It must be remembered that conservation is only one tourism niche. Several studies revealed that there is an acute shortage overall of trained manpower in Rwanda and in the conservation arena, this is no exception. The approach and implementation of capacity building and the development of local people in conservation has so far been fragmented. The quality of tourism professionals, including hotel employees, guides, waiters, and other key personnel is inconsistent and below par when compared with regional competitors (ROR, 2009:8).

The training facilities currently operated have poor equipment, limited books and Internet access, inconsistent curricula, and lack of qualified staff. Tourism is a people-to-people activity where human interaction plays an important role. For any tourism destination, such as national parks, to emerge as an important stop on the itinerary of the international tourist, the human factor and quality of service is very important. Capacity building is also needed at all levels of the government on tourism, including local administration and in destination-level communities (ROR, 2009:8).

In the framework of this study, the national biodiversity strategy of ROR (2016:77) predicts that building the capacity of local people to enable them to participate actively in conservation, will involve continuous and short-term tertiary education. The strategic plan provides that capacity building of local people will be strengthened by the implementation of short courses, medium and long-term training programmes for the benefit of early to mid-career professionals as well as the upgrading of experienced staff from various institutions involved in biodiversity, agro-biodiversity, and biotechnology management in Rwanda. Short courses are required for updating and upgrading knowledge and skills in short-term training. It is also recommended that post-graduate diploma programmes are organised for biodiversity conservation practitioners in medium-term training whilst long-term training would include MSc and PhD programmes. The government strategy states that training will be offered by different institutions specialised in biodiversity, agro-biodiversity, biotechnology, and related fields. These range from public and private institutions of higher learning to non-government organisations.

In an interview with an RDB official, he indicated that there was a clear strategy on how they were currently developing the capacity of local communities. He observed that through partnerships with international donors like USAID, WCS, GIS and others the office has been able to mobilise some people around the national parks to join co-operatives and they were taught some skills including handicraft and basket weaving. Furthermore, RDB develops capacity through funding schools in the local communities, which in turn benefits their children. RDB also undertakes awareness campaigns through mass media.

Capacity building is needed for conservation, tourism, and entrepreneurial activities so that communities have more livelihood alternatives. One expert who participated in the study pointed out that the government should conduct community capacity needs assessments to identify knowledge gaps. He added that skills like sales skills, communication skills, tour-guiding skills, knowledge of the natural history of East African flora and fauna as well as marketing skills could be vital for local people seeking employment and entrepreneurial opportunities. It is important to note that the skills needed depend on the type of opportunities available.

A government official who participated in this study indicated that there is a need to bridge the gap between university studies and technical level skills. He believes that schools need to develop tailor-made courses for less educated people so that they can also benefit from available opportunities. Most of the time, technical schools operate in the cities and towns and the rural areas miss these opportunities.

One expert who participated in the study noted that the government could implement scholarship programmes for guides to learn more about flora and fauna with appropriate

training facilities which could be beneficial to their localities. Another expert emphasised the role of the private sector in the overall value chain. He believed that on-the-job training at new hotels and restaurants could increase employment opportunities for local people. They could benefit from other training opportunities such as English, service skills, tourism-related skills, including chef, maintenance, guiding, management, finances, and administration.

Another expert suggested the promotion of bursaries/scholarships in tourism studies and interest-free study loans for students to study tourism. One expert said that local people who are considered as key stakeholders should be trained in various aspects of tourism. From his experience of working with local people, he strongly believed that local communities in rural areas already have certain indigenous traditional knowledge (ITK) that may be tapped into if they are to make a living out of tourism. In addition, entrepreneurial, marketing, and other skills could also form part of the training programmes. Two other expert participants highlighted that having national park/community-related programmes that build good relationships with all communities adjacent to national parks could be the best way to create a long-term partnership with the government to mitigate matters related to national parks.

5.4.2 Decision-making processes and conservation of the national parks

The study further sought to test whether local communities living around the three national parks were involved in decision-making in matters of the management and conservation of the national parks. The respondents were asked whether community members around national parks were involved in decision-making on conservation issues of the national parks. The findings showed that most of the respondents strongly disagreed (42.4%) and disagreed (41.1%), while 4.2% agreed and 4.6% strongly agreed. This implies that many local communities are not involved in decision-making on the conservation of the three national parks.

The researcher further asked the respondents whether local community members were properly involved in the allocation of resources and tourism planning. These statements had a mean score of 1.83 and 1.85 respectively, which implied that local communities were not involved in resource allocation or tourism planning. This highlights a lack of local community involvement in decision-making on issues of conservation of the national parks.

Finally, on the topic of a legal framework to ensure a participatory approach on matters of conservation of the national parks, the findings showed that 45.7% and 38.1% of the respondents strongly disagreed and disagreed respectively. The results further highlight the lack of local community involvement in decision-making concerning national park conservation activities.

Table 5.3: Decision-making process

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Standard deviation
All community members around national parks are involved in decision-making to conserve the park	42.4%	41.1%	7.6%	4.3%	4.6%	1.88	1.04
Local community members are properly involved in resources allocation	42.4%	41.9%	8.4%	4.9%	2.4%	1.83	0.95
Local community members are properly involved in tourism planning	43.5%	40.3%	8.4%	3.2%	4.6%	1.85	1.02
Decision-making on national parks management is done after consulting key stakeholders	45.9%	38.4%	7.3%	3.5%	4.9%	1.83	1.04
There is a legal framework to ensure a participatory approach on matters of national parks conservation	45.7%	38.1%	7.3%	5.7%	3.2%	1.83	1.01

Generally, the findings in this section established that there was no stakeholder participation in national park conservation in Rwanda. Lack of involvement of local communities implies that the government has no leverage on local communities in the management of national parks. On the other hand, the local communities do not benefit from the revenue generated from the national parks close to where they reside. Based on the argument of game theory, local communities may end up destroying the national parks by utilising the natural resources for their own interest. A participatory approach is the only way to ensure national parks are conserved and managed properly since everyone will benefit from this.

Given the above, the researcher argues that the more the people are involved in project selection and included in decision-making the more they are likely to realise the benefits they could get from those projects. Another important factor to consider is that the Rwandan government has several socio-economic programmes going on across the whole country, not only within the communities neighbouring the national parks. If communities around national parks are not well sensitised and conscious of the projects implemented in their area as an additional benefit from TRS then they will be regarded as benefits provided by any other socio-economic programmes implemented across the country. A good communication strategy should be designed for this purpose, especially in remote areas where people do not often interact with tourism and park authorities. Figure 6.1 in the following chapter depicts the proposed tourism management framework that could maximise communication between local communities and other stakeholders for the conservation of Rwanda's national parks.

To ensure an inclusive partnership and stakeholder involvement in decision-making, ways must be found to ensure both broad representation from the private sector and civil society and the voicing of community issues. Private sector and civil society actors play a central role in biodiversity protection and management and have the advantage of being more independent of political pressures than governmental agencies. Participation of non-State actors could also enhance investment in the biodiversity sector and facilitate the development of mechanisms for a broad framework for building partnerships between them and the government (ROR, 2011a:23). Interestingly, in the interview with officials, they revealed that the role of the private sector and NGOs in national parks conservation is more to create awareness in communities and bring projects that will provide alternative livelihoods for community members so that they are not dependent on the forests.

Apart from the interviews with officials, the researcher also considered the opinions of the experts. Most of them were excited to share their views on the role that the private sector could play, such as training institutions and non-government organisations (NGOs), in the spirit of maximising tourism benefits to local people around national parks and achieving conservation goals.

Most experts believed that the locals should be trained in entrepreneurial skills and that mobilisation carried out among these communities should be tailored to the specific conditions of each community. The needs of the individual communities usually differ and that is what should inform the role of different stakeholders wishing to maximise benefits to the communities. Training institutions should play a central role. However, policies would be required along with funding to provide these institutions for local community members.

As in the government sector driver, it is ideal to support those who are ready and willing to take part in the projects with training and advice. The experts advanced that the private sector and NGOs should intervene in tertiary education by supporting schools and universities, assist in establishing linkages, assist in developing partnerships in connecting people's capacities and establishing and managing micro-credit schemes. The institutions should impart knowledge and skills to all stakeholders, especially the local communities, on conservation and preservation of resources, train people and identify areas for development. The private sector and NGOs have capabilities to fund and facilitate the training and equipping locals with skills to diversify their sources of income other than relying on national park resources.

The Park authorities and policymakers indicated that there has been significant collaboration between the government and NGOs as well as the involvement of the private sector. Several investors have been attracted to invest in and around the national parks to provide employment opportunities for local community residents, even increasing the linkages through supply chains. The private investments noted by the RDB official include Mountain Gorilla View Lodge,

Sabyinyo Silverback Lodge (SACOLA Lodge), Virunga Lodge, Mountain Gorillas Nest, Jack Hanna's Guesthouse, Bisate Lodge, Bishops House, Five Volcanoes, Kinigi Guesthouse and Amakoro Songa Lodge. In and around NNP were Nyungwe Top View Hill Hotel, Nyungwe House (a partner hotel by One & Only) and Gisakura Guest House, while in and around ANP were Akagera Game Lodge, Ruzisi Tented Lodge and Karengwe Bush Camp.

5.4.3 Reporting channels and conservation of the national parks

The study sought to establish whether there were effective reporting channels between the stakeholders involved in the conservation of the three national parks under study. The respondents were asked whether there is a proper system to ensure matters concerning national park management are reported on time. The results show that 41.9% and 41.9% of the respondents disagreed and strongly disagreed respectively. The statement had a mean of 1.89, which confirms that most respondents disagreed and strongly disagreed. The results imply that the conservation of national parks lacks proper systems to ensure that matters concerning national park management are reported on time.

Secondly, the study sought to establish whether the effectiveness of reporting channels enhances the conservation of national parks and tourism. The findings show that 43.0% and 41.6% of the respondents agreed and strongly agreed, which implies that having effective reporting channels does enhance the conservation of national parks and tourism.

The study further sought to establish whether the country has effective reporting channels for problems and conflicts such as HWC and whether stakeholders in the tourism sector, including local communities, have been empowered with modern facilities for reporting conflicts. The mean of 1.84 shows that the majority disagreed and strongly disagreed. This implies that channels for reporting HWC are not effective and stakeholders, especially local communities, have not been empowered to report matters relating to conservation of the national parks.

The findings in this section also imply that agencies involved in the conservation of the national parks have failed to incorporate effective reporting channels in the management of the national parks. Lack of reporting channels means that local communities, although they have experienced the destruction of the national parks, they have no way to report incidents. This situation could derail the efforts to conserve national parks. Reporting channels are key components in any national park conservation framework.

Table 5.4: Reporting channels

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Standard deviation
There is a proper system to ensure matters concerning national park management are reported on time	41.9%	41.9%	6.8%	4.6%	4.9%	1.89	1.05
Effectiveness of reporting channels enhance conservation of national park and tourism	3.0%	5.4%	7.0%	43.0%	41.6%	4.85	0.98
Our country has effective reporting channels of problems and conflicts such as human-wildlife conflict	41.9%	44.9%	5.4%	3.5%	4.3%	1.84	0.99
Stakeholders in the tourism sector, including local communities, have been empowered with modern facilities for reporting conflict	42.2%	41.6%	8.9%	4.3%	3.0%	1.84	0.96

To improve awareness of government policies, such as the tourism revenue-sharing policy and compensation policy for the beneficiaries, these communities need to receive information regularly through a variety of channels, including written material, radio broadcasts and public meetings. This must be done regularly and should be considered a key operational requirement for the parks. If authorities are not disseminating these schemes and policies, in all likelihood many other important things are not being communicated. Without a high level of regular communication, 'participation' has no real meaning.

Local communities have some traditional governance and consultation structures. These structures may not always be ideal, but they could provide a starting point for the communication process with communities. It is important to be aware that when communicating with local communities about issues such as percentages of benefit-sharing schemes these may be alien concepts that need to be repeated over time until local communities can comprehend the idea. Depending on the level of education of these communities, the language may have to be revised and communicated in simpler terms to prevent confusion of people.

5.4.4 Compensation process of conservation of the national parks

Another component of the national park conservation framework is the compensation aspect, which is to ensure that all the stakeholders involved in the conservation are properly

compensated and rewarded for their efforts. The study sought to establish whether the compensation of stakeholders who conserve national parks was adequate. The respondents were asked whether the benefits from tourism projects are sufficient for them not to invade the park for economic use. The mean of 1.88 implies that most of the respondents disagreed, meaning that the benefits they got from tourism in their neighbouring parks were not sufficient for them to earn a living.

The study further sought to determine whether there was a compensation framework to encourage them to conserve park resources. The results show that 47.8% and 35.7% of the respondents strongly disagreed and disagreed respectively. The findings imply that most of the respondents were not part of the compensation framework aimed at encouraging them to conserve park resources. Furthermore, the mean score of 1.87 means that the respondents disagreed that they were part of the compensation fund of the government to mitigate the damage caused by wild animals.

The study also sought to establish whether there were proper laws that manage the compensation of communities around national parks. The study findings showed that 43.8% and 42.2% of the respondents strongly disagreed and disagreed respectively. According to the respondents, Rwanda has no proper laws that manage the compensation of the local communities living around the national parks, which makes them disinclined to participate in conservation activities of the national parks.

The findings in this section imply that compensation programmes for local communities are critical components in a national parks' conservation framework. These compensation programmes include benefits, a compensation framework, and necessary laws to regulate the compensation process so that no one is left out.

Table 5.5: Compensation process

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Standard deviation
The benefits I/we get from tourism projects are sufficient for me /us not to invade the for economic use	42.4%	39.7%	8.6%	5.7%	3.5%	1.88	1.02
There is a compensation framework to encourage them to conserve park resources	47.8%	35.7%	8.1%	5.4%	3.0%	1.80	1.00
Compensation fund put by the GoR to mitigate the damages caused by wild animals	44.6%	39.7%	5.7%	3.8%	6.2%	1.87	1.10
There is proper law that manages compensation of community around national parks	43.8%	42.2%	6.5%	4.6%	3.0%	1.81	0.96

During data collection, experts were asked to provide their views on the compensation fund since there were issues already revealed by community residents in the household questionnaire. One expert indicated that the beneficiaries and local government officials, as well as valuation officers from the parks or any other responsible agents, all need to be part of the assessment process. On-site visitation is necessary to determine an equitable compensation figure. A standard assessment form needs to be put in place, as well as a policy or law that stipulates the steps to be followed before compensation is made.

One expert invoked the need for clear and unambiguous compensation guidelines while another expert believed the process should be kept separate from the road traffic accident beneficiary fund. Other measures should be dealt with after this primary challenge has been overcome.

Another expert believed that very few government systems operate without corruption although it is much less pervasive in Rwanda than elsewhere. It is not entirely clear if a compensation scheme is feasible in the situation described. He felt that the problem of delays was also important as people quickly lose trust in such systems. He mentioned that community and park involvement would improve the system. It is managed by remote institutions with little interest in either the communities or the intended conservation outcomes (reduced conflict, improved relations, and perhaps improved livelihoods). This expert felt that the compensation scheme should ideally be run by an institution with a much greater interest in the problem and much

closer to the ground. He suggested that compensation should be administered at an individual park level by a joint park/community organisation.

Another expert respondent discouraged compensation for losses and suggested rewards for positive behaviour by compensating villages based on gorilla population numbers at the end of the year. This would require conducting accurate animal counts but essentially communities would be rewarded for the number of gorillas alive at the end of each year. The expert further suggested the use of insurance schemes to reduce moral hazard and ensure that the community has some liability as well. It is important to provide education on HWC mitigation measures to assist communities in reducing the conflict themselves and it is recommended to select a local village committee who runs the scheme at a cell level and could therefore monitor individuals more closely. Any funds not claimed could be used for local social development projects.

A further expert stated that the process considers leaders of the parks and people at both cell and village level, while the last expert suggested that the process requires strict accountability and frequent rotation of those in charge. Training should be given to those involved and signatories must be different.

An expert respondent indicated that revenue-sharing schemes should not be based purely on the fact that someone lives next to a protected area. In addition, these schemes should not be used as a way of 'bribing' the local people into conservation but rather to develop an attitude change and appreciation of nature. The concept of protected areas should be viewed from the environmental positives that they offer rather than merely the narrow perspective of economic benefits to communities. The aspect of tourism in the national parks should be managed through carefully selected market communication for the local people to realise sufficient benefits.

Another expert indicated that the discussion of benefits needs to be broadened from the purely material and largely financial aspect to include cultural goods. An analysis of the contributions that conservation and protected areas could make to wellbeing (livelihoods) indicates that the provision of "cultural ecosystem services" is developing. Engaging with local cultural values, connections to nature and the natural world has the potential to influence and strengthen the way conservation initiatives interact and engage with local communities. He added that considering the cultural values of communities is relevant to all aspects of the protected areas and tourism policy and practice. This could be particularly important in the identification and development of institutions through which real and meaningful engagement of local communities in conservation and protected area management could be established.

For example, the historical and still surviving cultural institutions of communities living around Rwenzori National Park in Uganda are beginning to be understood in terms of their traditional

roles in controlling and managing access to the mountain and forest area and their natural and cultural resources. The Uganda Wildlife Authority is beginning to establish partnerships with these institutions to improve both protected area management and local engagement in the conservation process.

A third expert indicated that employment is the main benefit of tourism but is limited by the size of the operation. Indirect employment through the tourism supply chain, local linkages, as well as through tourism staff spending their salaries in local villages is also a benefit. There is a need to promote all linkages and to assist households to diversify their livelihoods and move away from their great dependence on tourism, which is risky. Finally, another expert believed that the parks under study have not done well enough by communities because they are sidelined and 5% TRS is insufficient so maybe the government should revise it to 15%.

5.4.5 Local community involvement/participation in national parks conservation

The final component of the national park conservation framework is the local community involvement and participation. This involves bringing the local communities on board in actualisation of the conservation projects starting from the launching of the projects to actual development initiatives. The respondents were asked whether there was a scheme known by all community members because it was officially launched within the community. The mean of 1.96 implied that most of the respondents disagreed. The respondents further disagreed that the scheme has had positive impacts on the lives of community members.

On whether the projects implemented in the community were discussed with community members, the results showed that 43.2% and 39.2% of the respondents strongly disagreed and disagreed respectively. Similarly, 42.2% and 39.7% of the respondents strongly disagreed and disagreed that the selection of people to participate in the projects was done fairly and based on the provisions agreed by community members.

The respondents were asked whether many development initiatives solicited the participation of all concerned stakeholders. The findings showed that 41.1% and 44.6% of the respondents strongly disagreed and disagreed respectively. A mean of 1.86 confirmed that the majority of the respondents disagreed with the statement.

The general implication of the findings was that most of the respondents were not included in the actual projects aimed at conserving and managing the national parks. To obtain desirable results in national parks conservation there is a need for the local community to be involved actively in actualisation of conservation projects to make them feel they are part of the projects, and their efforts are appreciated. The study findings concur with Baral and Heinen (2007:522) who found that many development initiatives solicit the participation of all concerned stakeholders at the relevant level, for the sake of not only efficiency and equity of the

programmes, leverage of donors and demands of local communities but also for the sustainability of the initiatives.

Similarly, Ribot (2004:1590) argued that the real reason for soliciting such community participation is to create and produce an enabling environment. This enabling environment is needed by these stakeholders, especially local communities, who have been vulnerable to the negative impacts of tourism, partly because many tourism resources occur in their areas, so they need to have a real stake in development activities.

Safari (2017:97) explains that community participation in tourism expands livelihood opportunities for the poor by ensuring that the barriers to their participation are removed. The concept of CBT overlaps with PPT and its main aim is to involve local people in tourism initiatives, including the use of local people to engender effective conservation. Supporters of PPT argue that some of the most successful examples of tourism occur in countries that actively support community involvement in tourism and there is a positive correlation between community participation and PPC. Simply put, Tosun (2006:495) states that these studies focused mostly on participatory development approaches in development studies although they provided an important guide towards more interactive and authentic community participation. However, local communities are important players in the conservation and tourism industry, which will bring them economic benefits.

Apleni (2012, cited by Safari, 2017:97) discusses the typology of community participation to fit the tourism industry. After a thorough review of these studies, Apleni examined community participation in the tourism industry and designed a model that could be applied specifically to tourism and conservation. His model suggested three forms (typologies) of participation which

“...contextualises community participation as a categorical term that allows participation of people, citizens or a host community in their affairs at different levels, being local, regional or national” (Apleni, 2012, cited by Safari, 2017:97).

These are spontaneous community participation, coercive community participation and induced community participation.

This finding in the current study is, however, contrary to the belief of government authorities who opine that the scheme has had a tremendous impact on the communities around the national parks. For example, AMC (the company co-managing ANP with the Rwandan government) indicated that by 2015 through the 5% TRS scheme, a good number of programmes had been funded, such as social infrastructure (schools, health centres), local associations and small enterprises.

Table 5.6: Local community involvement

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Standard deviation
The scheme is known by all community members because it was officially launched within the community	37.3%	45.1%	6.8%	5.9%	4.9%	1.96	1.06
The scheme has had positive impacts on the lives of community members	43.0%	41.4%	6.8%	5.1%	3.8%	1.85	1.01
The projects implemented in our community were discussed with the community members	43.2%	39.2%	10.0%	3.8%	3.8%	1.86	1.00
The selection of people to participate in the projects was done fairly and based on the provisions agreed upon by community members	42.2%	39.7%	8.1%	3.5%	6.5%	1.92	1.11
Many development initiatives solicit the participation of all concerned stakeholders	41.1%	44.6%	6.5%	3.2%	4.6%	1.86	1.00

The community projects that are supported included a cassava processing plant (which has been mentioned by many respondents from ANP surroundings), the construction of health centres, a milk collection centre and a women's cultural centre in the Gatsibo district, construction of additional water provision sites and bee-keeping associations. In 2013, the government scheme also funded an electric wired fence on the western border of ANP, which has greatly reduced incidents of human-wildlife contact.

According to the researcher and from various government reports, the TRS impact is noticeable. The problem here might be about communication and sensitisation of the local people that all these projects are the fruit of TRS. Through Rwanda's EDPRS, various developmental programmes support community projects throughout the country and if not well communicated, residents may confuse funding sources given to them and hence not notice the impact TRS is making on the lives.

5.4.6 Conservation of national parks

Table 5.6 presents the findings on the effort made by the respondents in the conservation of the national parks under study. The researcher asked the respondents whether they provided information to the park management regarding potential harm to the biodiversity, like poaching. The results show that 41.4% and 41.4% of the respondents strongly disagreed and disagreed

respectively. Similarly, 36.2% and 45.9% of the respondents strongly disagreed and disagreed respectively that they do not go into the park to cause any harm to the biodiversity.

On whether the respondents represented other community members in the management board of the park, the majority, as shown by the mean response of 1.91, disagreed. The researcher further asked the respondents whether they participated in the conservation activities whenever the government leaders asked them to do so. The findings show that 43.8% and 40.8% of the respondents strongly disagreed and disagreed respectively. Asked whether they were members of a local movement/NGO that advocates the importance of biodiversity conservation to the community members, 41.4% and 41.4% of the respondents strongly disagreed and disagreed respectively.

The study findings in this section show that most of the local communities do not participate in the conservation of the national parks close to them. This can be partly attributed to the five components on which the study focuses, namely local community capacity building, decision-making process, reporting channels, compensation process and local community involvement. The study tested whether the inclusion of these components in a national park's management framework has a significant effect on the conservation of the three national parks under study.

Table 5.7: Conservation of national parks

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Standard deviation
I provide information to the park management regarding potential harm to the biodiversity, like poaching	41.4%	41.4%	7.0%	5.1%	5.1%	1.91	1.07
I simply don't go in the park to cause any harm to the biodiversity	36.2%	45.9%	9.7%	4.1%	4.1%	1.94	0.99
I represent other community members in the management board of the park	38.4%	45.9%	7.0%	3.8%	4.9%	1.91	1.02
I just participate in the conservation activities whenever government leaders ask us to	43.8%	40.8%	8.4%	2.7%	4.3%	1.83	1.00
I am a member of a local movement/NGO that advocates the importance of biodiversity conservation to the community members	41.4%	41.4%	9.2%	3.0%	5.1%	1.89	1.04

These findings are in line with Rutagarama's arguments (Rutagarama, 2006, cited by Nsabimana, 2010:56) that poaching in Akagera area has greatly reduced wildlife populations post- the civil war and what was formerly the north of the Park is now a settlement area for returned refugees. Nsabimana (2010:56) reports that the lakes remaining in the park are routinely used to water domestic cattle. Nsabimana, however, contends that ANP is worthy of a visit despite all the challenges mentioned above. There is plenty of game, such as buffalo, elephants, zebras, giraffes, hippos, and various antelope, which are reasonably visible. The lakes support some of the highest concentrations of hippo in Africa, as well as many large crocodiles.

REMA (2007:14) argues that forest fragmentation for agriculture and human settlement has resulted in the isolation of plant and animal populations to small forest patches, restricting their natural dispersal and consequently increasing their vulnerability to genetic erosion. The degradation of freshwater wetlands has been severe, due to pollution and siltation from unsustainable land use (including deforestation) which leads to soil erosion.

5.4.7 Impact of conservation of national parks

In this section, the study sought to determine some of the impacts the local communities have experienced due to the national parks. The researcher asked the respondents whether

employment opportunities for local residents in this area have increased because of tourism, to which 41.6% and 42.4% of the respondents strongly disagreed and disagreed respectively. These results imply that local communities did not experience an increase in employment due to tourism and being closer to national parks.

Asked whether infrastructure facilities like roads, public transport and electricity have improved because of tourism in this area, 41.6% and 38.9% strongly disagreed and disagreed respectively. Similarly, 44.1% and 41.4% strongly disagreed and disagreed that opportunities for local businesses (farmers, cattle herders, and handcraft) have increased because of tourism. The respondents further disagreed, as shown by the mean of 1.94, that tourism had increased the monthly income of residents in this area.

The study further sought to establish from the respondents whether levels of crime and social problems (for example prostitution, gambling and drugs) in this area have increased because of tourism (this is a negative impact), to which the majority of respondents also disagreed and strongly disagreed. Finally, asked whether entertainment and recreational opportunities have developed in this area because of tourism, the findings show that 43.0% and 42.2% of the respondents agreed and strongly agreed.

Table 5.8: Impact of conservation of national parks

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Standard deviation
Employment opportunities for local residents in this area have increased because of tourism	41.6%	42.4%	8.1%	2.7%	5.1%	1.87	1.03
Infrastructure facilities like roads, public transport, electricity have improved because of tourism in this area	41.6%	38.9%	11.6%	3.8%	4.1%	1.90	1.02
Opportunities for local businesses (farmers, cattle herders and handicraft) have increased because of tourism	44.1%	41.4%	7.8%	2.7%	4.1%	1.81	0.98
Tourism has increased the monthly revenues of residents in this area	37.8%	45.7%	6.8%	4.1%	5.7%	1.94	1.06
The level of crime and social problems (e.g. prostitution, gambling and drugs) in this area has also increased because of tourism. This is a negative impact	46.5%	38.9%	6.8%	4.1%	3.8%	1.80	1.00
Entertainment and recreational opportunities have developed in this area because of tourism.	4.3%	5.1%	5.4%	43.0%	42.2%	1.86	1.03

The study findings imply that the local communities that live around the national parks had not seen the impacts of the national parks in terms of employment opportunities, income generation, infrastructure development and creation of business opportunities. This calls for the incorporation of the local communities in conservation frameworks of the national parks in Rwanda (Mbaina, 2005). The study findings align with Mason (2003:28) who found that impacts were noted, which the researcher evokes to support later statements in this study. Mason points out that the impacts of tourism could be positive and beneficial but also negative and detrimental. Whether impacts are perceived as positive or negative depends on the value position and judgement of the observer of the impacts (Mason, 2003:28). For example, in the economic sector, Mason put forward his argument, saying that only economic impacts are considered, and the example relates to the building of a hotel in an area with little tourism activity. An observer can express a view that the building of the hotel will create more jobs, both in the building and running of the hotel and the observer would consider this to be a positive impact (Mason, 2003:28). Equally, another observer may claim that although jobs will be created, they will only be part-time, semi-skilled, poorly paid and lacking a career structure, as well as taking people away from traditional forms of employment (Mason, 2003:28).

The study findings also concur with Choi and Murray (2010:591) who support Sun's (2002) study. However, in many of these studies, the seasonality character of the tourism industry has brought some disappointments, as then there is a disruption in employment structures. One may ask the meaning of the seasonality character of the tourism industry. In short, seasonality in the context of this study is associated with social, economic, and environmental impacts as a major issue for the tourism industry. Lee et al. (2008:2) report that seasonality is generally defined depending on the context from which it is studied, that is hospitality, tourism or leisure and conservation in this study. It is an obvious experience in Rwandan tourism to observe such seasonality character

5.5 Correlation analysis results

This section presents the correlation matrix used to test the correlation between local community capacity building, the decision-making process, reporting channels, compensation, local community involvement and participation and conservation of the national parks in Rwanda.

The results show that local community capacity building and conservation of national parks have a Pearson correlation value of 0.748, which implies that local community capacity building has a strong correlation with the conservation of Rwandan national parks. One approach to achieve this is through investment in human capital such as education and health, investment in social capital such as local-level institutions and participatory processes and support for community-based development efforts planned and implemented from the bottom up (Havel, 1996:145). However, given the fact that the central point underlying people-participation may be the degree of power distribution, these efforts are less likely to succeed unless responsive institutions and the legal and policy frameworks that facilitate and support local participation are in place (Havel, 1996:146; Wang & Wall, 2005:48; Tosun, 2006:495).

It must be remembered that conservation is one of the tourism niches. Several studies have revealed an acute shortage of trained manpower in Rwanda and the conservation field is no exception. The approach and implementation of capacity building and the development of local people in conservation has so far been fragmented.

The quality of tourism professionals, including hotel employees, guides, waiters, and other key personnel, is inconsistent and below par when compared with regional competitors (ROR, 2009:8). The training facilities currently operated have poor equipment, limited books, sporadic Internet connectivity, inconsistent curricula, and lack of qualified staff. Tourism is a people-to-people activity in which human interaction plays an important role. For any tourism destination, such as national parks, to emerge as an important stop in the itinerary of the international tourist, the human factor and the quality of service is very important. Capacity building is also

needed at all levels of government in tourism, including local administrations and in destination-level communities (ROR, 2009:8).

Throughout the national biodiversity strategy, ROR (2016:77) predicts that building the capacity of local people and enabling them to participate actively in conservation will require continuous and short-term tertiary education. The strategic plan advanced that local people capacity building will be strengthened through the development and implementation of short courses, medium and long-term training programmes for the benefit of early to mid-career professionals, as well as the upgrading of experienced staff from various institutions involved in biodiversity, agro-biodiversity, and biotechnology management in Rwanda. Short courses are just for updating and/or upgrading knowledge and skills in short-term training. Post-graduate diploma programmes will be organised for biodiversity conservation practitioners in medium-term training whilst long-term training will include MSc and PhD programmes. The government strategy states that training will be offered by different institutions specialised in biodiversity, agro-biodiversity, biotechnology, and related fields. These range from public and private institutions of higher learning to non-government organisations.

Decision-making processes and conservation of the national parks had a Pearson correlation value of 0.733, which indicated that decision-making had a strong positive correlation with the conservation of national parks in Rwanda. Community conservation is concerned with involving local people in conservation, based on the principle that local people should participate in, benefit from, and take joint responsibility for the conservation of natural resources and protected areas. This approach arises from the recognition that the sustainability of protected areas in developing countries is very much affected by their ability to address the concerns of their human neighbours.

Similarly, reporting channels and conservation of the national parks had a Pearson correlation value of 0.739, which indicated a strong positive correlation between reporting channels and conservation of national parks in Rwanda. Local communities have some traditional governance and consultation structures. These structures may not always be the most ideal to use but they could provide a starting point for communication processes with the communities. It is important to note that when communicating with local communities about issues such as percentage benefit-sharing schemes these may be alien concepts that need to be repeated over time until they can grasp the idea. Depending on the level of education among these communities, sometimes the percentage language may have to be revised and communicated in simpler terms so as not to confuse people.

Compensation processes and conservation of the national parks had a Pearson correlation value of 0.750, which indicated that compensation processes had the strongest positive correlation with the conservation of Rwandan national parks. Sharing tourism benefits with

local communities has always been seen as one of the various modes of community participation in the industry. In other words, the participation of local communities through sharing the benefits of tourism is one of the major viewpoints for community participation in tourism (Timothy, 1999:386; Tosun, 2000:626; Li, 2004:188; 2005:139). Various studies and numerous international development agencies have established that tourism is one of the most powerful tools for poverty alleviation. This is especially due to its associated potential economic gains and because tourism is a significant and growing economic sector in most countries with high levels of widespread poverty (Wilkerson, 1996:80; Chok & Macbeth, 2007:152; Scheyvens, 2007:244; Zhao & Ritchie, 2007:125). Although there is no standard method for assessing the adequacy of community participation levels (Li, 2005:138), how benefits from the tourism industry are shared has been argued to be the focus of community participation. However, this simply implies that communities could be involved or attracted to participate in the tourism industry by sharing with them the benefits obtained from the industry. One precondition for a successful community tourism programme, according to Songorwa (1999:2062), is that equitable benefits of tourism “must remain in the hands of the majority of community members in an open and easily understood manner”.

Finally, the findings showed that local community involvement and participation and conservation had a correlation of 0.757, which confirmed that local community involvement and participation was positively associated with the conservation of the Rwandan national parks. The study findings concur with those of Baral and Heinen (2007:522) who found that many development initiatives solicit the participation of all concerned stakeholders, at the relevant level, for the sake of not only efficiency and equity of the programmes, leverage of donors and demands of local communities but also for the sustainability of these initiatives.

These findings imply that community capacity building, decision-making, reporting channels, compensation and community involvement and participation are significant components in the national park conservation framework.

Table 5.9: Correlation matrix

		Community capacity building	Decision-making process	Reporting channels	Compensation	Local community involvement & participation	Conservation of national parks
Community capacity building	r	1					
Decision-making Process	r	.438**	1				
Reporting channels	r	.412**	.331**	1			
Compensation	r	.692**	.416**	.682**	1		
Local community involvement and participation	r	.233**	.361**	.461**	.432**	1	
Conservation of national parks	r	.748**	.733**	.739**	.750**	.757**	1
	N	370	370	370	370	370	370

** Correlation is significant at the 0.05 level (2-tailed)

5.6 Interview results of policy-makers and industry experts

This chapter presented results from interviews conducted with policymakers and park authorities as well as tourism and conservation experts. The interviews with policymakers and park authorities sought to identify what the current situation is in managing and conserving the three national parks under study. The qualitative questionnaire sent to experts sought to gather ideas on possible solutions to the gaps that were identified from responses obtained from the household questionnaires and interviews with leaders. The information provided by experts led to ideas for the formulation of the proposed tourism management framework for the conservation of the three national parks, which is the main goal of the study. Therefore, this chapter discussed both interviewees' perceptions about the parks under study and the experts' suggestions to bridge the identified gaps.

The results indicate that strategies used to achieve conservation goals in the national parks ensure that there are ownership and participation from local community members surrounding the national parks. This is achieved through tourism revenue sharing, employment opportunities and awareness and education campaigns. Some experts stated that employment provides the main benefits of tourism but is limited by the size of the operation. Indirect employment through the tourism supply chain, local linkages, as well as through tourism staff spending their salaries in local villages, could also be beneficial. Therefore, there is a need to promote all linkages, as well as assisting households to diversify livelihoods away from a heavy dependence on tourism, as this could be risky. The experts felt that the issue of revenue sharing, and compensation funds should have clear conditions understood by all communities on how to benefit from them. Furthermore, and most importantly, communication should be improved to ensure that communities are well aware of the projects intended to be

implemented and not to be involved at inauguration ceremonies when projects have already been completed.

On the compensation fund, one expert felt that if road traffic accidents and HWC are not kept separate and administered separately, there will always be confusion and poor service delivery to the communities. For him, local communities are special constituencies that need special attention. Therefore, there is a need for a fund administered by personnel trained specifically to deal with these communities and that mixing them up with road traffic accident beneficiaries is not right. He felt that rural communities in Rwanda, as in most parts of rural Africa, comprised mainly old people with average or no education and they were predominantly poor. These demographics require special attention because they are usually quick to give up when their requests do not get attention.

Another expert felt that strategies, including communication through environmental clubs and schools in general, awareness-raising campaigns in villages at a cell level, through public meetings and posters should be strengthened. He added that community education visits to local parks, establishing a clear connection between benefits received and associated conservation is paramount. The experts felt that the role of NGOs should be training and raising awareness among local communities. The locals should be trained in entrepreneurial skills, for example, to increase their participation through employment. Experts felt that whatever form of training or mobilisation carried out among these communities should be tailored to the specific conditions of each community. The needs of individual communities are usually different and that is what should inform the role of different stakeholders wishing to maximise benefits to the communities. Furthermore, policies would be required along with funding to provide places at training institutions for local community members. The role of private and NGO institutions is in capacity building, skills training, offering support and business advice, raising environmental and tourism awareness, implementing environmental and tourism education programmes, bursaries, and scholarships for education at schools and universities, assisting in setting up linkages, assisting in developing partnerships to connect people and setting up and managing micro-credit schemes.

Officials were asked about their understanding of PPT and how it was used in Rwanda. They indicated that initiatives were implemented around the national parks to promote PPT. These initiatives included encouraging local people to form co-operatives to benefit from tourism revenue-sharing schemes, attracting investors that would employ local people, provision of a social safety net for vulnerable groups and providing a growth engine for sustainable development of an agricultural economy. The initiatives further included encouragement of community-based tourism enterprises (CBTEs), encouraging private sector operators to partner with local people's associations, co-operatives and with conservation NGOs,

organisation of training to provide basic skills like beekeeping, community tours, traditional healers, development of CBTEs (traditional beer, dancers, campsites, homestays).

Some experts suggested that designing policies to encourage tourism providers such as hotels and restaurants to source goods locally would provide markets for local producers and encourage schemes for local job development. This answer does not respond closely to the issue of local tourism entrepreneurs. It is hard for local people to break into the area of accommodation and meals in particular. A relatively easy entry point to employment would be the national parks themselves. Opportunities for direct employment with the parks could be improved by policies proposing quotas of staff to be employed at all levels of management from communities identified as 'front line communities' with respect to influencing conservation in the parks. This would also be an effective way of demonstrating the value of parks to local communities.

Other areas of PPT could be strengthened through capacity building, skills training and development in all areas related to tourism and in the tourism supply chain. Introduction of micro-credit schemes to assist community members with start-up capital, including financial management training in micro-credit schemes, as well as in general to all community members. Internships in tourism businesses to provide work experience and skills training. Offer scholarships to students to study hospitality and conservation courses could be important.

PPT could also be strengthened by the implementation of the TRS programme as adopted by the GOR since 2005. The RDB, the government agency in charge of tourism and conservation, donates a portion of revenue accrued from wildlife-based tourism to assist local communities living adjacent to national parks in the construction of schools, dispensaries, and water supply, amongst other projects. PPT could also be funded from this platform. The interviews with RDB officials (policymakers) indicated that over the past 12 years the scheme was designed such that 5% of the total revenues collected from tourism every year are sent back to the communities that live close to tourist attractions, which are predominantly national parks. The projects funded by the scheme include social infrastructure development like building schools and health centres. It was reported that besides social infrastructure, TRS extends to income-generating projects, for example, beekeeping and brick-laying co-operatives, which are among many that have received financial support from the scheme.

The officials indicated that in practice, individual residents were selected to the projects using the criteria that they belonged to co-operatives or associations and lived close to the parks. The projects mainly consider the level of poverty of local communities and their level of vulnerability to wildlife. The rationale behind not considering individuals is that the overall goal of the revenue-sharing programme is to ensure sustainable conservation of the national parks with the participation of the neighbouring communities by contributing to the improvement of

their living conditions. The officials indicated that local community residents were represented on the projects' selection committees to make sure their voices were heard.

In the previous chapter, it was found that most community residents were unaware of how project decisions were made, which is in contradiction to the discussion here which indicates that communities are represented on the project selection committees. However, this is explained by the fact that only residents who belong to a co-operative are considered as beneficiaries. Possibly the next step should be to advise all community members to belong to a co-operative. Furthermore, the issue of elitism arises, where only influential individuals in the community know what is going on and they are the ones who are on the committees, while the ordinary person does not know what is happening around them.

Experts reacted on possible strategies to involve local communities in decision-making regarding projects to be implemented or any other decision affecting their lives. By recognising that community members are the key stakeholders, experts believe that people should be involved in decisions on where such projects should be located and how much each should be allocated. One expert felt that instead of assigning the communities any role, he would prefer to have a round table meeting with them to find out what role they feel most comfortable and capable to fulfil in the process. To him, the process should begin by finding out what the community feels should be their role while another expert indicated that he would assign them a very central role. He believed that without this the value of the scheme in terms of improving relations between communities and parks would be reduced. This does not mean they will take decisions alone but that their perspective and values will be important to the decisions made.

On the issue of determining the impacts of TRS on conservation and poverty reduction, an official from RDB indicated that there is no clear system to track the impacts of TRS. He suggested that measuring the impacts of TRS could be achieved through observing reduction or change in HWC reported over time, increased participation of local people in patrols, increased number of voluntary informants from local communities and the voluntary returning of wild animals that had been captured in people's neighbourhoods.

Apart from the TRS, there is also the compensation fund. Law No. 52/2011 of 14/12/2011 established the SGF for accidents and damages caused by automobiles and animals. Its mission, organisation and functioning were enacted in Rwanda's Official Gazette on 12th January 2012 (ROR, 2012:7). The SGF is an insurance agency of the Rwandan government, mandated to compensate victims of accidents and damages caused by uninsured and unidentified automobiles and wild animals. From the household survey results, it was clear that community residents had serious issues with the fund, including ignorance of the fund, the lengthy process to get a claim accepted, unclear claiming procedures and to an extent, some irregularities, including requests for bribes.

An interview with an RDB official revealed that in a bid to strengthen social protection, the GoR continues to put in place improved programmes to ensure individuals and communities do not suffer because of unpredictable disasters. The SGF is one of the social protection programmes put in place to ensure the rights and well-being of citizens. He further emphasised that while compensation of victims of road accidents caused by non-insured vehicles may be found in a few other countries in Africa and beyond, in Rwanda, the additional aspect of compensating victims of wild animal damages is indeed unique. He believed that this is testimony again to how close to the population the GoR is, being always keen to address any problems affecting its people and the government's continued efforts towards conservation of the national parks. The RDB official stated that since its inception, a good number of claimants have received compensation from the SGF every year as evidenced by SGF statistics. He added that from January 2013 to the end of August 2017, the SGF compensated 5 189 claims for wild animal damages, including cases of crops destroyed, cattle killed as well as several people killed or injured by animals.

Experts indicated that beneficiaries and local government officials as well as valuation officers from the parks or any other responsible agent all need to be part of the assessment process. A site visit is necessary to determine the correct amount to be paid out in compensation and a standard assessment form must be in place and agreed upon by all parties. It is also necessary to have a policy or law that stipulates the steps to be followed before compensation is paid.

Finally, the study tried to understand how the private sector and other non-governmental stakeholders in the conservation of the national parks are engaged by the government. It is crucial to ensure an inclusive partnership and stakeholder involvement in decision-making and hence ways must be found to ensure broad representation from the private sector and civil society and the voicing of community issues. Private sector and civil society actors play a central role in biodiversity protection and management and have the advantage of being more independent of political pressures than governmental agencies. Participation of non-State actors could enhance investment in the biodiversity sector and facilitate the development of mechanisms for a broad framework for building partnerships between them and the government. Interestingly, in the interviews with officials, they revealed that the role of the private sector and NGOs in the conservation of the national parks is more of providing awareness to communities or bringing projects that will provide alternative livelihoods to community members so that they do not depend on the forests.

Park authorities and policymakers indicated that there has been very significant collaboration between the GoR and NGOs as well as the involvement of the private sector. This collaboration attracted numerous investors to invest in and around the national parks to provide employment opportunities to local community residents and increasing the linkages through supply chains. They stated that all these private partners try to employ residents from local communities but

in unskilled or semi-skilled positions because of their limited skills. The companies are usually forced to recruit expatriates from abroad or from other parts of the country, like Kigali City.

Furthermore, in the interviews, park and government officials stated that several NGOs have collaborated with the RDB and the GoR in the conservation of the three national parks. These collaborations include the WCS, the New Forest Company (NFC) and the USAID (that funded the 90-metre-long canopy walkway). Also included in the collaborations are several co-operatives such as Friends of Nyungwe (FON), Kitabi Handcraft women's co-operative, Twiyubake Kitabi, the Banda Pillar of Nature and Tourism Promotion Co-operative and the Cyamudongo Tourism and Promotion Co-operative, the Gorilla Organisation, the IGCP, the Dian Fossey Gorilla Fund International and the African Parks Network (APN), which form a partnership with the GoR to form the AMC to manage the ANP.

5.7 Chapter summary

The study sought to establish whether local community capacity building affects the conservation of the national parks in Rwanda. Table 5.1 presented the findings on the level of agreement or disagreement by the respondents to the statement used to measure local community capacity building and conservation of the national parks in Rwanda.

The study showed that the local communities surrounding the three national parks under study lacked knowledge of national park management. The findings seem to suggest willingness from local communities to be involved in conservation efforts. However, park authorities and policymakers indicated that there has been very significant collaboration between the GoR and NGOs as well as the involvement of the private sector

This collaboration has attracted several investors to invest in and around the national parks to provide employment opportunities to local communities. The results further suggest that local communities are not happy with the compensation and benefits received from tourism activities carried out in their neighbouring national parks. Compensation is a government policy that tries to compensate for damages caused by wild animals to local community members. There seems to be no clear process that guides community residents on how to access the compensation funds and some respondents are sceptical of the process.

The chapter explored the perceptions of government officials and provided insight of experts on how some of the issues between local communities and government institutions could be mitigated. For example, on the issue of compensation which is usually not understood in the same context by communities and government officials, experts suggested that a compensation beneficiary, a local government official and a valuation officer from a park, or any other responsible agent, should all be part of the assessment process, which is not usually the case.

Finally, the chapter noted the considerable involvement of non-governmental institutions. These institutions have played a big role in increasing the collaboration and involvement of local communities in various matters related to national park conservation and management.

The next chapter considers the proposed tourism management framework for the conservation of the national parks under study.

CHAPTER 6

VALIDATION OF PROPOSED TOURISM MANAGEMENT FRAMEWORK FOR THE CONSERVATION OF NATIONAL PARKS

6.1 Introduction

This section presents the hypotheses testing and validation of the proposed tourism management framework for the conservation of national parks in Rwanda. The study used structural modelling which was conducted using the SPSS Amos Software version 22. The study sought to test whether local community capacity building, the decision-making processes, reporting channels, compensation processes and local community involvement and participation were significant components of a tourism management framework for the conservation of the Rwandan national parks.

6.2 Proposed tourism management framework

USAID (2002) emphasised the importance of good natural resource governance at the local level and the considerable variations apparent at the local level that are fundamental to natural resource sustainability. The three national parks under study have shown critical socio-economic and ecological insight as far as resource governance is concerned and its attendant implications on the local people. In this regard, the researcher integrated various fields of literature to analyse, comprehend and gain a deep understanding of the complexities of the conservation of the three national parks in relation to communities found inside the parks and adjacent areas.

The most notable outcomes from local communities surrounding the parks can be summarised by stating that conservation of Rwanda's three national parks is complex with varying implications on local people's ability to enhance livelihoods and for them to continue supporting conservation activities governed at the highest level. It was apparent that there was some dissatisfaction at the local level about the current governance processes. Consequently, conservation organisations, from government agencies to environmental stakeholders, should be cautious to avoid misguided interventions and implementing policies based on misjudgements in the three national parks' conservation zones about pro-poor yielding. From what has been observed, it is critical to stress that most interventions are premised on hypothesised evidence, which has not been verified empirically, based on the credibility of socio-economic and ecological scientific results.

Despite conservation governance, community livelihoods and sustainable conservation being a complex subject, it was established that conservation conceptual underpinnings as currently practised in the national biodiversity strategic policy, does not involve the local people, let alone their local institutional processes regarding community participation and deriving livelihood

benefits. If anything, the issue of local property rights, resource access and utilisation are confrontational, which communities feel that they have been denied their sovereign right to resources, thus undermining local collaboration towards conservation.

Findings from empirical surveys on households and interviews with policymakers and experts revealed a need to develop a tourism management framework for the three national parks, which would describe how tourism would work for the upliftment of local communities. Such a management framework should be a broad policy guideline with clear performance indicators to measure effectiveness.

After a thorough investigation of employment as an impact of tourism on local communities around the parks, the researcher became concerned about the current management of the three national parks. The investigation covered local capacity building (including education and training, local participation in the management of the national parks), gaps (such as lack of top-down consultation, stakeholder conflict, lack of communication, lack of mentorship and coaching programmes and lack of awareness). The researcher then developed a tourism management framework for the conservation of the three national parks which would ensure increased communication between conservation stakeholders, with specific emphasis on surrounding communities, increased benefits to local communities and local communities' active participation in conservation activities.

A tourism management framework for biodiversity and upliftment of communities living adjacent to the parks through tourism enterprises is paramount in this study. It is clear that the protection of biodiversity will require the involvement of local, low-income communities and that tourism offers a way to achieve this. To understand how to drive conservation through tourism entails looking at what tourism enterprises are already doing on the ground, the management context, as well as who is supporting them to perform their work.

The findings of the literature study and surveys are used to kick-start the development of the framework. The essential elements of the proposed tourism management framework are aspects such as employment for local communities, capacity building, participation in decision-making, tourism entrepreneurship, involvement in revenue-sharing projects, clear and effective communication between government agencies, the private sector, non-government players and local communities.

According to Weaver and Oppermann (2000, cited by Mochechela, 2010:66), policy development is very detailed. It is defined as a strategy for the development of the tourism sector that establishes objectives and guidelines as a basis for what needs to be done. This means identifying and agreeing on objectives, establishing priorities, planning in a community context the roles of national governments, national tourist organisations, local governments, and private-sector businesses, establishing possible co-ordination and implementation of

agreed programmes to solve identified problems, with monitoring and evaluation of these programmes.

Swanepoel and de Beer (2011:61) define a community as:

“...a grouping of people who reside in a specific locality and who exercise some degree of local autonomy in organising their social life in such a way that they can, from that locality base, satisfy the full range of their daily needs”.

In other words, these are the residents who do not need spoon-feeding, rather a planning partnership approach to a positive change for the ordinary people and through empowered people with existing resources, to achieve a common developmental goal with inclusive approaches. These local communities are essential stakeholders in advancing the proposed tourism management framework and without them, the framework is not inclusive. The local communities here include organisations founded and run by individuals or groups within the communities.

Examples of CBOs are fishing, farming and handicraft co-operatives and cultural groups that have the potential to attract tourists (Safari, 2017:225). For the proposed framework to flow in the modern management paradigm, it is very important to engage the locals' active participation in decision-making for projects to be funded for their benefit. In the researcher's opinion, the definition of the role of local community participation in conservation and park management would be a visible demonstration of good governance of the protected areas in the democratic model of governance.

These may include civil society which, according to Safari (2017:223), may be CBOs, village associations, environmental groups, women's rights groups, farmers' associations, faith-based organisations (churches), labour unions, co-operatives, professional associations, chambers of commerce, independent research institutes and not-for-profit media. The researcher agrees with the OECD (2012:7), who defines civil society as groups outside of a family who organise themselves to pursue shared interests in the public domain, including tourism stakeholders in conservation for the upliftment of local communities.

Partnerships with public and private institutions could contribute to shaping practical policy and harnessing the neglected actors in both the tourism industry and conservation. Engaging steering committees from central and local governments, tourism SMEs, local community representatives, educational institutions and co-operatives in developmental programmes preparation such as mentoring, coaching and vocational training could create an ambience between all the parties involved in conservation. To this extent, local communities would feel ownership of the protected areas while benefiting from opportunities in the areas because they are active participants. Subsequently, security would be a common issue in protected areas.

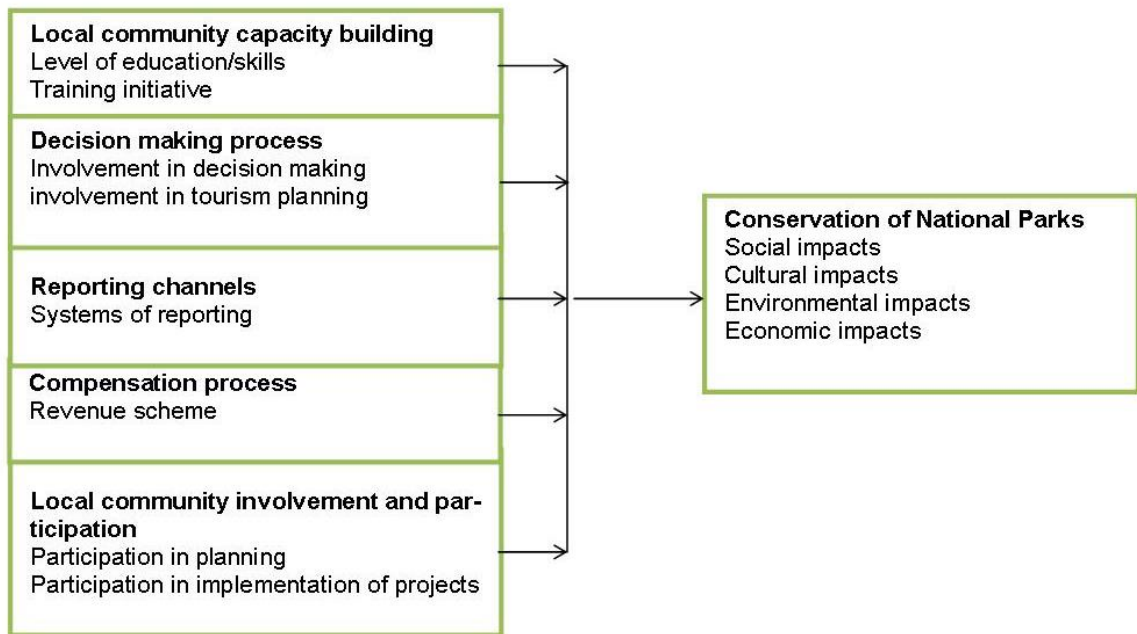


Figure 6.1: Proposed tourism management framework

The study sought to test the following hypotheses (not stated in chapter 1, only developed here) in creating the framework:

H₀₁ Community capacity building does not significantly affect conservation of the national parks

H₀₂ Decision-making processes do not significantly affect conservation of the national parks

H₀₃ Reporting channels do not significantly affect conservation of the national parks

H₀₄ Compensation process does not significantly affect conservation of the national parks

H₀₅ Local community involvement and participation does not significantly affect conservation of the national parks

6.3 Factor analysis

The main purpose of conducting a factor analysis was to summarise the information contained in several original variables into fewer factors without losing information. This implies that the newly created variables should represent the fundamental constructs that underlie the original variables (Gorsuch, 1990:35). Factor analysis looks at the internal correlations among data to come up with internally consistent surrogates of the variable (Mugenda, 2010:42).

These correlations helped the researcher to formulate an interpretation of the components (variables). Hair et al. (2010:99) highlight that factor analysis is necessary in research to test

for construct validity, highlight variability among observed variables and check for any correlated variables to reduce redundancy in data. Mwititi et al. (2013:70) suggest that variables with factor loadings greater than 0.3 are the ones that have the highest significance and influence.

The Kaiser-Meyer-Olkin measure of sampling adequacy shows a statistic of 0.951 which implies that data is adequate for conducting a factor analysis and is supported by the findings of Bartlett's Test of sphericity of $p=0.000$, which is less than the critical p -value of 0.05. These findings imply that data were adequate for factor analysis computation.

Table 6.1: KMO and Bartlett's test

KMO and Bartlett's test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.951
Bartlett's Test of Sphericity	Approx. Chi-Square	3224.696
	Df	253
	Sig.	.000

Since all the loadings were above 30% for all the independent variables, no factor was dropped because they followed the acceptable threshold. All the factors loaded adequately together.

Table 6.2: Factor loadings

Factors	Loadings
Local community capacity building	
All community members around national parks are properly trained to conserve the park	0.609
Local community members are properly educated on national park management	0.707
Training initiative aimed at equipping local residents with management skills help in the management of national parks in Rwanda	0.639
Promotion of community-based programmes to ensure participatory methods and to address the inefficiency problem should be encouraged	0.577
Community capacity building create an enabling environment needed by local communities to benefits from tourism and conservation of national parks	0.709
Decision-making process	
All community members around national parks are involved in decision-making to conserve the park	0.607
Local community members are properly involved in resources allocation	0.637
Local community members are properly involved in tourism planning	0.566
Decision-making on national parks management is done after consulting with key stakeholders	0.588
There is a legal framework to ensure a participatory approach on matters of national parks conservation	0.611

Factors	Loadings
Reporting channels	
There is a proper system to ensure matters concerning national park management are reported on time	0.499
Effectiveness of reporting channels enhance conservation of national park and tourism	0.505
Our country has effective reporting channels of problems and conflicts such as human-wildlife conflict	0.598
Stakeholders in the tourism sector including local communities have been empowered with modern facilities for reporting conflicts	0.567
Compensation process	
The benefits I/we get from tourism projects are sufficient for me /us not to invade the for economic use	0.602
There is a compensation framework to encourage them to conserve the park's resources	0.449
Compensation fund of the GoR to mitigate the damage caused by wild animals	0.451
There is proper law that manages compensation of community around national parks	0.513
Local community involvement and participation	
The scheme is known by all community members because it was officially launched within the community	0.582
The scheme has had positive impacts on the lives of community members	0.495
The projects implemented in our community were discussed with the community members	0.635
The selection of people to participate in the projects was done fairly and based on the provisions agreed by community members	0.585
Many development initiatives solicit the participation of all concerned stakeholders	0.650

Extraction method: Principal component analysis

6.4 Hypotheses testing (see page 128)

This section presents the results of hypotheses testing which was based on regression modelling. Hypotheses testing was conducted at a 0.05 level of significance.

Table 6.3: Regression estimates

Dependent		Independent	Estimate	S.E.	C.R.	P
Conservation of National parks	<---	Community Capacity Building	0.233	0.097	2.407	0.016
Conservation of National parks	<---	Decision-making process	0.114	0.115	0.995	0.320
Conservation of National parks	<---	Reporting Channels	0.297	0.102	2.908	0.006
Conservation of National parks	<---	Compensation	0.255	0.084	3.036	0.002
Conservation of National parks	<---	Local Community Involvement and Participation	0.434	0.128	3.390	0.000

H₀₁ Community capacity building does not significantly affect conservation of the national parks

The study sought to test the effect of community capacity building on the conservation of Rwanda's national parks. The results of regression estimates presented in Table 6.3 indicate that community capacity building had Beta (β) = 0.233, $p=0.016 < 0.05$, implying that local community capacity building had a positive and significant effect on the conservation of national parks in Rwanda. The study, therefore, rejected the null hypothesis and concluded that community capacity building significantly affected the conservation of the national parks. The study further concluded that local community capacity building was a significant component in the proposed tourism management framework for the conservation of Rwandan national parks.

For any tourism destination, such as the national parks, to emerge as an important stop on the itinerary of the international tourist, the human factor and the quality of service is very important. Capacity building is needed at all levels of government on tourism, including local administrations and in destination-level communities (ROR, 2009:8).

Throughout the national biodiversity strategy, the ROR (2016:77) predicts that building the capacity of local people enabling them to participate actively in the conservation will involve continuous and short-term tertiary education. The strategic plan advances that local people capacity building will be strengthened through the development and implementation of short courses, medium and long-term training programmes for the benefit of early to mid-career professionals, as well as upgrading of experienced staff from various institutions involved in biodiversity, agro-biodiversity, and biotechnology management in Rwanda.

One approach to achieve this is through investment in human capital such as education and health, investment in social capital such as local-level institutions and participatory processes and support for community-based development efforts planned and implemented from the bottom up (Havel, 1996:145). However, given the fact that the central point underlying people participation may be the degree of power distribution, these efforts are less likely to succeed unless responsive institutions and the legal and policy frameworks that facilitate and support local participation are in place (Havel, 1996:145; Wang & Wall, 2005:48; Tosun, 2006:495).

Bearing in mind that conservation is one of the tourism niches, numerous studies revealed that there is an acute shortage of trained manpower in Rwanda and conservation is no exception. To date, the approach and implementation of capacity building and the development of local people around conservation has been fragmented.

The quality of tourism professionals, including hotel employees, guides, waiters, and other key personnel, is inconsistent and below par when compared with regional competitors (ROR, 2009:8). The training facilities currently operated have poor equipment, limited books and Internet, inconsistent curricula, and a lack of qualified staff. Tourism is a people-to-people activity where human interaction plays an important role. Short courses are just for updating and/or upgrading knowledge and skills in short-term training. Post-graduate diploma programmes will be organised for biodiversity conservation practitioners in medium-term training, whilst long-term training will include MSc and PhD programmes. The government strategy states that training will be offered by different institutions specialised in biodiversity, agro-biodiversity, biotechnology, and related fields. These range from public and private institutions of higher learning to non-government organisations.

Experts point out that community capacity assessment must be conducted by the government to identify the knowledge gaps. Skills such as selling skills, communication skills and tour-guiding skills, knowledge of the natural history of East African flora and fauna as well as marketing skills are vital for local people when seeking employment and entrepreneurial opportunities. The skills needed depend on the type of opportunities available.

The government official indicated that there is a need to bridge the gap between university study and technical level skills. He believes that schools need to develop customised courses for less educated people so that they can also benefit from available opportunities. Most of the time technical schools operate from the cities and towns and the rural areas miss the opportunity. One expert felt that the government could have scholarship programmes for guides to learn more about the flora and fauna at appropriate training facilities in their areas.

Another expert invoked the role of the private sector in the overall value chain. He believed that training on-site at new hotels/restaurants could occur if staff who are skilled are brought from other areas to train the local population. English, service skills, all tourism-related skills

such as chef, maintenance, guiding, management, finances, and administration could be taught to local people to benefit in new ventures. Another expert suggested the promotion of bursaries/scholarships in tourism studies and offer interest-free study loans for students to study tourism.

An expert said that local people being considered as key stakeholders should be trained in various aspects of tourism. From his experience of working with local people, he strongly believed that local communities in rural areas already have certain ITK that may be tapped into if they are to make a living out of tourism. Entrepreneurship, marketing, and other skills could be taught in addition to that. The expert emphasised that park/community-related programmes that build upon good neighbour relations with communities adjacent to national parks is the best way of creating a long-term partnership with the government to mitigate matters related to national parks

H₀₂ Decision-making process does not significantly affect conservation of the national parks

The study sought to test the effect of the decision-making process on conservation of national parks in Rwanda. The results of regression estimates presented in Table 6.3 indicate that the decision-making process had Beta (β) = 0.114, $p=0.320 >0.05$, implying the decision-making process had a positive but insignificant effect on the conservation of Rwandan national parks. However, the study failed to reject the null hypothesis which stated that H₀₂ the decision-making process does not significantly affect the conservation of the national parks.

Community conservation is concerned with involving local people in conservation, based on the principle that local people should participate in, benefit from and take joint responsibility for the conservation of natural resources and protected areas. This approach stems from the recognition that the sustainability of protected areas in developing countries is affected significantly by the ability to address the concerns of their human neighbours.

H₀₃ Reporting channels do not significantly affect the conservation of the national parks

The study also tested the effect of reporting channels on the conservation of Rwandan national parks. The results of regression estimates indicate that reporting channels had Beta (β) = 0.297, $p=0.006 <0.05$, implying the reporting channels had a positive and significant effect on the conservation of Rwandan national parks. The study rejected the null hypothesis which stated that H₀₃ reporting channels do not significantly affect the conservation of the national parks. The study further concluded that reporting channels were a significant component in the proposed tourism management framework for the conservation of national parks in Rwanda.

Local communities have some traditional governance and consultation structures. These structures may not always be the most ideal settings to use but they could provide a starting point for communication processes with the communities. It is also important to note that when communicating with local communities about issues such as percentage benefit-sharing schemes these may be alien concepts that need to be reiterated over time until they can grasp the idea. Depending on the level of education of these communities, the 'percentage' terminology may have to be revised and communicated in simpler terms so as not to confuse them.

H₀₄ Compensation process does not significantly affect the conservation of the national parks

The results of regression estimates indicate that compensation had Beta (β) = 0.297, $p=0.006 < 0.05$, implying that compensation had a positive and significant effect on the conservation of Rwandan national parks. The study rejected the null hypothesis which stated that H₀₄ compensation does not significantly affect the conservation of the national parks. The study concluded that compensation was a significant component in the proposed tourism management framework for the conservation of Rwandan national parks. The researcher concurs with Kramer et al.'s (2007:43) view that the creation or expansion of economic opportunities could rightly be considered as a responsibility of government towards citizens. However, the researcher disagrees that the impacts of the State, who is driving the business, will not trickle down to local communities since many people would rather be self-employed, business owners or investors.

Sharing tourism benefits with local communities has always been seen as one of the ways to engender community participation in the industry. In other words, the participation of local communities through sharing the benefits of tourism is one of the major elements of community participation in tourism (Timothy, 1999:386; Tosun, 2000:622; Li, 2004:188; 2005:139). Various studies and numerous international development agencies have established that tourism is a powerful tool in poverty alleviation, especially due to the associated potential economic gains and the fact that tourism is a significant, growing, economic sector in most countries with high levels of poverty (Wilkerson, 1996:81; Chok & Macbeth, 2007:152; Scheyvens, 2007:245; Zhao & Ritchie, 2007). Although there is no standard method for assessing the adequacy of community participation levels (Li, 2005:134) the way benefits from the tourism industry are shared has been argued to be the focus of community participation.

This, however, simply implies that communities could be involved or attracted to participate in the tourism industry through sharing the benefits obtained from the industry and one precondition for a successful community tourism programme. According to Songorwa

(1999:2062), equitable benefits of tourism “...must remain in the hands of the majority community members in an open and easily understood manner” .

H₀₅ Local community involvement and participation does not significantly affect the conservation of the national parks

Finally, the results of regression estimates indicate that local community involvement and participation had Beta (β) = 0.297, $p=0.006 < 0.05$, implying the local community involvement and participation had a positive and significant effect on the conservation of national parks in Rwanda. The study rejected the null hypothesis H_{05} which stated that local community involvement and participation do not significantly affect the conservation of the national parks. The study also concluded that local community involvement and participation were a significant component in the proposed tourism management framework for the conservation of Rwandan national parks.

The study findings established that a tourism management framework that works with inclusiveness for local communities is in line with Gutierrez et al.'s (2005:92) description of the representation of local community stakeholders' voices. Along this line, it is important to ensure adequate stakeholder representation and involve a broad selection of target stakeholders in the destination. For example, the stakeholder groups may include members of the local communities at provincial, district, sector, cell and village level, academic community, the tourism industry (tour operators, hotels, restaurants, and park management). In addition, they may include local biodiversity conservation organisations, community development organisations, farming community, transportation, scientific community, culture and arts associations, national parks, and attraction management.

The researcher believes that a successful tourism management framework for a given destination, such as national parks, could transform the destination into a successful destination. As suggested by Gutierrez et al. (2005:19), for destination management to be successful, a combination of complementary decisions must be made by many different stakeholders, including tour operators, governments, communities, destination authorities, international agencies, donors, experts, financial institutions, tourists, and tourist-generating countries.

6.5 Validation of proposed tourism management framework for the conservation of the national parks

This section presents the findings of testing whether local community capacity building, decision-making processes, reporting channels, compensation and local community involvement and participation were significant aspects of the proposed tourism management

framework for national park conservation in Rwanda. The section below outlines the model summary statistics and validated framework for the conservation of Rwandan national parks.

To assess the model fitness, the study used confirmatory factor analysis. The results for CMIN/DF and RMSEA that were used to test the goodness of fit of the model are depicted in Table 6.4 below. CMIN is a Chi-square statistic comparing the tested model and the independence model to the saturated model. CMIN/DF, the relative chi-square, is an index of how much the fit of data to model has been reduced by dropping one or more paths. The value of CMIN/DF is above the threshold of 5, meaning the model had good fitness.

Table 6.4: CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	11	163.409	10	.000	16.341
Saturated model	21	.000	0		
Independence model	6	177.049	15	.000	11.803
Zero model	0	1107.000	21	.000	52.714

The Root Mean Square Error of Approximation (RMSEA) estimates lack of fit compared to the saturated model. RMSEA of .05 or less indicates good fit and .08 or less indicates adequate fit. LO 90 and HI 90 are the lower and upper ends of a 90% confidence interval on this estimate. PCLOSE is the p value testing the null that RMSEA is no greater than .05. The χ^2 statistic for model fit is significant, meaning that the null hypothesis of a good fit to the data can be rejected. The RMSEA likewise suggests that the fit of the model is good. The value of .204 exceeds the .05 suggested as a cut-off for accepting the model fit.

Table 6.5: RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.204	.177	.232	.000
Independence model	.171	.149	.194	.000

The overall model fit appeared good. The χ^2 test yields a value of 3.757 which, evaluated with 11 degrees of freedom, has a corresponding p-value of .178. This p-value is too high to reject the null of a good fit. The findings imply that the model had good fitness.

Table 6.6: Result (default model)

Minimum was achieved
Chi-square = 3.757
Degrees of freedom = 10
Probability level = .178

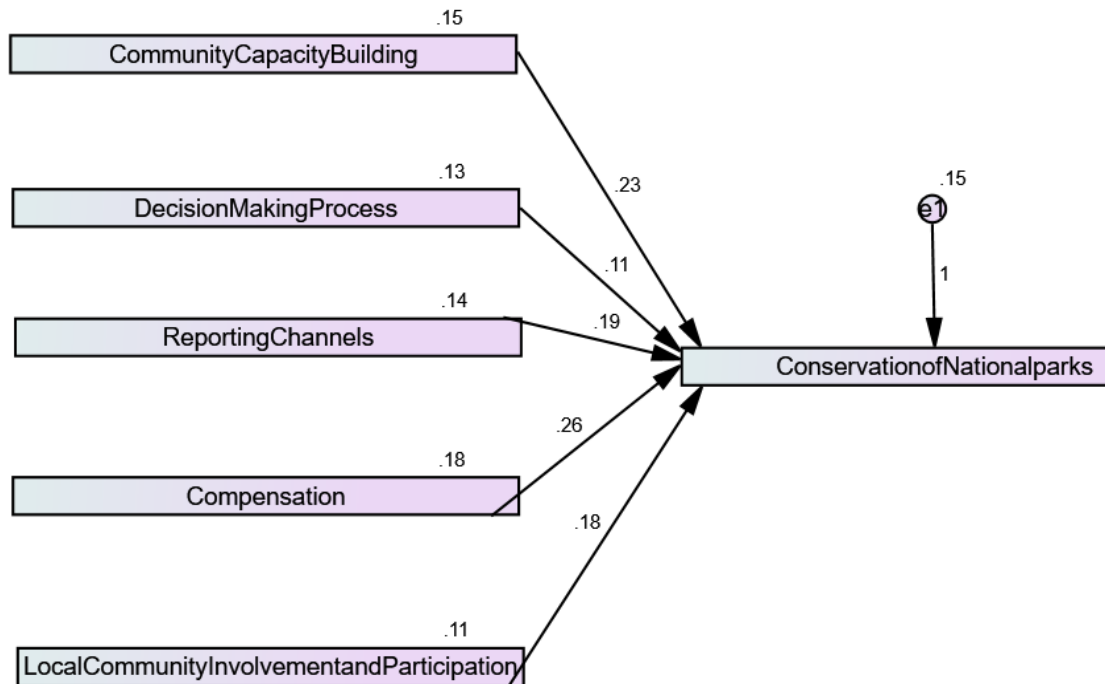


Figure 6.2: Validated national park conservation framework

Table 6.7 below shows that local community capacity building accounted for 15% in the proposed tourism management framework, decision-making process accounted for 13%, reporting channels accounted for 14%, compensation accounted for 18% and lastly, local community involvement and participation accounted for 12% in the tourism management framework for conservation of Rwandan national parks. Based on this framework, compensation contributes the largest variation in the conservation of national parks in Rwanda.

Table 6.7: Coefficients of determination

	R-Squared
Community capacity building	0.15
Decision-making process	0.13
Reporting channels	0.14
Compensation	0.18
Local community involvement and participation	0.12
e1	0.15

Snyman and Spenceley (2012:76) argue that three key mechanisms of sustainable tourism to reduce poverty and promote conservation are employment, value chains and equity. This thesis takes the same view in developing the proposed tourism management framework for the conservation of the three national parks under study but argues that these three elements are not sufficient to attain the stated objectives, especially in the case of Rwanda. Although in this chapter, according to policymakers and park officials, it can be concluded that the above three elements are an ideal model to involve local communities, Chapter 5 seems to suggest a different perspective whereby residents feel that not enough has been done in terms of employment and value chain penetration. It is clear from this chapter that the government used mostly the concept of tourism revenue sharing to try to achieve poverty reduction and biodiversity conservation in and around the three national parks under study. Even if this is true and likely to be a good strategy to attain the stated objectives, still the population (beneficiaries) is mostly unaware of tourism revenue sharing being the benefit from tourism offered to them as an alternative to forest resources. The researcher identified a big communication gap between the government (park authorities) and local communities, even though the present framework was designed with great emphasis on communication between the involved stakeholders.

The present framework intended to attain the three main objectives of improving livelihoods of surrounding communities, active participation of local communities in tourism and conservation activities and reduction in HWC caused by neighbouring community residents. If implemented as proposed, the new framework will ensure the following:

- Increased employment opportunities to local communities.
- That the local community residents have adequate skills and knowledge to benefit from tourism employment and entrepreneurial opportunities.
- Increased ownership of tourism enterprises by local communities through which they could maximise the value chain benefits.
- Active community participation in decision-making in tourism revenue-sharing funded projects and compensation process, and
- There is clear and effective communication between government agencies, the private sector, non-government players and local communities

6.5.1 Local communities' capacity building

Employment provides the main benefits from tourism but sometimes is limited by the size of the operation. There is a need to encourage indirect employment through the tourism supply chain, local linkages, as well as through tourism staff spending their salaries in local villages around the national parks under study. The proposed framework accepts that it might be hard for local people to enter the field of the delivery of accommodation and meals, in particular due

to the high-end tourism strategy that Rwanda is implementing currently. Hotels and accommodation establishments are likely to require very high-quality suppliers, which could prove difficult for the local people to supply, at least in the short and medium terms.

A particularly easy entry point to employment would be with the national parks themselves. Opportunities for direct employment with the parks will be improved by policies proposing quotas of staff to be employed at all levels of management from communities identified as 'front line communities' with respect to influencing conservation in the parks. This would also be an effective way of demonstrating the value of parks to local communities. Currently, there is no policy around this and although national parks are trying, it is in an unstructured manner. The concessionaries (hotels and lodges) within the national parks would also be bound by this arrangement.

The locals should be trained in entrepreneurial skills. Whatever form of training or mobilisation carried out among these communities should be tailor-made to the specific conditions of each community. For example, communities around the three national parks are all mostly engaged in agriculture but producing different types of crops. NNP has an opportunity to attract tea and coffee growing and processing experience while ANP could offer traditional beer-making experience as well as fishing experience due to the number of lakes found in and around this park.

Local people capacity building will be strengthened through the development and implementation of short courses and medium and long-term training programmes for the benefit of early to mid-career professionals, as well as the upgrading of experienced staff from various institutions involved in biodiversity, agro-biodiversity, and biotechnology management in Rwanda. Short courses are for updating and/or upgrading knowledge and skills in short-term training. However, community capacity needs assessments must be conducted by the government first to identify existing knowledge gaps. Skills such as sales, communication and tour guiding, the natural history of Rwanda, East African flora and fauna, as well as marketing skills could be vital to local people seeking employment and entrepreneurial opportunities. The government could have scholarship programmes for guides to learn more about the flora and fauna at appropriate training facilities, which could be beneficial in their localities.

Policies would no doubt be required, along with funding, to provide places at training institutions for local community members. The government should work closely with tourism authorities and conservation schools around these national parks and provide special opportunities for local communities. A training fund from the tourism revenue-sharing funds should be set aside for this purpose. Best students from these areas should be encouraged to apply to this fund for funding in study subjects related to tourism and conservation as well

entrepreneurship. Those residents who are ready to get involved should firstly receive training and be guided.

The private sector in the overall value chain plays an important role in training on-site. New hotels and restaurants could provide training if skilled staff are brought from other areas to train the local population. English, service skills, all tourism-related skills such as chef, maintenance, guiding and management, finances and administration could be taught to local people to benefit from new ventures.

Furthermore, the role of private and NGO institutions is usually seen in capacity building, skills training, offering support and business advice as well as raising awareness of conservation and tourism. These partners should be able to offer bursaries or scholarships for education to local community residents in schools and universities. They will also assist in setting up linkages and developing partnerships. The private sector and NGOs should set up and manage micro-credit schemes for local communities to engage in tourism-related ventures.

Moreover, these Institutions, especially NGOs, should impart knowledge and skills to all stakeholders especially the local communities on conservation and preservation of resources, train people and identify areas for development. They should fund and facilitate the training and equipping local communities with skills on how to employ alternative ways for income generation other than thinking about the park resources. All areas related to PPT in the tourism supply chain need to be explored.

Possibilities of recommending internships in tourism businesses to provide work experience and skills training should be encouraged. In addition, the government and NGOs should seek opportunities for exchange programmes in the communities so that they can learn more from others and be able to suggest new tourism business ideas. Through the co-ordination of the RDB and conservation NGOs, schools around the national parks should establish environmental clubs to educate children about conservation and tourism, offer regular school and community member outings to national parks, hold regular informative community meetings at a cell level and use posters and other forms of advertising to build awareness of conservation and the national parks. Communities need to be informed of the potential benefits and be involved in public award ceremonies of benefits.

Local people, being considered key stakeholders, already have certain ITK that may be tapped into if they are to make a living out of tourism. Entrepreneurship, marketing, and other skills may be tailored to their existing knowledge. It is also important to provide education related to HWC mitigation measures to assist communities in reducing HWC themselves.

It is crucial that rural people engage in commercial enterprises, so that they become part of the private sector themselves. Numerous key initiatives should be encouraged by the

government and other stakeholders to facilitate the communities to exploit the potential commercial advantages of tourism.

The government should design policies that encourage hotels and restaurants to source goods locally, which would provide markets for local producers and boost PPT practices

The government, in partnership with other stakeholders, including NGOs and the private sector, needs to develop strategies to strengthen CBTEs as a model to promote PPT projects around national parks. The CBTEs are mostly based on heritage, culture and lifestyle of local people. PPT initiatives should involve community tourism activities, starting from cultural activities to boost their businesses and through which the local communities will be sensitised about conservation. In addition, there need to be clear policy guidelines on the pricing of cultural tourism products offered by the local people to avoid exploitation of the local people by tour operators. The locals should not be seen as mere partners in conservation but competitors in tourism by ensuring that the selling of curios and artifacts is left to the local population.

Furthermore, encouraging local communities will need some kind of financial incentive. In following this line of thinking, the government should devise a strategy that offers incentives such as tax incentives to local entrepreneurs in certain community tourism-based initiatives. Similarly, there should be a strategy that provides communities with access to microcredit/loans for viable tourism projects. A portion of the tourism revenue-sharing funds could be used for direct financing of viable individual or group community tourism-based projects. This approach will directly link the RDB with potential projects without necessarily going through the existing process of project funding selected by the districts. The existing process will remain in place for its own categories while the new approach will have RDB develop a funding strategy directly linked to community tourism businesses that might not have succeeded using the existing approach. The funding could be channelled through local micro-financial institutions.

6.5.2 Decision-making process

Community conservation is concerned with involving local people in conservation, based on the principle that local people should participate in, benefit from, and take joint responsibility for the conservation of natural resources and protected areas. This approach stems from the recognition that the sustainability of protected areas in developing countries is very much affected by their ability to address the concerns of their human neighbours.

The sharing of benefits with local communities is one of the community conservation tools through which community-park relations could be improved. Benefit-sharing programmes allow access to park resources, which may consist of natural resources that could be sustainably

harvested, such as water and other natural products, as well as a share of the parks' financial revenue earned through tourism or other activities. Therefore, revenue is just one of the benefits that could be shared with local communities. It is an investment in conservation, and it must demonstrate a favourable conservation impact. In addition to the practical argument that revenue sharing is an effective conservation strategy, there is also a moral argument that revenue sharing is required as a form of compensation for people that are negatively impacted by the park in cases where other forms of local benefits from the park are not sufficient to counterbalance the costs to communities associated with living next to the park.

Parks do provide several benefits at a local level to surrounding communities, such as rainfall and climate control, water catchments, prevention of soil erosion, tourism-related income, aesthetic benefits, and biodiversity conservation. However, communities face problems from the proximity of national parks, which are mainly crop-raiding and problem animals but there are attacks by wild animals with the risk of injury and what is called the "opportunity cost" (perceived cost of the loss of opportunity to fully exploit the natural resources in protected areas).

Rwanda is an agricultural country, where more than 90% of the population relies on agricultural activity and depends on natural resources for firewood, water, medicinal plants, and other non-timber products like honey. Because of human pressure on natural resources and the need for agricultural land, the total area of Rwanda's parks has been reduced by more than 50% over the last 50 years.

As indicated in Chapter 1, the main threats currently faced by Rwanda's national parks are poaching, firewood collection, illegal fishing, collection of medicinal plants and other non-timber forest products, livestock grazing, fires, lack of a buffer zone, encroachment, water collection, beekeeping, and potential de-gazetting. Most of these threats originate in areas bordering the parks and therefore both practical and moral arguments suggest that benefit-sharing programmes must be focused on people living near the parks and particularly on the poorer households that are more dependent on (illegal) use of resources and more seriously hit by any negative impacts (costs).

6.5.3 Reporting channels

To enhance the awareness of government policies, such as the tourism revenue-sharing policy and compensation policy for the beneficiaries, it should not be impossible to reach these communities with information regularly through a variety of channels that may include written materials, radio broadcasts and public meetings. This must be done more than once and should be considered a key operational requirement for the parks in any case. If they are not communicating about these schemes and policies, it means there are many other things they

are not communicating. Without a high level of regular communication, 'participation' has no real meaning.

Local communities have some traditional governance and consultation structures. These structures may not always be the most ideal, but they could provide a starting point for communication processes with the communities. It is important to note that when communicating with local communities about issues such as percentage benefit-sharing schemes these may be alien concepts that need to be repeated over time until they can grasp the idea. Depending on the levels of education among these communities, sometimes the percentage language may have to be revised and communicated in simpler terms so as not to confuse them.

The findings of this study reveal a very serious communication gap between parks' authorities/policymakers and local communities, whereby more than 41% of the local residents surveyed indicated that they were not aware of the tourism revenue-sharing scheme. Different strategies have been suggested in this study to improve the communication of policies to communities around the national parks. They include school environmental clubs, community education visits, cell tourism liaison committees, wildlife movie shows, local and community radio channels as well as *Umuganda*, a monthly statutory community public work platform.

Strategies to improve communication of policies to communities around the national parks include:

- Forming environmental clubs in primary and secondary schools around the national parks to use as platforms for communicating government policies and initiatives.
- Having community education visits to local parks. Systematically select community residents and invite them to visit the national parks and pass on the needed messages regarding policies and initiatives. Village and cell leaders could be targeted so that it becomes a motivational tool to spread the message to the mass population.
- Form tourism liaison committees between the parks and the local people but the local people should not be directly involved in the management boards as this may create a sense of entitlement, yet national parks are national resources for the benefit of all in the country. The liaison committees should start from a cell level and directly deal with tourism and conservation matters only. A separate budget should be set up from the revenue-sharing funds to finance some of the costs such as transport, community restaurants and accommodation facilitation. The committees should regularly meet at least once a month at a cell level and a quarterly general meeting with the park authorities. Matters related to compensation for wildlife damage should be discussed and directed through this platform.
- Wildlife movie shows and village educational centres in different village centres would encourage local communities to learn about wildlife and conservation. Tourism entrepreneurship talks could be given through this platform, in recorded formats. Churches and other related organisations around the villages could also be used as platforms.

- Awareness-raising campaigns in villages at a cell level through public meetings should be held regularly. In Rwanda, several local radio stations and so-called community radio stations have been set up in rural towns and villages. These local channels should be used by RDB and other conservation stakeholders for effective communication with rural people in remote areas. These channels could also be used to disseminate information on entrepreneurial courses in tourism ventures and educate the communities about other tourism-related opportunities. Authorities could be invited to provide updates on tourism and conservation initiatives regarding the communities.
- Finally, Rwanda has established a monthly joint community work service called *Umuganda* that encourages every Rwandan to participate in community work, such as planting trees, cleaning public roads and streets, and constructing bridges. This platform has been very successful in bringing people together on the last Saturday of every month. It has been established as a very effective platform where the government can convey messages to the mass population. It is an excellent tool that RDB should use at least quarterly to update concerned communities on conservation and tourism initiatives. The tourism liaison committee mentioned above should also use the *Umuganda* platform to gather information from the people and provide feedback on any matters that might have been raised before. It would be strategic to hold the quarterly general meeting of all the liaison committees with the park authorities before the Saturday of *Umuganda* so that they can provide updates to the general population during *Umuganda*.

Although the issues of compensation will be communicated through the above communication platforms, it is important that in every village there is a communication representative selected by community members to represent the village in TRS and SGF-related issues. This representative will be a direct member of the Local Tourism Liaison Committee (LTLC). Furthermore, there should be an SGF community liaison officer at every park to make sure the SGF structure is decentralised. In addition, the SGF needs to have a full-time representative at RDB headquarters. The LTLCs at different levels of the local government structures (cell, sector and district) will make up the park conservation and tourism community assembly and co-ordination will be managed by the park. This assembly should convene every quarter (three monthly) chaired by the park authorities. Other stakeholders (NGOs and directly related private sector members) should be part of the quarterly gathering.

The researcher proposes the following graphical representation in Figure 6.3 to be used to improve communication and reporting among different stakeholders.

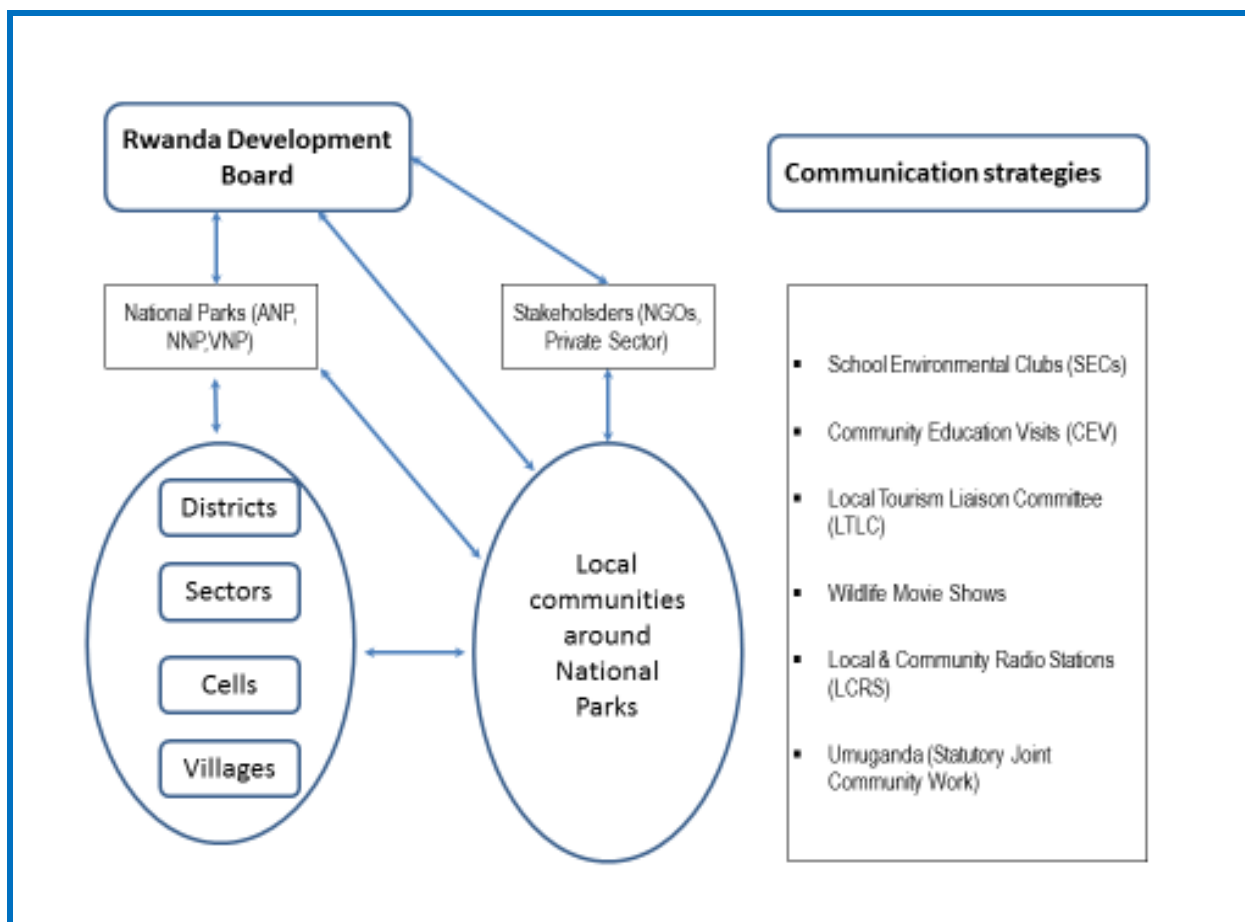


Figure 6.3: Diagrammatic flow for conservation communications

6.5.4 Compensation process

Law No. 52/2011 of 14/12/2011 established the SGF for accidents and damages caused by automobiles and animals (ROR, 2012:6). On 27 August 2012, Ministerial Order No. 18/2012/Minicom of 27/07/2012 was gazetted into Rwanda's national gazette, which orders the transfer of 5% of the gross annual income of the RDB into the SGF. The order instructs RDB to make the transfer once every financial year in the first quarter of the following financial year (ROR, 2012:6).

The above law establishing the SGF grants compensation to any person who has been injured and whose property has been damaged or destroyed by wild animals. The categories of compensation are determined by this law and set out by ROR (2011b:11) as follows:

- Article 4 of this law explains compensation to the relatives of someone killed by an animal. They will be entitled to compensation for moral loss, economic loss, medical expenses, transport fees and burial fees.
- In Article 9, the law stipulates that those entitled to such compensation are the spouse if the deceased was married, and to children, parents, or brothers and sisters. If the

person was injured, compensation shall be given to the victim, to parents or guardian if the victim is a minor.

- Article 5 defines compensation for people injured by an animal and who will be compensated per the level of disability and loss incurred, as well as for economic loss, medical expenses, and transport fees.
- Article 6 provides compensation for loss or damage of property and stipulates that a person whose property was damaged by an animal shall be compensated on real-cost valuation.

However, the law also makes it clear that if someone is found to have caused the destructive behaviour of the animals, he will be held responsible and must pay damages. Examples are visitors to national parks who do not follow the guidelines for behaviour towards animals and thus provoke an attack, or someone creating a fire that causes panic among animals.

The researcher perused this law and the compensation process and saw a direct connection to conservation of Rwanda's three national parks. It is indeed clear that if wild animals cause damage or death to members of the surrounding community residents there would be reprisals from the community if the government authorities have not reacted to the incidents. Cooperation from the community members in conservation would cease if they were not compensated for damages suffered by them.

Connecting compensation to community involvement in conservation prompted the researcher to find out from the community residents about their awareness of the compensation fund and the process through which compensation is given.

- As indicated in Chapter 5, it appeared that people were unaware of the compensation fund. Although they had heard of or experienced the compensation process, they were not aware of where the money came from. There was no awareness of what connects the compensation fund to tourism revenues from the parks. Chapter 5 highlighted several gaps that required intervention from this study to bring local communities on board. Several strategies have been suggested to mitigate the local communities' negative perceptions and to ensure that the compensation is commensurate with the damage caused.
- Ideally, the damages from wild animals and accidents should be kept separate from road traffic accidents. The two are different and the money from national parks should not be used to fund road and car accidents.
- There should be clear guidelines on claiming procedures, indicating timelines and clear channels of lodging complaints in case of non-conformity. Communication to the beneficiaries (all members of local communities around national parks) should be improved. The communication flow proposed in Figure 6.3 above should be adopted to maximise information sharing among different stakeholders, including local communities.
- A standard assessment form needs to be designed and made available to beneficiaries. A step-by-step guide for claiming compensation needs to be officially communicated to

all members of local communities. The compensation claimant (beneficiary), the local government official, RDB official (ideally based in individual national parks), as well as the SGF local representative, all need to be part of the damages assessment process.

- The compensation scheme should be run by an institution with a much greater interest in the question at hand and preferably be much closer to the ground. Ideally, the RDB should be assigned the role of managing the compensation scheme or at least an institution affiliated to the RDB. Alternatively, the RDB should have some level of control over the SGF as the beneficiaries of this fund have very direct links with the RDB, not SGF.
- The SGF, being in control and managing the compensation scheme, should have a full-time representative in the RDB-Tourism and Conservation (T&C) department to ensure direct involvement in solving complaints from victims. In addition, SGF should allocate its representatives to all districts neighbouring the national parks to decentralise decision-making and ensure easy and uncomplicated access by complainants and victims of wildlife conflict.
- The researcher recommends having compensation administered at an individual park level through a joint park/community institution as communities around national parks are predominantly less educated. The researcher believes that this demographic category requires special and closer attention because the rural citizens are usually quick to give up when their requests do not get attention and may resort to solving problems themselves, which would cause more harm to wildlife within the national parks.

6.5.5 Local communities' involvement and participation

Protected areas share benefits with local communities in the form of natural products (water, honey, medicine, and fuelwood), cultural/spiritual values, environmental factors (climate, rainfall), income from conservation-based enterprises and finally, a share of tourism benefits. The main point is that tourism revenue sharing is just one of the benefits that are shared with local communities. However, it must be distributed fairly and transparently so that it benefits the people most affected by the cost of living adjacent to the parks. Revenue sharing is meant to promote a more equitable sharing of the costs and benefits of conservation. In Chapter 5, local residents indicated a lack of awareness of the revenue-sharing scheme and the need for more participation in the process of deciding on the projects to be funded by the revenue sharing. Chapter 6, through expert opinions, reveals different ways local communities could be involved and have more say in the decision-making process for the projects to be funded under the TRS. The compensation process has also been discussed and how communities could be more involved. The below paragraphs discuss different strategies that should be used by the government through the RDB and other stakeholders to maximise the local communities' participation in decisions related to TRS and compensation funds.

Firstly, revenue-sharing schemes need to be developed together with other stakeholders to ensure a holistic view. Communities who are to receive benefits should be left alone to decide what they want to do with their accrued benefits from the government. Thereafter the process of endorsing the projects can follow but projects need to be proposed by communities alone. Involve civil society organisations and NGOs in the identification of projects and their implementation and monitoring, as well as for the provision of technical advice and institutional support. The best way is through a structure that gives communities a real stake in the management and benefits of the three national parks. Communities tire quickly of demands for their participation if it is clear that the level of influence on decisions is low and the level of benefits for participation is low. Implementing park-community-related programmes that build good relationships with communities adjacent to the national parks is the best way of creating long-term partnerships with the government to mitigate matters related to national parks. There is therefore a need to promote all linkages, as well as assisting households to diversify livelihoods away from a heavy dependence on the parks. Tourism entrepreneurship is one way but other linkages within the overall tourism value chain need to be investigated.

The scope of discussions on benefits needs to be broadened from being purely material and largely financial to include cultural goods. The contribution that conservation and protected areas can make to the wellbeing (and livelihoods when interpreted in a broad sense) through the provision of “cultural ecosystem services” is developing. Engaging with local cultural values and connections to nature and the natural world has the potential to significantly influence and strengthen the way conservation initiatives interact and engage with local communities.

Social infrastructure is important for local development and the delivery of benefits to communities. Some analysts suggest that basic infrastructure for health, education and communications are prerequisites for social and economic development. The needs of the individual communities are usually different and that is what should inform the role of different stakeholders wishing to maximise benefits to the communities.

Revenue from TRS in Rwanda has been widely used on communal projects like schools, water, bridges, and health centres. It cannot yet be stated categorically that the strategy has been successful because no scientific study has been conducted to date. However, RDB officials report that the initiative has been largely positive through indicators like the reduction of bush fires and animal poaching, increased reports from local communities to RDB (through informants), voluntary return of captured wild animals outside the parks by local residents and increased participation in conservation activities by former poachers. However, even though this is a good sign of the fund’s successes, it must be remembered that in Chapter 5 local residents expressed a lack of awareness of the fund itself. This is probably a result of the fund being used to fund communal projects only and mostly targeting a few members of the communities who are somehow directly linked with conservation or anti-conservation

practices. This, therefore, underscores the need for TRS to consider increasing individual benefits. Individual tourism projects should be initiated to encourage rural young people, for example, to venture into tourism enterprises, which would increase awareness among local people of the TRS. The impacts of TRS on the communities will thus be measured at a collective and individual level and should be traceable.

Individual benefits are the most important target. For example, as one expert responded, it has been demonstrated for revenue-sharing initiatives around Bwindi National Park in Uganda that investment in social infrastructure was not effective at building positive relations between park and community. This was partly because expectations were higher than what was delivered. It was also partly because the development was not properly tied into district plans and therefore not supported by wider development processes and requirements (e.g., schools might be built without provision for teachers, clinics might be built without provision for nurses or medicines or power). Furthermore, revenue-sharing funds simply seemed to replace government provisions or budgets and therefore did not end up being perceived as additional funds by communities.

The TRS could also set aside a fund for microcredit financing. The introduction of micro-credit schemes to assist community members with start-up capital is seen as a new way to increase community participation. The strategy should also include financial management training in micro-credit schemes for all community members.

6.6 Discussion of the findings

The most notable outcomes from local communities surrounding the parks can be summarised by stating that conservation of Rwanda's three national parks is complex with varying implications on local people's ability to enhance livelihoods and for them to continue supporting conservation activities governed at the highest level. It was apparent that there was some dissatisfaction at the local level regarding the current park governance processes.

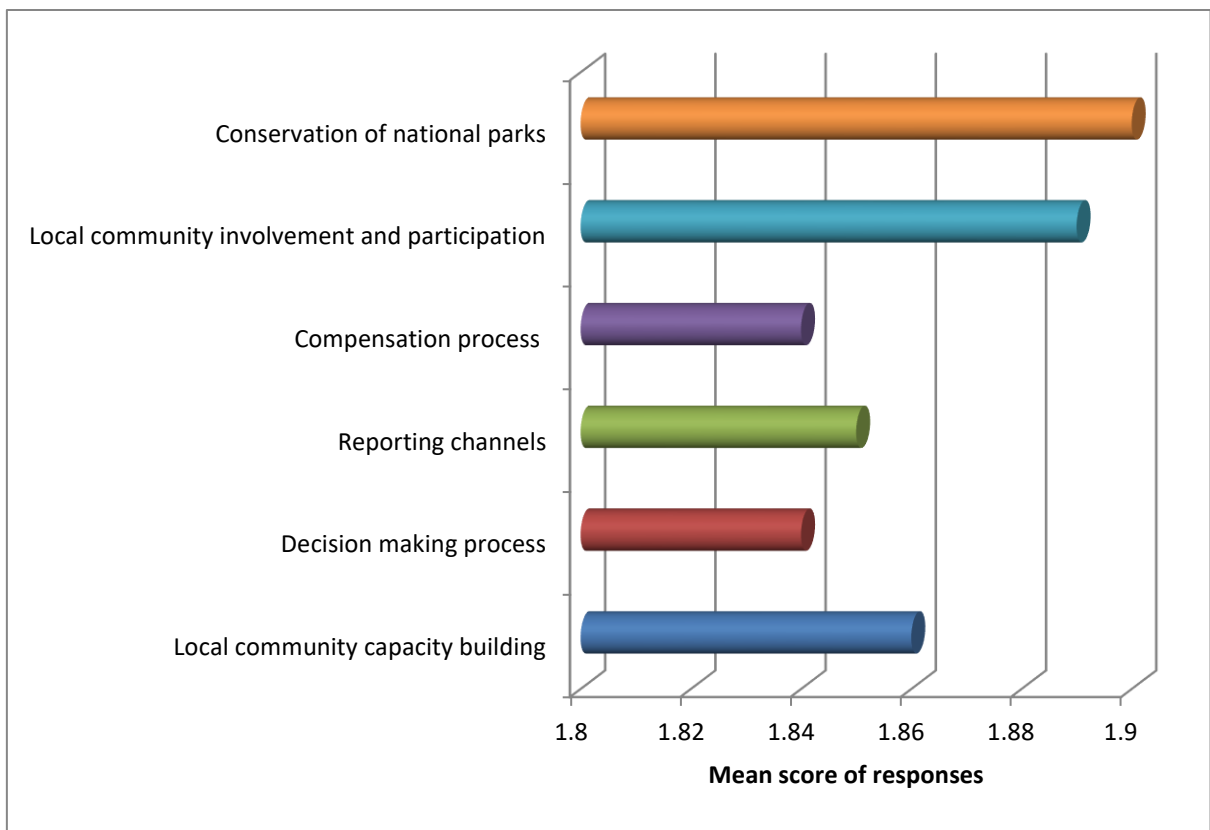


Figure 6.4: Summary of the respondents' feedback

Consequently, all conservation organisations, from government agencies to environmental stakeholders, should be cautious to avoid making narrow interventions and implement policies based on misjudgements in the three national parks' conservation zones about pro-poor yielding. From what has been observed, it is also critical to highlight that most interventions are premised on hypothesised evidence, which has not been empirically verified based on the credibility of socio-economic and ecological scientific results.

Despite conservation governance, community livelihoods and sustainable conservation being a complex subject, it was established that conservation conceptual underpinnings relevant to natural resource governance as currently practised in the national biodiversity strategic policy does not involve the local people or their local institutional processes regarding community participation and deriving livelihood benefits. If anything, the issue of local property rights, resource access and utilisation is confrontational, which the communities feel that they have been denied their sovereign right to resources, thus potentially undermining local collaboration towards conservation.

Findings from empirical surveys with households, interviews with policymakers and experts reveal that there is a need to develop a tourism management framework for the three national parks, which would describe how tourism would work for the upliftment of local communities.

Such a management framework should be a broad policy guideline with clear performance indicators to measure effectiveness.

The researcher conducted a thorough investigation into employment for local communities as an impact of tourism and local capacity building, including, for example, education and training and local participation in the management of the national parks. Gaps became apparent, including lack of consultation from top-down, stakeholder conflict, lack of communication, lack of mentorship and coaching programmes and lack of awareness. The current management of the three national parks became a great concern to the researcher.

The researcher developed a tourism management framework for the conservation of the three national parks which will ensure increased communication between conservation stakeholders, with specific emphasis on surrounding communities, increased benefits to local communities and active local community participation in conservation activities.

6.6.1 Management context

Bearing the findings in mind, a tourism management framework for biodiversity and upliftment of the bordering communities through tourism enterprises is paramount in this study. It is clear that the protection of biodiversity will require the involvement of local, low-income communities and that tourism suggests a way to achieve this. To comprehend how to drive conservation through tourism, it entails looking at what tourism enterprises are already doing on the ground, the management context as well as who is supporting them to perform their work.

The findings of the literature review and surveys are used to kick-start the development of the proposed framework. Aspects such as employment for local communities, capacity building, participation in decision-making, tourism entrepreneurship, involvement in revenue-sharing projects, clear and effective communication between government agencies, the private sector, non-government players and local communities, are arguably the essential elements of the proposed tourism management framework.

6.6.2 Legal basis

As reported in Land Project Policy Research Brief number 1 by Bisozza et al. (2013:9-12), several laws and policies relevant to the management of protected areas have been put in place. These include the Constitution of the Republic of Rwanda as amended to date, the Environmental Policy (2003), the Rwandan Office of Tourism and National Parks (ORTPN) Law (2003), the National Land Policy (2004), the Environment Law (2005), the Akagera Law (2010), the Forestry Policy (2010), the Rwanda Wildlife Policy (2013) and the Land Law (2013). Rwanda has also ratified international conventions such as the Convention on Biological Diversity (CBD) and Convention on International Trade in Endangered Species of Fauna and Flora (CITES).

Protected areas are classified by law as State land in the public domain which is reserved for environmental protection. As per policy and legislation, various rights and restrictions could be established by the relevant competent authorities that define each stakeholder's access to direct and indirect use of wildlife resources. Article 64 of the Environmental Law of 2005 obligates the population to conserve the environment by individual action, collective activities, or associations of the environment.

Rwanda has embarked on considerable institutional transformations in the environment sector. Several institutions have been formed or restructured to address different environmental needs and priorities. The former ORTPN is now the Department of Tourism and Conservation under the RDB. The mandate of the department is to conserve the rich biodiversity of Rwanda's protected areas and to develop sustainable tourism in collaboration with stakeholders for the benefit of all Rwandan people. The Ministry of Natural Resources (MINIRENA) is the overall leading institution of the environmental sector charged with ensuring sustainable management and rational use of natural resources. Under its mandate are two major implementing agencies of environmental sector policies and programmes, the Rwanda Environmental Management Authority (REMA) and the Rwanda Natural Resources Authority (RNRA), each with interlinked but separate mandates.

REMA is mandated to co-ordinate and oversee the implementation of national environmental policy and associated legislation. RNRA is responsible for implementing national policies, laws, strategies, regulations, and government resolutions in matters relating to the promotion and protection of natural resources. National parks are managed by RDB, forest reserves and other natural forests are managed by MINIRENA, RNRA and the Districts, while protected swamps fall under the authority of REMA.

Article 4 of Law no. 33/2010 of 24/9/2010, establishing the ANP, states that the management of the park and its buffer zone is entrusted to the institution in charge of the management of national parks, which is RDB (ROR, 2010:7). However, in December 2009 joint management of the park was entrusted to ANP, a not-for-profit company and RDB. The NNP is managed by RDB but the government, through the MINIRENA, has signed a management partnership with the NFC to exploit and manage the buffer zone around the park. Only ANP and NNP have buffer zones and management of these is entrusted to those institutions in charge of park management.

Allocation of rights to surrounding communities to economic benefits generated by protected areas is provided for in the case of national parks. In 2005, RDB launched a revenue-sharing programme which allocated 5% of tourism revenues earned by the park to fund community development projects. No management role of protected areas or buffer zones is assigned to ordinary citizens, although a section in the National Land Policy assigns responsibility to all

Rwandans to improve the protection and the management of protected areas. Rather, the role of the surrounding communities within protected areas is limited to the provision of labour, participating in awareness campaigns, and monitoring of their neighbours' illegal activities through overnight patrols. For example, about 200 people were employed in 2012 by the AMC for construction work, maintaining firebreaks and roads and removing exotic plant species, injecting about US\$260,000 into the local economy (African Parks, 2012:7). Within the buffer zones, communities may engage in activities approved and overseen by the park management, such as beekeeping.

Although Rwanda's protected areas were gazetted several decades ago, the number of individual and community claims to conservation is still considerable. According to the Land Project Policy Research Paper No. 1 of Bisoza and Ndangisa (2013:18-20), the threshold needs on national parks would be to:

- Prevent exploitation or occupation inconsistent with the protection of the ecological integrity of the area.
- Provide spiritual, scientific, educational, recreational and environmentally compatible tourism opportunities.
- Protect the area if it is of national or international biodiversity importance or contains a viable, representative sample of Rwanda's natural systems, scenic areas or cultural heritage site, or the ecological integrity of one or more ecosystems in the area.
- Expand the alternatives provided to communities to generate incentives to conserve and satisfy community livelihood needs.
- Confer full management authority in the GoR and park management companies.
- Provide the payment for environmental services (PES) to resource users in exchange for refraining from resource harvesting or other environmentally detrimental activities represent another approach that warrants consideration.
- Harness the local communities surrounding the three national parks.
- Allocate a greater share of park revenues to communities. Permitting community members to collectively determine how such funds are invested would likely bolster incentives to protect park resources, as would extending many opportunities to community members to work in the parks, receive employment training and engage in other educational opportunities.
- Establish clear boundaries for the NNP and VNP and define rights regimes within protected areas and buffer zones in collaboration with local communities have the potential to improve compliance with protected area regulations.
- Facilitate the process of compensation for damages caused by wildlife entering communities, which appears to be highly onerous and could aggravate community grievances over protected areas.
- Review the law to reduce costly documentation requirements and experts' reports while still ensuring sufficient evidence is produced to prevent fraud, which is recommended.

- Support the partnership coherently between all stakeholders in the conservation.
- Ensure that the rights of local communities are clear and alleviate livelihood pressures.
- Work with communities surrounding the parks to come up with a regime for assigning management and use rights in ways that could support both conservation and community livelihood needs.
- Incentivise protected area conservation through the introduction of a PES programme which is intended to combine both objectives of poverty reduction and protecting the ecosystem.
- Integrate local communities to establish awareness of equal employment for local communities, local capacity building, including, for example, education and training and local participation in the management of the national parks.
- Enhance participation in decision-making and create a conducive environment for local government involvement (from districts to villages).
- Clarify the significance of tourism revenue-sharing management (project selection process).
- Ease compensation fund management (compensation process and fairness issues), and
- Sharpen communication strategy.

6.6.3 Actors and their functions in the proposed tourism management framework

Stakeholders in the proposed tourism management framework for the conservation of Rwanda's three national parks include local communities, the public sector (government), the private sector, policymakers, experts, civil societies, NGOs, park authorities and tourists. All these components are presumed to be orientated towards community development. These stakeholders are ideally supposed to enact the conservation of the three national parks and to ensure the upliftment of the surrounding communities through tourism projects.

Safari (2017:221) avers those stakeholders in a framework are role-players who ensure the upliftment of surrounding communities through tourism projects. These could be persons, a group or an institution that performs a certain task. In the proposed framework, a stakeholder could be a governmental or non-governmental conservation research centre, a policymaker, a co-operative in charge of biodiversity protection, a business incubation centre established around the national parks, a parks warden, an expert in conservation and tourists who come for a specific purpose to the protected areas.

6.6.3.1 Policymakers

The role of Rwandan government institutions is clear. It is important to understand that the public sector consists of national ministries, special government boards and agencies, provinces, districts, sectors, cells, and villages. These governmental sub-structures are organised according to functional areas with ministries and departments dealing with issues

such as good governance, justice, social development, land affairs management, environmental affairs, water and energy, forestry, agriculture, commerce, industries, arts, co-operatives, and tourism (Swanepoel & de Beer, 2011:21).

According to Weaver and Oppermann (2000, cited by Mochechela, 2010:66), policy development is much more detailed. It is defined as a strategy for the development of the tourism sector that establishes objectives and guidelines as a basis for what needs to be done. These means identifying and agreeing on objectives, establishing priorities, planning in a community context the roles of the national government, national tourist organisations, local governments and private-sector businesses, establishing possible co-ordination and implementation of agreed programmes to solve identified problems, with monitoring and evaluation of these programmes.

Considering the above definition, it could be said that a tourism policy is very important in addressing problems caused by tourism (Mochechela, 2010:66). Policy plays an important role in helping all stakeholders to agree on the objectives of tourism and plays an important role in promoting co-ordination between the government, tourism management and other stakeholders (Mochechela, 2010:66).

In the researcher's understanding, it is not tourism per se that causes all negative impacts but rather the failure of tourism planners and management to come up with effective strategies and approaches to guide tourism. Mochechela (2010:68-69) pointed out that for tourism to be successful, sustainable, and beneficial to the local communities and for it to meet the demands and the needs of tourists, governments have an important role to play. The government should have policies in place to regulate and minimise the impacts that may be experienced by local communities because of irresponsible tourism. The government should protect people against tourism that will erode or commercialise the culture, sacred beliefs, and resources of the local communities. The government should play its role in protecting people and enhancing the benefits of tourism to the local people.

6.6.3.2 The private sector

In the proposed framework, the private sector is an important stakeholder. It comprises groups active in the tourism industry, trading, hospitality services, art and craft businesses, tour operators, tour guides and restaurants functioning to fight poverty at the destination through their contribution to the increase of tourism revenue to local residents. The researcher suggests that the CBT approach would be the best entry point of the private sector to harness the income diversification of the locals such as arts and crafts and other small businesses.

The public sector aims to uplift the economic lives of local communities by establishing basic infrastructure such as schools, clinics, roads, water, energy, bridges, libraries, and malls

around the protected areas. The private sector could partner with the public sector to develop these infrastructures and in so doing, create employment for local community residents. Donors are financial angels whose mission is to fund the protected areas to protect the global biodiversity and they acknowledge the role of the local communities surrounding the national parks.

6.6.3.3 Local communities

Swanepoel and de Beer (2011:61) define a community as:

“...a grouping of people who reside in a specific locality and who exercise some degree of local autonomy in organising their social life in such a way that they can, from that locality base, satisfy the full range of their daily needs”.

In other words, these are the residents who do not need spoon-feeding, rather a planned partnership approach to a positive change in the ordinary people, for the ordinary people and through empowered people with existing resources, to achieve a common developmental goal with inclusive approaches. These local communities are essential stakeholders to advance the proposed tourism management framework, without whom the framework is not inclusive. The local communities include organisations founded and run by individuals or groups within the communities. Examples of CBOs are fishing, farming, handicraft co-operatives and cultural groups that have the potential to attract tourists (Safari, 2017:225). For the proposed framework to flow in the modern management paradigm, it is very important to engage the locals' active participation in decision-making for projects to be funded for their benefit. In the researcher's opinion, the role of local community participation in conservation and park management would also be a visible demonstration of good governance of the protected areas in democratic governance.

In the empirical survey and interviews, it was revealed that the funding from TRS is generally accorded local communities in associations and co-operatives, but the question raised was how to shift tourism revenue from co-operatives to individuals through funding the projects from individuals. The proposed framework aims to maximise the local communities' benefits, both communal, joint and individual benefits, with increased involvement in tourism entrepreneurship and a clear compensation process.

6.6.3.4 Other stakeholders

These include civil society, which according to Safari (2017:223), could be CBOs, village associations, environmental groups, women's rights groups, farmers' associations, faith-based organisations (churches), labour unions, co-operatives, professional associations, chambers of commerce, independent research institutes and not-for-profit media. The researcher agrees with the OECD's (2012:7) definition of civil society as groups outside of a family who organise

themselves to pursue shared interests in the public domain, including tourism stakeholders in conservation for the upliftment of local communities.

Partnerships with public and private institutions could contribute to shaping practical policy and harnessing the neglected actors in both the tourism industry and conservation. For example, engaging steering committees from central and local governments, tourism SMEs, representatives of local communities, educational institutions, and co-operatives in developmental programmes such as mentoring, coaching and vocational training could create mutually beneficial relationships between all the parties involved in conservation. To this extent, local communities would feel ownership of the protected areas while benefiting from opportunities in the areas because they are active participants. Subsequently, security would be a common issue in protected areas.

6.7 Chapter summary

Conservation governance, community livelihoods and sustainable conservation is a complex subject. It was established that conservation conceptual underpinnings relevant to resource governance as currently practised in the national biodiversity strategic policy does not involve the local people or their local institutional processes regarding community participation and deriving livelihood benefits.

Findings from empirical surveys with households, interviews with policymakers and experts revealed that there is a need to develop a tourism management framework for the three Rwandan national parks under study, which would guide how tourism would work for the upliftment of local communities. Such a framework was developed in this chapter and considered aspects like employment for local communities, capacity building, participation in decision-making, tourism entrepreneurship, involvement in revenue-sharing projects, clear and effective communication between government agencies, private sector, non-government players and local communities. These are the essential elements of the proposed tourism management framework. The framework brings together several actors (stakeholders) including local communities, the public sector (government), the private sector, policymakers, experts, civil societies, NGOs, park authorities and tourists.

The present framework endeavours to achieve the three main objectives of improving livelihoods of surrounding communities, active participation of local communities in tourism and conservation activities and reduction in HWC caused by neighbouring communities. If implemented as proposed, the new framework will ensure increased employment opportunities for local communities. It will also ensure that local community residents have adequate skills and knowledge to benefit from tourism employment and entrepreneurial opportunities. It will increase ownership of tourism enterprises by local communities through which they can maximise the value chain benefits and increase active community participation in decision-

making regarding tourism revenue-sharing funded projects and compensation processes. The proposed framework will also ensure clear and effective communication between government agencies, the private sector, non-government players and local communities.

Although it is believed that employment is the main benefit of tourism, it is sometimes limited by the size of the operation. There is a need to encourage indirect employment through the tourism supply chain, local linkages, as well as through tourism staff spending their salaries in local villages around the national parks under study. The proposed framework argues that locals should be trained in entrepreneurial skills. Whatever form of training or mobilisation is carried out among these communities, it should be tailored to the specific conditions of each community. Capacity building of local people will be strengthened through the development and implementation of short courses and medium and long-term training programmes for the benefit of early to mid-career professionals as well as experienced staff from various institutions involved in biodiversity, agro-biodiversity, and biotechnology management.

The role of private institutions and NGOs is usually focussed on capacity building, skills training, offering support and business advice as well as raising conservation/tourism awareness. In addition, these partners should offer bursaries/scholarships for education to local community residents in schools and universities and should assist in setting up linkages and developing partnerships.

The proposed framework invokes the role of the government, in partnership with other stakeholders, including NGOs and the private sector, in developing strategies to strengthen CBTEs as a model to promote PPT projects around national parks. PPT initiatives should involve community tourism activities, starting from cultural activities to boost their businesses and through which the local communities will be sensitised to conservation. Encouraging local communities to enter tourism enterprises will need some kind of financial incentive, such as a tax incentive to local entrepreneurs in certain types of community tourism-based initiatives. Similarly, there could be a strategy that provides communities access to microcredit/loans for viable tourism projects. The framework proposes that a portion of the tourism revenue-sharing funds could be used to finance viable individual/group community tourism-based projects directly.

TRS revenues in Rwanda have been used widely on communal projects like schools, water, bridges, and health centres. This is a positive sign of the fund's successes, but it must be remembered, as stated in Chapter 5, that local residents expressed a lack of awareness of the fund itself. This is probably a result of the fund being used to fund only communal projects and targeting only a few members of the communities who are somehow directly linked with conservation or anti-conservation practices. This calls for TRS to consider increasing individual benefits. Individual tourism project competition should be initiated to encourage rural young

people to venture into tourism enterprises, which will then increase TRS awareness among the local people. The impacts of TRS on the communities will thus be measured at both a collective and individual level and will be traceable.

The literature review connects the wildlife compensation fund to community involvement in conservation and reveals little or no awareness on the part of local communities about the fund and the process through which compensation is given. The present framework recommends several interventions to improve the situation. Among others, it states that ideally damage and accidents by wild animals should not be mixed with road traffic accidents, as these two are completely separate types of accidents in nature and the money from national parks should not be used to fund road traffic accidents. The proposed framework recommends that the SGF should have a representative based full time at RDB T&C department. In addition, the SGF should allocate representatives to all districts where damage caused by wildlife occurs.

Finally, the lack of communication was found to be a serious gap in the active participation of local communities in tourism and conservation issues. To enhance awareness of government policies such as the tourism revenue-sharing policy and compensation policy for the beneficiaries, it should be possible to share information with communities regularly through channels such as written materials, radio broadcasts and public meetings. This study proposes a communication framework that will ensure maximum participation of local communities in conservation and tourism activities for Rwanda's three national parks. In the framework, different strategies are proposed to improve the communication of policies to communities around the national parks. The strategies include school environmental clubs, community education visits, cell tourism liaison committees, wildlife movie shows, local and community radio channels as well as *Umuganda*, a monthly statutory community public work platform. On the issue of compensation, the proposed framework recommends that in every village there should be a communication representative selected by community members to represent the village in TRS and SGF-related issues and who should be a member of the LTLC.

The next and last chapter summarises the research findings, makes recommendations and concludes the study.

CHAPTER 7

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

7.1 Introduction

This chapter presents a summary of the findings of the study, draws conclusions and makes recommendations. The summary is based on the research objectives and the recommendations made emanate from the research findings.

7.2 Summary

The study sought to develop a tourism management framework for the conservation of the Rwandan national parks. The proposed framework encompasses local community capacity building, decision-making processes, reporting channels, compensation and local community involvement and participation as predictor variables for the conservation of national parks.

The results of regression estimates presented in Table 6.3 indicate that Community Capacity Building had Beta (β) = 0.233, $p=0.016 < 0.05$, implying that local community capacity building had a positive and significant effect on the conservation of Rwandan national parks. The study, therefore, rejected the null hypothesis and concluded that community capacity building significantly affected the conservation of the national parks. The study concludes that local community capacity building is a significant component in the proposed tourism management framework for the conservation of Rwandan national parks

The results of regression estimates presented in Table 6.3 indicate that the decision-making process had Beta (β) = 0.114, $p=0.320 > 0.05$, implying that the decision-making process had a positive but insignificant effect on the conservation of Rwandan national parks. However, the study failed to reject the null hypothesis which stated that H_{02} decision-making process does not significantly affect the conservation of the national parks.

The results of regression estimates indicate that reporting channels had Beta (β) = 0.297, $p=0.006 < 0.05$, implying the reporting channels had a positive and significant effect on the conservation of Rwandan national parks. The study rejected the null hypothesis which stated that H_{03} reporting channels do not significantly affect the conservation of the national parks. The study further concluded that reporting channels were a significant component in a tourism management framework for the conservation of national parks in Rwanda

The results of regression estimates indicate that compensation had Beta (β) = 0.297, $p=0.006 < 0.05$, implying that compensation had a positive and significant effect on the conservation of national parks in Rwanda. The study rejected the null hypothesis which stated that H_{04} compensation does not significantly affect the conservation of the national parks. The study

concluded that compensation was a significant component in a tourism management framework for the conservation of Rwandan national parks

Finally, the results of regression estimates indicate that local community involvement and participation had Beta (β) = 0.297, $p=0.006 < 0.05$, implying that local community involvement and participation had a positive and significant effect on the conservation of Rwandan national parks. The study rejected the null hypothesis which stated that H_{05} local community involvement and participation does not significantly affect the conservation of the national parks. The study concluded that local community involvement and participation was a significant component in a tourism management framework for conservation of national parks in Rwanda

The study findings show that local community capacity building accounted for 15% in the tourism management framework, decision-making process accounted for 13%, reporting channels accounted for 14%, compensation accounted for 18% and finally, local community involvement and participation accounted for 12% in the tourism management framework for conservation of Rwandan national parks. Based on these numbers, compensation is the largest contributor to the conservation of national parks in Rwanda

7.3 Conclusions

It is worth noting that local community capacity building has a significant impact on the conservation of Rwanda's national parks and enhances tourism management to the benefit of all stakeholders. Therefore, for sustainable development of the tourism sectors, local community capacity building is a major component of the proposed tourism management framework. Secondly, the study concluded that involvement of the local communities in decision-making processes on tourism management in the three national parks increases the participation of local communities in the conservation of the parks, hence is beneficial to the tourism sector in Rwanda.

It must be emphasised that compensation of local communities living close to the national parks' accounts for the largest variation in the tourism management framework for conservation of Rwandan national parks. Finally, local community involvement and participation is a significant factor in the tourism management framework. Based on the validated framework, compensation contributes to the largest variation in the conservation of national parks in Rwanda. Adoption of these factors in tourism management will promote tourism in Rwanda through effective conservation of the three national parks.

7.4 Recommendations

The narrative findings on policymakers and experts revealed a gap in policy on biodiversity awareness. The study findings have several implications for policies related to conservation

integration in the economic sectors and social lives of Rwandan citizens, especially to uplift the locals living around the national parks. Recommendations apply to the policymakers/government agencies, the private sector as well as local communities.

7.4.1 Recommendations to policymakers

- a) Local authorities should be innovative and identify a win-win position for conservation protection. There should be a concern about community members merely having knowledge and skills on how to befriend conservation.
- b) A concerted effort is needed from the government to produce professionals through technical vocational education, training schools and incubation centres whereby they would acquire, for example, skills in bird watching, fishing, firefighting, customer care, safety and security and tour guiding at all levels so that they could contribute to and benefit from the overall tourism value chain. Higher learning institutions and the Technical & Vocational Education Training in partnership with the Rwanda Education Board (REB) should use a decolonised curriculum and training programme to equip learners with skills to compete in the job marketplace and to promote tourism-based conservation of biodiversity and hospitality entrepreneurship ventures around the protected areas. Primary and secondary curricula should include conservation and tourism subjects to be taught at all levels so that learners understand the interdependence of these two sectors.
- c) Concerning compensation and TRS programmes, relevant government institutions should work with reliable conservation experts and local communities to review how the compensation fund and TRS could benefit the disadvantaged people around the conservation areas. In the research findings, the issue of direct benefits for individuals from TRS was a concern. It is therefore recommended that policymakers and stakeholders must review the compensation process for it to work smartly for the communities and redefine the TRS to direct individual benefits from the conservation.
- d) The findings and grounding theories on conservation and livelihoods in Rwanda show that there still a conflict of interest between the policy guidelines and the needs of the real people. To overcome this, the researcher recommends that relevant authorities form partnerships with private and civil society to promote practical and decolonised policy guidelines wherein the local communities define themselves as active participants in the implementation of the policies. For example, community-based tourism organisation's initiatives should receive mentorship and coaching to be more tourism-responsible at the community level.
- e) Public institutions in partnership with relevant government agencies in charge of TRS should be driven by democratic transparency rather than being a mere fraction to be shared in a threshold approach. That is to say, the distribution of tourism revenue

allocated to local communities around the parks should be based on local communities' opinions rather than the decision on who should benefit exclusively. Regular assessment of the TRS programmes for community upliftment should be conducted to the conflict of interest between those who benefit unfairly from the TRS programme and those in need.

- f) Conservation awareness and literacy campaigns are needed, and priority should be given to the youth and vulnerable people who are already in the marketplace in Rwanda's territories. Steering committees should be set up to monitor the progress of these campaigns. Collaboration is required between the Ministry of Education, Ministry of Youth and ICT and local government to champion the campaigns in partnership with districts to secure budgets for the conservation of biodiversity awareness and literacy campaigns.
- g) Lastly, in the researcher's opinion, civil society in the framework represents influencers in different domains of a given country. Civil society's role in doing the right thing in the right way for the right people in need is justified. Given tourism impacts within biodiversity, it is recommended that civil society, particularly entities from the developed world, mostly called experts, which are active in Rwanda, share updated conservation information with all stakeholders. Their partnerships with public, local communities and private institutions could contribute to shaping practical policy incorporating all stakeholders in both the biodiversity and tourism sectors. For example, sharing successes with the support of conservation international and community-based tourism organisations could inspire non-committed local communities in biodiversity to cease their illegal logging, poaching or unsustainable farming practices. The role of civil society could be seen as knowledge-transfer through mentoring and coaching programmes in partnership with the Ministry of Education and community stakeholders towards building strong institutions for long-term development.

7.4.2 Recommendations to the private sector

The fact that the private sector's participation in biodiversity conservation is unclear has prompted the researcher to recommend that the private sector becomes involved in biodiversity conservation to promote responsible tourism for all. For instance, in the tourism and hospitality industry, there are undeveloped niche areas where the private sector, in partnership with the government, the NGOs, donors, local communities and civil society, could intervene in investing in biodiversity conservation. In the proposed tourism management framework for conservation, the private sector's voice must be heard.

7.4.3 Recommendations to the local communities

The researcher acknowledges that tourism involves bringing strangers into a community, which makes it important to consider its impacts on social, economic, cultural, and related

natural resource uses on tourism in a destination. Negative impacts of tourism, particularly to the social and cultural integrity of a community, usually occur when the values and behaviours of the local community are threatened, which could include changes to the family structure, relationships, collective traditional lifestyles, and moral values. On the other hand, tourism could have positive impacts by fostering local pride, decreasing urban flight, and increasing global understanding. For instance, it has been explained that in most destinations, pristine ecosystems and landscapes are resources for tourism, creating an economic reliance on a healthy natural environment.

It has been observed that tourism activities impact a host community's use of natural resources. If tourism competes with host communities for scarce resources such as food, fuel, wood, and other sources of energy, then a periodic assessment of the impacts of TRS on local communities must be done during good planning and management of the industry for the benefit of local communities. It is recommended that local host communities should seek to understand their position in partnerships with public, private, and civil society, NGOs, donors and experts to maximise their benefits from tourism and conservation of the destination.

7.5 Chapter conclusion

This chapter presented the study findings, drew conclusions, and made recommendations in relation to the study objectives. The chapter concluded and suggested recommendations that should be adopted by different stakeholders to ensure the proposed tourism management framework is effectively implemented. Recommendations were specifically made to policymakers/government agencies, the private sector as well as local communities. Education and training of stakeholders play an important role in the successful implementation of the proposed framework.

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APPENDICES

APPENDIX A: SURVEY QUESTIONNAIRE FOR LOCAL COMMUNITIES

Dear Community Resident

My name is Emmanuel Nsabimana and I am a doctoral student at the Cape Peninsula University of Technology in Cape Town, South Africa. I am conducting academic research on three of the Rwandan national parks concerning pro-poor tourism to “develop a tourism management framework”.

Attached is a questionnaire designed to assess the impacts of tourism on your quality of life in the community. Specifically, this survey is designed to assess community residents' perceptions of how their overall quality of life is affected by tourism and also what contribution is giving to the conservation of the parks around you. Your participation in this survey allows you to voice your opinion to help tourism planners improve the quality of life in your community. Your help will be greatly appreciated.

It will take approximately 15 minutes of your time to complete this survey. Your participation in this survey is voluntary and your response will remain confidential.

All the responses will be combined to develop statistical profiles to help government leaders and community leaders identify areas of strength and weakness. There are no right or wrong answers to any of the questions in this survey. You need only express your feelings about how you see things in your community.

Please complete this survey as precisely as you can. Where you do not understand, the research assistant will help to clarify the information. I appreciate your co-operation in this matter very much.

If you have any questions regarding this survey, please contact the following:

Emmanuel Nsabimana
Principal Investigator
Hospitality and Tourism Management
Cape Peninsula University of technology
nsabemm@yahoo.fr (+250) 785389981

Prof J P Spencer (Project supervisor).
Adjunct Professor
Department of Tourism and Events Management
Cape Peninsula University of Technology
jpsafron@mweb.co.za

QUESTIONNAIRE

SECTION A: DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

1. Respondent age

Respondent	21-30	31-40	41-50	51-60	>60

2. Respondent's gender

Male		Female	
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3. Respondent's role in the household

Head of household (family)		Dependant	
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4. What is your highest education level?

Never been to school	
Primary level	
Secondary level (A level)	
Attended a vocational training	
Postgraduate degree (Bachelor, Masters, PHD)	
Other (please specify):	

5. Please indicate the park closest to your home

Nyungwe	Akagera	Volcanoes

SECTION B: COMMUNITY CAPACITY BUILDING AND CONSERVATION OF THE NATIONAL PARKS

Statements	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
All community members around national parks are properly trained to conserve the park					
Local community members are properly educated on national park management					
Training initiative aimed at equipping local residents with management skills help in management of national parks in Rwanda					
Promotion of community-based programmes to ensure participatory methods and to address the inefficiency problem should be encouraged					
Community capacity building create an enabling environment needed by local communities to benefits from tourism and conservation of national park					

SECTION C: DECISION-MAKING PROCESS AND CONSERVATION OF THE NATIONAL PARKS

Statements	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
All community members around national parks are involved in decision-making to conserve the park					
Local community members are properly involved in resources allocation					
Local community members are properly involved in tourism planning					
Decision-making on national parks management is done after consulting with key stakeholders					
There is a legal framework to ensure participatory approach on matters of national parks conservation					

SECTION D: REPORTING CHANNELS AND CONSERVATION OF THE NATIONAL PARKS

Statements	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
There is a proper system to ensure matters concerning national park management are reported on time					
Effectiveness of reporting channels enhance conservation of national park and tourism					
Our country has effective reporting channel of problems and conflicts such as human-wildlife conflict					
stakeholders in tourism sector including local communities have been empowered with modern facilities for reporting conflicts					

SECTION E: COMPENSATION PROCESS ON CONSERVATION OF THE NATIONAL PARKS

Statements	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
The benefits I/we get from tourism projects are sufficient for me /us not to invade the park for economic use					
There is a compensation framework to encourage them to conserve the park's resources					
Compensation fund of the GoR to mitigate the damages caused by wild animals					
There are proper laws that manage compensation of community around national parks					

SECTION F: LOCAL COMMUNITY INVOLVEMENT AND PARTICIPATION ON CONSERVATION OF THE NATIONAL PARKS

Statements	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
The scheme is known by all community members because it was officially launched within the community					
The scheme has had positive impacts on the lives of community members					
The projects implemented in our community were discussed with the community members					
The selection of people to participate in the projects was done fairly and based on the provisions agreed by community members					
Many development initiatives solicit the participation of all concerned stakeholders					

If any, what type of tourism business activities are you engaged in? You may choose more than one business activity if it is applicable to you.

Restaurant		If yes indicate whether you are the	Owner		or employee	
Guest house		If yes indicate whether you are the	Owner		or employee	
Community lodge		If yes indicate whether you are the	owner		Or employee	
Craft shop		If yes indicate whether you are the	Owner		or employee	
Camping Site		If yes indicate whether you are the	Owner		or employee	
None						

SECTION G: CONSERVATION OF NATIONAL PARKS

Statements	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
I provide information to the park management regarding potential harm to the biodiversity, like poaching					
I simply don't go in the park to cause any harm to the biodiversity					
I represent other community members in the management board of the park					
I just participate in the conservation activities whenever government leaders ask us to do so					
I am a member of a local movement/NGO that advocates the importance of biodiversity conservation to the community members					

SECTION H: IMPACT OF CONSERVATION OF NATIONAL PARKS

Statements	Strongly disagree	Disagree	Not sure	Agree	Strongly Agree
Employment opportunities for local residents in this area have increased because of tourism					
Infrastructure facilities like roads, public transport, electricity have improved because of tourism in this area					
Opportunities for local businesses (farmers, cattle herders and handicraft) have increased because of tourism.					
Tourism has increased the monthly revenues of residents in this area.					
Level of crime and social problems (e.g., prostitution, gambling and drugs) in this area has also increased because of tourism. (This is a negative impact)					
Entertainment and recreational opportunities have developed in this area because of tourism in this area.					

Use the following space to include any other positive benefits you get from tourism activities done in this area:

If there are any negative impacts caused by tourism in this area, please indicate them in the space below (example: lack of grazing space, lack of access to traditional medical ingredients, increased prostitution).

APPENDIX B: INTERVIEW GUIDE FOR POLICY-MAKERS AND PARK AUTHORITIES

Research title:

Development of a tourism management framework for the conservation of three of Rwanda's National Parks.

1. Name of respondent:
2. Institution:
3. Position:
4. Can you please describe in brief what is being done to conserve the biodiversity within the Rwandan national parks?
5. What strategies do you use to ensure that conservation goals are achieved in the national parks? You can be specific on each park if that is the case.
6. One of the tourism objectives in Rwanda is to eradicate poverty among local people through pro-poor tourism. How do you understand the concept of pro-poor tourism and how is it being used around the national parks?
7. In 2005, the GOR introduced a revenue sharing policy by setting up a 5% revenue scheme to local communities living around the national parks. Please describe how the policy has been implemented so far.
8. What projects that have been funded by the scheme to help local communities since its introduction.
9. What are factors do you base on to fund projects using the above scheme?
10. What is the process and what are the criteria do you base on to select people (community members) who participate/benefit in the implemented projects (for example employment, scholarships, commodity supply,...)
11. Is there any system that helps you to track down the impact of the 5% scheme, for example, on poverty reduction and improved biodiversity conservation? If any, how does it work?
12. Do you think the benefits derived from these projects are enough to offset the exploitation of the forest (park) by local communities?
13. The Rwandan government has opted to the use of community conservation for the national parks. How is this approach being implemented?
14. Still on the community conservation, how do you build the capacity of local people to enable them actively to participate in the conservation?
15. What challenges are you still facing in the conservation of the national parks? Which ones are they specifically caused by local communities? Specific information may be provided on each park if that is the case.
16. How do you engage with the private sector in the conservation of the national parks?
17. Do you have any other additional information?

APPENDIX C: QUESTIONNAIRE FOR EXPERTS

After looking at the objectives of this study and having been given the background information about the issues motivating the development of the tourism management framework, please provide insight to the following elements. It will take approximately 20 to 30 minutes of your time to complete this qualitative questionnaire. The information provided will be kept confidential at all times. Your participation is voluntary, and you have the right to withdraw from this study at any point during this Delphi process. The researcher expects to receive the responses for this survey by 5th October 2014.

1. In your expert opinion what do you think might be the causes of the problems highlighted in the study background, in general?

2. How do you think the government should react or respond to these identified issues?

3. What do you think is the best way to communicate to local communities' matters related to the national parks?

4. How would you want communities to be integrated into the solution-generation, given the issues highlighted in the study background information?

5. What strategies do you suggest could be used to enhance the awareness of government policies, such as the 5% tourism revenue sharing policy and compensation policy for the beneficiaries? Compensation occurs when wild animals have made damages to residents' properties. The government takes account of the lost/damaged property and pays back the victims through the Special Guarantee Fund; this fund also caters for general road accidents within the Republic on which liability cannot be assigned to any party. This money is usual taken from the 5% tourism revenue sharing scheme.

6. How would you suggest the compensation process be monitored to remove the corruption problem? The process takes also too long to finish and it is ambiguous to the beneficiaries.

7. What should the Rwandan government (or the Rwanda Development Board) do in remote areas in terms of communication and sensitisation of its policies?

8. What role would you assign to local communities in relation to decision-making regarding projects to be implemented through the tourism revenue sharing scheme?

9. How do you think the government should enhance tourism entrepreneurial spirit among the residents bordering the parks so that they can benefit from the tourism value system?

10. What skills and capabilities do these rural people need so that they can benefit from employment in the parks or in the tourism value chain; and how do you think the government should act thereon?

11. What should be the overall role of training institutions and Non-Government Organisations (NGOs) in the spirit of maximising tourism benefit to local people and achieving conservation goals?

12. What is the best way to maximise the individual benefits for local people?

13. Please use the box below to put any other information you think is helpful for this study.

APPENDIX D: ETHICAL CLEARANCE FROM CPUT ETHICS COMMITTEE



P.O. Box 1906 • Bellville 7535 South Africa • Tel: +27 21 6801680 • Email: sallefa@cput.ac.za
Symphony Road Bellville 7535

Office of the Chairperson Research Ethics Committee	Faculty: BUSINESS
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At a meeting of the Research Ethics Committee on 10 April 2013, Ethics

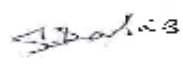
Approval was granted to NSABIMANA, Emmanuel (201220645), for research activities

Related to the MTech/DTech: DTech: Tourism & Hospitality Management
at the Cape Peninsula University of Technology.

Title of dissertation/thesis:	Develop a tourism framework for the conservation of three of Rwanda's National Park
	Supervisor: Prof Spencer, Prof Steyn

Comments:

Decision: **APPROVED**

	10 April 2013
Signed: Chairperson: Research Ethics Committee	Date
Signed: Chairperson: Faculty Research Committee	Date

Clearance Certificate No 1 of 1: EBREC0089

APPENDIX E: RWANDA DEVELOPMENT BOARD RESEARCH AUTHORISATION

Note:

The Faculty of Business and Management Sciences at CPUT required that the thesis title be changed slightly to read as current and to better reflect the contents of the thesis

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RESEARCH CONTRACT

263/01/0812

This agreement is made between the Rwanda Development Board (RDB) Tourism & Conservation (hereinafter referred to as "the authority") on one part and

MSABIMANA Emmanuel of address KICUKIRO - KICUKU
(hereinafter referred to as "the researcher")

WHEREAS the researcher is the desirous of carrying out the research in the authority's protected area called Biagama Forest and Park, Volcanoes National Park and Gungwe National Park

And WHEREAS the authority has agreed to the said research to be carried out in the said protected areas, under the terms and conditions herein stipulated,

IT IS NOW AGREED AS FOLLOWS:

1. The authority has authorized and allowed the researcher to carry out the research described herein below, in The impact of tourism on the development of a tourism management framework for the conservation of three of Rwanda's national parks.
2. The research shall be restricted to Gathering information from local communities living around the above protected areas and RDB staff working for these protected areas
3. The said research shall be commenced one days after execution of this agreement and shall have a duration of 12 months after which the said research shall cease to be carried out,
4. The researcher shall pay a monthly research fee of as consideration for the permission to carry out the research above described.
5. The researcher shall produce a progress report in on the activities covered under the research to the authority and shall at the completion of the research submit a final report on the research which shall include analyzed data, findings and recommendations.
6. The researcher shall where necessary make an application for permission to collect, take and/or use any specimens for the carrying out of the said research. such application shall be made to the Executive Director of the Authority and shall indicate the exact need for the specimens and the number and the number and categories of specimens required.
7. The researcher shall not hunt , collect take, kill or injure any wild plant or animal or any part or derivative thereof and shall not collect , take or use any specimen without prior written approval of the Executive Director of the Authority such approval shall bear a stamp of the authority.

APPENDIX E continued

8. The authority shall at all times have absolute discretion in deciding on whether or not to grant permission to collect, take or use any specimen and on whether or not to grant permission to hunt, collect, take, kill, or injure any wild plant or animal.
9. The authority shall have a right to stop the research from commencing or continuing with the research herein above described, for good cause
10. This agreement shall be governed by and be subject to the Rwanda Wildlife Statute and all subsidiary legislation made there under , and to all other laws of Rwanda.

IN WITNESS WHEREOF, the duly authorized representatives of the parties hereto have set their hands hereunto on the day and year above mentioned.

**For Rwanda Development Board
Tourism and Conservation**

For the Researcher

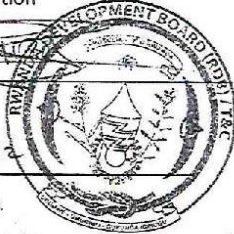
Rica RWIGAMBA
Head of Department
Tourism and Conservation

Names... Emmanuel Nsabimana

Signature

03-09-12

Date



signature

Date

21-08-2012

APPENDIX F: PROOFREADING CERTIFICATE

PROOFREADING CERTIFICATE

To Whom It May Concern

Date: 4th March 2019

Kigali - Rwanda

This serves to confirm that I have proofread the doctoral research study entitled: "Developing a Tourism Management Framework for the Conservation of National Parks in Rwanda" by Mr. Emmanuel NSABIMANA and that the candidate has been advised to make the necessary changes.

Yours faithfully,

A rectangular box containing a handwritten signature in blue ink. The signature is cursive and appears to read 'Pravda Mfurankunda'.

*Dr. Pravda Mfurankunda (PhD)
Lecturer, University of Rwanda
College of Arts and Social Sciences
School of Arts and Languages
Tel: +250788511297
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APPENDIX G: GRAMMARIAN CERTIFICATE

22 Krag Street
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27 December 2020

LANGUAGE AND TECHNICAL EDITING

Cheryl M. Thomson

THE DEVELOPMENT OF A TOURISM MANAGEMENT FRAMEWORK FOR THE CONSERVATION OF NATIONAL PARKS IN RWANDA

Supervisor: Prof J P Spencer

This is to confirm that I, Cheryl Thomson, executed the language and technical editing of the above-titled Doctoral thesis of **EMMANUEL NSABIMANA** at the CAPE PENINSULA UNIVERSITY OF TECHNOLOGY in preparation for submission of this thesis for assessment.

Yours faithfully



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